CITY COUNCIL MEETING
(AMENDED 9/15/22)
AGENDA

7:00 PM - Tuesday, September 20, 2022

via Teleconference

Please Note: Per California Executive Order N-29-20, the City Council will meet via Telephone/Video Conference Only.

Telephone: 1-669-444-9171 / Webinar ID: 874 0755 2553

https://losaltosca-gov.zoom.us/j/87407552553?pwd=KytZVlhFYkVHRkhMOFJSUytuVS9HUT09

Passcode: 139953

TO PARTICIPATE VIA VIDEO: Follow the link above. Members of the public will need to have a working microphone on their device and **must have the latest version of ZOOM installed** (available at https://zoom.us/download). To request to speak, please use the "Raise hand" feature located at the bottom of the screen.

TO PARTICPATE VIA TELEPHONE: Members of the public may also participate via telephone by calling the number listed above. To request to speak, press *9 on your telephone.

TO SUBMIT WRITTEN COMMENTS: Prior to the meeting, comments on matters listed on the agenda may be emailed to *PublicComment@losaltosca.gov*. Emails sent to this email address are sent to/received immediately by the City Council. Please include a subject line in the following format:

PUBLIC COMMENT AGENDA ITEM ## - MEETING DATE

Correspondence submitted in hard copy/paper must be received by 2:00 PM on the day of the meeting to ensure distribution prior to the meeting. Correspondence received prior to the meeting will be included in the public record. .

Public testimony will be taken at the direction of the Mayor, and members of the public may only comment during times allotted for public comments.

AGENDA

CALL MEETING TO ORDER

ESTABLISH QUORUM

PLEDGE ALLEGIANCE TO THE FLAG

REPORT ON CLOSED SESSION

CHANGES TO THE ORDER OF THE AGENDA

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

Members of the audience may bring to the Council's attention any item that is not on the agenda. Speakers are generally given two or three minutes, at the discretion of the Mayor. Please be advised that, by law, the City Council is unable to discuss or take action on issues presented during the Public Comment Period. According to State Law (also known as "The Brown Act") items must first be noted on the agenda before any discussion or action.

1. Submitted Public Comments

CONSENT CALENDAR

These items will be considered by one motion unless any member of the Council or audience wishes to remove an item for discussion. Any item removed from the Consent Calendar for discussion will be handled at the discretion of the Mayor.

2. **Solid Waste Disposal and Recycling Agreement:** Authorize the City Manager to execute the New Agreement on behalf of the City with International Disposal Corporation of California, Inc for recycling and disposal of the City's solid waste (A. Fairman)

3. **Construction Contract Award:** Award Annual Street Resurfacing and City Alley Resurfacing Project (TS-01001, TS-01004, and TS-01009) (M. Loatfi)

4. **Emergency Declaration Resolution:** Adopt a resolution extending the declaration of a local emergency due to the COVID-19 pandemic (J. Maginot)

5. **Approve Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc.:** Authorize the City Manager to execute Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc. in the amount not-to-exceed of $31,150 for construction inspection services for the CIPP Corrosion Rehabilitation, Project WW-01005, for a total contract amount of $182,250 and find that the approval of the amendment is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15301 (T. Nguyen)

6. **Approve Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement:** Authorize the City Manager to execute Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement between the cities of Palo Alto, Mountain View, and Los Altos to fund rehabilitation and upgrade of the secondary treatment system and to increase the financing of the primary sedimentation tank rehabilitation project (T. Nguyen)

7. **Minutes:** Approve Minutes of the City Council Regular Meeting of August 23, 2022. (A. Rodriguez)

8. **Minutes:** Approve Minutes of the City Council Special Meeting of August 30, 2022. (A. Rodriguez)

9. **Minutes:** Approve Minutes of the City Council Regular Meeting of September 6, 2022. (A. Rodriguez)

PUBLIC HEARINGS

10. **330 Distel Circle Multiple Family Affordable Housing Development Project:** Consider finding the project exempt from environmental review under Section 15332 (Class 32) of the California Environmental Quality Act (CEQA), and consider approval of the Design Review Permit and Conditional Use Permit for a 90-unit multiple family residential affordable rental housing development project at 330 Distel Circle (Application Nos. D22-0002 and CUP22-0001) (R. Hayagreev)

DISCUSSION ITEMS

11. **AB 481 Military Equipment Use Policy**

12. **Commission Appointments:** Consider Commission applications and make appointments as appropriate (A. Rodriguez)

13. **City of Los Altos Non-Profit and Civic Organization Contributions Policy:** Adopt Resolution 2022-XX of the City of Los Altos defining a Non-Profit and Civic Organization Contributions Policy (A. Carneseca)

14. **Updated License Agreement with SFPUC for Hetch Hetchy Trail in Los Altos:** Approve the updated License Agreement with SFPUC for Hetch Hetchy Trail in Los Altos; find that the approval of the agreement is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15301 (Existing Facilities) (M. Hernandez)

INFORMATIONAL ITEMS ONLY

15. 2021 Santa Clara County Multi-Jurisdictional Program for Public Information (PPI) Annual Report (FY22 - Year 1)

16. Informational memo establishing a policy and process for formal outreach and engagement by City Commissioners and Committee Members

17. Tentative Council Calendar

COUNCIL/STAFF REPORTS AND DIRECTIONS ON FUTURE AGENDA ITEMS

ADJOURNMENT

(Council Norms: It will be the custom to have a recess at approximately 9:00 p.m. Prior to the recess, the Mayor shall announce whether any items will be carried over to the next meeting. The established hour after which no new items will be started is 11:00 p.m. Remaining items, however, may be considered by consensus of the Council.)

SPECIAL NOTICES TO THE PUBLIC

In compliance with the Americans with Disabilities Act, the City of Los Altos will make reasonable arrangements to ensure accessibility to this meeting. If you need special assistance to participate in this meeting, please contact the City Clerk 72 hours prior to the meeting at (650) 947-2610.

Agendas Staff Reports and some associated documents for City Council items may be viewed on the Internet at *http://www.losaltosca.gov/citycouncil/online/index.html*.

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, and that are distributed to a majority of the legislative body, will be available for public inspection at the Office of the City Clerk's Office, City of Los Altos, located at One North San Antonio Road, Los Altos, California at the same time that the public records are distributed or made available to the legislative body.

If you wish to provide written materials, please provide the City Clerk with 10 copies of any document that you would like to submit to the City Council for the public record.

PUBLIC CORRESPONDENCE

The following is public correspondence received by the City Clerk's Office after the posting of the original agenda. Individual contact information has been redacted for privacy. This may *not* be a comprehensive collection of the public correspondence, but staff makes its best effort to include all correspondence received to date.

To send correspondence to the City Council, on matters listed on the agenda please email PublicComment@losaltosca.gov

From: Gabriel Engeland
To: Public Comment
Subject: Fw: Reach Codes Regarding Electrification and Natural Gas
Date: Monday, September 12, 2022 5:41:28 PM

Thanks,

Gabe

Gabriel Engeland
City Manager
City of Los Altos
(650) 947-2740 | www.losaltosca.gov

From: lothar kleiner [redacted]
Sent: Monday, September 12, 2022 4:41 PM
To: City Council <council@losaltosca.gov>
Subject: Reach Codes Regarding Electrification and Natural Gas

Dear Council Members,

Regarding the mandates that are coming for electrification of homes and phase out of natural gas, have you put into consideration: “then what?”

We all know how fragile the CA electric power grid is, so if there is a hot spell or a freezing spell, demand for power will go up and the probability of rolling black outs will be high. Therefore:

1. No AC, if too hot or heat, if too cold; seniors will suffer the most
2. No charging of EVs for transportation to job or urgent care emergencies
3. No backup generators that run on natural gas
4. No refrigerator - spoiled food

These are a few and probably many more. Consider that natural gas is a clean fuel that emits only water and carbon dioxide (which is a plant fertilizer) during combustion. The rise in carbon dioxide has caused our planet to green. It is also sustainable if derived from plants and animal waste. The vast mineral mining operations required for so called green energy (lithium, rare earth metals, nickel, etc) have destroyed the environment where it is done, mainly in China, Chile, Democratic Republic of Congo (think child labor), Australia and Russia because the footprint for getting these resources is very high as opposed to the small footprint for harvesting natural gas.

Please think this policy through carefully. I do believe in climate change because that represents the history of our planet. I also believe in being good stewards and not polluting. I

am a scientist who has studied the science for many years. I absolutely will not knowingly post anything that is incorrect.

With deep respect for your position. Thank you for reading this and I welcome any questions that you may have either in person or via e-mail.

Lothar Kleiner, Ph.D.

[redacted]

From: Carmen Colet
To: Public Comment
Subject: I do not support GAS BAN. Thank you!
Date: Monday, September 12, 2022 5:38:09 PM

This is late because I just returned from my vacation.

Carmen Colet
11630 Jessica Lane

From: Val Arnesen
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM 4 – September 6, 2022
Date: Monday, September 12, 2022 4:04:04 PM

Dear Members of the City Council,

I oppose a total ban on use of gas in homes.
I also object to the city adopting restrictions stricter than that mandated by the State of California.
These requirements may cause residents to incur significant additional costs, including cabinet/millwork modifications and upgrading of electrical panels.
How about instead providing incentives to promote voluntary switching to gas appliances?

Thank you,

Valarie Arnesen (Resident of Los Altos)
[redacted]

From: Zane
To: Public Comment
Subject: Do not ban natural gas
Date: Monday, September 12, 2022 4:04:01 PM

This will not help reduce global warming at all. Stop your non sense.

zane morris
575 Tyndall St unit 7
Los Altos, ca

[redacted]

From: Bill White
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM 4
Date: Thursday, September 8, 2022 12:20:54 PM

I don't support a gas ban and oppose adopting codes more stringent than those set out by the state.

--

Bill White
1220 Larnel Pl, Los Altos
[redacted]

From: Ron Stefani
To: Public Comment
Subject: Gas Ban
Date: Monday, September 5, 2022 9:32:15 AM

We are residents of Los Altos and Do Not Support the proposed gas ban. Thank you.
Ron and Jane Stefani

From: hank@gauthier.us
To: Public Comment
Subject: [SPAM] PUBLIC COMMENT AGENDA ITEM 4 – September 6, 2022
Date: Tuesday, September 6, 2022 2:21:52 PM
Importance: High

I am a resident and home owner in Los Altos since 1967. I STRONGLY oppose any gas bans which are more stringent than those passed by Sacramento.

Hank Gauthier

1359 Chelsea Dr, Los Altos

PUBLIC CORRESPONDENCE

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To send correspondence to the City Council, on matters listed on the agenda please email PublicComment@losaltosca.gov

From: Brenda
To: City Council; Public Comment
Subject: Local leaders urge your support CA Prop 1 (2022)
Date: Saturday, September 17, 2022 3:33:54 PM
Attachments: Support CA Proposition 1 (2022) (3).pdf

Public Comment--Not on the agenda

September 17, 2022

Dear Councilmembers,

For over half a century in California, we have had the legal right to make decisions about our reproductive health care, including whether to continue a pregnancy or have an abortion, and whether to choose or refuse contraceptives, based on our personal life circumstances, beliefs, and health concerns. These are among the most private, consequential, and complex decisions we make in our lives.

Physicians and other health care providers have also had legal protection to serve our reproductive health needs without being prosecuted or second-guessed by unqualified, unaffected, and often politically motivated forces.

This year, the Supreme Court of the United States, in “Dobbs v. Jackson Women’s Health Organization”, removed the federal protection of Roe v. Wade and left it to each state to determine whether we will retain, or lose, these fundamental reproductive rights.

As a result, individuals, organizations, and government entities all over California are joining together to support Proposition 1, “Right to Reproductive Freedom Amendment (2022)”, which would protect these rights in our state. Prop 1 is just three sentences:

"SEC. 1.1. The state shall not deny or interfere with an individual’s reproductive freedom in their most intimate decisions, which includes their fundamental right to choose to have an abortion and their fundamental right to choose or refuse contraceptives. This section is intended to further the constitutional right to privacy guaranteed by Section 1, and the constitutional right to not be denied equal protection guaranteed by Section 7. Nothing herein narrows or limits the right to privacy or equal protection.[4]"

Since 1879, California’s constitution has been amended over 500 times. There have been few cases where the need for a state constitutional amendment has been so clear, so urgent, and so widely supported as with Proposition 1. The bill to put Proposition 1 on our November ballot passed with overwhelming majorities in our state legislature, and is supported by the California Medical Association, the League of Women Voters, and the Santa Clara County Board of Supervisors, among many others.

As the tragic real-life consequences of the Supreme Court decision become clear in headlines across our country, it is up to us to protect the right of all Californians to make decisions about their reproductive lives, in private, based on their own beliefs and circumstances, and with the guidance of health care professionals who are able to practice to the highest ethical standards of care.

We urge the City of Los Altos to join us in supporting Proposition 1 “Right to Reproductive Freedom Amendment (2022)”.

Sincerely,

Los Altos Women’s Caucus
Los Altos Mountain View Community Foundation
Los Altos/Mountain View Chapter, American Association of University Women
Los Altos Community Voices

September 19, 2022

Dear Mayor Enander, Vice-Mayor Meadows and members of the Los Altos City Council,

On behalf of Los Altos Community Voices (LACV) we extend our thanks and appreciation for your unanimous vote at the Council meeting of September 6, approving the housing development at the corner of El Camino Real and Los Altos Avenue. The 47-unit project will bring seven much needed affordable units to our city.

Robin Abrams, Curtis Cole, Kim Cranston, Bill Sheppard, Marie Young
LACV Steering Committee

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject: Solid Waste Disposal and Recycling Agreement

Prepared by: R3 Consulting, Inc.
Reviewed by: Aida Fairman, Environmental Services and Utilities Department Director
James Sandoval, Public Works Director
Approved by: Gabriel Engeland, City Manager

Attachments:
1. Solid Waste Disposal Agreement with International Disposal Corp. Of California, Inc. (New Agreement)

A. Resolution Authorizing the City Manager to enter into an Agreement with International Disposal Corp. Of California, Inc (Republic Services)

Initiated by:
Staff

Previous Council Consideration:
None

Fiscal Impact:
None. The tip fees associated with this New Agreement are incorporated into the overall solid waste rates paid for by residential and commercial ratepayers in the City.

Environmental Review:
Not applicable - Categorically Exempt pursuant to CEQA Section 15061(b)(3). It can be seen with certainty that the New Agreement will not pose a significant effect on the physical environment, and none of the circumstances in CEQA Guidelines Section 15300.2 apply.

Policy Questions for Council Consideration:
- Does the New Agreement alleviate the need for competitive proposals for similar services?
- Does this New Agreement provide the City with a modern agreement that complies with all laws and regulations and provides the City with long-term rate stability and disposal capacity?

Reviewed By:

City Manager	City Attorney	Interim Finance Director
GE	JH	SN

Subject: Consideration of a new long-term solid waste disposal agreement

Summary:

- The New Agreement has a total contract value exceeding the $100,000 limit, which requires authorization by City Council.
- Contractor owns and operates the Newby Island Sanitary Landfill and associated recycling and composting facilities ("Newby Island").
- City desires to contract for recycling and long-term disposal of Municipal Solid Waste at the currently used Newby Island Landfill.
- The City and Contractor desire that the Newby Island Landfill be available to the City as a fully permitted facility to receive Municipal Solid Waste from the City for recycling and disposal in accordance with this New Agreement.
- The initial term of this New Agreement shall commence on November 21, 2023, and is expected to continue for a period of the lesser of (i) fifteen years or (ii) the useful life of Newby Island, which for purposes of this New Agreement means that the permitted capacity of the landfill is met.
- The proposed tipping fee of $52 per ton is competitive with other similar agreements for neighboring jurisdictions and guarantees long-term capacity and stable tipping fees for the term of the New Agreement.

Staff Recommendation

Authorize the City Manager to execute the New Agreement on behalf of the City with International Disposal Corporation of California, Inc for recycling and disposal of the City's solid waste

Purpose

The current Solid Waste Disposal Agreement (Current Agreement) is set to expire in November 2023. To properly plan for its conclusion, the City engaged R3 Consultants, Inc. (R3) to assist with the strategy, negotiations, and possible competitive procurement of new disposal and recycling services. The early start to the process was done to ensure that if negotiations with the current disposal provider were unsuccessful, there would still be adequate time to seek proposals from other service providers. Based on the long negotiation process, market analysis, and likely alternatives, the staff is recommending acceptance of the New Agreement you have before you for consideration. Should the City Council not authorize the City Manager to sign this New Agreement, staff will work with R3 to develop a Request for Proposals (RFP) to seek other alternatives.

Subject: Consideration of a new long-term solid waste disposal agreement

Background

The City of Los Altos holds a 30-year Agreement for the Disposal of Municipal Solid Waste with International Disposal Corporation of California, Inc., owned by Republic Services, which is set to expire in November 2023. The Current Agreement requires them to accept for disposal or recycling of all municipal solid waste at its Newby Island Sanitary landfill (Newby Island) and associated recycling facilities. Under the old agreement and the anticipated new agreement, construction and demolition debris for most construction or demolition projects utilizing the franchise hauler are also required to be delivered to Newby Island.

The staff has been negotiating the New Agreement with the Contractor since Fall 2021. The proposed New Agreement would begin in August 2023 for the initial term and last for the expected life of the landfill. The New Agreement may be extended in two-year renewal terms if the landfill's useful life extends past its expected life. The currently negotiated terms of the New Agreement include a modest increase in the landfill disposal fee in the first year, which equates to an approximately $0.19 increase to the average residential customer's monthly collection costs. The landfill disposal fee would be adjusted annually by the Water, Sewer, and Trash Consumer Price Index (WST), a common industry index that aligns with the annual increases under the collection agreement with Mission Trail Waste Systems (MTWS). City staff also negotiated increased commitments for source-separated construction and demolition material recycling and the provision of compost to the City and/or Los Altos residents to assist in meeting the required Senate Bill 1383 procurement targets.

Discussion/Analysis

The City's material is currently disposed of at the Newby Island Sanitary landfill in Milpitas, CA, with the City staff directly managing the Current Agreement with Newby Island and Republic Services. Under the New Agreement, the City's solid waste material would be sent to the same facility through 2038. The current tipping fee paid by MTWS and supported through the customer rates is $45.79 per ton; the negotiated tipping fee beginning in 2023 would be $52.00 per ton and is believed to reflect the actual costs and reasonable profit for these services. Based on our analysis, the tipping fee is comparable to other recently negotiated agreements, and well within the market price compared with other jurisdictions, and most importantly, ensures long-term local capacity.

Los Altos is one of several cities with disposal contracts with Newby Island that are expiring in the coming few years; of those, Los Altos will be the first to finalize a new disposal agreement with Newby Island. The proposed New Agreement has largely isolated the proposed fees from the current significant inflationary pressures and locks in that fee subject to the index.

The initial term of this New Agreement will commence on November 21, 2023, and continue for a period of the lesser of (i) fifteen years or (ii) the useful life of Newby Island. After the Initial Term (if the landfill still has the capacity, the parties may extend this New Agreement in two-year increments by mutual agreement). Republic will provide the City with notice at least four years prior to the end of the useful life of the landfill and each year thereafter. If the landfill's capacity is increased via an

Subject: Consideration of a new long-term solid waste disposal agreement

expansion, Contractor and City shall meet and confer on a term extension and tipping fee, and the Contractor will give the City a right of first refusal for access to the increased capacity for the life of the landfill.

Proximity is the most important criteria in recommending this New Agreement. The distance from Los Altos to Newby Island is 15.1 miles, which allows MTWS to haul solid waste directly to the landfill without double-handling it through a transfer station. If the City were to bring its solid waste to a transfer station, more solid waste disposal facilities could be available because the range of travel distance would be longer; however, there are substantial costs associated with the transfer of approximately $20/ton (with additional costs per mile transferred) and there are limited current options for solid waste transfer. **Table 1**, below presents facilities that would be capable of potentially receiving the City's material if transferred.

Table 1: Facility Options if Material is Transferred

Facility	City	Distance (miles)
Keller Canyon Landfill	Bay Point	65.3
John Smith Road Landfill	Hollister	66.2
Monterey Peninsula Landfill	Marina	66.9
Potrero Hills Landfill	Suisun City	91.7
Redwood Landfill	Novato	70.2
Forward Landfill	Manteca	81.4

Due to the additional cost to transfer material to a more distant facility, use of these facilities will be more expensive on an overall per ton basis than the facilities listed in **Table 2** below, because of the associated transfer costs. Additional environmental impacts associated with longer trucking distances may also need to be considered through the CEQA process. Because of the need to transfer the solid waste, these facilities are likely cost prohibitive when compared to the Newby Island fee.

If the City desires an RFP, Newby Island might still compete for the City's material and could propose a higher rate based on inflation and likely other proposed fees it would be competing with. Nearby landfills that might propose on the City's disposal material are shown in **Table 2**, below. We have not included any other Republic facilities in this list, as we don't expect Republic to propose more than once on a disposal RFP (e.g., Ox Mountain in Half Moon Bay is another nearby landfill operated by Republic, located 24 miles from Los Altos City Hall).

Subject: Consideration of a new long-term solid waste disposal agreement

Table 2: Disposal Facility Options

Facility	City	Distance (miles)
Newby Island Sanitary Landfill	**Milpitas**	**15.1**
SMaRT Station	Sunnyvale	8.0
Guadalupe Landfill (Waste Management)	San Jose	20.9
Kirby Canyon (Waste Management) (requires transfer)	Morgan Hill	32
Altamont Landfill (requires transfer)	Livermore	54

If the City were to develop and release an RFP for solid waste disposal alone, the four facilities in **Table 2** are the likely proposers. However, these facilities are not guaranteed to bid on the City's material due to a host of reasons: small tonnage amounts, capacity constraints, and/or the requirement to enter a long-term partnership inclusive of other material streams. Guadalupe Landfill, which is otherwise the closest feasible landfill for the direct haul, has contentious and potentially litigious neighbors. For reference, this resulted in the City of Milipitas spending additional money to redirect its garbage flow.[1] Sunnyvale's SMART station, which is a transfer station and landfill, requires a commitment to deliver all garbage to the station for processing prior to disposal at a steep additional cost to ratepayers. Based on the current tip fees and location of the transfer stations and landfills, R3 does not recommend that the City release an RFP for solid waste disposal as no cost savings are anticipated.

[1] Additional information about the City of Milpitas process can be found at the following web link: https://www.wastedive.com/news/milpitas-ca-will-change-disposal-site-for-extra-12m-due-to-community-rel/438977/

AGREEMENT FOR DISPOSAL OF MUNICIPAL SOLID WASTE
BETWEEN
THE CITY OF LOS ALTOS
AND
INTERNATIONAL DISPOSAL CORP. OF CALIFORNIA, INC.

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AGREEMENT FOR DISPOSAL OF MUNICIPAL SOLID WASTE

THIS AGREEMENT FOR DISPOSAL OF MUNICIPAL SOLID WASTE (this "Agreement") is made and entered into on September ____, 2022, by and between the CITY OF LOS ALTOS, CALIFORNIA a California municipal corporation (the "City"), and INTERNATIONAL DISPOSAL CORP. OF CALIFORNIA, INC., a California corporation ("Contractor").

RECITALS

WHEREAS, City desires to contract for recycling and long-term disposal of Municipal Solid Waste (defined below); and

WHEREAS, Contractor owns and operates the Newby Island sanitary landfill and associated recycling facilities ("Newby Island"); and

WHEREAS, City and Contractor desire that Newby Island be maintained as a fully permitted facility in order to receive Municipal Solid Waste from City for recycling and disposal in accordance with this Agreement; and

WHEREAS, this Agreement is intended to supersede and replace all prior contracts between the parties.

AGREEMENT

NOW THEREFORE, in consideration of the mutual promises, covenants and conditions contained in this Agreement, and for other good and valuable consideration, the parties to this Agreement hereby agree as follows.

1. DEFINITIONS. The following capitalized names and terms shall have the respective meanings indicated below:

1.1. "Biomedical Waste" means waste which may be reasonably considered infectious, pathological or biohazardous, originating from hospitals, public or private medical clinics, departments or research laboratories, pharmaceutical industries, blood banks, forensic medical departments, mortuaries, veterinary facilities and other similar facilities and includes equipment, instruments, utensils, fomites, laboratory waste (including pathological specimens and fomites attendant thereto), surgical facilities, equipment, bedding and utensils (including pathological specimens and disposal fomites attendant thereto), sharps (hypodermic needles, syringes, etc.), dialysis unit waste, animal carcasses, offal and body parts, biological materials, (vaccines, medicines, etc.) and other similar materials, but does not include any such waste which is determined by evidence reasonably satisfactory to Contractor to have been rendered non-infectious, non-pathological and non-biohazardous.

1.2. "City" means the City of Los Altos, California, a municipal corporation organized under the laws of the State of California, all of the geographic area lying within the municipal boundaries of the City.

1.3. "Construction and Demolition Debris" means commonly used or discarded materials removed from construction, remodeling, repair, demolition, or renovation operations on any pavement, house, commercial building, or other structure, or from landscaping. Such materials include, but are not limited to, dirt, sand, rock, gravel, bricks, plaster, gypsum wallboard, aluminum, glass, asphalt material, plastics, roofing material, cardboard, carpeting, cinder blocks, concrete, copper, electrical wire, fiberglass, formica, granite, iron, lad, linoleum, marble, plaster plant debris, pressboard, porcelain, steel, stucco, tile, vinyl, wood, masonry, rocks, trees, remnants of new materials, including paper, plastic, carpet scraps, wood scraps, scrap metal, building materials, packaging and rubble resulting from construction, remodeling, renovation, repair and demolition operations on pavements, houses, commercial buildings and other structures. Construction and Demolition Debris does not include Excluded Waste.

1.4. "Contractor" means International Disposal Corp. of California, its successors and assigns.

1.5. "Debris Box" means a roll-off waste container used to collect, without compaction, residential and commercial Municipal Solid Waste, yard trimmings, construction debris, and similar materials.

1.6. "Designated Hauler" means the waste hauler or haulers named by City pursuant to Subsection 3.3.2 to deliver Municipal Solid Waste to Newby Island.

1.7. "Excluded Waste" means Biomedical Waste, Hazardous Waste, sludge, automobiles, automobile parts, boats, boat parts, boat trailers, internal combustion engines, and those wastes under the control of the Nuclear Regulatory Commission.

1.8. "Hazardous Waste" means any of the following:

(a) all waste defined or characterized as hazardous waste by the federal Solid Waste Disposal Act (42 U.S.C. Section 3251 et seq.), as amended, including the Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 et seq.) and all future amendments thereto, or regulations promulgated thereunder;

(b) all waste defined or characterized as hazardous waste by the principal agencies of the State of California (including without limitation the Department of Health Services and the California Waste Management Board) having jurisdiction over hazardous waste generated by facilities within such State, and pursuant to any applicable State or local law or ordinance, and all future amendments thereto, or regulations promulgated thereunder;

(c) radioactive wastes;

(d) any sewage sludge or other residue from wastewater treatment facilities;

(e) waste commonly known as cannery waste;

(f) those substances or items which require special or extraordinary handling or disposal due to their hazardous, harmful, toxic or dangerous character or quality; and

(g) those substances and items which are not normally expected to be disposed of by generally accepted sanitary landfill disposal methods.

1.9. "Hazardous Waste" shall be construed to have the broader, more encompassing definition where a conflict exists in the definitions employed by two or more governmental agencies having concurrent or overlapping jurisdiction over hazardous waste. If any governmental agency or unit having appropriate jurisdiction shall hereafter determine that substances which are not, as of the date hereof, considered harmful, toxic, dangerous or hazardous, are harmful, toxic, dangerous or hazardous, then such substances shall be Hazardous Waste for the purposes of this Agreement as of the effective date of such determination. If any governmental agency or unit having appropriate jurisdiction shall hereafter determine that substances which are, as of the date hereof, considered harmful, toxic, dangerous or hazardous, are not harmful, toxic, dangerous or hazardous, then such substances shall not be Hazardous Waste for purposes of this Agreement as of the effective date of such determination.

1.10. "Municipal Solid Waste" means all substances or materials that are generally discarded or rejected as being spent, useless, worthless or in excess to the owners at the time of rejection, including, without limitation, trash, garbage, refuse and rubbish, and which are generated by all residential, commercial, industrial, institutional, municipal, agricultural and other activities within the City; provided, however, Municipal Solid Waste does not include Excluded Waste, Construction and Demolition Debris, Source Separated Organic Materials, and Source Separated Recyclables.

1.11. "Newby Island" means the Newby Island Sanitary Landfill and associated recycling facilities, located at 1601 Dixon Landing Road, San Jose, CA 95131.

1.12. "Source Separated Organic Materials" means discarded materials separated from Municipal Solid Waste by the generator and deposited into the organics container for Recycling, including any vegetative matter resulting from normal yard and landscaping maintenance that is not more than three (3) feet in its longest dimension or six (6) inches in diameter and food scraps and trimmings from food preparation, including but not limited to: meat, fish and dairy waste, fruit and vegetable waste, grain waste, Stable Matter, and acceptable food packaging such items as pizza boxes, paper towels, waxed cardboard and food contaminated paper products. Source Separated Organic Materials include plant debris, such as palm, yucca and cactus, ivy, grass clippings, leaves, pruning, weeds, branches, brush, holiday trees, and other forms of vegetative waste. Source Separated Organic Materials does not include items herein defined as Excluded Waste.

1.13. "Publicly Hauled Waste" means Municipal Solid Waste generated at residences or commercial establishments in the City and hauled directly to a solid waste facility, including Newby Island, by the respective generators (or, in the case of residences, their family members or designees) of such waste.

1.14. "Recycling" or "Recycle" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.

1.15. "Regulatory Changes" means changes in laws or regulations (including enactment or new laws or regulations and permit changes) affecting Newby Island which occur on or after November 21, 2023, and changes in the enforcement or interpretation of present or future laws or regulations (including permits) affecting Newby Island which occur on or after November 21, 2023, including Contractor's future increased costs for financial assurances for closure, post-closure, third-party and pollution liability required by applicable regulatory agencies.

1.16. "Source Separated Recyclables" means discarded materials that are separated from Municipal Solid Waste by the generator prior to collection for purposes of Recycling, including but not limited to including newsprint (including inserts); mixed paper (including magazines, catalogs, envelopes, junk mail, corrugated cardboard, brown bags and paper, paperboard, paper egg cartons, office ledger paper, and telephone books); glass containers; aluminum beverage containers; small scrap and cast aluminum (up to 20 pounds); steel including "tin" cans, empty aerosol cans (empty, non-toxic products) and small scrap (up to 20 pounds); bimetal containers; plastic bags, plastic food containers, #1-7 plastics regardless of form or mold (including but not limited to plastic containers, bottles, wide mouth tubs, plastic bags, film plastic, and polystyrene), aluminum foil and pans.

1.17. "Taxes" means all taxes or governmental fees now or hereafter imposed on the Recycling and/or disposal of Municipal Solid Waste delivered to Newby Island pursuant to this Agreement. As of the date of this Agreement, "Taxes" are $19.66 per Ton, composed of the following: The current City of San Jose Business Tax of $13.00 per ton, the City of San Jose Enforcement Fee of $0.38 per ton, the County of Santa Clara Solid Waste Planning Fee of $0.78 per ton, the County of Santa Clara AB 939 Fee of $4.10 per ton, and the $1.40 fee resulting from State AB 1220.

1.18. "Tipping Fee" means the amount, as set forth in Section 5, payable by City to Contractor for each Ton of Municipal Solid Waste delivered to Newby Island pursuant to this Agreement.

1.19. "Ton" means a short ton of 2,000 U.S. pounds.

2. CITY'S RESPONSIBILITIES.

2.1. Delivery of Municipal Solid Waste. Subject to the other provisions of this Agreement, during the term of this Agreement, City shall deliver or cause delivery of all Municipal Solid Waste to Newby Island, for Recycling and/or disposal in accordance with this Agreement; provided, however, City shall not be required to deliver or cause delivery of Municipal Solid Waste not controlled by the City's franchise agreement, including Publicly Hauled Waste. City shall have no obligation to deliver any specific number of tons to Contractor at any time.

2.2. Excluded Waste. City shall use reasonable business efforts to prevent delivery to Newby Island by Designated Haulers of Excluded Waste or material other than Municipal Solid Waste. Subject to Contractor's agreement, as set forth in Section 3.4 to attempt to reject or have a Designated Hauler remove such other Excluded Waste, City shall pay all costs of handling, demurrage, reloading, transportation and/or disposal of such other waste or material.

2.3. Debris Box Municipal Solid Waste. City shall deliver or cause delivery of all Municipal Solid Waste and Construction and Demolition Debris collected in Debris Boxes to Newby Island for Recycling and/or disposal in accordance with this Agreement. If Contractor does not meet the diversion goal for the Debris Box waste stream described in Section 3.1, the City shall have the option of directing its Debris Box waste stream to another facility if that other facility offers to pursue a higher diversion rate goal than that being achieved by Contractor at Newby Island, provided that Contractor shall have the right of first refusal, with a minimum of sixty (60) days advance written notice from the City of the terms (diversion level and price) offered by such other facility, to meet those terms and retain the City's Debris Box waste stream.

3. CONTRACTOR'S RESPONSIBILITIES.

3.1. Receipt of Municipal Solid Waste. Subject to the other provisions of this Agreement, during the term of this Agreement, Contractor shall receive all Municipal Solid Waste delivered to Newby Island for disposal at Newby Island in accordance with this Agreement. Contractor shall determine in its sole discretion whether to Recycle or dispose of such Municipal Solid Waste.

3.2. Receipt of Construction and Demolition Debris. Contractor shall use reasonable business efforts starting with the date of execution of this Agreement to achieve the annual goal of Recycling and diverting from disposal 65 percent by weight of the Construction and Demolition Debris delivered to Newby Island in Debris Boxes by the Designated Hauler and Publicly Hauled Waste. Contractor's compliance with this diversion goal shall be determined annually based upon the determination of a third-party certifier as recommended by Contractor and designated by the City which may change from time-to-time. Third-party certifications may be conducted by the City of San Jose, the Recycling Certification Institute, or any other certifier that is determined by the City to meet the City's standards. Contractor shall provide the City with annual reports by the designated Third-Party Certifier that include the certifier's determination of Contractor's diversion rate.

Contractor shall not be in breach of this Agreement if Contractor fails to achieve the annual Recycling and diversion goal of 65 percent, and the City's sole remedy if Contractor fails to achieve this goal is to seek another facility to achieve higher Recycling and diversion levels, subject to Contractor's right of first refusal described herein.

3.3. Provision of Compost. Contractor shall provide up to 750 tons of landscaping-grade compost to the City annually. City shall be responsible for arranging for the pickup of the compost at 601 Dixon Landing Rd. Milpitas, CA and shall inform Contractor six months in advance of the quantities to be picked up. If Contractor opens an area of the landfill site for residential customer pick-up of compost or mulch materials, access to that pick-up area shall be granted to residents of the City that provide adequate proof of residency, of up to 10 cubic yards of compost per resident per day. The compost picked up by residents shall be accounted for as a part of the 750 annual tons of compost described in Section 3.3.

3.4. Operational Requirements

(a) Hours. Contractor shall operate Newby Island for the receipt of Municipal Solid Waste from the Designated Haulers from at least 6:00 a.m. to 5:00 p.m. Monday through Friday and from 8:00 a.m. to 4:00 p.m. on Saturday, except that Newby Island may be closed on Christmas Day, the fourth Thursday of November and New Year's Day. Notwithstanding the foregoing, Contractor changed the Saturday hours at Newby Island due to the Covid-19 pandemic from 5:00 a.m. to 1:00 p.m., and may continue to operate Newby Island on Saturdays during this reduced schedule until Contractor determines, in its reasonable judgment, that it may resume the regular hours of operation on Saturdays. Contractor shall provide the City with notice of such change in advance.

(b) Signs. At Contractor's sole expense, Contractor shall prominently post signs at the entrance to Newby Island detailing the regulations which must be followed by vehicles entering the site, indicating the hours of operation, the types of Municipal Solid Waste accepted and a local telephone number to call for information or in case of emergency.

(c) Site Access. Contractor shall construct and maintain all roads running in and over Newby Island as shall be reasonable under the circumstances, from the end of the public access road to the points designated for the deposit of materials. A smooth surface within the disposal area will be maintained properly to assist vehicles in their disposal operations. Contractor shall designate an area immediately adjacent to an all-weather road for disposal during periods of inclement weather. Contractor shall operate and maintain such inclement weather site and shall construct and maintain an access road to such site. Contractor shall not be responsible for any expense or inconvenience incurred by Designated Haulers as a result of construction along the public access road. If delay occurs, Contractor and Designated Haulers shall attempt to arrange alternate scheduling.

(d) Scales; Cubic Yard Conversion. Contractor shall operate and maintain a scale or scales to weigh all Municipal Solid Waste and Construction and Demolition Debris delivered by Designated Haulers to Newby Island. Contractor shall test and calibrate, as necessary, all scales in accordance with applicable local, state and federal law.

(e) Records. Contractor shall maintain all records as required by law, including records of financial transactions and weight tickets. City or City's designated representative shall have the right to inspect such records and the record keeping procedures at any time during normal business hours provided that such representative does not interfere with work being performed by Contractor and for a period of up to three years following expiration or termination of the contract. These records shall be retained for a period of no less than three years from the later of the following (except weight records which shall be kept for seven years): 1) final payment made, 2) expiration of the contract, or 3) termination of the contract.

(i) City's Right to Obtain Copies of LEA Reports. The parties acknowledge that the Contractor must generate, and deliver to the LEA, periodic reports pertaining to the recycling and diversion of solid waste. Contractor waives any restriction which may prevent the City from obtaining copies of such reports directly from the LEA and shall not object to any request by the City to obtain such reports.

(f) Truck turnaround time and queuing: City and Designated Hauler vehicles shall have priority access to landfill and weigh stations; contractor shall ensure turnaround time for City and Designated Hauler vehicles no more than 25 minutes for route collection trucks and 55 minutes for transfer trucks (defined as time between arriving at the location and dumping the load, accounting for time spent waiting to be weighed) and provide queuing space within landfill to avoid queuing on public streets. If this turnaround time is exceeded, Contractor may be subject to Liquidated Damages of up to $50 per 10-minute increment.

(g) Subcontractors. Contractor shall not use Subcontractors without written approval of City for any subcontracts in excess of $10,000, and Contractor shall remain responsible for Contract and paying Subcontractors.

(h) Designated Haulers.

(i) Acceptance of Waste. Contractor shall accept all Municipal Solid Waste from City's Designated Haulers and shall charge City the Tipping Fee therefor. Contractor shall have no obligation to accept Excluded Waste.

(ii) City Designation. City shall designate those waste haulers responsible for delivery of Municipal Solid Waste to Newby Island, provided that those so designated shall agree to observe all regulations at Newby Island and to operate according to safe industry practices.

(iii) No Preference. Contractor shall give no preference or priority of treatment over Designated Haulers to any other persons bringing wastes to Newby Island. Also, Contractor shall not give any preference or priority among Designated Haulers unless and until such preference or priority is requested by Contractor or City and approved in writing by the other party to this Agreement. Said approval shall not be unreasonably withheld.

3.5. Excluded Waste. If Excluded Waste or other waste or material other than Municipal Solid Waste is delivered or attempted to be delivered by Designated Haulers to Newby Island, Contractor shall first attempt to reject such attempted delivery or cause the Designated Hauler, at its expense, to remove such waste or material from Newby Island. However, if such delivery occurs and such waste or material in not so removed, Contractor shall promptly notify City thereof and, subject to City's payment of costs as set forth in subsection 2.3, use reasonable business efforts to comply with City's request for handling and transportation of such waste or material to a disposal facility that can lawfully accept it.

3.6. Compliance with Laws and Regulations. Subject to the other terms and conditions of this Agreement, Contractor agrees that, in the operation of Newby Island and the performance of services under this Agreement, Contractor will qualify under, and comply with, any and all federal, state and local laws and regulations now in force and which may hereafter, during the term of this Agreement, be enacted and become effective, which are applicable to Contractor, its employees, agents, or subcontractors, if any, concerning the operation of Newby Island. However, Contractor shall have the right to contest in good faith the application of such law or regulation to Newby Island and Contractor shall not be deemed in breach of this Agreement during such good faith contest for failure to comply.

3.7. Permits, Licenses, Closure/Post-Closure.

(a) Contractor to Obtain. Subject to the other terms and conditions of this Agreement, Contractor shall be responsible, at its sole expense, for obtaining and maintaining all necessary permits, licenses and approvals from any and all governmental entities having jurisdiction over Newby Island in order that Contractor may operate Newby Island in accordance with the terms and conditions of this Agreement and any laws or regulations applicable to Newby Island. City shall fully cooperate with Contractor in obtaining and maintaining such permits, licenses and approvals as long as any out-of-pocket expense incurred by City is borne by Contractor. Contractor shall file with the City a true and correct copy, certified by the granting agency, of each permit, license, or approval. However, Contractor shall have the right to contest in good faith any requirement of a permit, license, or approval necessary for the operation of Newby Island and Contractor shall not be deemed in breach of this Agreement during such good faith contest for failure to comply.

(b) Closure Plan. Contractor shall demonstrate adequate financial responsibility sufficient to finance Contractor's closure and post closure plan as submitted to state and local permit enforcement agencies.

3.8. Inspection of Operations. The designated representative of City shall have the right to observe and review Contractor's operations and enter Contractor's premises at Newby Island for the purpose of such observation and review during normal operating hours, subject to reasonable notice. This provision shall not be construed as giving to City any right to exercise control over the business or operations of Contractor or to direct any operations of Contractor or to direct in any respect the manner in which the business and operations shall be conducted.

3.9. Labor Force.

(a) Workers. Contractor shall employ or utilize only such superintendents, mechanics, and other workers who are careful, competent and fully qualified to perform the duties or tasks assigned to them. All workers shall have sufficient skill, ability and experience to properly perform the work assigned to them and to operate any equipment necessary for them to carry out their assigned duties property.

(b) Safety Provisions. Contractor shall operate Newby Island in compliance with all applicable federal, state and local laws and regulations pertaining to safety.

(c) Discrimination Prohibited. In the performance of this Agreement, Contractor will comply with the provisions of the California Fair Employment and Housing Act, California Government Code Section 12900 et seq., as amended, and any regulations promulgated thereunder, and with any federal statutes, and regulations promulgated thereunder, prohibiting employment discrimination.

4. TERM.

4.1. Term. The initial term of this Agreement shall commence on November 21, 2023 (the "Effective Date") and shall continue for a period of the lesser of (i) fifteen years or (ii) the useful life of Newby Island, which for purposes of this Agreement means that the permitted

capacity of the landfill is met (the "Initial Term") unless otherwise terminated in accordance with Section 7.1. After the Initial Term (if the landfill still has capacity), the parties may extend this Agreement in up to two-year increments by written agreement. Contractor shall provide City with notice at least four years prior to the end of the useful life of the landfill and each year thereafter. If the landfill's capacity is increased via an expansion, Contractor and City shall meet and confer on a term extension and tipping fee, and Contractor shall maintain City's right of first refusal for access to the increased capacity for the life of the landfill at a mutually agreed-upon tipping fee. As requested by City, Contractor shall provide any necessary supporting documentation to support the adjustment during the expansion period.

5. COMPENSATION.

5.1. Tipping Fee. The Tipping Fees payable under this Agreement shall not exceed the fees listed in Exhibit A, as it may be adjusted in accordance with Sections 5.2 and 5.4. As of the Effective Date, the Tipping Fee for the disposal of Municipal Solid Waste at Newby Island shall not exceed $52.00 per Ton, inclusive of Taxes; the Tipping Fee for the recycling of Mixed C&D shall not exceed $89.00 per ton inclusive of Taxes; the Tipping Fee for Source Separated C&D materials shall not exceed $30.00 per ton inclusive of Taxes. Maximum Tipping Fees shall be adjusted in accordance with Sections 5.2 and 5.4. Notwithstanding the foregoing, for Debris Boxes containing source separated loads of concrete or clean soil the City shall be charged the gate rates for concrete and clean soil, respectively, provided application of those gate rates results in a lower cost to the City.

5.2. Annual Tipping Fee Adjustment. Contractor shall increase the rates for all services effective on each anniversary of the Effective Date of this Agreement in an amount equal to the percentage increase in the Consumer Price Index for All Urban Consumers (Water, Sewer and Trash Collection Services) U.S. City Average, as published by United States Department of Labor, Bureau of Statistics (the "CPI-W"), except that the CPI-W shall not cause the Tipping Fee to increase more than 6.0% per year. For the CPI calculation, rates will be adjusted using the most recently available trailing twelve (12) months average CPI compared to the twelve (12) months preceding.

5.3. Other Adjustments.

(a) Regulatory Change. The Tipping Fee may be adjusted by Contractor from time to time to reflect City's pro rata share of all costs incurred or to be incurred by Contractor in operating Newby Island (including closure and post-closure monitoring) which are attributable to Regulatory Changes and exceed 1% of total cost incurred by Contractor; provided, however, Contractor may not increase the Tipping Fee for costs attributable to any of the following:

(i) Regulatory Changes, by their terms, imposed solely with respect to operation of a sanitary landfill located adjacent to San Francisco Bay;

(ii) existing regulatory or remedial work, monitoring or other work which is required due to refuse which was placed in Newby Island sanitary landfill prior to November 21, 1988 even if part of such wastes were generated in the City;

(iii) Contractor's intentional misconduct or negligent acts or omissions in operation of Newby Island;

(iv) compliance with the Calderon Legislation (California Health & Safety Code Section 41805.5), subchapter 15, BAAQMD Rule 34, Proposition 65, and California Administrative Code Titles 14 and 22, and the final version of EPA's Subtitle D criteria when it is enacted; provided, however, this subparagraph (iv) shall not include any future changes to the foregoing statutes, rules and/or regulations; and

(v) odor, noise and/or dust control due to encroaching land uses around Newby Island which uses were not present on November 21, 2023.

(b) City's Proportionate Share. The City's pro rata share of costs attributable to Regulatory Changes under subsection 5.3(a) shall be determined on the basis of either of the following:

(i) The percentage of the daily volume of wastes disposed of at the sanitary landfill at Newby Island or Recycled at Newby Island, as the case may be, which is attributable to City, for those costs which are, according to generally accepted accounting principles, attributable to the daily operating costs of the sanitary landfill and Recycling operations at Newby Island, as the case may be. The percentage of daily volume attributable to City, shall be based upon the average amounts during the one-year period immediately preceding the request for an adjustment pursuant to this Section; or

(ii) The percentage of the remaining total site capacity at the sanitary landfill at Newby Island or the percentage of material Recycled at Newby Island, as the case may be, which is expected to be utilized by or attributable to the City under this Agreement, for those costs which are, by generally accepted accounting principles, not attributable to the daily operating costs of disposal or Recycling operations, as the case may be. If costs incurred by Contractor are amortized over several years, the increase in the Tipping Fee shall be repealed at the end of such amortization period. This repeal shall not affect other increases resulting from costs which were not amortized.

(iii) Contractor shall notify City of any Tipping Fee adjustment attributable to Regulatory Changes under this Section 5.3 at the earliest practicable time. At the time Contractor makes a request for a Tipping Fee adjustment attributable to Regulatory Changes pursuant to this Section 5.3, Contractor shall submit to City written documentation showing the actual costs incurred or estimated to be incurred in future years (for costs that are expected to be incurred or amortized over more than one year), demonstrating that the costs were incurred by reason of Contractor's compliance with changes in laws or regulations or changes in the enforcement or interpretation thereof, indicating the method of determining City's pro rata share of such cost, and showing the calculation of City's pro rata share. If Contractor bases the request for adjustment on a change in the enforcement on interpretation of a law or regulation affecting Newby Island, then Contractor shall also provide to City supporting documentation demonstrating the existence of and the nature of the change in enforcement or interpretation. City shall have the right, at reasonable times and upon reasonable notice to Contractor, to inspect all records or other information contained therein pertaining to Contractor's request for adjustment under Section 5.4.

No increase in the Tipping Fee attributable to Regulatory Changes shall be made pursuant to this Section 5.3 unless and until Contractor has submitted the above-described written documentation to City.

(c) Taxes. The Tipping Fee shall be adjusted by Contractor from time to time to include all Taxes.

5.4. Payment.

(a) Monthly Invoice and Report. On or before the tenth (10th) day of each month, Contractor shall submit to the City or Designated Hauler(s) an invoice for the preceding month. Said invoice shall state the Tipping Fee then in effect and the amount due for the invoice month calculated in accordance with the provisions of this Section 5. At the time Contractor submits the monthly invoice, Contractor shall also submit to City a report stating, for each Designated Hauler, the information in substantially the form of the sample report form attached hereto as Exhibit B and made a part hereof. If the City institutes a voucher system whereby City issues vouchers or coupons to Designated Haulers for delivery of Municipal Solid Waste, Contractor shall attach to the monthly report either copies of such list or the voucher numbers printed on such vouchers and the name of the Designated Hauler submitted voucher.

(b) Time of City's Payment. The City or Designated Hauler(s) shall review the monthly invoice and the monthly report received from Contractor. The City shall have ten (10) working days from receipt of the report to request reasonable additional information regarding the report. Such request shall be in writing and shall specify the information requested. Contractor shall have ten (10) working days from the date of the request to supply the City the requested additional information. City shall remit payment to Contractor with thirty (30) days of receipt of the requested information, or, if no additional information is requested, within thirty (30) days of receipt of the invoice and report. Where the City or Designated Hauler(s) disputes a portion of any invoice, the City or Designated Hauler(s) shall nevertheless timely pay in full the undisputed portion. The City shall pay a charge for all past due amounts for each month or part thereof during which such amounts remain unpaid at the prime annual interest rate then established by Chase Manhattan Bank, N.A., but in no event higher than the maximum rate allowed by applicable law.

(c) Payment for Publicly Hauled Waste. Contractor shall accept Publicly Hauled Waste for disposal and shall require those delivering such waste to pay directly for disposal at a rate not more than that posted from time to time for deliveries of waste by the general public.

(d) False Claims Act. CONTRACTOR acknowledges that it is aware of liabilities resulting from submitting a false claim for payment by the CITY under the California False Claims Act (Cal. Gov. Code 12650 et. seq.), including treble damages, costs of legal actions to recover payments and civil penalties of up to $10,000 per false claim.

5.5. Full Payment. Contractor hereby agrees to accept payments from City or Designated Haulers and those delivering Publicly Hauled Waste as described above as full compensation for services rendered under this Agreement. Late penalties or interest on outstanding invoices are not to be levied by Contractor on City or Designated Haulers.

6. ASSURANCE OF PERFORMANCE.

6.1. Force Majeure. Except for City's obligation to pay amounts due to Contractor, any failure or delay in performance under this Agreement due to contingencies beyond a party's reasonable control, including, but not limited to, strikes, riots, terrorist acts, compliance with applicable laws or governmental orders, fires, bad weather and acts of God, shall not constitute a breach of this Agreement, but shall entitle the affected party to be relieved of performance at the current pricing levels under this Agreement during the term of such event and for a reasonable time thereafter. The collection or disposal of any increased volume resulting from a flood, hurricane or similar or different Act of God over which Contractor has no control, shall not be included as part of Contractor's service under this Agreement. If increased volume due to a Force Majeure event, Contractor and the City shall negotiate the additional payment to be made to Contractor.

6.2. Alternate Disposal Arrangements. If Contractor fails or is unable to accept or dispose of any waste which it is obligated to accept or dispose of under the terms of this Agreement because of any event other than described in Section 6.1 whose occurrence materially and adversely affects Contractor's ability to accept or dispose of such waste at Newby Island, Contractor shall transport and dispose of such waste at an alternative landfill site or disposal facility selected by Contractor at no additional cost to City or in the alternative, at Contractor's option, shall reimburse City for any and all extra costs incurred by City, over and above the Tipping Fee, to haul and dispose of Solid Waste at such other location. If the City hauls or arranges for hauling of said waste, it is understood that these costs may include costs incurred by the City which are payable by it to Designated Haulers for using an alternative landfill site. The provisions of this Section 6.2 shall govern over any conflict with Section 7.

6.3. Performance Bond. Contractor shall also make, execute, and deliver to City within fourteen days, a good and sufficient surety bond or letter of credit in a form reasonably satisfactory to City to secure the faithful performance by Contractor of the terms and conditions herein. Such bond shall be in the penal amount One Million and No/100 Dollars ($1,000,000.00) and shall be for a term of at least one (1) year. Such bond shall be signed by the President or General Officer of Contractor, together with signature of its corporate secretary and corporate seal. The surety shall be a surety company duly authorized to do business in the State of California and acceptable to City. The surety company which issues the bond shall not be obligated to renew the bond after the expiration of the year term; provided, however, Contractor shall maintain similar replacement bonds issued by a mutually acceptable surety company meeting the requirements set forth above during the term of this Agreement. City agrees that Contractor's failure to replace the bond shall not result in City having any right to make a claim on the expiring bond. Notwithstanding the foregoing, Contractor may at any time, in lieu of the aforesaid surety bond, provide City with a letter of credit in the aforesaid sum, in a form reasonably satisfactory to City, securing the faithful performance by Contractor of the terms and conditions herein.

6.4. Insurance Requirements. Contractor shall procure and maintain for the duration of this Agreement insurance as described in Exhibit C against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor, its agents, representatives, employees or subcontractors. The insurance requirements set forth in Exhibit C shall be reviewed

for sufficiency by City at five-year intervals and such requirements may be reasonably amended or modified by City as deemed necessary or prudent by City, provided that any required new or increased coverage is available on a commercially reasonable basis. Within (30) days of the effective date of this Agreement, Contractor shall submit proof of the aforesaid coverage in the form of Certificates of Insurance, with copies of all required blanket-form endorsements attached thereto to City.

6.5. Hold Harmless and Indemnity.

(a) By Contractor. To the fullest extent permitted by law, Contractor shall defend (with counsel reasonably approved by City), indemnify and hold City, the City Council, members of the City Council, its employees, representatives, agents and volunteers harmless from any and all suits, damages, costs, fees, claims, demands, causes of action, liabilities, losses expenses, damage or injury of any kind, in law or equity, to property or persons, including wrongful death and financial losses (collectively, "Claims") in any manner arising out of, pertaining to, or incident to any actual or alleged negligent acts, errors or omissions, or willful misconduct of Contractor or Contractor's officers, assistants, subcontractors, employees or agents in connection with the performance of Contractor's services or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and reasonable attorneys' fees and other related costs and expenses.

(b) Notwithstanding the foregoing, to the extent Contractor's services are subject to Civil Code Section 2782.8, (Design Professionals) the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to Claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Contractor. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by City, the City Council, members of the City Council, its employees, or authorized volunteers.

(c) Negligence Defined. For purposes of Sections 6.5(a) and 6.5(b), "negligence" shall be deemed to include both negligent acts and omissions and willful misconduct, and the negligence of a party shall include the negligence of its respective officers, employees or agents (including subcontractors).

(d) Notice and Access. The party claiming a right to indemnity shall:

(i) give written notice thereof within a reasonable period following the earlier of actual or constructive notice of the event or occurrence as to which the right to indemnification is or may be asserted, provided, that any delay in or failure to give such notice shall not alter any obligation of indemnity herein, except to the extent the indemnifying party is materially prejudiced thereby; and

(ii) allow the other party (including their employees, agents and counsel) reasonable access to any of its employees, property and records reasonably related to the matter giving rise to the claim for indemnification (excluding records protected by the privilege applicable to communications between attorney and client and the work product of attorneys) for the purpose of conducting an investigation of such claim and taking such other steps as may be necessary to preserve evidence of the occurrence on which the claim is based.

(e) Insurance Coverage. Provision of the insurance coverage set forth in Section 6.4 does not relieve Contractor or its subcontractors from liability under the above hold harmless/indemnification clause.

(f) Survival. The indemnities contained in this Section 6 shall survive expiration or termination of this Agreement.

6.6. Agreement Defense

Contractor shall defend, at its sole cost and expense, with counsel approved by the City, the City in any Actions that assert or allege liabilities paid, incurred or suffered by, imposed upon or asserted against, the City that result or are claimed to have resulted directly or indirectly by Contractor's negligent performance or non-performance of this Agreement, including the following:

(a) Contractor negligence or misconduct: the wrongful, willful or negligent act, error or omission, or the misconduct of the Contractor;

(b) Failure to comply with Applicable Law: Contractor's failure or alleged failure to comply with Applicable Law or any alleged violation thereof, including any actions in connection with its permits;

(c) Breach of representation: Contractor's breach of any representation, warranty or covenant made in this Agreement; or,

(d) Challenges to Agreement: legal challenge to the City of the City to enter into this Agreement or to contract out Services, regardless of the legal theory advanced or relied upon by any interested third party, including any appeals necessary to validate that City or the Agreement.

City reserves the right to retain, at its sole cost and expense, co-counsel and Contractor shall direct Contractor's counsel to assist and take direction from such co-counsel with respect to City's defense.

6.7. Unpermitted Waste Defense and Indemnification

Contractor shall defend, indemnify, and hold harmless at its sole cost and expense with counsel approved by the City, the City in any actions that assert or allege liabilities paid, incurred or suffered by, imposed upon or asserted against, the City that result or are claimed to have resulted directly or indirectly from the presence, disposal, escape, migration, leakage, spillage, discharge, release or emission of Excluded Waste or petroleum to, in, on, at, or under the landfill whether: (1) in one or more instance, (2) threatened or transpired, (3) Contractor is negligent or otherwise culpable, or (4) those liabilities are litigated, settled, or reduced to a final judgment. For purposes of this Indemnity, liabilities include, liabilities arising from or attributable to any operations, repair, clean-up or detoxification, or preparation and implementation of any removal, remedial, response, Closure, Post-Closure or other plan, regardless of whether undertaken due to government directive or action, such as remediation of surface or ground water contamination and replacement or restoration of natural resources. The foregoing indemnity is

intended to operate as an agreement pursuant to 42 U.S.C. Section 9607(e) and California Health and Safety Code Section 25364, to insure, protect, hold harmless and indemnify the City from liability in accordance with this Section.

6.8. Environmental Indemnity

Contractor shall defend, indemnify, and hold the City harmless against and from any and all claims, suits, losses, penalties, damages, and liability for damages of every name, kind and description, including attorneys' fees and costs incurred, attributable to the negligence or willful misconduct of Contractor in handling Excluded Waste.

7. SUSPENSION OR TERMINATION FOR DEFAULT.

7.1. Suspension or Termination by City.

(a) Termination for Default. If either party breaches any material provision of this Agreement and such breach is not substantially cured within thirty (30) days after receipt of written notice from the non-breaching party specifying such breach in reasonable detail, the non-breaching party may terminate this Agreement by giving thirty (30) days' written notice of termination to the breaching party. However, if the breach cannot be substantially cured within thirty (30) days, the Agreement may not be terminated if a cure is commenced within the cure period and for as long thereafter as a cure is diligently pursued. Upon termination, the City shall pay Contractor only such charges and fees for the Services performed on or before the termination effective date and Contractor shall collect its equipment, and Contractor shall have no further obligation to perform any Services under this Agreement.

(b) City shall not suspend or terminate this Agreement unless and until Contractor has failed to substantially perform under this Agreement and has been given notice of such failure and has not cured such failure, or commenced to cure such failure, within thirty (30) days after receipt of said notice (and, in the case of commencement to cure, does not thereafter diligently proceed to cure such failure); provided that no opportunity to cure prior to suspension shall be required if the health, welfare, or safety of the public is endangered by the continued delivery of Municipal Solid Waste to Newby Island.

(c) Performance Assurance Defaults. (1) Failure to Provide Insurance. Contractor fails to provide insurance in accordance with Section 6.4; (2) Failure to Provide Assurances of Performance. Contractor fails to timely provide assurances of performance; (3) Failure to Pay Authority. Contractor fails to timely pay Authority any amounts due and owing to Authority, reimbursement of costs for alternative services (4) Transfer, Assignment. Contractor Assigns this Agreement without Authority approval; (5) Seizure, Attachment. Any asset used to provide services is seized, attached, or levied upon (other than a pre-judgment attachment) so as to substantially impair Contractor's ability to timely and fully perform Services, and which cannot be released, bonded, or otherwise lifted within forty-eight (48) hours, excepting weekends and Holidays; (6) Insolvency, Bankruptcy, Liquidation. Contractor files a voluntary claim for debt relief under any applicable bankruptcy, insolvency, debtor relief, or other similar law now or hereafter in effect, or shall consent to the appointment of or taking of possession by a receiver, liquidator, assignee (other than as a part of a transfer of assets no longer used to provide services

or backup services), trustee (other than as security of an obligation under a deed of trust), custodian, sequestration, administrator (or similar official) of Contractor for any part of Contractor's operating assets or any substantial part of Contractor's property, or shall make any general Assignment for the benefit of Contractor's creditors, or shall fail generally to pay Contractor's debts as they become due or shall take any action in furtherance of any of the foregoing. The foregoing notwithstanding, nothing herein shall or is intended to affect the jurisdiction and authority of any trustee or receiver in connection with bankruptcy proceedings pursuant to the federal Bankruptcy Act or any similar or successor statute. A court, having jurisdiction, enters a decree or order for relief in respect of the Agreement, in any involuntary case brought under any bankruptcy, insolvency, debtor relief, or similar law now or hereafter in effect, or Contractor consents to or fails to oppose any proceeding, or that court enters a decree or order appointing a receiver, liquidator, assignee, custodian, trustee, sequestrator, administrator (or similar official) of the Contractor or for any part of the Contractor's operating equipment or assets, or orders the winding up or liquidation of the affairs of the Contractor.

(d) A copy of the suspension order or action of the City shall be served on Contractor and on Contractor's surety (if there is a surety). When work is suspended for any cause or causes during the term of this Agreement, Contractor shall discontinue the work or such part thereof as City shall designate, whereupon the surety may, at its option, assume this Agreement or that portion thereof which City has ordered Contractor to discontinue, and may perform the same or may sublet the work or that portion of the work taken over to a contractor approved in writing by City's Director of Public Works; provided, however, that the surety shall exercise its option and begin performance of the work, it at all, within thirty (30) days after the written notice to discontinue the work has been served upon Contractor and upon the surety or its authorized agent. The surety, in such event, shall assume Contractor's place in all respects and shall be bound by all the terms and conditions of this Agreement. The surety shall be paid by City for all work performed by it in accordance with the terms of this Agreement.

In case the Surety does not, within the above specified time, assume Contractor's responsibilities under this Agreement, or that portion thereof which City has ordered Contractor to discontinue, then City shall have the power and right to perform and complete, by contract or otherwise, as it may determine, the work herein described or such part thereof as it may deem necessary, and Contractor agrees that City shall have the right to procure equipment, labor and materials necessary for the completion of the work. City shall be required to mitigate expenses, in accordance with applicable law, for the work of completing the services provided in this Agreement, and the expense to City for same shall be the actual cost to City of such work, plus any additional costs which City may incur in payment to its Designated Haulers should the alternate disposal site be located at greater distance from the point of collection of Municipal Solid Waste than Newby Island.

(e) In case such expenses shall exceed the amount, which would have been payable under this Agreement if the same had been fully performed by Contractor, then Contractor and its surety shall pay the amount of such excess to City on notice from City of the excess due. When any part of the work is carried out by the surety or by City, by contract or otherwise, under the provisions of this Section, Contract shall continue the remainder of the work in conformity with the terms of this Agreement.

(f) In all instances, Contractor and its surety shall be liable for all damages incurred by City during the period after notice to discontinue the work has been served upon Contractor and the surety; provided, however, notwithstanding anything to the contrary contained in this Agreement, Contractor shall not be liable to City for any special, punitive or consequential damages, whether in contract, tort, strict liability or otherwise. Rights and remedies of City provided in this section shall not be exclusive and are in addition to any others provided by law/Contract.

(g) In computing damages which City incurs under this Section, additional costs of haulage of waste to a more distant site for waste disposal shall be included, as well as actual fees charged for disposal. Such additional haulage costs shall be negotiated in good faith between City and its Designated Haulers and shall be passed on to surety and Contractor without markup.

7.2. Suspension or Termination by Contractor. Contractor shall not suspend or terminate this Agreement unless and until City has failed to substantially perform under this Agreement and has been given notice of such failure and has not cured such failure, or commenced to cure such failure, within thirty (30) days after receipt of said notice (and, in the case of commencement to cure, does not thereafter diligently proceed to cure such failure); provided that no opportunity to cure prior to suspension shall be required if the health, welfare, or safety of the public is endangered by the continued delivery of Municipal Solid Waste to Newby Island.

8. TITLE TO WASTE. Title to Municipal Solid Waste shall pass to Contractor when loaded into Contractor's collection vehicle or otherwise received by Contractor. Title to and liability for any Excluded Waste shall at no time pass to Contractor.

9. GENERAL PROVISIONS.

9.1. Independent Contractor. It is expressly understood and agreed that Contractor shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of City; that Contractor shall have exclusive control of and the exclusive right to control the details of the services and work performed hereunder and all persons performing the same; that Contractor shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors, if any; and that nothing herein shall be construed as creating a partnership or joint venture between City and Contractor. No person performing any of the work or services described hereunder shall be considered an officer, agent, servant or employee of City, nor shall any such person be entitled to any benefits available or granted to employees of City.

9.2. City Warranty. City warrants to Contractor that:

(a) City has full power in accordance with applicable law to enter into this Agreement;

(b) the entering into this Agreement will not constitute a violation or breach by City of any contract or other instrument to which the City is a party, OR of any judgment, order, writ, injunction or decree issued against or imposed upon City, or that will result in a violation of any applicable law, order, rule or regulation of any governmental authority; and

(c) this Agreement constitutes a valid and binding obligation of City in accordance with its terms, including, without limitation, for the full period of the term of this Agreement notwithstanding the future change of elected or appointed City officials or the City's failure to budget and appropriate sufficient funds for this Agreement. Prior to the parties' entering into this Agreement, legal counsel for the City shall render a written legal opinion to Contractor that the matters set forth in this Section 9.2 are true and correct.

9.3. Representations and Warranties.

(a) The City represents and warrants that:

(i) Existence. The City is a general law city validly existing under the Constitution and laws of the State of California.

(ii) Due Authorization. The City has duly authorized the execution and delivery of this Agreement, and this Agreement has been duly executed and delivered by the City.

(iii) No Litigation. There is no action, suit or other proceeding, at law or equity, before or by any court or Governmental Body pending or, to the City's best knowledge, threatened against the City in which an unfavorable decision, ruling or finding which would materially and adversely affect the validity of or enforceability of this Agreement or any other agreement or instrument to be entered into by the City in connection with the transactions contemplated hereby, or which would materially and adversely affect the performance by the City of its obligations hereunder or under any such other agreement or instrument.

(b) The Contractor represents and warrants that:

(i) Existence. The Contractor is a corporation organized and existing under the laws of the State of California.

(ii) Due Authorization. The Contractor has duly authorized the execution and delivery of this Agreement, and this Agreement has been duly executed and delivered by the Contractor.

(iii) No Conflict. Neither the execution nor the delivery by the Contractor of this Agreement nor the performance by the Contractor of its obligations hereunder nor the consummation by the Contractor of the transactions contemplated hereby (1)conflicts with, violates or results in a breach of any applicable law or (2) conflicts with, violates or results in a breach of any term or conditions of any contract, agreement, franchise, judgment, instrument or decree to which the Contractor is a party or by which the Contractor or any of its properties or assets are bound, or constitutes a default under any such contract, franchise, judgment, decree, agreement or instrument.

(iv) No Litigation. There is no action, suit or other proceeding, at law or equity, before or by any court or governmental body pending or, to the Contractor's best knowledge, threatened against the Contractor in which an unfavorable decision, ruling or finding which would materially and adversely affect the validity of or enforceability of this Agreement or

any other agreement or instrument to be entered into by the Contractor in connection with the transactions contemplated hereby, or which would materially and adversely affect the performance by the Contractor of its obligations hereunder or under any such other agreement or instrument.

9.4. Venue. The parties agree that should any action, whether real or asserted, as law or in equity, arise out of the terms and conditions of this Agreement, venue for said action shall be in Santa Clara County, California.

9.5. Savings Clause. If any nonmaterial provision of this Agreement shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such provision shall not affect any of the remaining provisions of this Agreement and this agreement shall be enforced as if such invalid and unenforceable provision had not been contained herein.

9.6. Headings. The Section and paragraph headings contained herein and the table of contents attached hereto are for convenience in reference and are not intended to define or limit the scope of any provision of this Agreement.

9.7. Amendment. This Agreement may be amended only by written agreement duly authorized and executed by the parties hereto.

9.8. Assignment. This Agreement is assignable with the written consent of both parties and shall be binding upon and insure to the benefit of the parties hereto and their respective heirs, successors in interest, and assigns. The reasonable costs for evaluation of City approval for assignment shall be paid by Contractor. Such consent shall not be withheld unreasonably, nor shall such consent be required if of any of the following: (i) an assignment by operation of law, (ii) an assignment to an affiliate or subsidiary of Contractor, or (iii) an assignment by City to the State of California or to any agency or subdivision of the State of California or to any agency or subdivision of the State or of City if such entity undertakes responsibility of the disposal of Municipal Solid Wastes; provided, however, assignor shall remain responsible for performance of its obligations under this Agreement.

9.9. Contractor Request for Assignment. If Contractor requests the City's consideration of and consent to an assignment, the City may reasonably deny or approve such requests. No request by Contractor for consent to any assignment need be considered by City unless and until Contractor has met the following requirements:

Contractor shall pay City its reasonable expenses for attorney's fees and investigation costs necessary to investigate the suitability of any proposed assignee, and to review and finalize any documentation required as a condition for approving any such assignment. An initial, retainer deposit payment to reimburse such costs shall be made in the amount of one hundred thousand dollars ($100,000) to the City by Contractor or the proposed assignee along with Contractor's formal request for the City's consideration of an assignment. City shall draw against the retainer for its actual reasonable costs of the assignment review. In the event such costs exceed the deposit amount, Contractor shall make the additional payment, beyond the initial deposit amount, upon approval of the assignment. In the event that the actual costs of the review are less than the retainer deposit amount, such unused portion of the retainer shall be returned upon the conclusion of the review of the Assignment.

Contractor shall furnish City with audited financial statements of the proposed Assignee's operations for the Immediately preceding three (3) operating years. Contractor shall furnish City with satisfactory proof: (i) that the proposed Assignee has at least ten (10) years of Solid Waste management experience on a scale equal to or exceeding the scale of operations conducted by Contractor under this Agreement; (ii) that in the last five (5) years, the proposed Assignee has not suffered any significant citations or other censure from any federal, State, or local agency having jurisdiction over its Solid Waste management operations due to any significant failure to comply with State, federal, or local Environmental Laws and that the assignee has provided City with a complete list of such citations and censures; (iii) that the proposed assignee has at all times conducted its operations in an environmentally safe and conscientious fashion; (iv) that the proposed assignee conducts its Solid Waste management practices in accordance with sound Solid Waste management practices in full compliance with all federal, State, and local laws regulating the collection and Disposal of Solid Waste including Hazardous Materials; and, (v) of any other information required by City to ensure the proposed assignee can fulfill the terms of this Agreement in a timely, safe, and effective manner. Under no circumstances shall City be obligated to consider any proposed assignment if Contractor is in default at any time during the period of consideration.

9.10. Notices. Notices by either party to this Agreement to the other party shall be deemed given if personally served or if sent by express mail or deposited in the United States Mail as certified mail, return receipt requested, postage prepaid, addressed to the other party as designated below, or to such other place designated in writing. Such notice shall be deemed effective on the date personally served or when actually received. Notice that a party intends to rely upon the occurrence of an event described in Section 7.1 or 7.2 hereof to suspend obligations under this Agreement may be given verbally; provided that written notice is provided immediately following such verbal notification.

To the City:	To Contractor:
City of Los Altos, California Attn: Director, Environmental Services and Utilities Dept. 1 N. San Antonio Road, Los Altos, CA 94022	International Disposal Corp. of California, Inc. Attn: General Manager Newby Island Resource Recovery Park 1601 Dixon Landing Road Milpitas, CA 95035

9.11. Waiver. A waiver of any breach of any provision of this Agreement shall not constitute or operate as a waiver of any other breach of such provision or of any other provision, nor shall any failure to enforce any provision hereof operate as a waiver of such provision.

9.12. Governing Law. It is understood and agreed by the parties that the law of the State of California shall govern the rights, obligations, duties and liabilities of the parties to this Agreement and shall govern the interpretation of this Agreement.

9.13. Attorney's Fees. If legal action is instituted to enforce this Agreement the prevailing party shall be entitled to reasonable attorneys' fees and actual costs incurred in connection with such action.

9.14. Severability. Should any portion of this Contract be determined to be void or unenforceable, such shall be severed from the whole and the Contract will continue as modified.

9.15. Disputes. Should a dispute or controversy arise concerning provisions of this Contract or the performance of work hereunder, the parties may elect to submit such to a court of competent jurisdiction.

9.16. Entire Agreement. The parties agree that this Agreement represents the full and entire agreement between the parties to this Agreement with respect to matters covered herein. This Agreement completely replaces and supersedes any prior agreements between the parties except for any indemnification obligations or other obligations that by their nature survive.

THE PARTIES TO THIS AGREEMENT hereby indicate their acknowledgment and acceptance of the terms and conditions stated herein by the following signatures of their duly authorized representatives.

The City of Los Altos	**International Disposal Corp. of California, Inc.**
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____

EXHIBIT A Rates/Tipping Fees

Material	Tipping Fee	Taxes, effective April 2022 (included in Tipping Fee)
Municipal Solid Waste	$52.00	$19.66
Mixed C&D	$89.00	$0.38
Source Separated C&D*	$30.00	$0.38
Clean Concrete	Lesser of $30/ton or Gate Rate	$0.38
Clean Soil**	Lesser of $30/ton or Gate Rate	$0.38

* Source Separated C&D means inerts, drywall, wood, clean fill up to 10 yards, and other materials as determined by Contractor.
* Clean Soil means soil originating from existing residential properties in quantities less than ten cubic yards. Soil originating from commercial and industrial locations requires profiling before acceptance.
Tipping Fees shall be adjusted annually in accordance with Section E of the Agreement.

EXHIBIT B Monthly Reporting

1. Materials Received

Date	Weight Ticket Number	Material Type Received	Weight of Load (tons)	Charge Rate ($/T)	Load Cost ($)
..					
Monthly Totals					

2. Compost and other usable products provided to City

Date	Weight Ticket Number	Material Type Received	Weight of Load (tons)	Charge Rate ($/T)	Load Cost ($)
..					
Monthly Totals					

EXHIBIT C Insurance Requirements

CONTRACTOR shall provide its insurance broker(s)/agent(s) with a copy of these requirements and request that they provide Certificates of Insurance complete with copies of all required blanket-form endorsements to: **Project Manager, City of Los Altos, 1 N. San Antonio Road, Los Altos, CA 94022**

Minimum Scope of Insurance
Coverage shall be *at least as broad as*:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, with limits no less than **$5,000,000 or $5,000,000 aggregate** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. CGL insurance must include coverage for the following:

   a. Bodily Injury and Property Damage
   b. Personal Injury/Advertising Injury
   c. Premises/Operations Liability
   d. Products/Completed Operations Liability
   e. Aggregate Limits that Apply per Project
   f. Explosion, Collapse and Underground (UCX) exclusion deleted
   g. Contractual Liability with respect to this Agreement
   h. Broad Form Property Damage
   i. Independent Consultants Coverage

   The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; (3) products/completed operations liability; or (4) contain any other exclusion contrary to the Agreement.

2. **Automobile Liability:** Insurance Services Office Form Number CA 00 01 covering, Code 1 (any auto), or if CONTRACTOR has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than **$1,000,000** per accident for bodily injury and property damage.

3. **Workers' Compensation/Employer's Liability:** CONTRACTOR certifies that it is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and it will comply with such provisions before commencing work under this Agreement. To the extent CONTRACTOR has employees at any time during the term of this Agreement, at all times during the performance of the work under this Agreement CONTRACTOR shall maintain insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than **$1,000,000** per accident for bodily injury or disease.

4. **Umbrella or Excess Liability:** Umbrella or Excess Insurance. If umbrella or an excess liability insurance policy is used to satisfy the minimum requirements for CGL or Automobile Liability insurance coverage listed above, the umbrella or excess liability policies shall provide coverage at least as broad as specified for the underlying coverages and covering those insured in the underlying policies. Coverage shall be "pay on behalf.". CONTRACTOR shall provide a "follow form" endorsement or schedule of underlying coverage satisfactory to the CITY indicating that such coverage is subject to the same terms and conditions as the underlying liability policy.

5. If applicable, The CITY, its officers, officials, employees, and volunteers are to be covered as additional insureds on the umbrella or excess policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts or equipment furnished in connection with such work or operations. If CONTRACTOR maintains broader coverage, umbrella or excess coverage and/or higher limits than the minimums shown above, the CITY requires and shall be entitled to the broader coverage, umbrella or excess coverage and/or the higher limits maintained by CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and any other coverages shall be available to the CITY.

Other Insurance Provisions. The insurance policies are to contain, or be endorsed via blanket-form endorsement to contain, the following provisions:

Additional Insured Status. The CITY, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy and the Automobile Liability policy, with endorsements under CG 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage, with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts or equipment furnished in connection with such work or operations.

Primary Coverage. For any claims related to this contract, the CONTRACTOR's insurance coverage shall be primary insurance as respects the CITY, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.

Notice of Cancellation. Each insurance policy required above other thank workers' compensation and, if applicable umbrella, shall be endorsed via blanket-form endorsement to state that coverage shall not be canceled except after thirty (30) days' prior written notice (10 days for non-payment) has been given to the CITY.

Waiver of Subrogation. CONTRACTOR hereby grants to CITY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the CITY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any blanket-form endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the CITY has received a waiver of subrogation endorsement from the insurer.

Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions shall be at the sole risk of CONTRACTOR.

Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the CITY.

Claims Made Policies. If any of the required policies provide claims-made coverage:

6. The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work.

7. Insurance must be maintained and evidence of insurance must be provided ***for at least three (3) years after completion of the contract work***.

8. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONSULTANT must purchase "extended reporting" coverage for a minimum of ***three (3)*** years after completion of contract work.

Verification of Coverage. CONTRACTOR shall furnish the CITY with original certificates and blanket-form amendatory endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the CITY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them.

ATTACHMENT A

RESOLUTION NO. 2022-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT WITH INTERNATIONAL DISPOSAL CORP. OF CALIFORNIA, INC (REPUBLIC SERVICES)

WHEREAS, Contractor owns and operates the Newby Island sanitary landfill and associated recycling facilities ("Newby Island") and is currently providing service to the City; and

WHEREAS, City desires to contract for recycling and long-term disposal of Municipal Solid Waste at the currently used Newby Island Landfill; and

WHEREAS, the City and Contractor desire that the Newby Island Landfill remain available to the City as a fully permitted facility in order to receive Municipal Solid Waste from the City for recycling and disposal in accordance with this Agreement; and

WHEREAS, the initial term of this Agreement shall commence on November 21, 2023 and shall continue for a period of the lesser of (i) fifteen years or (ii) the useful life of Newby Island, which for purposes of this Agreement means that the permitted capacity of the landfill is met; and

WHEREAS, the proposed tipping fee of $52 per ton, for the disposal of municipal solid waste, is competitive with other similar agreements for neighboring jurisdictions and guarantees long-term capacity and stable tipping fees for the term of the agreement.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Los Altos hereby authorize the City Manager to enter into an agreement with International Disposal Corporation of California, inc. (Republic Services).

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a meeting thereof on the ___ day of ____, 2022 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____

Anita Enander, MAYOR

Attest:

_____

Angel Rodriguez, INTERIM CITY CLERK

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject: Construction Contract Award: Annual Street Resurfacing and City Alley Resurfacing Project (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022) and authorize the Interim Finance Director to amend the FY 2022/23 CIP budget

Prepared by: Morgan Loatfi, Special Projects Manager
Reviewed by: Jim Sandoval, Director of Public Works
Approved by: Gabriel Engeland, City Manager

Attachment(s):
1. Project Map
2. Bid Summary dated August 12, 2022
3. Resolution 2022-__

Initiated by:
City Council CIP Projects (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022)

Previous Council Consideration:
None

Fiscal Impact:
The construction project will cost $6,006,256, and with the 15% contingency of $900,938 and project soft costs of $89,860, total project costs are estimated to be $6,997,054. The City has sufficient funds for the project. However, staff is proposing some transfers between funds in the adopted FY 22/23 CIP budget, along with an appropriation of $930,672 in Gas Tax and $310,180 in SB1/RMNA funds received from the state that were not reflected in the adopted budget, and an appropriation of $581,815 of Measure B funds anticipated from the VTA in FY 22/23. These transfers and appropriations will allow staff to fund the various construction tasks (e.g., paving, safe routes to school (SR2S), Cuesta traffic calming revisions, etc.) from the appropriate CIPs and funding sources. Additional budget is not requested for the project. Based on the lowest responsive and responsible bidder, the estimated project costs and funding sources are broken down, as follows:

Reviewed By:

City Manager	City Attorney	Interim Finance Director
GE	JH	SN

Subject: Construction Contract Award: Annual Street Resurfacing and City Alley Resurfacing Project (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022) and authorize the Interim Finance Director to amend the FY 2022/23 CIP budget

Annual Street Resurfacing and City Alley Resurfacing Project ESTIMATED COST	
Project Item	**Project Budget**
Construction	$ 6,006,256
Construction Contingency (15%)	$ 900,938
Inspection	$ 79,860
Printing/Advertising/Mailing/Misc.	$ 10,000
Estimated Total Cost	**$ 6,997,054**

Breakdown of Approved CIP Funds Available			
CIP #	**CIP Name**	**Funding Source**	**Approved Funds Available**
TS-01001*	Annual Street Resurfacing Project	Gas Tax, Measure B, RMNA/SB1, CIP/GF	$ 4,584,790
TS-01004*	Annual Street Slurry Seal Project	Gas Tax, CIP/GF	$ 1,541,987
TS-01009*	Annual City Alley Resurfacing Project	Gas Tax/GF	$ 149,261**
TS-01003*	Annual Street Striping Project	Gas Tax, CIP/GF	$ 286,964
TS-01005*	Annual Concrete Repair Project	CIP/GF	$ 518,074
TS-01006*	Annual Traffic Sign Replacement Project	CIP/GF	$ 294,821
TS-01008*	Annual ADA Improvements Project (Street and Roadways)	CIP/GF	$ 211,757
TS-01060*	SR2S Improvement Project	VRF***	$ 300,000
TS-01052*	Annual Bicycle/Pedestrian Access Improvements Project	CIP/GF	$ 583,994
TS-01007*	Annual Neighborhood Traffic Management Project	VRF***	$ 50,000
TS-01022*	Annual Collector Street Calming Project	VRF***	$ 163,851
	Total Project Budget		**$ 8,685,499**

NOTES:

* *Approved project budgets include the Fiscal Year 21/22 and 22/23 budgets and rollover funds from previous years.*

** *TS-01009 has $100,000 in approved FY 22/23 Gas Tax funds budgeted. A transfer of $49,261 from TS-01001 Annual Street Resurfacing (General Fund) is needed to fully fund the Alley Resurfacing bid item.*

*** *Transfer from Traffic Impact Fee Fund, upon Council authorization in attached Resolution*

- Estimated Total Cost of $6,997,054 already included in approved budget? Yes
- Amount above budget requested: $0

Subject: Construction Contract Award: Annual Street Resurfacing and City Alley Resurfacing Project (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022) and authorize the Interim Finance Director to amend the FY 2022/23 CIP budget

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Environmental Review:
Categorically Exempt pursuant to CEQA Section 15301(c) consisting of the operation, repair and maintenance of existing facilities such as streets and involves negligible or no expansion of existing or former use.

Policy Question(s) for Council Consideration:
None

Summary:

- The Annual Street Resurfacing and City Alley Resurfacing Project includes the annual scope of work to resurface Los Altos streets and alleys and integrates mobility enhancements to improve safety for all modes of transport, with an emphasis on safer routes to schools. All work supports the Council Priorities of Community Safety and Asset Management.
- On July 20, 2022, the City advertised the Annual Street Resurfacing and City Alley Resurfacing Project for bidding.
- On August 11, 2022, the City received and opened three (3) bids in a public virtual session.
- The Council-approved CIPs listed in the Fiscal Impact section above will fund the project.

Staff Recommendation:
Staff recommend the City Council adopt a resolution to A) award the Base Bid, Additive Alternate No. 2, and Additive Alternate No. 3 for the Annual Street Resurfacing and City Alley Resurfacing Project to O'Grady Paving, Inc. and authorize the City Manager to execute a contract in the amount of $6,006,256, B) authorize the City Manager to execute change orders up to 15% ($900,938) of the construction contract, and C) authorize the Interim Finance Director to amend the FY 2022/23 CIP budget, as follows:

1. transfer $51,069 from CIP TS-01001 (General Fund) to CIP TS-01003
2. transfer $49,261 from CIP TS-01001 (General Fund) to CIP TS-01009
3. transfer $50,000 from the Traffic Impact Fee budget in CIP TS-01007 to the Vehicle Registration Fee budget
4. transfer $163,851 from the Traffic Impact Fee budget in CIP TS-01022 to the Vehicle Registration Fee budget
5. transfer $300,000 from the Traffic Impact Fee budget in CIP TS-01060 to the Vehicle Registration Fee budget
6. appropriate $930,672 in unallocated Gas Tax funds into CIP TS-01001
7. appropriate $310,180 in unallocated SB1/RMNA funds into CIP TS-01001
8. appropriate $581,815 in anticipated Measure B funds, into CIP TS-01001

Subject: Construction Contract Award: Annual Street Resurfacing and City Alley Resurfacing Project (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022) and authorize the Interim Finance Director to amend the FY 2022/23 CIP budget

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Purpose
Please see the above Staff Recommendation.

Background
The Annual Street Resurfacing (TS-01001), Annual Street Slurry Seal (TS-01004), Annual Street Striping (TS-01003), and Annual City Alley Resurfacing (TS-01009) capital improvement projects (CIPs) are dedicated to repairing and maintaining asphalt concrete (AC) roadways and alleyways in the City. Annual Concrete Repair (TS-01005), Annual Traffic Sign Replacements/Additions (TS-01006), Annual ADA Improvements (Streets & Roadways) (TS-01008), Safe Routes to School (SR2S) Improvement Projects (TS-01060), Annual Bicycle/Pedestrian Access Improvements (TS-01052), Annual Neighborhood Traffic Management (TS-01007), and the Annual Collector Street Calming (TS-01022) CIPs will also support the subject project by integrating mobility enhancements to improve safety for all modes of transport, with an emphasis on safer routes to schools. All work supports the Council Priorities of Community Safety and Asset Management

This year, all eleven CIPs are combined into one large project--"Annual Street Resurfacing and City Alley Resurfacing"—to take advantage of economies of scale. This is especially important during a year of historic inflation and several years of high-cost escalation in the construction industry owing to the pandemic, supply chain delays, labor shortages, the high price of oil, etc. Given the unprecedented economic climate, the bids were high, and the FY 2021/22 CIP budgets reserved for this FY 2021/22 street resurfacing project had to be supplemented with resurfacing funds from the FY 22/23 budget.

The streets and alleys to be upgraded and resurfaced are shown in Attachment 1—Project Map. This work includes localized pavement damage repairs (digouts) and overlaying entire roadway segments with asphalt-concrete or a protective seal coat called "microsurfacing". The work includes restriping roadways after the resurfacing to replace the striping that is paved over.

The street segments selected this year align with the roadway infrastructure condition assessments detailed in the City's pavement management analysis, which is updated every 2-3 years, and supports the Council's goal of achieving a Pavement Condition Index (PCI) of 75 by 2026. Staff is updating the pavement management analysis this fiscal year to get an updated PCI value. The prior one was completed in 2019 and yielded a PCI of 68.

SR2S and "complete streets" enhancements include extensive new high visibility striping and enhanced signage to delineate safer routes for pedestrians and bicyclists while improving visibility for motorists. The street areas receiving SR2S and "complete streets" enhancements are as follows.

Subject: Construction Contract Award: Annual Street Resurfacing and City Alley Resurfacing Project (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022) and authorize the Interim Finance Director to amend the FY 2022/23 CIP budget

No	Street	Segment	School
1	Almond Ave	San Antonio Rd to El Monte Ave	Almond Elem. / LAHS
2	Edith Ave	Cypress Dr to 4th St	Gardner Bullis Elem.
3	Berry Ave	Springer Rd to Miramonte Ave	Loyola Elem.
4	Springer Rd	Fremont Ave to Berry Ave	Loyola Elem.
5	Oak Ave	Marinovich Wy to Truman Ave	Oak Ave Elem.
6	Santa Rita Ave	Portola Ave to Van Buran St	Santa Rita Elem.
7	Los Altos Ave	Portola Ave to Pine Ln	Santa Rita Elem.
8	Covington Rd	Miramonte Ave to Grant Rd	Blach Middle
9	Portola Ave	Los Altos Ave to San Antonio Rd	Egan Middle
10	St Joseph Ave	Foothill Exp to Rancho San Antonio Park	Bike Blvd – Montclaire
11	Eva Ave	St Joseph Ave to Granger Ave	Bike Blvd – Montclaire
12	Miramonte Ave & Berry Ave All-Way STOP		Spot Improvement
13	Jordan Ave & E Portola Ave All-Way STOP		Spot Improvement
14	S. El Monte Ave & Hawthorne Ave X-Walks		Spot Improvement
15	Miramonte Ave X-Walks (Loraine Ave to A St)		Spot Improvement
16	Grant Rd X-Walk at Woodland Branch Library		Spot Improvement

Subject: Construction Contract Award: Annual Street Resurfacing and City Alley Resurfacing Project (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022) and authorize the Interim Finance Director to amend the FY 2022/23 CIP budget

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All school locations include improvements recommended in the Final Draft of the Complete Streets Master Plan, which the Council has reviewed.[1] The spot improvements include safety enhancements at intersections and roadways identified by the public and staff.

The bid package also includes three optional "additive alternates", as follows:

- Additive Alternate 1, which develops a designated student drop-off zone behind Los Altos High School on Jardin Drive, including safer accessibility improvements for bicyclists and pedestrians.
- Additive Alternate 2, which replaces the existing asphalt speed tables on Cuesta Drive with rubberized speed tables and striping and signage enhancements. The redesign was necessary
    a) to comply with Santa Clara County Fire Department (SCCFD) speed hump/table specifications for emergency vehicles
    b) because Cuesta Drive is a SCCFD Primary Emergency Response Route and a City of Los Altos Evacuation Route, and
    c) the existing speed tables make emergency response more difficult because they significantly slow down emergency response times and necessitate pauses to medical care as ambulance vehicles drive over them.
- Additive Alternate 3: St. Joseph Sidewalk Gap Closure Project, which creates a safer route for students attending Montclaire Elementary School. The project includes a new concrete sidewalk, ADA ramps, curb and gutter, street resurfacing, striping and signage, and other improvements.

Discussion/Analysis

On July 20, 2022, the City advertised the Annual Street Resurfacing and City Alley Resurfacing project. On August 11, 2022, three (3) bids were received and opened in a virtual public bid opening via RingCentral. The bid result summary is provided in Attachment 2. The lowest responsive and responsible bidder is O'Grady Paving, Inc. for a Base Bid of $5,711,830.95.

The funding summarized above is sufficient to award the Base Bid ($5,711,830.95), Additive Alternative 2 ($123,600.00), and Additive Alternate No. 3 ($170,825.00), along with a 15% as-needed contingency.

The Complete Streets Commission have voted unanimously in support of Additive Alternates 2 and 3 and both projects have undergone extensive public outreach from planning through final design.

[1] The next final draft of the CSMP is scheduled to come back to Council for a final review in October 2022.

Subject: Construction Contract Award: Annual Street Resurfacing and City Alley Resurfacing Project (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022) and authorize the Interim Finance Director to amend the FY 2022/23 CIP budget

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Staff does not recommend awarding Additive Alternate 1—Jardin Drive student drop-off zone--to help solve the high school's student-drop-off traffic problem along Almond Avenue owing to the high cost to the City ($334,693.90) for a solution that is not guaranteed to solve the problem. However, the Streets Division recently installed a more economical drop-off zone on Jardin Drive as a trial for the current school year. Public Works and Police staff are deeply invested in assisting the high school with solving the student drop-off congestion problem through educating parents and student, traffic monitoring and enforcement, and other means.

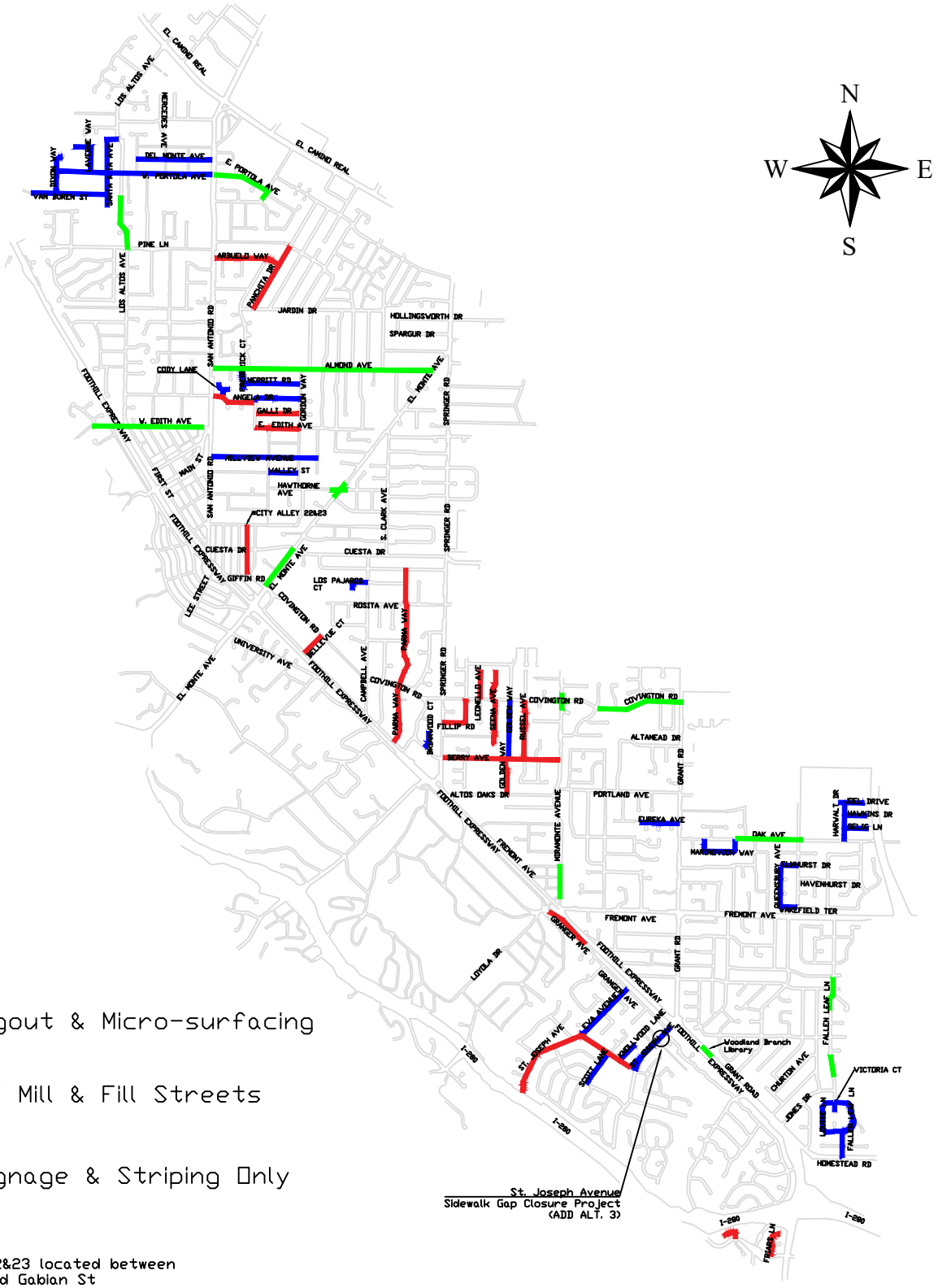
Public notices will be sent to residents as soon as the Annual Street Resurfacing and City Alley Resurfacing project is awarded by the Council. Residents will be provided with information to follow the project details, schedule, and updates on the City website. The Contractor will also be required to distribute notification letters to affected residents and post street signages at least 48-hours prior to start of work.

Recommendation

Adopt a resolution to A) award the Base Bid, Additive Alternate No. 2, and Additive Alternate No. 3 for the Annual Street Resurfacing and City Alley Resurfacing Project to O'Grady Paving, Inc. and authorize the City Manager to execute a contract in the amount of $6,006,256, B) authorize the City Manager to execute change orders up to 15% ($900,938) of the construction contract, and C) authorize the Interim Finance Director to amend the FY 2022/23 CIP budget, as follows:

1. transfer $51,069 from CIP TS-01001 (General Fund) to CIP TS-01003
2. transfer $49,261 from CIP TS-01001 (General Fund) to CIP TS-01009
3. transfer $50,000 from the Traffic Impact Fee budget in CIP TS-01007 to the Vehicle Registration Fee budget
4. transfer $163,851 from the Traffic Impact Fee budget in CIP TS-01022 to the Vehicle Registration Fee budget
5. transfer $300,000 from the Traffic Impact Fee budget in CIP TS-01060 to the Vehicle Registration Fee budget
6. appropriate $930,672 in unallocated Gas Tax funds into CIP TS-01001
7. appropriate $310,180 in unallocated SB1/RMNA funds into CIP TS-01001
8. appropriate $581,815 in anticipated Measure B funds, into CIP TS-01001

2022 Annual Street Resurfacing Project



LEGEND:

- Digout & Micro-surfacing
- 2'' Mill & Fill Streets
- Signage & Striping Only

*City Alley 22&23 located between Lassen St and Gabian St

CITY OF LOS ALTOS ENGINEERING SERVICES DEPARTMENT SANTA CLARA COUNTY, CALIFORNIA	2022 Resurfacing Project Map E-7

DRAWN BY:	–
CHECKED BY:	–
APPROVED BY:	–
DATE:	–
SCALE:	NTS
DWG NO.:	–

Attachment No. 2

CITY OF LOS ALTOS
2022 STREET RESURFACING AND CITY ALLEY RESURFACING PROJECT (TS-01001, TS-01004, TS-01009, TS-01003, TS-01005, TS-01006, TS-01008, TS-01060, TS-01052, TS-01007, and TS-01022)

BID OPENING
August 11, 2022, 2:00 PM
City of Los Altos Civic Center
One North San Antonio Road
Los Altos, CA 94022

CONTRACTOR	BASE BID	ADD ALT 1	ADD ALT 2	ADD ALT 3	TOTAL BID
O'Grady, Paving Inc.	$5,711,830.95	$334,693.90	$123,600.00	$170,825.00	$6,340,949.85
Granite Rock Company	$5,975,905.10	$342,816.00	$165,000.00	$173,100.00	$6,656,821.10
Interstate Grading & Paving	$6,102,479.40	$341,461.80	$110,700.00	$121,495.00	$6,676,136.20

8/12/2022

BIDS HAVE BEEN VERIFIED

RESOLUTION NO. 2022-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS FOR AWARD OF CONSTRUCTION CONTRACT FOR ANNUAL STREET RESURFACING AND CITY ALLEY RESURFACING PROJECT AND AUTHORIZATION TO AMEND THE FISCAL YEAR 2022/23 CIP BUDGET

WHEREAS, the Annual Street Resurfacing and City Alley Resurfacing Project includes the annual scope of work to resurface Los Altos streets and alleys and integrates mobility enhancements to improve safety for all modes of transport, with an emphasis on safer routes to schools.

WHEREAS, all work supports the Council Priorities of Community Safety and Asset Management; and

WHEREAS, on July 20, 2022, the City advertised the Annual Street Resurfacing and City Alley Resurfacing Project for bidding; and

WHEREAS, on August 11, 2022, the City received and opened three (3) bids in a public virtual session; and

WHEREAS, the FY 22/23 Council-approved CIP budget has adequate funding to fund the project.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Los Altos hereby adopt a resolution to:

1. Award the Base Bid, Additive Alternate No. 2, and Additive Alternate No. 3 for the Annual Street Resurfacing and City Alley Resurfacing Project to O'Grady Paving, Inc., and authorize the City Manager to execute an agreement with O'Grady Paving, Inc. in an amount not to exceed $6,006,256,

2. Authorize the City Manager to execute change orders up to 15% ($900,938) of the construction contract,

3. Authorize the City Manager to take such further actions as may be necessary to implement the foregoing agreement, and

4. Authorize the Interim Finance Director to amend the FY 2022/23 CIP budget, as follows:

    a) transfer $51,069 from CIP TS-01001 (General Fund) to CIP TS-01003
    b) transfer $49,261 from CIP TS-01001 (General Fund) to CIP TS-01009
    c) transfer $50,000 from the Traffic Impact Fee budget in CIP TS-01007 to the Vehicle Registration Fee budget

d) transfer $163,851 from the Traffic Impact Fee budget in CIP TS-01022 to the Vehicle Registration Fee budget
e) transfer $300,000 from the Traffic Impact Fee budget in CIP TS-01060 to the Vehicle Registration Fee budget
f) appropriate $930,672 in unallocated Gas Tax funds into CIP TS-01001
g) appropriate $310,180 in unallocated SB1/RMNA funds into CIP TS-01001
h) appropriate $581,815 in anticipated Measure B funds, into CIP TS-01001

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a meeting thereof on the 20th day of September 2022 by the following vote:

AYES: Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows, Mayor Enander
NOES: None
ABSENT: None
ABSTAIN: None

_____
Anita Enander, MAYOR

Attest:

_____
Angel Rodriguez, Interim City Clerk

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject Emergency Declaration Resolution

Prepared by: Jon Maginot, Assistant City Manager
Approved by: Gabe Engeland, City Manager

Attachment(s):
1. Resolution No. 2022-xx

Initiated by:
Staff

Previous Council Consideration:
March 12, 2020 (Declaration of Emergency); March 17, 2020; August 24, 2021; October 12, 2021; November 9, 2021; December 7, 2021; January 11, 2022; February 8, 2022; March 8, 2022; April 12, 2022; May 10, 2022; June 14, 2022; July 12, 2022; August 4, 2022; August 23, 2022

Fiscal Impact:
None; however, a local emergency declaration is a prerequisite for requesting state or federal assistance.

Environmental Review:
Not applicable

Policy Question(s) for Council Consideration:
- Does the Council wish to renew its existing declaration by adopting a resolution declaring a local emergency to emphasize the need for continued adherence to public health guidance?

Summary:
- AB 361 requires the City to adopt a resolution every 30 days extending a local emergency declaration to continue to allow legislative bodies to meet virtually

Staff Recommendation:
Adopt a Resolution extending the declaration of a local emergency due to the COVID-19 pandemic

Reviewed By:

City Manager	City Attorney	Finance Director
JM	JH	SN

Subject: Emergency Declaration Resolution

Purpose
To adopt a resolution extending the existing declaration of emergency

Background
On March 12, 2020, the City Manager issued an Emergency Declaration in response to the COVID-19 pandemic. On March 17, 2020, the City Council adopted Resolution No. 2020-08 ratifying the Emergency Proclamation. The City Council subsequently adopted resolutions monthly beginning in October 2021 continuing the declaration of the existence of a local emergency due to the COVID-19 pandemic.

The threat posed by COVID-19 continues to pose a serious risk to the public health and safety of the City of Los Altos.

Discussion/Analysis
AB 361, signed into law on September 15, 2021, allows a public agency to continue to hold virtual City Council and Commission meetings while under a declaration of emergency without complying with certain elements of the Ralph M. Brown Act. The bill requires that a legislative body renew the declaration of emergency every 30 days in order to continue meeting in this manner. AB 361 applies to local agencies until January 1, 2024.

Recommendation
The staff recommends Council adopt the attached resolution extending the declaration of emergency due to the COVID-19 pandemic.

RESOLUTION NO. 2022-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS DECLARING THE EXISTENCE OF A LOCAL EMERGENCY DUE TO THE COVID-19 PANDEMIC

WHEREAS, on March 12, 2020, the Los Altos City Manager, in his capacity as the City's Director of Emergency Services, proclaimed a local emergency in response to the escalation of COVID-19 to a pandemic, and on March 17, 2020, the City Council adopted Resolution 2020-08 ratifying and continuing the proclamation of local emergency; and

WHEREAS, since October 2021, the City Council has monthly adopted resolutions extending the declaration of a local emergency; and

WHEREAS, by the beginning of August 2022, over 2,300 Santa Clara County residents had died of COVID-19; and

WHEREAS, due to the diligence of Los Altos residents in complying with health guidance Los Altos has one of the lowest rates of reported incidence of COVID-19 infection in Santa Clara County; and

WHEREAS, vaccines provide proven protection against COVID-19; and

WHEREAS, by the beginning of August 2022, approximately 92 percent of Santa Clara County residents over the age of 5 had been vaccinated, and statewide vaccination rates were higher than the national average; and

WHEREAS, the Governor lifted the Blueprint for a Safer Economy on June 15, 2021, and local health restrictions have also been lifted due to sharp declines in COVID-19 case counts since vaccines first became available; and

WHEREAS, despite progress in addressing the pandemic, not all eligible individuals are fully vaccinated, and new, more virulent variants of the SARS-CoV-2 virus are spreading in California and throughout the world; and

WHEREAS, although breakthrough infections are rare for fully vaccinated individuals, available COVID-19 vaccines have proven less effective against variants than against prior strains of the SARS-CoV-2 virus; and

WHEREAS, despite significant progress, COVID-19 remains a threat to public health and safety in the Los Altos community; and

WHEREAS, throughout the pandemic, the City of Los Altos has taken steps to address the health crisis, for example, by facilitating outdoor dining within the City; and

WHEREAS, AB 361 requires the City Council make findings every thirty (30) days reaffirming the existence of a local emergency; and

WHEREAS, in view of the ongoing health crisis, the City Council now desires to affirm its existing declaration of local emergency.

NOW THEREFORE, BE IT RESOLVED, by the City Council of the City of Los Altos that:

1. The City Council has reviewed the need for continuing the declaration of local emergency and finds, based on substantial evidence, that the foregoing recitals are true and correct and that the public interest and necessity require the continuance of the proclamation of local emergency related to COVID-19.

2. Said local emergency shall be deemed to continue to exist until terminated by the City Council of the City of Los Altos.

3. The Director of Emergency Services is hereby directed to report to the City Council within thirty (30) days on the need for further continuing the local emergency. At this If deemed appropriate the City Council may take further action.

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a meeting thereof on the ___ day of ____, 2022 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Anita Enander, MAYOR

Attest:

_____
Angel Rodriguez, INTERIM CITY CLERK

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject Consider approval of Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc. for the CIPP Corrosion Rehabilitation, Project WW-01005; find that the approval of the amendment is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15301

Prepared by: Thanh Nguyen, Senior Civil Engineer
Reviewed by: Aida Fairman, Environmental Services and Utilities Director
Approved by: Gabriel Engeland, City Manager

Attachments:
Attachment A – Resolution No. 2022-__

Initiated by:
Staff

Previous Council Consideration:
- September 30, 2021 – Approval of the Agreement Between the City Of Los Altos and Freyer & Laureta, Inc. for the Professional Engineering Services for CIPP Corrosion Rehabilitation, Project WW-01005

Fiscal Impact:
Amendment No. 1 to the Professional Engineering Services for CIPP Corrosion Rehabilitation, Project WW-01005 will be in the not-to-exceed amount of $31,150 (for construction inspection services):

- The proposed Amendment No. 1 will increase the total contract value from $151,100 to $182,250.
- The funds for this Amendment No. 1 are already included in the approved Environmental Services and Utilities Department Sewer CIP project budget for FY 2022-2023 in the amount of $917,386.

Environmental Review:
The approval of the amendment is categorically Exempt from review under CEQA pursuant to CEQA Guidelines Section 15301(b) (Existing Facilities), in that the project consists of the repair and maintenance or minor alteration of existing sewerage publicly-owned sewerage facilities

Reviewed By:

City Manager	City Attorney	Interim Finance Director
GE	JH	SN

Subject: Consider approval of Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc. for the CIPP Corrosion Rehabilitation, Project WW-01005; find that the approval of the amendment is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15301

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involving negligible or no expansion of existing or former use, and none of the circumstances stated in CEQA Guidelines Section 15300.2 applies.

Summary:

• This Amendment No. 1 would provide additional funds for general daily construction inspection services for the CIPP Corrosion Rehabilitation, Project WW-01005.

Staff Recommendation:

Authorize the City Manager to execute Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc. in the amount not-to-exceed of $31,150 for construction inspection services for the CIPP Corrosion Rehabilitation, Project WW-01005, for a total contract amount of $182,250.

Subject: Consider approval of Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc. for the CIPP Corrosion Rehabilitation, Project WW-01005; find that the approval of the amendment is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15301

Purpose

Authorize the City Manager to execute Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc. in the amount not-to-exceed of $31,150 for construction inspection services for the CIPP Corrosion Rehabilitation, Project WW-01005, for a total contract amount of $182,250.

Background

The 2013 Sanitary Sewer Master Plan Update recommended the rehabilitation of pipe segments at various locations throughout the City. This project consists of lining four trunk sewer main segments located on El Camino Real. These four lines range in size from 27 to 30 inches in diameter and would be rehabilitated using the trenchless method of Cured-In-Place Pipe (CIPP) lining.

On September 30, 2021, the City entered into an agreement in the amount of $151,100 with Freyer & Laureta, Inc. for the CIPP Corrosion Rehabilitation, Project WW-01005. The work included performing professional engineering services and preparing plans, specifications, and Engineer's estimate. Currently, the project is moving toward the construction phase and needs inspection services to be performed in the near future. This is a specialty inspection that is always performed by outside inspectors. Additional funds are now being requested to contract with Freyer & Laureta, Inc. to perform construction inspection services for the project.

Discussion/Analysis

The proposed Amendment No. 1 would extend Freyer & Laureta's services to include the daily construction inspection services until the project is constructed and closed out. Tasks include, but are not limited to, full-time daily site visits, preparation of the construction daily construction reports, coordination with the City's Project Manager, the project contractor, and other agencies.

Recommendation

Authorize the City Manager to execute Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc. in the amount not-to-exceed of $31,150 for construction inspection services for the CIPP Corrosion Rehabilitation, Project WW-01005, for a total contract amount of $182,250.

RESOLUTION NO. 2022-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS AUTHORIZING THE CITY MANAGER TO EXECUTE AN AMENDMENT NO. 1 TO THE PROFESSIONAL SERVICES AGREEMENT WITH FREYER & LAURETA FOR THE CIPP CORROSION REHABILITATION, PROJECT WW-01005 IN AN AMOUNT NOT-TO-EXCEED $31,150

WHEREAS, the project, which consists of lining four trunk sewer main segments located on El Camino Real, will provide necessary rehabilitation to the City's sanitary sewer system to ensure its proper functioning; and

WHEREAS, Fryer & Laureta has satisfactory completed similar projects for the City of Los Altos and other municipalities; and

WHEREAS, the project is Categorically Exempt from environmental review pursuant to CEQA Section 15301 (b) consisting of the repair and maintenance or minor alteration of existing publicly-owned sewerage facilities involving negligible or no expansion of existing or former use.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Los Altos hereby:

1. Authorize the City Manager to execute Amendment No. 1 to the Professional Services Agreement with Freyer & Laureta, Inc. in the not-to-exceed amount of $31,150 for construction inspection services for the CIPP Corrosion Rehabilitation, Project WW-01005.

2. Authorizes the City Manager to take such further actions as may be necessary to implement the foregoing agreement.

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a meeting thereof on the 20th day of September, 2022, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Anita Enander, MAYOR

Attest:

_____
Angel Rodriguez, INTERIM CITY CLERK

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement

Prepared by: Thanh Nguyen, Senior Civil Engineer
Reviewed by: Aida Fairman, Environmental Services and Utilities Director
Approved by: Gabriel Engeland, City Manager

Attachments:
Attachment A – Resolution No. 2022-__
Attachment 1 – Addendum 11 to Basic Agreement Between the City of Palo Alto, the City of Mountain View, and the City Of Los Altos for the Acquisition, Construction, and Maintenance of a Joint Sewer System

Initiated by:
Palo Alto Regional Water Quality Control Plant (RWQCP) Long-Range Facilities Plan

Previous Council Consideration:
- June 26, 2012 – Oral presentation from the City of Palo Alto regarding the Final Draft report of the Long-Range Facilities Plan for the RWQCP for informational purposes only.

- February 23, 2016 – Approval of Amendment 8 for the design of the Primary Sedimentation Tank Rehabilitation and Secondary Treatment Upgrades Projects.

- May 26, 2020 – Approval of Amendment No. 10 for constructing the Primary Sedimentation Tank Rehabilitation Project.

Fiscal Impact:
The SRF loan for thein-progress primary sedimentation tank rehabilitation project is being amended from the already approved $17.0 million in Amendment 10 to a new financing amount of $19.4 million, asd detailed in Amendment 11. Loan repayments for the primary sedimentation tank rehabilitation project will begin in 2024, one year after project substantial completion.

The SRF loan for the secondary treatment upgrades project is approximately $169 million. Total project cost estimates were adjusted when new engineer's cost estimates and design stages were completed. The requested loan amount reflects securing the initial loan with a conservative total

Subject: Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement

project estimate. The design and construction of this project, including assicated construction management and administrative costs, will be financed through the SRF loan, which is disbursed to Palo Alto on a reimbursement basis. Pursuant to SRF policy, the first repayment occurs one year after project substantial completion, which is estimated to be in 2028, one year after project completion. The annual SRF loan repayment, which includes principal and interest, will be based on an amortized period of 30 years.

The estimated annual repayments contributed by contributing partner agency for the Primary Sedimentation Tank Rehabilitation Project and the Secondary Treatment Upgrades Project are summarized in Tables 1 and 2 below:

Table 1: CWSRF (California Clean Water State Revolving Fund) Loan Repayment Partner Agency Estimates Primary Sedimentation Tank Rehabilitation Project

Contributing Partner Agency	Percent Share	Annual Repayment[1]
Palo Alto	38.16%	$282,682
Mountain View	37.89%	$280,681
Los Altos	9.47%	$70,152
East Palo Alto Sanitary District	7.64%	$56,595
Stanford University	5.26%	$38,965
Los Altos Hills	1.58%	$11,704
Total:	**100.00%**	**$740,779**

Note: 1. Based on CWSRF loan amount of $19,400,000 at 0.9% locked interest rate for a 30-year term

Table 2: CWSRF Loan Repayment Partner Agency Estimates Secondary Treatment Upgrades Project

Contributing Partner Agency	Percent Share	Annual Repayment[1]
Palo Alto	38.16%	$2,421,600
Mountain View	37.89%	$2,404,466
Los Altos	9.47%	$600,958
East Palo Alto Sanitary District	7.64%	$484,828
Stanford University	5.26%	$333,795
Los Altos Hills	1.58%	$100,265
Total:	**100.00%**	**$6,345,912**

Subject: Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement

Note: 1. Based on CWSRF loan amount of $168,658,977 at 0.8% locked interest rate for a 30-year term

Environmental Review:
This action is not a project subject to California Environmental Quality Act (CEQA) review under section 15378(b)(4) of the CEQA Guidelines in that it is a government fiscal activity which does not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment. The underlying Secondary Treatment Upgrades Project is exempt under sections 15301, 15302, and 15303 of the CEQA Guidelines. The City of Palo Alto filed a Notice of Exemption for the Secondary Treatment Upgrades Project on April 2, 2021 (State Clearinghouse #2021040051).

Summary:
- The Palo Alto Regional Water Quality Control Plant (RWQCP) provides wastewater treatment services for the cities of Palo Alto, Mountain View, Los Altos, Town of Los Altos Hills, East Palo Alto Sanitary District, and Stanford University. Over the years, the costs for projects to upgrade the RWQCP have been shared proportionally by the various agencies.
- In 2012, the RWQCP Long-Range Facilities Plan (LRFP) was prepared to provide a plan for future capital improvement program projects--addressing aging equipment and increasing regulatory requirements.
- The Primary Sedimentation Tank Rehabilitation Project and the Secondary Treatment Upgrades Project address aging infrastructure.

Staff Recommendation:
Authorize the City Manager to execute Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement between the cities of Palo Alto, Mountain View, and Los Altos to fund rehabilitation and upgrade of the secondary treatment system and to increase the financing of the primary sedimentation tank rehabilitation project

Subject: Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement

Purpose
Authorize the City Manager to execute Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement between the cities of Palo Alto, Mountain View, and Los Altos to fund rehabilitation and upgrade of the secondary treatment system and to increase the financing of the primary sedimentation tank rehabilitation project.

Background
In 1968, the cities of Mountain View and Los Altos agreed to retire their wastewater treatment plants and approved a contract with the City of Palo Alto (Basic Agreement, also referred to as the Partners Agreement) for the acquisition, construction, and maintenance of a joint wastewater treatment plant. The Plant began operating in 1972. The Basic Agreement was originally set to expire on July 1, 2035, but was extended to December 31, 2060, as part of Amendment No. 8.

The Palo Alto Regional Water Quality Control Plant (Treatment Plant) provides wastewater treatment services for the cities of Palo Alto, Mountain View, Los Altos, Town of Los Altos Hills, East Palo Alto Sanitary District, and Stanford University. Over the years, various agencies have shared project costs to upgrade the Treatment Plant.

The Treatment Plant is an advanced treatment facility that uses a multi-stage process to remove organic materials and other pollutants from approximately 17 million gallons per day of wastewater generated in the service area. The treated effluent is predominantly discharged to San Francisco Bay and meets the stringent requirements for reuse in recycled water applications. Per the Basic Agreement, Palo Alto owns and operates the Treatment Plant's wastewater treatment and disposal facilities and is responsible for managing capital improvements to the Plant. Partner cities must amend the Basic Agreement to implement and fund major capital projects to replace obsolete or end-of-life equipment.

In 2012, the RWQCP Long-Range Facilities Plan (LRFP) was prepared to provide a plan for future capital improvement program projects--addressing aging equipment and increasing regulatory requirements. The major recommendation of the LRFP was to rehabilitate and replace existing facilities nearing the end of their useful life. The highest priority projects are being implemented over multiple years to manage resources and costs effectively.

Based on LRFP recommendations, Los Altos' Council approved Amendment No. 8 in 2016, Amendment No. 9 in 2018, and Amendment No. 10 in 2020 to authorize the construction and cost-sharing of a sludge dewatering and truck loadout facility; funding for the design of the secondary treatment upgrades project; and funding for the design and construction of the primary sedimentation tank rehabilitation project. Construction of the sludge dewatering facility was completed in 2019, which was a key component of the LRFP. The primary sedimentation tank rehabilitation project is in construction and will be completed in 2023. Other facilities requiring capital improvement in the next ten years for facilities at the end of their useful life include a new

outfall pipe, new support facilities, relining of an aging joint intercepting sewer, and a new headworks facility.

The Treatment Plant was originally constructed in 1934 and has undergone several expansions and upgrades. A key upgrade in 1972 included the construction of a biological treatment process unit (i.e., secondary treatment). The process unit consists of four concrete aeration basins (each measuring 120 feet by 135 feet and 20 feet deep) that allow the growth of specific bacteria to break down and remove organic compounds in the wastewater. Ancillary facilities included an air blower room and pump stations. This equipment delivers oxygenated process air and recirculates sludge as needed. Other equipment includes a standby power generator, electrical switchgear, and motor control centers to distribute electrical power to the process equipment. This equipment is between 28 to 50 years old and beyond its useful life. The current secondary treatment process is not able to remove nitrogen which is a new regulatory requirement to discharge treated effluent to San Francisco Bay.

Design work for the Secondary Treatment Upgrades project is complete. Construction documents have been prepared, and bids are being solicited from construction contractors. Palo Alto will then award contracts for construction and construction management.

California Clean Water State Revolving Fund (SRF) Program

The State Water Resources Control Board Division of Financial Assistance administers the Clean Water State Revolving Fund (SRF) program. The SRF program provides low-interest financing to agencies for wastewater projects. Under this program, eligible projects can apply for loans with interest rates approximately half of the State General Obligation rate, resulting in lower project costs and maximizing benefits ti ratepayers and partner agencies. For the Secondary Treatment Upgrades project, Palo Alto executed a loan with the SRF program on May 9, 2022 with favorable terms, including a 0.8% locked-in interest rate, a 30-year term, project financing of approximately $169 million, and debt payments that will start one year after substantial project completion.

The total SRF loan application includes the costs for planning, design, construction, construction contingency, capital program administration, and construction management. The partner agreements with Mountain View, Los Altos, East Palo Alto Sanitary District, and Stanford University all require modification to the document commitment to the project repayment of the SRF Loan.

Discussion/Analysis

Amendment No. 11 will authorize construction funding to rehabilitate the Primary sedimentation Tank Rehabilitation Project and the Secondary Treatment Upgrades Project.

Previously, Council approved Amendment No. 10 to fund the Primary Sedimentation Tank Rehabilitation Project. Amendment No. 11 will increase the maximum amount of financing

Subject: Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement

authorized for the construction of the Primary Sedimentation Tank Rehabilitation Project to reflect increases in project costs, including design engineering, construction management, construction contingency, program management, and construction costs.

The Primary Sedimentation Tank Rehabilitation Project addresses aging infrastructure. The primary sedimentation tanks are four in number, each 220 feet long by 41 feet wide by 14 feet deep and covered with a concrete slab. The purpose of these tanks is to remove the majority of the settleable solids. Removal of the settleable solids from the wastewater reduces the organic loading on the secondary treatment process. Electrical gear associated with the primary sedimentation tanks installed in 1972 distributes electrical power to the sludge pumping and collection equipment. Periodically, failures of aged equipment have led to partial process outages and associated expedited repairs and expensive maintenance. The project will rehabilitate the primary sedimentation tank structure and upgrade the associated mechanical and electrical equipment.

For the Primary Sedimentation Tank Rehabilitation Project, assuming an estimated maximum cost of $19.4 million, an interest rate of 0.9 percent, and a 30-year loan with repayments beginning the year after project completion, the Partners' annual loan payments will be as shown on the first table under "Fiscal Impact" on page 2 of this report. For Los Altos, the estimated payment is $70,152 annually for 30 years. Annual payments begin approximately December 2023, with the final payment approximately December 2053.

The secondary treatment process must be upgraded to a process that removes harmful nitrogen by creating both oxygen-deficient and oxygen-rich zones in modified aeration tanks. The project will improve final water quality, ensure the Plant continues to meet effluent discharge permit limits, and allow for ultimate decommissioning of the aging bio-trickling filters and other aging equipment. The project will rehabilitate four concrete aeration basins as well as the blower room and sludge pumping stations. Equipment will be replaced, including piping and ancillary systems, extending the useful life of mechanical and electrical equipment components by at least another 30 years, while the concrete and steel structure life cycle will be extended by at least another 50 years. The scope of work includes the following for all four basins: replacement of the air bubble diffusers and the piping manifolds in the basins; replacement and automation of influent and effluent flow diversion gates; concrete work to install new flow channels for flow distribution; replacement of air blowers and sludge pumps; installation of two pump stations, a standby generator and an electrical power load center; and replacement of aging motor control centers (i.e., electrical power distribution equipment).

For the Secondary Treatment Upgrades Project, assuming an estimated maximum cost of $168.7 million, an interest rate of 0.8 percent, and a 30-year loan with repayments beginning the year after project completion, the Partners' annual loan payments will be as shown on the second table under "Fiscal Impact" on page 2 of this report. For Los Altos, the estimated payment is $600,958

Subject: Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement

annually for 30 years. Annual payments begin approximately June 2027, with the final payment approximately June 2057.

Recommendation

Authorize the City Manager to execute Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement between the cities of Palo Alto, Mountain View, and Los Altos to fund rehabilitation and upgrade of the secondary treatment system and to increase the financing of the primary sedimentation tank rehabilitation project

RESOLUTION NO. 2022-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS AUTHORIZING THE CITY MANAGER TO EXECUTE AMENDMENT NO. 11 TO THE REGIONAL WATER QUALITY CONTROL PLANT BASIC AGREEMENT BETWEEN THE CITY OF PALO ALTO, THE CITY OF MOUNTAIN VIEW AND THE CITY OF LOS ALTOS FOR THE ACQUISITION, CONSTRUCTION AND MAINTENANCE OF THE JOINT SEWER SYSTEM

WHEREAS, City of Palo Alto and City of Los Altos have entered a Joint Sewer System Agreement and subsequent amendments No. 1 through No. 10; and

WHEREAS, the Amendment No. 11, which provides funding to rehabilitate and upgrade the Secondary Treatment Upgrades Project and increases the financing of the Primary Sedimentation Tank Rehabilitation Project; and

WHEREAS, the Project is not a project subject to California Environmental Quality Act (CEQA) review under section 15378(b)(4) of the CEQA Guidelines in that it is a government fiscal activity which does not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment. The underlying Secondary Treatment Upgrades Project is exempt under sections 15301, 15302, and 15303 of the CEQA Guidelines. The City of Palo Alto filed a Notice of Exemption for the Secondary Treatment Upgrades Project on April 2, 2021 (State Clearinghouse #2021040051).

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Los Altos hereby:

1. Authorize the City Manager to execute Amendment No. 11 to the Regional Water Quality Control Plant Basic Agreement between the cities of Palo Alto, Mountain View, and Los Altos to fund rehabilitation and upgrade of the secondary treatment system and to increase the financing of the primary sedimentation tank rehabilitation project.

2. Authorizes the City Manager to take such further actions as may be necessary to implement the foregoing agreement.

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a meeting thereof on the 20th day of September, 2022, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Anita Enander, MAYOR

Attest:

_____
Angel Rodriguez, INTERIM CITY CLERK

ADDENDUM NO. ELEVEN TO THE BASIC AGREEMENT BETWEEN THE CITY OF PALO ALTO, THE CITY OF MOUNTAIN VIEW AND THE CITY OF LOS ALTOS FOR THE ACQUISITION, CONSTRUCTION AND MAINTENANCE OF A JOINT SEWER SYSTEM

This Addendum No. Eleven (11) to the Basic Agreement for the Acquisition, Construction and Maintenance of a Joint Sewer System is made and entered into on [DATE], by and among the CITY OF PALO ALTO ("Palo Alto"), the CITY OF MOUNTAIN VIEW ("Mountain View"), and the CITY OF LOS ALTOS ("Los Altos") (individually, a "Party", collectively, the "Parties"), all municipal corporations under the laws of the State of California.

RECITALS

A. The Parties have entered into that certain Basic Agreement Between the City of Palo Alto, the City of Mountain View and the City of Los Altos for the Acquisition, Construction, and Maintenance of a Joint Sewer System, executed on October 10, 1968, as amended by the Addenda described below (collectively, the "Basic Agreement"). The Basic Agreement has been amended ten times by addenda, as follows: Addendum No. One (1) to Basic Agreement Between the Cities of Palo Alto, Mountain View, and Los Altos for Acquisition, Construction and Maintenance of a Joint Sewer System, dated as of December 5, 1977; Addendum No. Two (2) to Basic Agreement Between the Cities of Palo Alto, Mountain View, and Los Altos for Acquisition, Construction and Maintenance of a Joint Sewer System dated as of January 14, 1980; Addendum No. Three (3) to an Agreement By and Between the Cities of Palo Alto, Mountain View, and Los Altos for Acquisition, Construction and Maintenance of a Joint Sewer System, dated as of April 9, 1985; Addendum No. Four (4) to the Agreement By and Between the Cities of Mountain View, Los Altos, and Palo Alto as further amended and dated May 30, 1991; Addendum No. Five (5) to Basic Agreement Between the Cities of Palo Alto, Mountain View, and Los Altos for Acquisition, Construction and Maintenance of a Joint Sewer System, dated as of July 31, 1992; Addendum No. Six (6) to Basic Agreement Between the City of Palo Alto, the City of Mountain View, and the City of Los Altos for Acquisition, Construction and Maintenance of a Joint Sewer System dated as of March 16, 1998; and Addendum No. Seven (7) to Basic Agreement Between the City of Palo Alto, the City of Mountain View, and the City of Los Altos for Acquisition, Construction and Maintenance of a Joint Sewer System dated as of April 15, 2009; Addendum No. Eight (8) to the Basic Agreement between the City of Palo Alto, the City of Mountain View and the City of Los Altos for the Acquisition, Construction, and Maintenance of a Joint Sewer System dated as of October 17, 2016; Addendum No. Nine (9) to the Basic Agreement between the City of Palo Alto, the City of Mountain View and the City of Los Altos for the Acquisition, Construction and Maintenance of a Joint Sewer System dated March 4, 2019; and Addendum No. Ten (10) to the Basic Agreement between the City of Palo Alto, the City of Mountain View, and the City of Los Altos for the Acquisition, Construction and Maintenance of a Joint Sewer System dated May 17, 2021 (collectively, the "Addenda").

B. Palo Alto owns and operates the sanitary sewerage treatment and disposal works and system (the "Joint System") pursuant to the Basic Agreement, and is responsible for making capital additions to the Joint System. Under the Basic Agreement, any major capital additions for the replacement of obsolete or worn-out units require an agreement by the Parties amending the Basic Agreement.

C. The Parties now desire to increase the maximum amount of financing authorized for the construction of the Primary Sedimentation Tank Project approved by Addendum No. Ten (10) to reflect increases in Project Costs as defined therein, including design engineering, construction management, program management, and construction costs.

D. The Parties further desire to agree to construct a project to improve the Joint System by upgrading the secondary treatment process (biological process) to a process that removes harmful nitrogen by creating anoxic and aerated zones in existing aeration basins. The project will improve final water quality, ensure the Plant continues to meet effluent discharge permit limits, and allow for ultimate decommissioning of the aging biotrickling filters and other aging equipment. The Parties also agree to provide for the sharing of costs associated with this project. The project will become part of the Regional Water Quality Control Plant (the "Plant"), which is owned and operated by Palo Alto as part of the Joint System.

AGREEMENT

NOW, THEREFORE, in consideration of the terms, conditions and covenants set forth in this Addendum No. Eleven (11), the Basic Agreement is hereby amended, as follows:

Section 1. Paragraph 41 is hereby added to the Basic Agreement to read, as follows:

> "41. MAXIMUM AMOUNT OF FINANCING FOR THE PRIMARY SEDIMENTATION TANK REHABILITATION PROJECT. The maximum amount of financing authorized for the Primary Sedimentation Tank Rehabilitation Project described in Paragraph 40 is increased from $17.0 million to $19.4 million."

Section 2. Paragraph 42 is hereby added to the Basic Agreement to read, as follows:

> "42. CONSTRUCTION AND IMPLEMENTATION OF THE SECONDARY TREATMENT UPGRADES PROJECT. Palo Alto, Mountain View, and Los Altos hereby approve the construction of various improvements collectively referred to as the Secondary Treatment Upgrades or "STU" Project. The STU Project includes: new air blowers; air diffusers in aerobic zones; anoxic zone pulsed air equipment; membrane aerated biofilm reactor cassettes; slide and sluice gates and valves to isolate and throttle flows; instruments such as flowmeters and oxygen probes; power distribution equipment including standby diesel generator and power transfer equipment; and return activated sludge piping and pumping. Each Party shall pay its share of the STU Project Costs, in proportion to the capacity it owns in the Joint System or portion thereof as shown in Exhibit "H" to Addendum No. Six (6) to the Basic Agreement. "Project Costs", as used in this Section 42, means all costs incurred in connection with the construction and implementation of these two Projects. Without limiting the generality of the foregoing, Project Costs shall include, but not be limited to: engineering and other consultants' fees and costs, including fees incurred pursuant to agreements with engineers, contractors and other consulting, design and construction professionals; deposits, applicable permit fees; all costs to apply for and secure necessary permits from all required regional, state, and federal agencies; plan check fees, and inspection fees; construction costs; initial maintenance; attorneys' fees and costs; insurance; interest from the date of payment on any contracts.
>
> The Parties authorize Palo Alto to receive State Revolving Fund ("SRF") loans from the State Water Resources Control Board ("SWRCB") or pursue other project financing (i.e. utility

revenue bonds) to fund the costs of the Project. The maximum amount of financing for the project is one hundred sixty-nine million dollars and no cents ($169,000,000).

The SRF loan will have a thirty-year repayment term. The repayments of the SRF loan shall be treated in the same manner as debt services under the Basic Agreement and its Addenda, and repaid by the Parties in the same proportionate shares as shown on Exhibit "H" to Addendum No. Six (6) to the Basic Agreement. The Parties further agree that, if necessary, each Party shall secure the funding necessary for repayment of the SRF loan, operations, and/or maintenance of the Projects, following any appropriate process executed under California Constitution article XIII C and D (Proposition 218).

If the SWRCB terminates its loan commitment unexpectedly following execution of the planning and/or construction contract(s) for the Project, Palo Alto shall notify the Parties promptly. Following notification of the termination of the SRF loan commitment, the Parties shall meet in a timely manner to discuss alternative funding sources and strategies for completion of the Project. If the Parties are unable to agree on new funding sources in a timely manner, then Palo Alto shall have the right to terminate the Project.

The Parties shall remain responsible for Project Costs and loans incurred, whether before or after termination of the Project/Projects, including costs incurred in connection with the termination of Project planning/design/construction contract(s), in the same proportion to each organization's share of Plant capacity, as stated in Exhibit "H" to Addendum No. Six (6) of the Basic Agreement. Total Project Costs shall not exceed the authorized maximum financing amount approved by Parties without prior approval of each Party's governing body. Unless earlier terminated, the obligations and responsibilities of the Parties shall commence with the execution of Addendum No. Eleven (11) to the Basic Agreement and be in force for the term of the SRF loan or other financing.

Mountain View and Los Altos shall pay their respective shares of any Project Costs within thirty (30) business days of receipt of the quarterly billing statement sent by Palo Alto. Palo Alto shall not send more than one invoice in any thirty-day period. If a Party disputes the correctness of an invoice, it shall pay the invoice in full and the dispute shall be resolved after payment in accordance with Section 19 of the Basic Agreement, and shall not offset against any payment due.

Section 3. Except as modified herein, the Basic Agreement shall remain unchanged, and is hereby ratified and confirmed.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties have by their duly authorized representatives executed this Addendum as of the date first written above.

CITY COUNCIL MEETING
MINUTES
7:00 PM - Tuesday, August 23, 2022
via Videoconference

CALL MEETING TO ORDER

At 7:00 p.m. Mayor Enander called the meeting to order.

ESTABLISH QUORUM

PRESENT: Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows and Mayor Enander

ABSENT: None

PLEDGE ALLEGIANCE TO THE FLAG

Elodie Guy with Troop 60078 and Julien Guy with Pack 103 led the pledge of allegiance.

REPORT ON CLOSED SESSION

Public Employment: City Manager Performance Evaluation:
Pursuant to Government Code section 54957(b)

Mayor Enander stated that a Closed Session was continued to after tonight's Regular Meeting.

CHANGES TO THE ORDER OF THE AGENDA

No changes were requested.

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

The following members of the public spoke: Kendall Nord, Jacob Sterling Silver, and Pierre Bedard.

CONSENT CALENDAR

1. **Minutes:** Approve Minutes of the City Council Special Meeting of August 4, 2022. (A. Rodriguez)

2. **Project Acceptance of Annual Street Striping Project TS-01003:** Adopt Resolution No. 2022-____ accepting the Annual Street Striping Project TS-01003; consider finding the project exempt from review under the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15301 (D. Fisch)

3. **Project Acceptance of El Monte Avenue Sidewalk Gap Closure Project TS-01038:** Adopt Resolution No. 2022-XX regarding Project Acceptance of the El Monte Avenue Sidewalk Gap Closure (TS-01038); consider finding that the project is exempt from review under the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15301 (N. Shahbazi)

4. **Quarterly Investment Portfolio Report** – Quarter Ended June 30, 2022 (S. Niederhofer)

5. **Emergency Declaration Resolution**: Adopt a resolution extending the declaration of a local emergency due to the COVID-19 pandemic (J. Maginot)

Following a motion by Council Member Fligor, seconded by Vice Mayor Meadows, Items 1-5, were approved with the following roll call vote:

AYES: Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows, Mayor Enander
NOES: None
ABSENT: None
ABSTAIN: None

PUBLIC HEARING

6. **Prometheus Real Estate Group, Inc - 5150 El Camino Real:** Consider the Proposed Vesting Tentative Subdivision Map, Inclusionary Housing, and State Density Bonus Modification for a 196-Unit Multiple Family Development at 5150 El Camino Real; consider finding that no further review under the California Environmental Quality Act (CEQA) is required for the project because the findings in CEQA Guidelines Section 15162 cannot be made (S. Gallegos)

Senior Planner Sean Gallegos presented to Council.

Council Member Weinberg disclosed that he had met with the applicant. Further, his client hired BKF Engineers, which worked on 5150 El Camino Real, as an expert witness in a legal case but he has not been in a financial relationship with the company.

Council Members Fligor, Lee Eng, and Vice Mayor Meadows also disclosed that they have met with the applicant.

The Prometheus Real Estate Group presented to Council. Council Member Fligor, Lee Eng, Weinberg, Vice Mayor Meadows asked clarifying questions.

Public Comment was provided by: Giovanni Ottoline, Jacob Sterling Silver, Jeanine Valadez, Andy Dolich, and Pierre Bedard.

The Prometheus Real Estate Group team responded to some of the public comments. Council engaged in further discussion.

At 9:14 pm, Mayor Enander called a for a recess and returned the meeting back to order at 9:25 pm.

Council engaged in further discussion amongst themselves and the Prometheus Real Estate Group.

DRAFT

Following a motion by Council Member Enander, seconded by Council Member Weinberg, the Council approved a resolution making findings, approving a vesting tentative subdivision map, inclusionary housing and density bonus modification for a 196- unit multiple-family development at 5150 El Camino Real as presented with the agreed changes to condition 26, with respect to the Parkland Dedication, once staff renumbers the conditions, and condition 42 regarding the five townhomes and to the priorities for the assignment of the BMRs as discussed and agreed upon by all parties at the meeting and making the finding that there is no further review under CEQA guidelines under section 15162 cannot be made. Motion passed with the following roll call vote:

AYES:	Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows, Mayor Enander
NOES:	None
ABSENT:	None
ABSTAIN:	None

DISCUSSION ITEMS – NONE

INFORMATIONAL ITEMS ONLY

7. Annual Development Impact Fees Report for Fiscal Year 2021

8. Tentative Council Calendar

COUNCIL/STAFF REPORTS AND DIRECTIONS ON FUTURE AGENDA ITEMS

Council Member Fligor inquired regarding the Complete Streets Master Plan moving further out to which Jim Sandoval, Engineering Services Director, responded.

Council Member Weinberg disclosed that he will be moving to a new residence in the north part of the City of Los Altos.

Council Member Lee Eng asked staff to look at the tape regarding the Chamber of Commerce request for funds. Mayor Enander supported this request and City Manager Engeland responded that staff would review the tape.

The Legislative Subcommittee will be looking into the ability for the Council to support ballot propositions utilizing a memo from City Attorney.

The Legislative Subcommittee is working on further recommendations for Council for a near future meeting.

City Manager Engeland gave an update of City activates.

DRAFT

ADJOURNMENT

Mayor Enander adjourned the Regular meeting at 10:54 pm to reconvene Closes Session at 10:58 pm. At 12:04 am, Mayor Enander announced that there was nothing to report and adjourned the meeting.

_____
Anita Enander MAYOR

ATTEST:

_____
Angel Rodriguez, INTERIM CITY CLERK

DRAFT

CITY COUNCIL SPECIAL MEETING
MINUTES – COMMISSION INTERVIEWS
5:30 PM - Tuesday, August 30, 2022
via Videoconference

CALL MEETING TO ORDER

At 5:32 p.m. Mayor Enander called the meeting to order.

ESTABLISH QUORUM

PRESENT: Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows and Mayor Enander

ABSENT: None

DISCUSSION ITEMS

1. **A. Conduct Interviews for Commission Vacancies**
   B. Council discussion of applicant pool, credentials and qualifications
   C. Council discussion of nomination/voting procedure for making appointments

The Council conducted interviews of interested candidates.

2. **Letter to County of Santa Clara regarding Stanford University Community Plan Update**

After Council discussion and following a motion by Council Member Fligor, seconded by Council Member Lee Eng, to approve and delegate authority to the Mayor to execute the letter and forward it on to the Santa Clara County Board of Supervisors Planning Commission and also delegate authority to the Mayor to make changes that still fall within the intent of the letter before the Council passed with the following roll call vote:

AYES:	Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows, Mayor Enander
NOES:	None
ABSENT:	None
ABSTAIN:	None

ADJOURNMENT

Mayor Enander adjourned the meeting at 8:47 pm.

_____
Anita Enander MAYOR

ATTEST:

_____
Angel Rodriguez, INTERIM CITY CLERK

DRAFT

CITY COUNCIL MEETING
MINUTES
7:00 PM - Tuesday, September 06, 2022
via Videoconference

DRAFT

CALL MEETING TO ORDER

At 7:00 p.m. Mayor Enander called the meeting to order.

ESTABLISH QUORUM

PRESENT: Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows and Mayor Enander

ABSENT: None

PLEDGE ALLEGIANCE TO THE FLAG

Ivy Berger-Morris and Siri Satish with Troop 60762 led the pledge of allegiance.

Mayor Enander announced that City Manager England was delayed, and Assistant City Manager Jon Maginot will be Acting City Manager while he arrives.

REPORT ON CLOSED SESSION

No closed session, nothing to report.

CHANGES TO THE ORDER OF THE AGENDA

No changes were requested.

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

There were none.

CONSENT CALENDAR

1. Accept Annual Development Impact Fees Report (J. Du)

2. **Minutes:** Approve Minutes of the City Council Regular Meeting of July 12, 2022. (A. Rodriguez)

Following a motion by Council Member Weinberg, seconded by Council Members Fligor, Items 1 and 2 were approved with the following roll call vote:

AYES:	Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows, Mayor Enander
NOES:	None
ABSENT:	None

ABSTAIN: None

PUBLIC HEARING

3. **4350 El Camino Real Multiple Family Development Project; 19-D-01, 19-UP-01 and 19-SD-01 -** Multiple-Family Design Review, Conditional Use Permit and Tentative Subdivision map for a new multiple-family development with a five-story building with 47 condominium units along El Camino Real with two levels of underground parking. The proposal includes seven affordable units with four moderate-income units and three very-low-income units, and a density bonus with development incentives to allow for increased building height and a reduced parking aisle width. A Mitigated Negative Declaration with Mitigation Monitoring and Reporting Program in compliance with the California Environmental Quality Act (CEQA) will be considered. (R. Hayagreev)

City Manager Engeland joined the meeting and Radha Hayagreev, Senior Contract Planner, gave a Staff presentation to Council.

Angie Galatolo, developer of 4350 El Camino Real along with David Kornfield, developer's consultant and Alex Seidel, developer's architect provided a presentation to Council.

Council Member Fligor, Vice Mayor Meadows and Mayor Enander asked questions to the Applicant and Staff.

Council Member Weinberg disclosed that his client hired BKF Engineers, which worked on 4350 El Camino Real, as an expert witness in a legal case but he has not been in a financial relationship with the company. Mayor Enander and Council Member Lee Eng disclosed that they had conversation with the applicant regarding story poles but no conversations regarding this development. Vice Mayor Meadows disclosed that she saw this first at a Planning Commission 4 years ago. Council Member Fligor disclosed that she has had no conversations with the applicant.

The following members of the Public spoke: Frank Martin, Greg Stewart, Anne Paulson, Abby Ahrens, Roberta Philips, Donald Gardner, Wendy, David Feld, Jeremy McCabe, Allison, Sergey Finkelstein, Renee Rashid, and Nancy Martin.

Angie Galatolo, owner of 4350 El Camino Real, responded to some public comments.

Council Member Fligor, Vice Mayor Meadows, Council Member Weinberg, Council Member Lee Eng, and Mayor Enander asked further questions to the applicant and provided additional comments.

Following a motion by Mayor Enander, seconded by Council Member Lee Eng, the Council adopted a mitigated negative declaration and approving the design review, conditional use permit and subdivision applications for a forty-seven unit multiple family development project at 4350 El Camino Real subject to the following changes:

- Condition 37: to be amended as specified by City attorney to account for the uncertainty with respect to the current, as-built size of the sewer
- Condition 38: to be amended by Staff to accommodate instruction for mitigating construction parking to minimize impact on Los Altos Ave and adjacent streets
- Condition 31; to be amended to have the Below Market Rate Deed Restriction increased from 55 to 99 years

- Applicant will work with staff to alter the landscape plan for the required common open space to ensure it meets code
- Roof deck amenity will be removed, reducing the elevator height
- Condition 17; to be amended to include language 'as verified by the Development Services Director

Motion was approved with the following roll call vote:

AYES: Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows, Mayor Enander
NOES: None
ABSENT: None
ABSTAIN: None

At 9:40 pm, Mayor Enander called for a recess and returned the meeting back to order at 9:50 pm.

The Council announced the continuance of Item 5 to the Sept 20th meeting.

DISCUSSION ITEMS

4. **Environmental Commission Reach Codes Recommendation:** Receive a presentation with recommended municipal code amendments regarding Reach Codes.

Environmental Commission Subcommittee composed of Tom Hecht, Don Weiden and Laura Teksler, presented to Council.

Council Member Fligor, Council Member Weinberg, Vice Mayor Meadows, Council Member Lee Eng and Mayor Enander asked clarifying questions. City Manager Engeland and City Attorney Houston provide clarifications.

The following members of the public spoke: Frank Martin, Jared Johnson, Pete Dailey, Freddie Wheeler, Renee Rashid, Gary Hedden, Christian Hansen, Mia Ravishankar, Roberta Philips, Diane Bailey, Michelle Hudson, Joe Beninato, Christian Hansen, Mia Ravishankar and Nancy.

Mayor Enander asked clarifying questions to the Environmental Subcommittee.

Mayor Enander moved to direct the Environmental Subcommittee to stop work on Reach Codes and allow the California State codes to take over in January 2023 which was seconded by Council Member Lee Eng.

Council Member Fligor, Vice Mayor Meadows, and Council Member Weinberg provided further comments.

Motion failed 2-3 with the following roll call vote:

AYES: Council Member Lee Eng, Mayor Enander
NOES: Council Members Fligor, Weinberg, Vice Mayor Meadows
ABSENT: None
ABSTAIN: None

DRAFT

Council Member Weinberg moved to adopt the first three recommendations, seconded by Council Member Fligor, as presented in the Staff report. Vice Mayor Meadows requested a friendly amendment to include the fourth recommendation in the staff report, which was accepted.

Motion passed 3-2 by the following roll call vote:

AYES: Council Member Fligor, Council Member Weinberg, Vice Mayor Meadows
NOES: Council Member Lee Eng, Mayor Enander
ABSENT: None
ABSTAIN: None

5. **Commission Appointments:** Consider Commission applications and make appointments as appropriate (A. Rodriguez)

Continued to September 20, 2022, Regula Meeting per Council direction.

INFORMATIONAL ITEMS ONLY

6. Tentative Council Calendar

7. Receive report from Legislative Subcommittee

Vice Mayor Meadows questioned the Council's position as noted on AB2181 as noted on the report. The Subcommittee will review and update the report if needed.

COUNCIL/STAFF REPORTS AND DIRECTIONS ON FUTURE AGENDA ITEMS

Council Member Weinberg asked for clarification as to their voting responsibilities to the CA League Cities to which Council Member Fligor responded.

City Attorney Houston asked Council for their support to work on a model ordinance for the Concealed Weapon Permit with neighboring jurisdiction. Council asked for it come back as an agenda item.

ADJOURNMENT

Mayor Enander adjourned the meeting at 12:28 pm

_____
Anita Enander MAYOR

ATTEST:

_____
Angel Rodriguez, INTERIM CITY CLERK

DRAFT

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject 330 Distel Circle Multiple Family Affordable Housing Development Project

Consider finding the project exempt from environmental review under Section 15332 (Class 32) of the California Environmental Quality Act (CEQA), and consider approval of the Design Review Permit and Conditional Use Permit for a 90-unit multiple family residential affordable rental housing development project at 330 Distel Circle (Application Nos. D22-0002 and CUP22-0001)

Prepared by: Radha Hayagreev, Consulting Senior Planner
Reviewed by: Steve Golden, Interim Planning Services Manager
Nick Zornes, Development Services Director

Attachment(s):

1. Draft Resolution 2022_XX with findings and Conditions of Approval
2. Notice of Exemption – Class-32 Categorical Exemption and Supporting Documents
3. Memorandum of Understanding between City of Los Altos and County of Santa Clara executed January 28, 2021.
4. Applicant's Density Bonus Report
5. August 18, 2022, Joint Planning Commission and Complete Streets Commission Agenda Report and Meeting Minutes
6. March 22, 2022, Story Pole Exemption minutes and conformance documents
7. Project Design Plans

Initiated by:
EAH Housing, Property Owner, and Applicant

Previous Council Considerations:
October 27, 2020: Memorandum of Understanding with the County of Santa Clara for an Affordable Housing Project at 330 Distel Circle
April 27, 2021: Affordable Housing Update and Introduction of the Affordable Housing Developer

January 11, 2022: City Council/Planning Commission Joint Study Session with Planning Commission – Project Pre-Application
March 22, 2022: Story Pole Exemption hearing

Fiscal Impact:
Payment of Traffic Impact and Park In-lieu Fee will be waived for this project pursuant to the executed Memorandum of Understanding between the city of Los Altos and county of Santa Clara dated January 28, 2021 (Attachment 3). Pursuant to Section 3.52.030 of the Los Altos Municipal Code (LAMC) the project is exempt from paying the Public Art In-lieu Fee since the project is a 100 percent affordable housing project and are not considered into the contribution rate that the in-lieu fee is based on.

Environmental Review:
This project is categorically exempt from environmental review under Section 15332 (Class 32) of the California Environmental Quality Act ("CEQA") because it is an in-fill development on a site in an urban setting that is under five-acres in size that is substantially surrounded by urban uses and does not contain significant natural habitat for endangered species (in that the project site is already developed with urban uses). The development proposal is consistent with the General Plan and Zoning Ordinance, as set forth in this staff report does not result in any significant effects related to traffic, noise, air or water quality, and is adequately served by all required utilities and public services, and none of the exceptions stated in CEQA Guidelines Section 15300.2 to applicability of the exemption are present. A more thorough and detailed analysis including supporting documentation is contained in Attachment 2.

Policy Question(s) for Council Consideration:

- Does the proposal meet the required findings for design review and conditional use permits per the Los Altos Municipal Code?

Summary:

- The project includes the demolition of the existing one-story, 12,120 square-foot., single-story office building, removal of nineteen trees, preservation of eight trees, and removal of the surface parking lot to construct a new five-story residential building on a 0.87 acre lot.
- The Applicant proposes a five-story multiple-family residential building that would have 90 residential rental units with 88 below market rate (BMR) units and two market rate manager units.
- Pursuant to State Density Bonus Law and the city of Los Altos Density Bonus Ordinance, 100 percent affordable projects that are within ½ mile of a Major Transit Stop are eligible for: four concessions; an increased building height of 33 feet or three-stories; and elimination of vehicle parking requirements. The Applicant seeks concessions to deviate from the zoning district standards for front yard

setback, private open space, building massing and articulation with the upper story step-back, and reduced requirements for EV Ready parking spaces. There is no requirement to approve development waivers for this type of project but the Applicant requests waivers for the design of the interior courtyard, building materials, and location and screening of the temporary refuse staging area. The Project includes 90 vehicle parking spaces.

- A Design Review Permit and Conditional Use Permit approval is required for the proposed project. The Complete Streets Commission and the Planning Commission have reviewed the proposal at a public meeting and recommend approval of the project.

Staff Recommendation:
Determine the project is exempt from environmental review pursuant to the California Environmental Quality Act (CEQA) and approve a Design Review Permit (D22-0002) and Conditional Use Permit (CUP22-0001) with the inclusion of the density bonus, concessions and waivers to construct a 90 unit five-story multiple-family residential building per the findings and conditions contained in the resolution (Attachment 1).

Purpose:
To review and consider a request for a design review permit and conditional use permit to allow the construction of a 90-unit five-story 100 percent affordable multiple-family residential project at 330 Distel Circle.

Background:

Site Setting and Project Description
The project site (APN 170-04-051) is a 0.87-acre parcel located at 330 Distel Circle which is close to the El Camino Real corridor in northern Los Altos. The project site is designated as 'Thoroughfare Commercial' in the General Plan and zoned CT (Commercial Thoroughfare). The Applicant requests approval for Design Review and Conditional Use Permits for a new multiple-family development project. The proposed project (Project) includes a five-story apartment building with 90 rental units, consisting of 88 affordable units and two market rate manager units. The first/ground floor is comprised of common building amenities including common amenity spaces, tenant administrative offices, tenant coworking space, trash collection and sorting room, a bike locker room for 45 bicycles, and 90 vehicle parking spaces that includes eight at grade parking spaces and 82 parking spaces on a mechanical parking lift system. The second floor has a 5,530 square-foot common open space courtyard and the second thru fifth floor contains the 90 residential units.

The Planning Commission Agenda Report contains more technical details of the project and site development standards (Attachment 5)

SB 330

Development project applications submitted after January 1, 2020, are subject to SB 330, the Housing Crisis Act of 2019. The application was submitted on March 3, 2022; therefore, the project is considered an SB 330 project and is subject to the maximum five hearing limitation.

One public hearing was already conducted on March 22, 2022, for the Applicant's request to the City Council for an exemption to the requirement for the installation of story poles pursuant to the Council's Open Government Policy.

The second public hearing was on August 18, 2022, for a joint public hearing with the Complete Streets Commission and Planning Commission where the project was unanimously recommended approval to the City Council.

Housing Accountability Act

Pursuant to the Housing Accountability Act, Government Code Section 65589.5, if a housing development project complies with all applicable objective standards imposed by the City, then the City has limited discretion to condition the project, and it may not deny a conditional use permit or other discretionary entitlement for the project or approve the project at a lower density unless the approval authority finds that the project "would have a specific, adverse impact upon the public health or safety." A "specific, adverse impact" means "a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete."

In addition, since at least 20 percent of the units in the project would provide housing for households at or below 60 percent of Area Median Income, per Government Code Section 65589.5 (d), the City cannot deny the project or approve it subject to conditions of approval that would make the project infeasible for housing at the levels of affordability proposed, unless one of the following findings can be made:

1. *The City has met its RHNA targets for the current housing cycle at each of the affordability levels proposed for this project;*

   Staff Review: *The findings cannot be made.* The city has not met its RHNA targets for the current housing cycle at each of the affordability levels of the project.

2. *Denial or the imposition a condition of approval that would have the effect of rendering the project infeasible for affordable housing is necessary to avoid a violation of state or federal law;*

   Staff Review: *The findings cannot be made.* The city has not imposed a condition of approval or recommends denial that would result in rendering

the project infeasible for affordable housing to avoid a violation of state or federal law.

3. *The project site is located on land for agriculture or resource preservation and either: (1) the site lacks adequate water or wastewater facilities, or (2) the project site is surrounded on at least two sides by land used for agriculture or resource preservation;*

Staff Review: *The findings cannot be made.* The project site is in an urban infill site, surrounded by urban land uses and has an existing functional facility with adequate water and wastewater services.

4. *The project would have a specific, adverse, and unmitigable impact on public health or safety; or*

Staff Review: *The findings cannot be made.* The project site does not have a specific, adverse and unmitigable impact on public health. The project will be considered as a Class 32 categorical exemption pursuant to the guidelines and standards under the California Environmental Quality Act and a detailed analysis has been conducted to make this determination. There is no specific, adverse, or unmitigable impact on public health or safety as a result of the proposed project.

5. *All the following are true: (1) the project is inconsistent with the zoning ordinance; (2) the project is inconsistent with the applicable general plan land use designation; (3) the City has a certified Housing Element; and (4) the project site is not identified in the Housing Element inventory or is proposed at a greater density than projected in the inventory.*

Staff Review: *The findings cannot be made.* The project is consistent with the zoning ordinance and applicable general plan land use designation, and the city has a certified Housing Element. The city is currently updating the Housing Element (6th cycle) and the public available draft does not identify the project site as a housing opportunity site.

Story Pole Installation

On March 22, 2022, the City Council approved an exemption to the story pole installation for this development project. As an alternative, the Applicant was required to install additional billboard signs which included an additional 3D rendering of the proposed project from the residential neighborhood on Marich Way. The billboard signs including the additional 3D rendering were installed per the approved plans on May 12, 2020, as verified by staff. Per the story pole policy, the requirement is for the story poles to remain

installed 30 days prior to any public hearing approval. Refer to Attachment 6 for details of the installed poles and compliance provided by the applicant.

Joint Complete Streets Commission and Planning Commission Hearing

On August 18, 2022, the Complete Streets Commission (CSC) and Planning Commission (PC) held a duly noticed Joint Commission public meeting to consider the Project.

Pursuant to Section 14.78.090 of the Zoning Code, an application for Council design review shall be subject to a multimodal transportation review and recommendation to the PC and Council by the CSC as part of the approval process in order to assess potential project impacts to various modes of transportation such as but not limited to bicycle, pedestrian, parking, traffic impacts on public streets, and/or public transportation. Following the discussion, the CSC voted 5-0 to recommend approval of the Project to the PC and Council subject to the finding and conditions of approval that are included into the draft resolution. The Joint Commission meeting agenda report and minutes is contained in Attachment 5 of this agenda report.

At the Joint Commission meeting, the PC reviewed the Design Review and Conditional Use Permit aspects of the project. Following their discussion of the proposed Project, the PC voted 6-0 to recommend Council consideration that the project is exempt from further environmental review in compliance with CEQA statutes and guidelines, approval of the Design Review Permit and Conditional Use Permit with the inclusion of the density bonus, concessions, and waivers, subject to the findings and modified conditions of approval in the resolution (Attachment 1). The August 18, 2022, Joint Commission agenda report and minutes is included in Attachment 5.

Discussion/Analysis:

This section is intended to be a summarized version of staff's complete evaluation and analysis of the project for conciseness. As referenced above and included as attachments, staff refers readers to the August 18, 2022 Joint Complete Streets and Planning Commission agenda report and meeting minutes (Attachment 5) for a more detailed analysis.

The city of Los Altos is partnering with the county of Santa Clara for this proposed 100 percent affordable housing project. A Memorandum of Understanding (MOU) (Attachment 3) was executed between the City and County on January 28, 2021, memorializing the expected purchase agreement by the County for the property from Midpeninsula Open Space District and the commitment to develop a 90-unit affordable housing project with certain affordability levels and the city's commitment to waive 100 percent of the project's development impact fees.

The applicant proposes to demolish the existing building and construct a five-story building with 90 residential rental units, an at grade parking garage with 90 parking spaces including

electric vehicle (EV) charging spaces, a bike room to accommodate 45 Class I bike parking spaces and ten outdoor Class II bike parking spaces, a large open space in the rear portion of the property at the second floor and other common amenities for the residents on the first floor (Project). The Project will install landscaping on the project site and will replace the public sidewalk, curb and gutter, and driveway approach along the project frontage on Distel Circle.

The proposed 90-unit residential project is 100 percent affordable exclusive of two manager units. Pursuant to the State Density Bonus Law and the Los Altos Density Bonus Ordinance (Chapter 14.28, Article 2), provisions for 100 percent affordable projects within half mile-distance from a major transit stop, the Project qualifies for an unlimited density bonus, four concessions, a building height increase of up to three stories or 33ft increase that doesn't count as a concession, and no parking is required. In addition to requesting concessions, the Applicant is requesting development waivers; however, per the State Density Bonus Law, development waivers are optional for 100 percent affordable projects within one-half mile of a major transit stop since the project is entitled up to a 33-foot building height increase; therefore, the approval of development waivers are at the discretion of city council approval. Further details regarding the proposed project, density bonus provisions, and Council findings are discussed below.

General Plan Conformance

The draft resolution (Attachment 1) and Planning Commission Agenda Reports (Attachment 5) provide findings and details how the project conforms to the city's General Plan. This includes the project's conformance with the goals and policies for the Land Use Element, Community Design, and Housing Element. As discussed in other sections of this report and the Planning Commission Report, the Applicant will construct a total of 90 residential units with 88 affordable units and improvements to the pedestrian streetscape, all of which are consistent with the General Plan Land Use and Housing Element policies. Although, the height and density of the proposed building is greater than what is allowed for a non-affordable project in the CT zoning district, they are similar with other approved buildings along the El Camino Real Corridor and in conformance with the Community Design and Land Use Elements that suggest intensification of uses in this area of the city.

Zoning District and Other Development Standards

The proposed Project is within the Commercial Thoroughfare (CT) Zoning District. As detailed in the Planning Commission Agenda Report (Attachment 5), the Project is consistent with applicable objective development standards with the inclusion of the four requested density bonus concessions and three additional discretionary waivers. The requested concessions include: a 10-foot front yard setback, whereas 25 feet is required; a reduction of the required open space from an average of 50 square feet for the total units to 25 square feet; elimination of the required 10-foot step-back from the ground floor façade for the upper stories of the building above 45 feet in height; and a reduction in the number of EV ready parking spaces that would normally be required under the city's adopted REACH codes.

With regards to development waivers, the Applicant is requesting that the interior courtyard not be visible and accessible to the public street that is normally required; the use of wood as a foundation/base material that is not listed as an allowable material, and the use of the public street for a temporary refuse staging area for pickup that is required to be screened and located on-site.

The concessions and waivers are analyzed in detail in the Planning Commission staff report (Attachment 5) and further discussed below in the Density Bonus and Affordable Housing section.

Affordable Housing and Density Bonus

Affordable Unit Distribution

Per the MOU (Attachment 3) executed between the city of Los Altos and the county of Santa Clara, the proposed housing project was anticipated to provide "a minimum of 90 units, with 100% of the units restricted to occupants earning 80% or less of the area medium income (AMI), with a minimum of 5% earning 30% or less of the area medium income (AMI), 50% earning 50% or less of the area medium income (AMI), and 45% earning 80% or less of the area medium income (AMI)."

The Applicant proposes 90 residential rental units with 88 affordable units and two market rate units to be used for manager units distributed in the income categories as found in the table below:

Unit Mix – 330 Distel		AMI					
	SQFT PU	30%	50%	60%	80%	**Unit Total**	**Unit Mix**
SRO/Efficiency	465	14	3	7	-	24	27%
1-BR	645	9	3	7	1	20	22%
2-BR	965	12	3	4	2	21	23%
3-BR	1140	10	3	7	3	23	26%
4-BR	0	-	-	-	-	-	0%
MGR	965					2	2%
Unit Total		45	12	25	6	**90**	100%
Affordability Dist.		50%	13%	28%	7%	100%	
Average Affordability	**44.66%**						

The table below is a comparison of the affordable units anticipated in the MOU as compared to the affordable units offered by the Applicant.

Affordability	MOU	Proposed
30% AMI (Extremely- Low)	5% (4.5 Units)	50% (45 units)
50% AMI (Low)	50% (45 Units)	13.3% (12 units)
80% AMI (Moderate)	45% (40.5)	34.4% (31 units)

The Applicant's proposal offers more units in the extremely-low income category than the MOU, a higher number of units in the low-income category[1], and a lower number of units in the moderate-income category. Overall, since the number of extremely-low and low-income units is more than what was anticipated when the MOU was executed and contributes more of those units towards the city's Regional Housing Needs Assessment (RHNA) goals, this proposal will be a significant contribution to the BMR units. While the Applicant has included the unit types (i.e. bedroom count) in their proposal for each income category, the Applicant is committing to an overall number of units in each income category and requests flexibility in achieving the right mix of unit types for the project. In response to the applicant's request for flexibility within each BMR category, and as modified in Condition #2 of resolution (Attachment I), only the total number of units at each income level is specified under each category. Furthermore, this unit count for each income category will be stated in the Affordable Housing agreement document upon approval of the project.

Typically, with a market rate residential project that includes affordable units, there is more of an equity concern regarding the type and distribution of affordable units compared to the market rate units; however, here the project is a 100 percent affordable project, so there isn't a concern. Aside from the city's requirements, the Applicant will need to maintain an average affordability level across all units to satisfy certain funding requirements for the affordable housing project.

Density Bonus

The proposed 90-unit residential project is a 100 percent affordable project exclusive of two manager units. As such, pursuant to the State Density Bonus Law (Government Code Section 65915) and the Los Altos Density Bonus Ordinance (LAMC Chapter 14.28, Article 2), the project is eligible for a density bonus, development concessions, and elimination of parking requirements. Per the Commercial Thoroughfare (CT) zoning district standards (Section 14.50.080 LAMC), the maximum permitted residential density is 38 dwelling units per net acre which would allow up to a maximum of 33 units on the project site. With density bonus, there is no maximum density limitation since 100 percent of the housing units will be affordable and the project is located within one-half mile of a major transit stop. (Table D of the Appendix to the Affordable Housing

[1] For the purposes of determining overall low-income units, all extremely-low income units are also considered low-income.

Ordinance (Chapter 14.28 LAMC) and State Density Bonus Law (Government Code Section 65915 (f)(3)(D)(ii)).
Per State Density Bonus Law Section 65915(o)(4) "major transit stop" includes an existing rail or bus rapid transit station. The project site is 0.4 miles to a major transit bus stop at El Camino Real and Showers Drive since VTA Rapid line 522 makes a stop at this location (see Attachment 5); therefore, the project is within one-half mile of a major transit stop as defined in the State Density Bonus Law and is eligible for unlimited density.

Density Bonus Concessions
Per State Density Bonus Law and the Los Altos Density Bonus Ordinance (Chapter 14.28 LAMC, Article 2), projects providing 100 percent affordable units including the density bonus units, exclusive of manager's units, are entitled to four development concessions. The table below summarizes the four concessions requested by the applicant that are detailed further in the applicant's submitted Density Bonus report (Attachment 4) including the project's eligibility for the density bonus allowances, the concession and waiver requests and justification for the requests.

	Standard (in CT zone)	**Proposed**	**Concessions and Waivers**
Front Setback LAMC 14.50.090	25ft	10ft	Concession -1
Private Open Space LAMC 14.50.150	Not required for every unit, average 50 sq. Ft. shall be provided for the total number of dwelling units. For 90 units 4,500 sq. ft	25 sq. Ft. Average 2,550 sq. ft.	Concession - 2
Design Control 14.50.170 B (1) Building Massing and articulation. Upper Story Step-Back	Min 10ft from ground floor façade for stories above 45ft in height (top story)	No step back	Concesssion-3
Reduced Standards for Los Altos REACH codes for EV Ready charging points for affordable housing projects to meet reduced requirement	EV2 ready spaces – 9 EV1 ready spaces – 81	Meets affordable housing 10% EV2 ready spaces. (2019 code) Proposed EV2 ready - 9	Concession – 4

which is 10% EV2 ready spaces of total of 9 spaces in total.			

All requested concessions in the proposed project are off-menu concessions per the Los Altos Density Bonus Ordinance. Pursuant to Govt Code Section 65915(d)(1), a concession request must be granted unless the City Council is able to make one of the following findings:

A. The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).
B. The concession or incentive would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon public health and safety or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households.
C. The concession or incentive would be contrary to state or federal law.

A thorough analysis for each requested concession and justification that none of the above findings can be made is included in the August 18, 2022 Joint Commission Agenda Report (Attachment 5). The Planning Commission and staff recommend approval of the concession requests and are included in the draft resolution (Attachment 1) since none of the above findings can be made. With regards to the request for a reduction of Electric Vehicle (EV) Ready parking spaces, the Applicant would only be eligible for a reduction or elimination of the REACH code requirement adopted by the city, but the California Building Standards ("Building Code") would still apply. The city's increased requirements for EV parking under the city's adopted REACH codes are the city's local amendment to the Building Code, but under State Density Bonus Law, a developer cannot receive a development concession for a requirement under state law; therefore, the standards under the Building Code and more specifically the mandatory measures for EV parking under the California Green Building Standards Code would still apply..

Development Waivers

In addition to requesting concessions, density bonus projects are typically eligible for waivers of any development standards that would physically preclude the construction of a project with the density bonus and the concessions to which the development is entitled; however, per the State Density Bonus Law, development waivers are optional for 100 percent affordable projects within one-half mile of a major transit stop since the project is entitled up to a 33-foot building height increase and are at the discretion of City Council

approval. The applicant has requested three development waivers that are necessary to construct the project as proposed as found in the table below:

	Standard (in CT zone)	**Proposed**	**Waivers**
Design Control 14.50.170 C (5) a. Building Design. Interior Courtyard.	Interior courtyard must be partially visible from the street and linked to the street by a clear accessible path of travel	Raised courtyard on level 2 not visible from the street. Access to courtyard and exit via stair.	Waiver-1
Design Control 14.50.170 D (4) a. Materials. Materials Defining Building Elements.	For multistory elements, the base of the building shall be defined by a distinct material selected from among the following: stone, brick, concrete, CMU, or stucco ("base material")	Wood serves as a distinct material	Waiver-2
CT required conditions 14.50.060 C. 2. Access and screening of refuse collection	Every development will be required to provide suitable space on-site for solid waste separation, collection, storage and pick up and shall site these in locations that facilitate access, collection, and minimize any negative impact on persons occupying the development site, neighboring properties, or public right-of-way	Solid waste separation, collection and storage are on-site, but the pickup is proposed to be in the service staging area on the public right-of-way	Waiver-3

A waiver cannot be granted if doing so would violate state or federal law or if the waiver would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources. Also, ordinarily an applicant must demonstrate that denying the waiver would physically preclude the applicant from constructing a project that the applicant wants to construct at the allowed density and with the concessions granted. Because the waivers requested here are optional and no density limit applies to the project, other relevant factors may be

considered. These factors may include, for example, the ability to provide parking even though no parking is required for the project (as discussed below), the desire otherwise to maximize the use of the site for affordable housing or to provide suitable amenities and services to residents, cost savings for affordable housing (like with a concession), the inability to achieve a concession or to realize its cost saving benefits without a waiver, or flexibility to achieve a superior design.

The project is a 100 percent affordable project, exclusive of the managers units, with 63 percent of the units for Very Low and Extremely Low-Income households, the City is a co-sponsor of the project, and the project will help the City meet Regional Housing Needs Allocation (RHNA) targets at multiple affordability levels. Additionally, the requested development waivers as further discussed and detailed in the Joint Commission Agenda Report (Attachment 5) will result in a superior architectural design that provides for resident amenities such as on-site parking and other common amenities that would not otherwise be required for this residential development project. Therefore, the Planning Commission and staff recommends granting the optional waivers and are included in the draft resolution (Attachment 1).

Parking Reduction

Pursuant to Government Code Section 65915 (p)(3), and Section 14.28.040 Table F of the Los Altos Density Bonus Ordinance, any project that is 100 percent affordable and has unobstructed access to a major transit stop located within a one-half mile radius does not require any vehicle parking. This special parking reduction is allowed in addition to any requested development concession or waiver. In lieu of the required parking elimination, the Applicant proposes 90 parking spaces in a parking garage accessed at grade.[2] The garage is located on the first floor of the project which has two rows of parking stalls with a 24-foot drive aisle. One row of parking stalls contains 69 parking stalls within a mechanical parking lift system. The lift system is designed as a three-level stacking solution with one level of parking platforms lowered into a pit, a second level at grade, and third stacked above. The opposite row contains regular at-grade stalls.

Since, vehicle parking requirements are eliminated for this project per Density Bonus Requirements, any parking provided exceeds the minimum required. Additional discussion is provided in the August 18, 2022 Joint Commission Report (Attachment 5).

Discretionary Permits

The project requires a Design Review Permit and a Conditional Use Permit, as summarized below and discussed in greater detail in the Joint Commission Agenda Report (Attachment 5). Because at least 20 percent of the units in the project would provide housing for households at or below 60 percent of Area Median Income, the Housing Accountability

[2] Since parking is being provided, minimum requirements for accessible parking and electric vehicle charging must be provided consistent with Building Code requirements.

Act states at Government Code Section 65589.5(d) that the City cannot deny the project or approve it subject to conditions of approval that would make the project infeasible for housing at the levels of affordability proposed, unless one of the following findings can be made:

1. The City has met its RHNA targets for the current housing cycle at each of the affordability levels proposed for this project;
2. Denial or the imposition a condition of approval that would have the effect of rendering the project infeasible for affordable housing is necessary to avoid a violation of state or federal law;
3. The project site is located on land for agriculture or resource preservation and either: (1) the site lacks adequate water or wastewater facilities, or (2) the project site is surrounded on at least two sides by land used for agriculture or resource preservation;
4. The project would have a specific, adverse, and unmitigable impact on public health or safety; or
5. All the following are true: (1) the project is inconsistent with the zoning ordinance; (2) the project is inconsistent with the applicable general plan land use designation; (3) the City has a certified Housing Element; and (4) the project site is not identified in the Housing Element inventory or is proposed at a greater density than projected in the inventory.

Even if one of the foregoing findings can be made, under Government Code Section 65589.5(j), the project must be approved at the density proposed if it complies with all applicable objective standards, unless the project would have a specific, adverse, and unmitigable impact on public health or safety, as defined in the statute. A project is deemed to be consistent with an objective standard unless notice of inconsistency was provided to the applicant pursuant to Government Code Section 65589.5(j)(2).

Design Review Permit

To approve the project as proposed by the applicant, the City Council must make positive design review findings as outlined in Section 14.78.060 of the LAMC and found below. A more complete analysis of the design review can be found in the Joint Commission Agenda Report (Attachment 5). The Planning Commission recommended positive design review findings as summarized below and contained in the draft resolution (Attachment 1).

1. *The proposal meets the goals, policies and objectives of the general plan and any specific plan, design guidelines and ordinance design criteria adopted for the specific district or area.*

The project meets the goals and policies for the El Camino Real Corridor under the Special Planning Area in the Land Use Element, Community Design and Historic Resources Element, Housing Element and Economic Development Element. Together these elements discourage exclusive office use and promote inclusion residential development, encourage affordable housing projects, increased height for residential development, intensification of development to be compatible to the opposite side of the El Camino Real Corridor and streetscape improvement and pedestrian friendly streetscape designs. The project is a multiple family residential project that includes affordable housing with a proposed building height that is compatible with other residential projects on El Camino Real. The Planning Commission agenda reports provide details of the project's compliance with the design criteria adopted in the Commercial Thoroughfare district.

2. *The proposal has architectural integrity and has an appropriate relationship with other structures in the immediate area in terms of height, bulk and design.*

   The proposal demonstrates architectural integrity since it complies with the objective design standards except for those requested exceptions per density bonus concessions and waivers. The proposed building is five stories which is similar to existing or proposed structures in the vicinity which are four to five stories and similar in scale and proportion. The relationship of this proposal with the neighboring structures and that of the recently approved projects in the area will result in harmonious buildings as envisioned in the General Plan for this zone and the El Camino Corridor Special Planning Area.

3. *Building mass is articulated to relate to the human scale, both horizontally and vertically. Building elevations have variation and depth and avoid large blank wall surfaces. Residential or mixed-use residential projects incorporate elements that signal habitation, such as identifiable entrances, stairs, porches, bays, and balconies.*

   The project conforms to the city's adopted objective design standards with eligible concessions and waivers as noted in the agenda report. The bulk and massing have been appropriately scaled using architectural design elements such as metal screens, façade material separation into primary and secondary bays, and mass timber canopy at the first floor to articulate the human scale. The first-floor landscaping and primary façade make an inviting space and there are defined entrances to with projecting wooden pergola elements which signal habitation while providing human scale design at the first story. Fenestration details provide a connection between the outside and inside space enhancing the signs of habitation.

4. *Exterior materials and finishes convey high quality, integrity, permanence and durability, and materials are used effectively to define building elements such as base, body, parapets, bays, arcades, and structural elements. Materials, finishes, and colors*

have been used in a manner that serves to reduce the perceived appearance of height, bulk, and mass, and are harmonious with other structures in the immediate area.

The exterior base material is mass timber which is an alternative to the standard list of base materials; however, the applicant requests a development waiver. The mass timber conveys a high-quality character and durable finish to the structure while rendering a warm welcoming experience to the pedestrian environment. The exterior material of the upper floors is primarily stucco with highlights of wood panels, metal railings, wood composite railings and white metal and vinyl windows. All facades show accents of perforated metal screens which provide relief to a long façade in addition to the primary and secondary bays. The materials above in the second thru fifth floor are alternating dark grey and light grey stucco to highlight the primary and secondary bays. Each floor has a horizontal band showing visual separation for each floor. These materials and finishes are used in the manner to reduce the bulky nature of the five-story building and are harmonious with the other structures in the immediate area.

5. *Landscaping is generous and inviting, and landscape and hardscape features are designed to complement the building and parking areas, and to be integrated with the building architecture and the surrounding streetscape. Landscaping includes substantial street tree canopy, either in the public right-of-way or within the project frontage.*

   Landscaping is generous and inviting. The project incorporates hardscape and softscape features at the lobbies and entrances to signify entry elements. The tree canopy is substantial along the main Distel Circle side as well as the side setback areas. The landscape plan proposes six new street trees along the project's Distel Circle frontage. There are twenty-seven peripheral trees and shrubs proposed along the side and rear setback. An additional six trees are proposed in planter boxes with other landscape features in the interior private courtyard space. The landscaped courtyard area also includes amenities such as play mounds, waterlily balance play structure, community garden planters, and gathering space with seating areas.

6. *Signage is designed to complement the building architecture in terms of style, materials, colors, and proportions.*

   The architectural rendering indicates entrance signage which complement the building architectural style. A sign permit review is required if the project is approved.

7. *Mechanical equipment is screened from public view and the screening is designed to be consistent with the building architecture in form, material, and detailing.*

The rooftop mechanical and other mechanical equipment appear to be set inside and appropriately screened from public view using a roof screen which is consistent with the building. Surface area for photovoltaic panels are set inside from the parapet line on the rooftop. These are consistent with the building architecture in form, material, and detailing.

8. *Service, trash, and utility areas are screened from public view, or are enclosed in structures that are consistent with the building architecture in materials and detailing.*

   The main refuse collection room on the first floor is screened from public view and enclosed. Per requested waiver #2, temporary staging of refuse containers is requested to be located on Distel Circle on collection days. The location and design of the service, trash and utility areas are integrated well into the building architecture and is consistent with the rest of the building with the material use and detailing.

Conditional Use Permit Review

To grant Conditional Use Permit UP19-001, the City Council must make the following findings in accordance with Chapter 14.80.060 of the LAMC and found below. A more complete analysis of the design review can be found in the Joint Commission Agenda Report (Attachment 5). The Planning Commission recommended positive Conditional Use Permit findings as summarized below and contained in the draft resolution (Attachment 1):

1. *That the proposed location of the conditional use is desirable or essential to the public health, safety, comfort, convenience, prosperity, or welfare.*

   The proposed multi-family residential building is envisioned as a conditional use in the General Plan and has been reviewed and conditioned for approval for health and safety and environmental considerations. Based upon the technical reports and the categorical infill exemption for the project, there is evidence that the project will have no significant impact on the surrounding community. The project will enhance the affordable housing stock and make available more housing units to enhance comfort, prosperity, and welfare of the community, furthering the City's housing goals.

2. *That the proposed location of the conditional use is in accordance with the objectives of the zoning plan as stated in Chapter 14.02 of this title;*

   The project is categorically exempt from CEQA as an infill project and will conform to many of the goals and objectives of the General Plan and complies with the City's inclusionary housing requirements. Pursuant with State Density Bonus requirements, the project complies with the density bonus and is eligible for additional density, concessions, building height increases, and parking reduction standards. Notwithstanding the requested concessions and waivers, the project complies with all

the objectives set forth in Section 14.02.020 of the Los Altos Municipal Code. The project conforms to the City's design objectives, as set forth above with respect to the Design Review Permit findings.

3. *That the proposed location of the conditional use, under the circumstances of the particular case, will not be detrimental to the health, safety, comfort, convenience, prosperity, or welfare of persons residing or working in the vicinity or injurious to property or improvements in the vicinity.*

   Because the project is recommended for a categorically exemption as an infill project, the development of a housing project at 330 Distel Circle will not be detrimental to the health and safety, comfort, convenience, prosperity or welfare of persons residing or working in the vicinity to property or improvements in the vicinity.

4. *That the proposed conditional use will comply with the regulations prescribed for the district in which the site is located and the general provisions of Chapter 14.02;*

   Notwithstanding the density bonus concessions, waivers and approvals which is consistent with State Law, the proposed conditional use of a multi-family residential project complies with the regulations prescribed for the CT district as detailed in the Joint Commission Agenda Report (Attachment 5).

Options:

1) Approve Resolution No. 2022-XX

Advantages: The project will replace an existing office building with a 90-unit affordable multiple-family residential rental development that helps the city meet its goals for producing new affordable housing units at various affordability levels to meet the RHNA goals and is supportive of the General Plan Vision for the El Camino Real Corridor.

Disadvantages: The City will lose the office building.

2) Do not approve Resolution No. 2020-XX

Advantages: The existing office building and surface parking lot will remain.

Disadvantages: The City will lose an opportunity to make progress on achieving its goals to produce new housing units and implementation of the General Plan vision for El Camino Real Corridor. The sidewalk

along the frontage of the project will not be replaced with a standard city sidewalk and newer infrastructure. There will be no improvement to Distel Circle.

Public Notification and Correspondence:

For this meeting, a public hearing notice was published in the *Town Crier* and mailed to 455 property owners and 534 current tenants within 1,000 feet of the site. A public notice billboard with color renderings was installed along the project's frontages and a modified story pole installation to represent the walls and roof line of the building were installed in conformance with the City Council approved modified story pole design for this project.

Previous public correspondences are included with the Planning Commission agenda reports (Attachment 5) and staff will forward any additional correspondence received to the Council.

Recommendation:
The staff recommends Option 1.

RESOLUTION NO. 2022-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS APPROVING A CLASS 32 NOTICE OF EXEMPTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) AND APPROVING THE DESIGN REVIEW PERMIT AND CONDITIONAL USE PERMIT APPLICATIONS FOR A 90 UNIT MULTIPLE FAMILY DEVELOPMENT PROPOSAL AT 330 DISTEL CIRCLE

WHEREAS, the City of Los Altos received a development application from EAH Housing, ("Applicant"), for a new 90 unit multiple-family residential building (88 Below market rate units and 2 manager units) at 330 Distel Circle that includes requests for a Design Review Permit (File Number D22-0002) and a Conditional Use Permit (CUP22-0001) referred to herein as the "Project"; and

WHEREAS, said Project is in the Commercial Thoroughfare (CT) district, which allows multiple-family housing as a conditional use and for a maximum of 38 dwelling units per acre residential density, and the Project proposes a density if 103.45 dwelling units per acre: and

WHEREAS the Applicant is offering all 88 units for rental at below market rates and 2 units to be manager's quarter units at Market Rate as part of the Project proposal; and

WHEREAS, by providing 88 units at a below market rate, the Project is entitled to four concessions pursuant to the Los Altos Density Bonus Ordinance (Appendix to Affordable Housing Ordinance, Table E) and State Density Bonus Laws (Government Code Section 65915(d)(2)(D)); and

WHEREAS, the Applicant has requested four concessions:

1) To reduce the front yard setback to 10 feet whereas a standard front setback of 25 feet for the CT zoning district is required per Section 14.50.090 Los Altos Municipal Code (LAMC).
2) To reduce the private open space requirement to an average 28 square feet whereas an average of 50 square feet of open space is required in the CT zoning district per Section 14.50.150 (LAMC).
3) To eliminate the 10-foot upper story step-back from the ground floor façade for stories above 45 feet in height as required in the CT Zoning District per Section 14.50.170.B.1 (LAMC).
4) To eliminate the required electric vehicle parking requirements provided in the City's adopted REACH Codes per Section 4.106.4.2 (LAMC) (as the same may be renumbered or amended from time to time); and

WHEREAS, the Applicant has requested three development waivers as follows that are at the discretion of City Council since the project is 100 percent affordable and within one-half mile of a major transit stop:

1) No visibility and direct access to street from the second-floor interior courtyard whereas Design Control Section 14.50.170 C (5)(a) of the CT zoning district requires for interior courtyards partially visible from the street and linked to the street by a clear accessible path of travel visibility from street and lined to the street by a clear accessible path of travel to propose no visibility pursuant to Design Control
2) Temporary placement of refuse and recycling containers within the public right-of-way whereas Section 14.50.060 C(2) of the CT zoning district requires separation, collection,

storage and pick-up is located in areas that minimize any negative impact on persons occupying the development site, neighboring properties, or public right-of-way.

3) Use of wood as a distinct base material whereas Design Control Section 14.50.170 D(4)(a) of the CT zoning district requires distinct material options of stone, brick, concrete, CMU, or stucco as the base material.

WHEREAS, Pursuant to Government Code Section 65915 (d)(2)(D), if the location of the project is within one-half mile of a major transit stop it is entitled to unlimited density and to receive a height increase of up to three additional stories, or 33 feet; and

WHEREAS, the Project is in within one-half mile of a major transit stop along El Camino Real and is seeking a height increase of 19.5 feet over the maximum allowable height of 45 feet of the CT zoning district standards; and

WHEREAS, on January 11, 2022, the Planning Commission and City Council held a joint design review study session on the Project where they received public testimony and provided the Applicant with preliminary architectural and site design feedback; and

WHEREAS, the Project has been processed in accordance with the applicable provisions of the California Government Code and the Los Altos Municipal Code; and

WHEREAS, said Project is exempt from environmental review as in-fill development in accordance with Section 15332 of the California Environmental Quality Act of 1970 as amended ("CEQA"); and

WHEREAS, on March 3, 2022, Project has been submitted for review under the SB330 streamlining provisions which limit the number of public hearings to a maximum of five; and

WHEREAS, the first public hearing under SB330 review was on March 22, 2022, with the City Council for an exception to the story pole installation standards per the adopted policy and procedures; and

WHEREAS, on March 22, 2022, the City Council reviewed and approved a modified story pole design to comply with the city's Story Pole policy; and

WHEREAS, the story pole exemption was conditionally approved for the project to require four on-site notice of development boards; and

WHEREAS, on May 12, 2022, five billboards for notice of development were installed on-site complying with the modified story pole approval; and

WHEREAS, on July 27, 2022, the City gave public notice of the Planning Commission's and Complete Streets joint public hearing on the proposed Project by advertisement in a newspaper of general circulation; and

WHEREAS, on August 3, 2022, the City notified all property owners and business tenants within a 1,000-foot radius and a meeting notice was posted to the billboard sign; and

WHEREAS, on August 18, 2022, the Planning Commission and Complete Streets Commission conducted a duly noticed public hearing at which members of the public were afforded an opportunity to comment upon the Project, and at the conclusion of the hearing, the Complete Streets Commission recommended Planning Commission approval of the Project and the Planning Commission recommended City Council approval of the Project; and

WHEREAS, on August 31, 2022, the City gave public notice of the City Council's public hearing on the proposed Project by advertisement in a newspaper of general circulation and to all property owners and business tenants within a 1,000-foot radius and a meeting notice was posted to the billboard sign; and

WHEREAS, on September 20, 2022 the City Council held a duly noticed public meeting as prescribed by law and considered public testimony and evidence and recommendations presented by staff related to the Project; and

WHEREAS, all the requirements of the Public Resources Code, the State CEQA Guidelines, and the regulations and policies of the City of Los Altos have been satisfied or complied with by the City in connection with the Project; and

WHEREAS the findings and conclusions made by the City Council in this Resolution are based upon the oral and written evidence presented as well as the entirety of the administrative record for the proposed Project, which is incorporated herein by this reference. The findings are not based solely on the information provided in this Resolution; and

WHEREAS all other legal prerequisites to the adoption of this Resolution have occurred.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Los Altos hereby _____ the Project pursuant to the Findings and subject to the Conditions of Approval set forth in Exhibits A and B, respectively, attached hereto and incorporated by this reference.

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a meeting thereof on the ____day of _____ 2022 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Anita Enander, MAYOR

Attest:

_____
Angel Rodriguez, CMC, CITY CLERK

EXHIBIT A

FINDINGS

1. ENVIRONMENTAL REVIEW FINDINGS. With regard to environmental review, in accordance with Section 15332 of the California Environmental Quality Act Guidelines, based on the whole record before it, including, without limitation, the analysis and conclusions set forth in the staff reports, testimony provided at the proposed Project's public hearings, and the supporting documents which includes an Initial Study completed by David J Powers (July 2022) with technical studies that include air quality, geotechnical, noise assessment, traffic assessment, Phase I environmental assessment, and an arborist report, the City Council finds and determines that the following Categorical Exemption findings can be made:

   a. The Project is consistent with the applicable General Plan designation and all applicable General Plan policies as well as with the applicable zoning designation (Commercial Thoroughfare District).

   b. The Project occurs within City limits on a site of no more than five acres that is substantially surrounded by urban uses and there is no record that the site has value as habitat for endangered, rare or threatened species.

   c. Approval of the Project will not result in any significant effects relating to traffic, noise, air quality, or water quality and the completed technical studies and staff analysis contained in the agenda report and support this conclusion.

   d. The Project has been reviewed and it is found that the site can be adequately served by all required utilities and public services.

   e. None of the exceptions to the applicability of the categorical exemption, as specified in section 15300.2, are present.

2. **Design Review Permit**

Per Chapter 14.76.060 – Design Review Findings, the City Council must make the following findings to grant the Design Review Permit:

A. The proposal meets the goals, policies and objectives of the general plan and any specific plan, design guidelines and ordinance design criteria adopted for the specific district or area.

This finding can be made: For reasons stated in the City Council agenda report and in the staff report for the joint meeting of the Planning Commission and Complete Streets Commission, held on August 18, 2022, the Project meets the goals, policies and objectives for the Land Use Element, Community Design, and Housing Element of the Los Altos General Plan. The Project is also consistent with the design guidelines and ordinance design criteria adopted for the Commercial Thoroughfare District with the inclusion of density bonus concessions and waivers.

B. The proposal has architectural integrity and has an appropriate relationship with other structures in the immediate area in terms of height, bulk and design.

This finding can be made. The proposal shows architectural integrity while meeting most of the city's adopted design standards required by the CT zone. The objective design standards that are not met are requested and approved under eligible waiver and concession as found in the staff agenda report packet. The immediate area has structures that are 4-5 story tall structures, quite similar in scale and proportion to the proposed project. The relationship of this proposal with the neighboring structures and that of the recently approved projects in the area will result in harmonious buildings as envisioned in the General Plan for this zone.

C. Building mass is articulated to relate to the human scale, both horizontally and vertically. Building elevations have variation and depth and avoid large blank wall surfaces. Residential or mixed-use residential projects incorporate elements that signal habitation, such as identifiable entrances, stairs, porches, bays, and balconies.

The findings can be made. The project conforms to the city's adopted objective design standards with eligible concessions and waivers as noted in the staff report. The bulk and massing have been appropriately scaled using architectural design elements such as metal screens, façade material separation into primary and secondary bays, mass timber canopy at the first floor, to articulate the human scale. The first-floor landscaping and primary façade make an inviting space to signal habitation in the amenity space while providing human scale to the five-story building. Each entrance has projecting wooden pergola elements, the pedestrian entrance is set inside. The walls are made of glass providing a visual connection between the outside and inside space enhancing the signs of habitation.

The vertical and horizontal articulation of the building mass have been articulated to reflect the provisions of the design standards for CT zone. The pedestrian entrances and vehicular entrances are distinguished using architectural elements such as a canopy and façade treatments besides doors. The building has been designed as a series of primary and secondary bay per guidelines in the objective design standards.

D. Exterior materials and finishes convey high quality, integrity, permanence and durability, and materials are used effectively to define building elements such as base, body, parapets, bays, arcades, and structural elements. Materials, finishes, and colors have been used in a manner that serves to reduce the perceived appearance of height, bulk, and mass, and are harmonious with other structures in the immediate area.

The findings can be made. The exterior base material mass timber, this material serves as an alternative to standard list of approved design element materials. Mass timber is a high-quality material and brings a warmth and integrity to the first floor of the building. The upper floors are primarily stucco with highlights of wood panels, metal railings, wood composite railings and white metal and vinyl windows. All facades show accents of performed metal screens which provide relief to a long façade in addition to the primary and secondary bays.

The materials above in the second thru fifth floor are alternating dark grey and light grey stucco to highlight the primary and secondary bays. Perforated metal screen breaks up large facades. Each floor has a horizontal band showing visual separation for each floor. These materials and finishes are used in the manner to reduce the bulky nature of the five-story building and are harmonious with the other structures in the immediate area.

E. Landscaping is generous and inviting, and landscape and hardscape features are designed to complement the building and parking areas, and to be integrated with the building architecture and the surrounding streetscape. Landscaping includes substantial street tree canopy, either in the public right-of-way or within the project frontage.

The findings can be made. Landscaping is generous and inviting. The project incorporates the appropriate designed hardscape and softscape features at the lobbies and entrances to signify entry elements. The tree canopy is substantial along the main Distel Circle side as well as the side setback areas. The landscaped courtyard area includes amenities such as play mounds, waterlily balance play structure, community garden planters and gathering space with seating areas. The courtyard also has large trees in planters.

F. Signage is designed to complement the building architecture in terms of style, materials, colors, and proportions.

The findings can be made. The architectural rendering indicates entrance signage which complement the building architectural style. A sign permit review is required if the project is approved, this would be a made a condition of project approval.

G. Mechanical equipment is screened from public view and the screening is designed to be consistent with the building architecture in form, material, and detailing.

The findings can be made. The rooftop mechanical and other mechanical equipment appear to be set inside and appropriately screened from public view using a roof screen which is consistent with the building. The Solar PV areas are set inside from the parapet line on the rooftop. These are consistent with the building architecture in form, material, and detailing.

H. Service, trash and utility areas are screened from public view, or are enclosed in structures that are consistent with the building architecture in materials and detailing.

The finding can be made: The garbage room on the first floor is screened from public view and enclosed. The location and design of the service, trash and utility areas are integrated well into the building architecture and is consistent with the rest of the building with the material use and detailing.

3. **Conditional Use Permit**

To grant Conditional Use Permit UP19-001, the City Council must find the following in accordance with Chapter 14.80.060 of the LAMC:

A. That the proposed location of the conditional use is desirable or essential to the public health, safety, comfort, convenience, prosperity, or welfare.

This finding can be made: The proposed multi-family residential building is envisioned as a conditional use in the General Plan and has been reviewed and conditioned for approval for health and safety and environmental considerations. Based upon the technical reports and the categorical infill exemption for the project, there is evidence that the project will have no significant impact on the surrounding community. The project will enhance the affordable housing stock and make available more homes to enhance comfort, prosperity, and welfare of the community, furthering the City's housing goals.

B. That the proposed location of the conditional use is in accordance with the objectives of the zoning plan as stated in Chapter 14.02 of this title;

This finding can be made. The project is categorically exempt from detailed environmental impact study as an infill project and it will meet many of the goals and objectives of the General Plan and complies with the City's inclusionary housing requirements. Pursuant with State Density Bonus requirements, the project request and complies with the density bonus and avails additional height increase and parking reduction standards while seeking qualifiable concessions because it complies with required affordable housing standards. It meets all the City's design policies and objectives, as set forth above with respect to the Design Review Permit findings. Notwithstanding the requested concessions and waivers, the project complies with all the objectives set forth in Section 14.02.020 of the Los Altos Municipal Code.

C. That the proposed location of the conditional use, under the circumstances of the particular case, will not be detrimental to the health, safety, comfort, convenience, prosperity, or welfare of persons residing or working in the vicinity or injurious to property or improvements in the vicinity.

This finding can be made. Because the project is categorically exempt as an infill project, the development of a housing project at 330 Distel Circle will not be detrimental to the health and safety, comfort, convenience, prosperity or welfare of persons residing or working in the vicinity to property or improvement in the vicinity.

D. That the proposed conditional use will comply with the regulations prescribed for the district in which the site is located and the general provisions of Chapter 14.02;

This finding can be made. Notwithstanding the density bonus concessions, waivers and approvals which is consistent with State Law, the proposed conditional use of a multi-family residential project complies with the regulations prescribed for the CT district as detailed in the staff report analysis and development standards Table 1.

Exhibit B

CONDITIONS OF APPROVAL

GENERAL

1) Approved Plans

a) The project shall be developed in substantial compliance with the design plans submitted as part of the Los Altos planning application D22-0002 on June 3, 2022, and the support materials and technical reports, except as modified by these conditions and as specified below.

b) The conditions of approval shall be incorporated into the building permit plans and shall be referenced in the Sheet Index.

c) The bike parking room shall have electrical outlets for the residents use for electric biking charging.

d) Loading spaces shall be striped indicating the loading spaces and identifying the spaces for "loading only." The striping shall be always maintained by the property owner/tenant in a clear and visible manner.

e) The applicant shall "red-curb" and provide necessary signage to the satisfaction of the City Engineering Division to prohibit street parking approximately 40 feet to the south and 35 feet to the north of the project driveway. This is to provide adequate sight distance for exiting drivers at the driveway to see the oncoming traffic along Distel Circle. The project driveway also should be free and clear of any obstructions such as shrubs or other landscape features to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles on Distel Circle.

f) Minimum 7 feet deep parking pits shall be provided to accommodate the height of a design vehicle.

g) The applicant shall work with the City and Mission Trail Waste Systems to design a plan for waste collection service.

2) Affordable Housing

The applicant shall offer the City eighty-eight (88) below market rate rental units as follows:

a. Extremely low-income at 30% AMI: Forty-five units or fifty one percent
b. Very low-income at 50% AMI: Twelve units or thirteen percent
c. Low-income at 60% and 80% AMI: Thirty-one units or thirty five percent

In addition to the eighty-eight units detailed above, two units shall be reserved for manager units and are not required to be income restricted for a total of ninety units.

3) Impact Fee Waiver for Affordable Housing Project
The Memorandum of Understanding (MOU) executed on January 28, 2021, between the City of Los Altos and County of Santa Clara includes a discount of 100% of the City's impact fees for traffic impact fees and for park in-lieu fees. Therefore, no such fees will be charged for the Project.

4) Americans with Disabilities Act
All improvements shall comply with Americans with Disabilities Act (ADA) and other applicable disability access laws. The latest edition of Caltrans ADA requirements shall apply to all improvements in the public right-of-way.

5) Signage Permit – City of Los Altos
Prior to the issuance of the building permit, the applicant shall apply and get approval for a detailed signage permit from the Planning Division. The signage package is required to comply with provisions of LAMC 14.68.4.1. Adequate signage shall be provided that directs delivery vehicles to the loading space in the garage.

6) Diesel Generator Prohibition
Diesel powered electric generators are prohibited for any purpose in this project.

7) Indemnity and Hold Harmless
The applicant/property owner agrees to indemnify, defend, protect, and hold the City harmless from all costs and expenses, including attorney's fees, incurred by the City or held to be the liability of the City in connection with the City's defense of its actions in any proceedings brought in any State or Federal Court, challenging any of the City's action with respect to the applicant's project. The City may withhold final maps and/or permits, including temporary or final occupancy permits, for failure to pay all costs and expenses, including attorney's fees, incurred by the City in connection with the City's defense of its actions.

8) Tree Preservation Guidelines
All recommendations for tree preservation, pre-construction treatments and tree-protection during construction that are listed on page 7-9 of the arborist report are required conditions of approval for this project. The listed recommendation will need to be printed on the first page of the building plan set in addition to these COA's.

9) Encroachment Permit
An encroachment permit, and/or an excavation permit shall be obtained prior to any work done within the public right-of-way and it shall be in accordance with plans to be approved by the City Engineer.

10) Public Utilities
The applicant shall contact electric, gas, communication, and water utility companies regarding the installation of new utility services to the site.

11) Municipal Regional Stormwater Permit
The project shall comply with City of Los Altos Municipal Regional Stormwater (MRP)NPDES Permit No. CA S612008, Order No. R2-2015-0049 dated November 19, 2015.

12) Sewer Lateral
Any proposed sewer lateral connection shall be approved by the City Engineer. Only one sewer lateral per lot shall be installed. All existing unused sewer laterals shall be abandoned according to the City Standards, cut and cap 12" away from the main.

13) Transportation Permit
A Transportation Permit, per the requirements specified in California Vehicle Code Division 15, is required before any large equipment, materials or soil is transported or hauled to or from the construction site. Applicant shall pay the applicable fees before the transportation permit can be issued by the Traffic Engineer.

14) Pollution Prevention
The improvement plans shall include the "Blueprint for a Clean Bay" plan sheet in all plan submittals.

15) Storm Water Management Plan
The Applicant shall submit a Storm Water Management Plan (SWMP) in compliance with the MRP. The SWMP shall be reviewed and approved by a City approved third party consultant at the Applicant's expense. The recommendations from the Storm Water Management Plan (SWMP) shall be shown on the building plans.

PRIOR TO ISSUANCE OF BUILDING PERMIT

16) Affordable Housing Agreement
The Applicant shall execute and record an Affordable Housing Agreement, in a form approved and signed by the Development Services Director and the City Attorney with eighty-eight (88) below market rate units as detailed on Condition No. 2, for a period of at least 99 years.

17) Santa Clara County Fire Department Review
The project shall comply with all Santa Clara County Fire Department standards including but not limited to the comments and conditions provided in the Fire Department Development Review Comment letter dated July 11, 2022. A formal review of the building permit plans will be completed after submittal of the building permit application and a complete set of building permit design plans.

18) Public Utility Dedication
The applicant shall dedicate public utility easements as required by the utility companies to serve the site.

19) Payment of Fees
The applicant shall pay all applicable fees, including but not limited to sanitary sewer connection and impact fees as required by the City of Los Altos Municipal Code.

20) Storm Water Filtration Systems
The Applicant shall insure the design of all storm water treatment systems and devices are without standing water to avoid mosquito/insect infestation.

21) Cost Estimate and Performance Bonds
The applicant shall submit a cost estimate for the improvements in the public right-of-way and shall submit a 100 percent performance bond or cash deposit (to be held until acceptance of improvements)

and a 50 percent labor and material bond (to be held 6 months after acceptance of improvements) for the work in the public right-of-way.

22) Grading and Drainage Plan
The Applicant shall submit on-site grading and drainage plans that include (i.e. drain swale, drain inlets, rough pad elevations, building envelopes, drip lines of major trees, elevations at property lines, all trees and screening to be saved) for approval by City Engineer. No grading or building pads are allowed within two-thirds of the drip line of trees unless authorized by a certified arborist and the Planning Division.

23) Sewage Capacity Study
The applicant shall submit calculations showing that the City's existing sewer line will not exceed two-thirds full due to the project's sewer loads. Calculations shall include the 6" main from the end of the main on Distel Circle to the point where it connects to the 8" sewer line on El Camino Real and along El Camino Real to Jordan Avenue. For any segment that is calculated to exceed two-thirds full for average daily flow or for any segment that the flow is surcharged in the main due to peak flow, the applicant shall replace the 6" sewer line with an 8" sewer line, and 8" sewer line with a 12" sewer line. For any segment that is calculated to exceed two-thirds full for average daily flow or for any segment that the flow is surcharged in the main due to peak flow, the applicant shall replace the sewer line with a larger sewer line.

24) Construction Management Plan
The Applicant shall submit a construction management plan for review and approval by the Community Development Director and the City Engineer. The construction management plan shall address any construction activities affecting the public right-of-way, including but not limited to excavation, traffic control, truck routing, pedestrian protection, material storage, earth retention and construction vehicle parking. The plan shall provide specific details with regards to how construction vehicle parking will be managed to minimize impacts on nearby residential and commercial properties. Sidewalks, parking and travel lanes along Distel Circle shall not be closed for the full duration of the project. Closures will be reviewed and approved with Encroachment Permit submittals.

25) Solid Waste Ordinance Compliance
The Applicant shall be in compliance with the City's adopted Solid Waste Collection, Remove, Disposal, Processing & Recycling Ordinance (LAMC Chapter 6.12) which includes a mandatory requirement that all multi-family dwellings provide for recycling and organics collection programs.

26) Solid Waste and Recyclables Disposal Plan
The Applicant shall contact Mission Trail Waste Systems and submit a solid waste and recyclables disposal plan indicating the type, size and number of containers proposed, and the frequency of pick-up service subject to the approval of the Engineering Division. The Applicant shall also submit evidence that Mission Trail Waste Systems has reviewed and approved the size and location of the proposed trash enclosure. The enclosure shall be designed to prevent rainwater from mixing with the enclosure's contents and shall be drained into the City's sanitary sewer system. The enclosure's pad shall be designed to not drain outward, and the grade surrounding the enclosure designed to not drain into the enclosure. In addition, Applicant shall show on plans the proposed location of how the solid waste will be collected by the refuse company. Include the relevant garage clearance dimension and/or staging location with appropriate dimensioning on to plans.

27) Acoustical Report
The applicant shall submit a report from an acoustical engineer/consultant ensuring that the rooftop mechanical equipment meets the City's exterior noise regulations.

PRIOR TO OCCUPANCY

28) Landscape and Irrigation Installation
All on- and off-site landscaping and irrigation shall be installed and approved by the Development Services Director and the City Engineer or their designees. Provide a landscape WELO Certificate of Completion, signed by the project's landscape professional and property owner, verifying that the trees, landscaping and irrigation were installed per the approved landscape documentation package.

29) Sidewalk in Public Right-of-Way
The Applicant shall remove and replace entire sidewalk and curb and gutter along the project frontage of Distel Circle as directed by the City Engineer. All sidewalks in the public right-of-way shall be City Standard concrete sidewalks.

30) New ADA Ramps and Crosswalks
The applicant shall provide two (2) new ADA ramps per the City standards. Two ADA ramps shall be installed at the new driveway approach on Distel Circle.

31) Micro-surfacing Distel Circle
The applicant shall install micro-surfacing treatment up to half the width of Distel Circle along the project frontage.

32) Parking Stall and Red Curb Striping
The applicant shall install parking stall striping and red curb along the project frontage of Distel Circle as directed by the City Engineer or his designee.

33) Public Infrastructure Repairs
The Applicant shall repair any damaged right-of-way infrastructures and otherwise displaced curb, gutter and/or sidewalks and City's storm drain inlet shall be removed and replaced as directed by the City Engineer or his designee. The Applicant is responsible to resurface (grind and overlay) half of the street along the project frontage of Distel Circle if determined to be damaged during construction, as directed by the City Engineer or his designee.

34) Maintenance Bond
A one-year, ten-percent maintenance bond shall be submitted upon acceptance of improvements in the public right-of-way.

35) SWMP Certification
The Applicant shall have a final inspection and certification done and submitted by the Engineer who designed the SWMP to ensure that the treatments were installed per design. The Applicant shall submit a maintenance agreement to City for review and approval for the stormwater treatment methods installed in accordance with the SWMP. Once approved, City shall record the agreement.

36) Label Catch Basin Inlets
The Applicant shall label all new or existing public and private catch basin inlets which are on or directly adjacent to the site with the "NO DUMPING - FLOWS TO ADOBE CREEK" logo as required by the City.

37) Prevailing Wages
All improvements to infrastructure in the public right of way required by these conditions of approval shall be subject to payment of prevailing wages, as required by Labor Code Section 1720, et seq.

Notice of Exemption

Appe

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: Santa Clara
70 W Hedding Street, East Wing, 1st Floor
San Jose, CA 95110

From: (Public Agency): City of Los Altos
1 N San Antonio Road, CA
94022
(Address)

Project Title: 330 Distel Circle Residential Project

Project Applicant: EAH Housing

Project Location - Specific:
330 Distel Circle, located south of the intersection of Distel Circle and El Camino Real

Project Location - City: Los Altos Project Location - County: Santa Clara

Description of Nature, Purpose and Beneficiaries of Project:
The project proposes to demolish the existing 12,120 square foot office building, associated surface parking, and landscaping on-site in order to construct a new, five-story apartment building totaling approximately 114,970 square feet. The apartment building would include 90, 100 percent affordable studio, one-, two-, and three-bedroom apartment units situated around a central courtyard on top of podium parking.

Name of Public Agency Approving Project: City of Los Altos

Name of Person or Agency Carrying Out Project: Radha Hayagreev, Senior Consulting Planner

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: Infill Development Project, Class 32, CEQA Guidelines Section 15332
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:
The project is exempt under CEQA Guidelines Section 15332 In-Fill Development Projects (Class 32) by meeting the required conditions of a) being consistent with the general plan and zoning, b) being located on a parcel under 5 acres within the city limits surrounded by development, c) containing no sensitive habitats on-site, d) not resulting in any significant impacts related to traffic, noise, air or water quality, and e) being adequately served by existing on-site utilities. None of the exceptions pursuant to CEQA Guidelines Section 15300.2 were met.

Lead Agency Contact Person: Radha Hayagreev Area Code/Telephone/Extension: (408) 796-4370

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: _____ Date: _____ Title: Senior Consulting Planner

▪ Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

Initial Study

330 Distel Circle Residential Project

Application Number: 2021-0006

Prepared by

CITY OF LOS ALTOS • CALIFORNIA • INCORPORATED DECEMBER 1 • 1952

In Consultation with

50 YEARS EST. 1972 DAVID J. POWERS & ASSOCIATES, INC. ENVIRONMENTAL CONSULTANTS & PLANNERS

July 2022

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Appendix A: Air Quality and GHG Assessment

Appendix B: Arborist Report

Appendix C: Geotechnical Report

Appendix D: Phase I Environmental Site Assessment

Appendix E: Noise Assessment

Appendix F: Transportation Analysis

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Los Altos, as the Lead Agency, has prepared this Initial Study for the 330 Distel Circle Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Los Altos, California.

The approximately 0.87-acre project site is located at 330 Distel Circle, south of the intersection of Distel Circle and El Camino Real, in the City of Los Altos. The project proposes to demolish the existing 12,120 square foot office building, associated surface parking, and landscaping on-site in order to construct a new, five-story apartment building totaling approximately 116,040 square feet. The apartment building would include 90, 100 percent affordable studio, one-, two-, and three-bedroom apartment units situated around a central courtyard on top of podium parking. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

Based on the analysis and documentation in this Initial Study, the City of Los Altos staff have determined that the project qualifies for a Categorical Exemption (CE) under CEQA.

1.2 NOTICE OF EXEMPTION

If the project is approved, the City of Los Altos will file a Notice of Exemption (NOE), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 35 days. The filing of the NOE starts a 35-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15062(d)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE, APPLICATION NUMBER

330 Distel Circle Residential, Application Number: 2021-0006

2.2 LEAD AGENCY CONTACT

Radha Hayagreev, Senior Consulting Planner
City of Los Altos
1 North San Antonio Road, Los Altos, CA 94022
Email: rhayagreev@losaltosca.gov
Phone Number: (408) 796-4370

2.3 PROJECT APPLICANT

Steve Pratt / Welton Jordan
EAH Housing
16170 Monterey Road, Suite 100, Morgan Hill, CA 95037
Email: 330distelcircle@eahhousing.org or Steve.Pratt@eahhousing.org
Phone Number: (415) 258-1800

2.4 PROJECT LOCATION

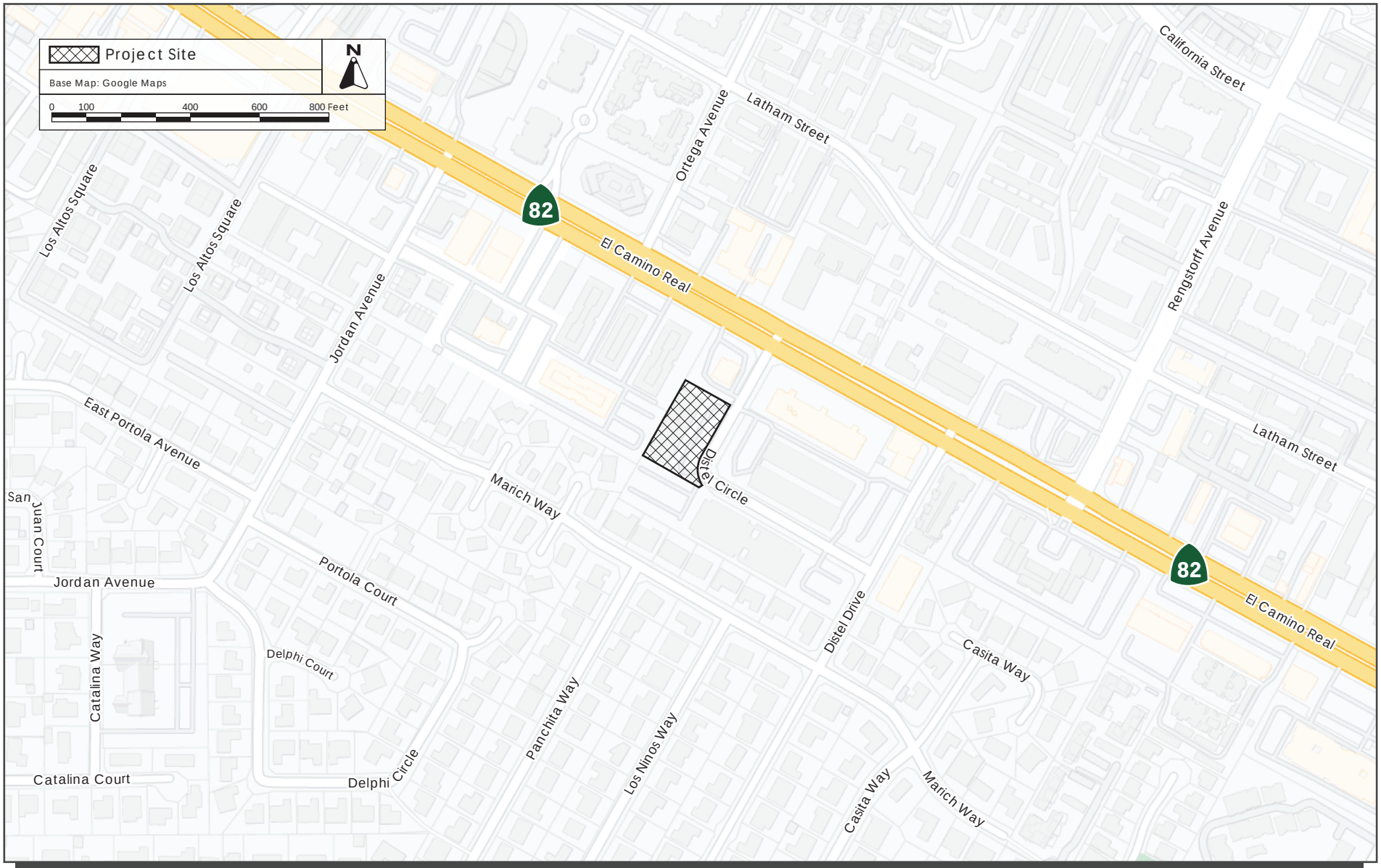
The approximately 0.87-acre project site is located at 330 Distel Circle, south of the intersection of Distel Circle and El Camino Real, in the City of Los Altos. The project site is currently developed with an approximately 12,120 square foot single-story office building, landscaping, and surface parking. The landscaping on-site includes a variety of shrubs and a total of 19 trees exist within the project site boundary. In this document, for ease of reference, El Camino Real is considered north of the project site and Distel Circle is considered east of the project site.

Surrounding land uses include office uses to the east and west, a commercial fast-food restaurant followed by El Camino Real to the north, and a medical office building to the southwest of the site. Additionally, residential uses are located southwest and north (on the north side of El Camino Real) of the site. Office and commercial uses are the predominant land uses along the El Camino Real corridor in the vicinity of the project site.

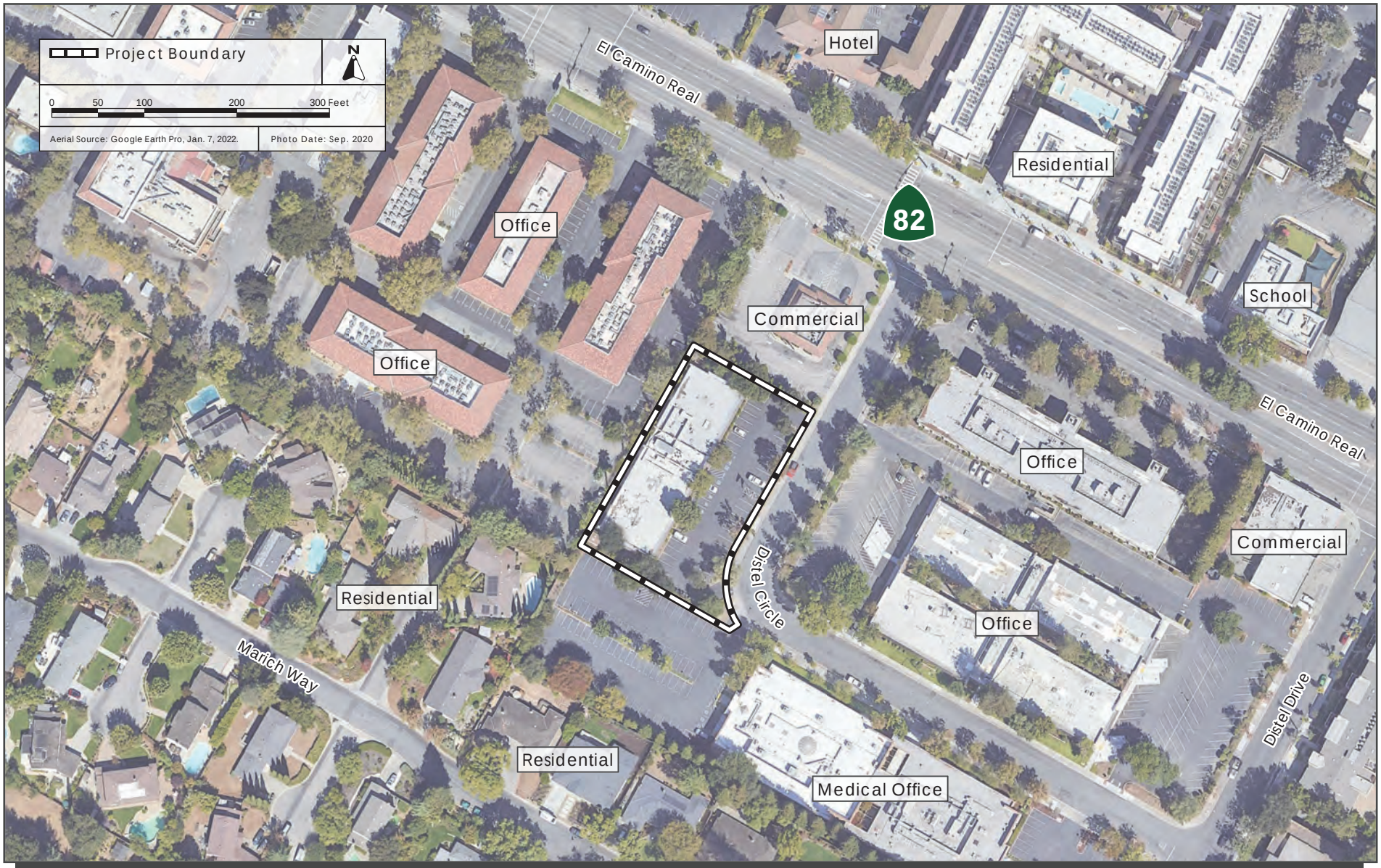
Regional and vicinity maps of the site are shown below on Figure 2.4-1 and Figure 2.4-2, respectively, and an aerial photograph of the project site and the surrounding land uses is shown on Figure 2.4-3.

REGIONAL MAP

FIGURE 2.4-1



VICINITY MAP | FIGURE 2.4-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 2.4-3

2.5 ASSESSOR'S PARCEL NUMBER

170-04-051

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

The General Plan designation for the project site is Thoroughfare Commercial. The Thoroughfare Commercial land use designation typically allows for retail, service, and office uses. The city allows commercial mixed-use with housing or residential-only development within this land use designation as well. High-density residential land uses that provide affordable housing are also encouraged within this designation.

The project site is zoned CT (Commercial Thoroughfare). Specific purposes of the CT District include encouraging a variety of residential developments (including affordable housing), promoting the economic and commercial success of Los Altos, buffering the impacts of commercial and multi-family land uses on neighboring residential properties, and allowing for mixed uses of commercial and residential. Multiple-family housing and single-room occupancy housing projects are conditional uses in this district. The Commercial Thoroughfare area allows residential building heights of up to 45 feet and a residential development density of 38 dwelling units per acre (du/ac).

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

The applicant proposes to finance the project through Department of Housing and Urban Development (HUD) funding. The project, therefore, would be subject to National Environmental Policy Act (NEPA) environmental review pursuant HUD regulations (24 CFR 58.36). Discretionary approvals required from the City for the project include the following:

- Multiple-Family Design Review
- Conditional Use Permit
- Tree Removal Permit
- Density Bonus and Development Incentives
- Building Permits

SECTION 3.0 PROJECT DESCRIPTION

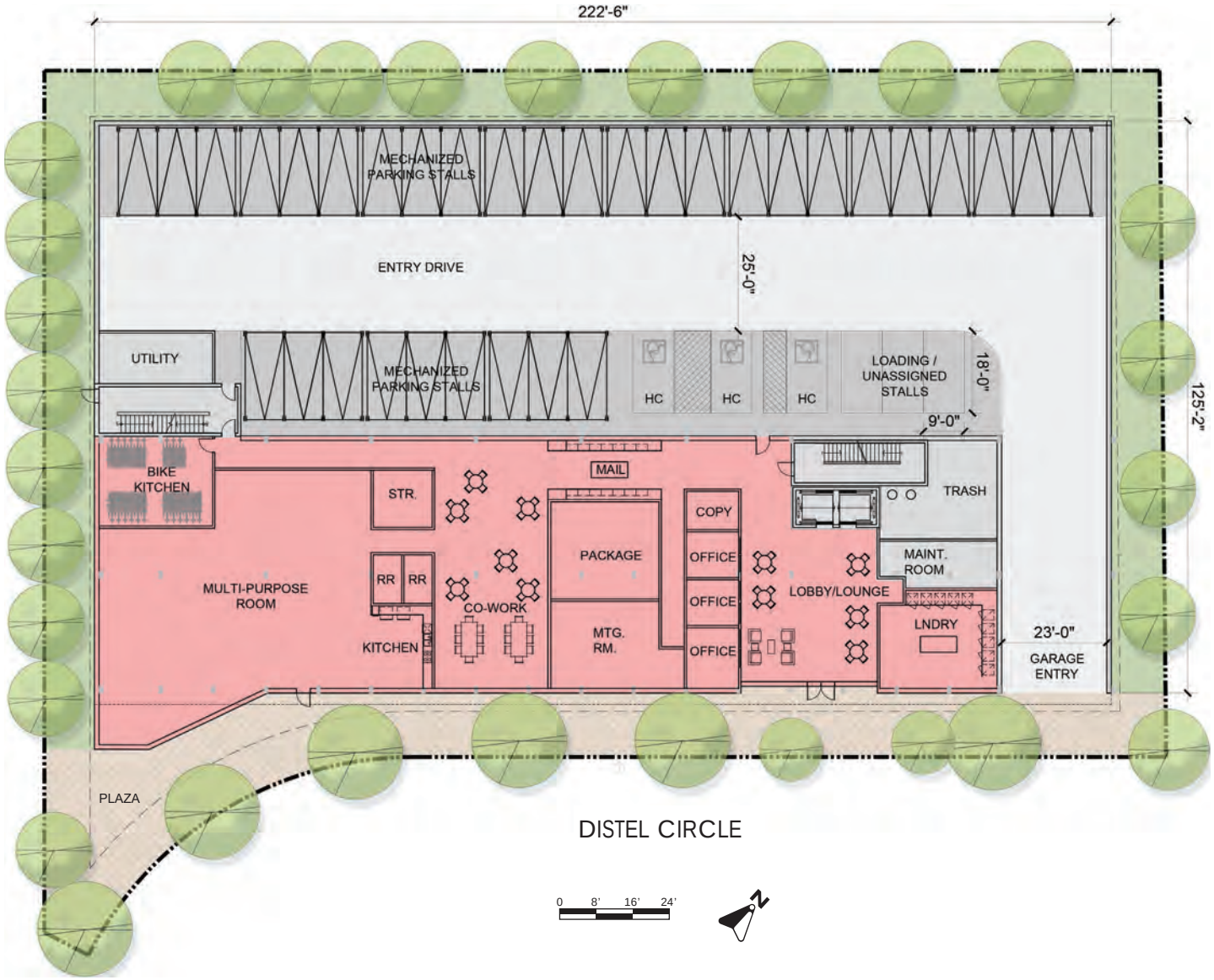
3.1 PROJECT OVERVIEW

The project would demolish the existing 12,120 square foot office building, associated surface parking, and landscaping on-site in order to construct a new, five-story apartment building totaling approximately 116,040 square feet. The apartment building would include 90, 100 percent affordable studio, one-, two-, and three-bedroom apartment units situated around a central courtyard on top of podium parking. The ground floor would contain the residential lobby, utility, trash, and maintenance rooms, bike storage, car parking (including mechanized parking stalls), and loading stalls. The residential lobby would consist of the leasing office and meeting room space, a co-working area, a multi-purpose room with restrooms, and laundry, package, and mail rooms. The five-story building would have a maximum building height of 64 feet and a density of 103.45 du/ac.

The project would utilize the State Density Bonus Law and the City's Affordable Housing Ordinance to exceed the allowed density and maximum building height; therefore, the project would not require a General Plan amendment or rezoning. Pursuant to State Density Bonus Law and the City's Affordable Housing Ordinance, the project may be eligible for the following concessions and waivers, including maximum controls on density, reduction of the front setback, reduced private open space per resident, a reduced upper story setback, partial visibility elimination of the interior courtyard, to allow wood as a distinct base material, and to allow refuse pick up from the public right-of-way.

The proposed site plan is shown on Figure 3.1-1 and elevations of the proposed building are shown on Figure 3.1-2 and Figure 3.1-3 below.

Additional details about the proposed amenity space and landscaping, site access and parking, stormwater controls, green building features, and construction activities are provided below.



Source: ktgy Architecture + Planning, October 18, 2021.

CONCEPTUAL GROUND FLOOR SITE PLAN | FIGURE 3.1-1

SIDE ELEVATION

DISTEL CIRCLE ELEVATION

Source: ktgy Architecture + Planning, October 18, 2021.

BUILDING ELEVATIONS (DISTEL CIRCLE) | FIGURE 3.1-2

SIDE ELEVATION

REAR ELEVATION

Source: ktgy Architecture + Planning, October 18, 2021.

BUILDING ELEVATIONS (REAR) | FIGURE 3.1-3

3.1.1 Amenity Space and Landscaping

The proposed project would include a total of approximately 9,260 square feet of outdoor amenity space, most of which would be provided in the second-floor courtyard on top of the podium, with additional amenity space provided by the ground floor plaza located at the southeast corner of the site. The project would also provide two benches on the sidewalk, in front of the building. The proposed outdoor common areas would include amenities such as a landscaping, lounge areas, a children's play space, vegetable gardens, and outdoor game areas. The ground floor plaza would specifically consist of seating areas, landscaping, and a connection to the pedestrian walkway on the western side of the property that would lead to the stairwell and garage. Select units on the exterior of the building would have private balconies.

The project would preserve seven existing on-site and off-site trees and require the removal of remaining twenty on-site trees. Eight of the trees to be removed are designated "protected trees."[1] The project would plant a new vegetative buffer along the western boundary of the project site and new trees along the perimeter of the site.

3.1.2 Site Access and Parking

Currently, vehicle access the project site from two driveways on Distel Circle. The project would remove the southern driveway on-site and replace the northern driveway with a new 24-foot wide, two-way driveway accessed via Distel Circle that would lead to the ground-level podium parking garage. This garage would contain a total of 90 vehicle parking spaces, which equates to one stall per dwelling unit.

The parking garage would include surface parking spaces and mechanical parking stalls that allow for the stacking of parked cars. The garage would provide 84 total parking spaces in mechanical lift parking stalls. These mechanical lift parking stalls provide multiple parking spaces per stall by stacking two cars vertically, and in some cases, with a third car stacked in a pit area below grade. The parking stalls with pits would extend approximately eight feet below grade. Of the 84 mechanical parking stalls in the garage, 68 would have the capacity to store two vehicles vertically and 16 would have a pit area to allow for the storage of three vehicles at a time. Three spaces would be provided as standard surface parking stalls and an additional three surface stalls would be handicap accessible.

The project also includes a total of 45 Class I bicycle parking space in a secure storage room on the ground floor of the building (refer to Figure 3.1-1). Six, short term bicycle parking spaces are provided on the sidewalk in front the building.

[1] The definition of "protected trees" is as follows: 1) Any tree that is 48-inches (four feet) or greater in circumference when measured at 48-inches above the ground. 2) Any tree designated by the Historical Commission as a Heritage Tree or any tree under official consideration for a Heritage Tree designation. (All Canary Island Palm trees on Rinconada Court are designated as Heritage Trees.) 3) Any tree which was required to be either saved or planted in conjunction with a development review approval (i.e. new two-story house). 4) Any tree located within a public right-of-way. 5) Any tree, regardless of size, located on property zoned other than single-family (R1). Source: City of Los Altos. "Tree Removal." Accessed January 13, 2022. Available at: https://www.losaltosca.gov/communitydevelopment/page/tree-removal.

Pedestrian access to the project site would continue to be provided via sidewalks on Distel Circle, which would also provide access to the plaza located on the southern corner of the building. The project would expand the existing sidewalk from five to 14 feet wide.

3.1.3 Stormwater Controls

Construction of the project would result in a decrease in impervious surfaces compared to existing conditions. The impervious surface area under the proposed project would total 29,022 square feet (or 76 percent of the site). Stormwater runoff from the site would be treated via new on-site bioretention area within the eastern setback, permeable pavement for portions of the sidewalk, and storm drain treatment unit in the eastern corner of the setback near Distel Circle.

3.1.4 Green Building Features

The project would be built in accordance with the California Green Building Standards Code (CALGreen) requirements. The project would incorporate green building features including, but not limited to, the following:

- **Resource Efficient Landscaping:** The project would plant drought tolerant species for landscaping. The plants would be located and allowed to grow to natural size.
- **Water-Efficient Fixtures:** The project would install WaterSense bathroom faucets and toilets in residential units and common areas. High efficiency irrigation fixtures would also be installed for the on-site landscaping.
- **Solar Photovoltaic Panels:** The project would reserve several areas on the roof top for potential solar panel arrays.
- **Increase Energy Efficiency:** The project would install higher-efficiency appliance, high - efficiency outdoor light, and obtain third-party heating, ventilation, and air conditioning (HVAC) commissioning.

3.1.5 Construction Activities

Project construction activities include demolition, site preparation, grading and excavation, building construction, architectural coatings, and paving. The project would utilize mass timber (a renewable resource) as opposed to concrete (a non-renewable resource) to construct the ground floor of the proposed apartment building. All of the residential units would be modular units. The modular units would be manufactured off-site and then transported to the project site, which reduces on-site construction noise, minimizes material waste, and facilitates faster construction of the project.

It is estimated that project construction would take a total of 20 months and require excavation at a maximum depth of eight feet below ground surface. The project would comply with the City of Los Altos Demolition Permit and Municipal Code Section 6.14.030 (Construction Diversion Ordinance), which requires sixty five percent construction waste is diverted from the landfill as recycled or salvaged for reuse. Excavation and removal of approximately 35 cubic yards of soil would be necessary to accommodate the proposed building foundations and footings, utilities, and parking pits. It is assumed that construction of the project would start in January 2023 and be completed in August 2024.

3.1.5.1 *Standard Construction Measures*

The project proposes to conform to all existing regulations including Bay Area Air Quality Management District (BAAQMD) best management practices, the Migratory Bird Treaty Act and California Fish and Game Code, City of Los Altos Demolition Permit Construction Diversion Ordinance, Provision C.3 of the Municipal Regional Permit, Los Altos Municipal Code, and Cal Green requirements. The project includes the following standard measures to avoid and minimize impacts related to construction-related air quality emissions, nesting birds, undiscovered subsurface cultural resources (if present), contaminated soil, and construction-related noise. The below measures are standard measures required to comply with existing regulations and/or are typically implemented by urban, infill development.

Air Quality

- Designate an on-site coordinator and monitor to ensure implementation of the below dust and emission control measures.
- Water all exposed surfaces at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- Cover all haul trucks transporting soil, sand, or other loose material off-site.
- Remove all visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Limit all vehicle speeds on unpaved roads to 15 mph.
- Complete pavement of all roadways, driveways, and sidewalks as soon as possible.
- Lay out building pads as soon as possible after grading unless seeding or soil binders are used.
- Maintain and properly tune all construction equipment in accordance with manufacturer's specifications. Check all equipment by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number of the on-site coordinator/monitor and telephone number and person to contact at the City of Los Altos regarding dust complaints. The on-site coordinator/monitor would respond and take corrective action within 48 hours. Post the Air District's phone number to be visible to ensure compliance with applicable regulations.
- Suspend all excavation, grading, and/or demolition activities when average wind speeds exceed 20 mph.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established.
- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time. Phase activities to reduce the amount of disturbed surfaces at any one time.
- Wash all trucks and equipment, including their tires, prior to leaving the site.

- Treat site accesses to a distance of 100 feet from the paved road with a 6-to-12-inch compacted layer of wood chips, mulch, or gravel.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to two minutes. Provide clear signage for construction workers at all access points.
- Reduce diesel particulate matter emissions by 87 percent such that increased cancer risk and annual $PM_{2.5}$ concentrations from construction would be reduced below TAC significance levels is as follows:
    - Require all construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total meet U.S. Environmental Protection Agency (EPA) Tier 4 emission standards for PM (PM_{10} and $PM_{2.5}$) if feasible, otherwise,
        - If use of Tier 4 equipment is not available, alternatively use equipment that meets EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to California Air Resources Board (CARB) verifiable diesel emission control devices that altogether achieve an 87 percent reduction in particulate matter exhaust from the project in comparison to uncontrolled equipment; alternatively (or in combination),
    - Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment.
    - Power stationary cranes by electricity.
    - Register all mobile diesel construction equipment used for the project with CARB through DOORS and have an assigned unique Equipment Identification Number (EIN).[2] The vehicles EIN label will be clearly visible on the equipment so the public can use DOORS, the CARB online tool, to look up the equipment type, size, and age.

  Alternatively, the applicant may develop another construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 87 percent or greater. Elements of the plan could include a combination of some of the following measures:
    - Implementation of No. 1 above to use Tier 4 or alternatively fueled equipment,
    - Installation of electric power lines during early construction phases to avoid use of diesel generators and compressors,
    - Use of electrically-powered equipment,
    - Use electric or propane/natural gas powered forklifts and aerial lifts for exterior and interior building construction
    - Change in construction build-out plans to lengthen phases, and
    - Application of different building methods that result in less diesel equipment usage.

[2] DOORS is an online reporting tool operated by the California Air Resource Board (CARB) for off-road diesel and large park-ignition equipment.

Such a construction operations plan would be subject to review by an air quality expert and approved by the City prior to construction.

Nesting Birds

- The project would schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive).
- If demolition and construction cannot be scheduled between September 1st and January 31st (inclusive), pre-construction surveys for nesting birds would be completed by a qualified ornithologist to ensure that no nests are disturbed during project implementation. This survey would be completed no more than seven days prior to the initiation of construction activities. During this survey, the ornithologist would inspect all trees and other possible nesting habitats within 250 feet (for raptors) and 100 feet (for non-raptors) of the construction areas for nests.
- If an active nest is found within 250 feet for raptors and 100 feet for non-raptors of the work areas to be disturbed by construction, the ornithologist/biologist would determine the extent of a construction free buffer zone to be established around the nest, typically 250 feet for raptors and 100 feet for other birds, to ensure that raptor or migratory bird nests are not disturbed during project construction. The no-disturbance/construction free buffer zone would remain in place until the ornithologist/biologist determines the nest is no longer active or the nesting season ends. If construction ceases for seven days or more then resumes again during the nesting season, an additional survey would be necessary to avoid impacts to active bird nests that may be present.

Cultural and Paleontological Resources

- In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, stop all activity within a 50-foot radius of the find until a qualified archaeologist can assess the find and provide recommendations for further treatment, if warranted. Preservation in place is the preferred treatment of an archeological resource. When preservation in place of an archeological resource is not feasible, data recovery, in accord with a data recovery plan prepared and adopted by the City, is the appropriate action. Construction and potential impacts to the area within a radius determined by the archaeologist would not recommence until the assessment is complete.
- In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find would be stopped. The Santa Clara County Coroner would be notified and would make make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner would notify the California Native American Heritage Commission (NAHC) immediately. Once NAHC identifies the most likely descendants, the descendants would make recommendations regarding proper burial, which would be implemented in accordance with Section 15064.5 of the CEQA Guidelines.

- Should a unique paleontological resource be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet would cease and the Planning and Building Director notified immediately. A qualified paleontologist would be retained to evaluate the find and prescribe action measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while action for paleontological resources is implemented. Upon completion of the paleontological assessment, a report would be prepared and submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology would also be submitted to the City.

Contaminated Soil

- Prior to issuance of demolition or grading permits, the project applicant would prepare a Site Management Plan (SMP) to guide activities during demolition, excavation, and initial construction to ensure that potentially contaminated soils are identified, characterized, removed, and disposed of properly. The purpose of the SMP is to establish appropriate management practices for handling impacted soil or other materials that may be encountered during construction activities. The SMP would provide the protocols for sampling of in-place soil to facilitate the profiling of the soil for appropriate off-site disposal or reuse, and for construction worker safety, dust mitigation during construction and potential exposure of contaminated soil to future users of the site. The soil profiling would include (but not limited to) the collection of shallow soil samples (upper one-foot) and analyses for lead and organochlorine pesticides. The soil profiling would be performed prior to any significant earthwork.

  If there are no contaminants identified on the project sites that exceed applicable screening levels for construction workers and residential users published by the Regional Water Quality Control Board, Department of Toxic Substances Control, and/or Environmental Protection Agency, the SMP does not need to be submitted to an oversight agency and only submitted to the City prior to construction earthwork activities. If contaminants are identified at concentrations exceeding applicable screening levels, the project applicant would obtain regulatory oversight from the Santa Clara County Department of Environmental Health (or Department of Toxic Substances Control) under their Site Cleanup Program. A copy of the SMP and any soil sampling and resting results would be submitted to the Director of Community Development.

Noise

- Limit construction activities to the hours between 7:00 a.m. and 5:30 p.m., Monday through Friday, and on Saturdays between 9:00 a.m. and 3:00 p.m., in accordance with the City's Municipal Code. Prohibit construction on Sundays and holidays unless permission is granted with a development permit or other planning approval.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Strictly prohibit unnecessary idling of internal combustion engines.

- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors., Use adequate muffling (with enclosures where feasible and appropriate) to reduce noise levels at the adjacent sensitive receptors if noise-generating equipment must be located near receptors. Face enclosure openings or venting away from sensitive receptors.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Erect a temporary noise barrier along the northeast and southeast property lines of the residence at 311 Marich Way. Design the barrier to achieve a minimum nine-dBA of noise reduction for ground level activities and five-dBA of noise reduction from upper-level activities in order to reduce construction noise levels in the rear yard to 75 dBA Leq or less.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.

Designate a “disturbance coordinator” who would be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and implement reasonable measures to correct the problem. The telephone number for the disturbance coordinator at the construction site shall be conspicuously posted and include the notice sent to neighbors regarding the construction schedule.

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions. Where applicable, implementation of proposed standard avoidance and minimization measures or adherence to the General Plan, City's Municipal Code, and state and federal regulations are identified.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to Level of Service (LOS) for evaluating transportation impacts, specifically Vehicle Miles Traveled (VMT). SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts. Under SB 743, a project's aesthetic impacts will no longer be considered significant impacts on the environment if:

- The project is a residential or mixed-use residential project, and
- The project is located on an infill site within a Transit Priority Area (TPA).[3,4]

SB 743 also clarifies that local governments retain their ability to regulate a project's aesthetics impacts outside of the CEQA process.

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment.

Local

Los Altos General Plan

The City of Los Altos General Plan was adopted in November of 2002 and serves as the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life within the City. Implementation of the General Plan ensures future development is consistent with the community's goals and that adequate urban services are available to meet the needs of new development. The General Plan is divided into eight different elements, each of which provide issues,

[3] An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." A "Transit Priority Area" or TPA is defined as "an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan." A "major transit stop" means "a site containing an existing rail transit station or bus rapid transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Source: Office of Planning and Research. "CEQA Review of Housing Projects Technical Advisory." Accessed March 28, 2022. https://opr.ca.gov/docs/20190208-TechAdvisory-Review_of_Housing_Exemptions.pdf.

[4] Metropolitan Transportation Commission. Transit Priority Areas (2021). Accessed June 28, 2022. https://opendata.mtc.ca.gov/datasets/transit-priority-areas-2021-1/explore?location=37.773000%2C-122.191730%2C9.35.

goals, and policies related to the element topic. The eight elements include Community Design and Historic Resources, Land Use, Housing, Economic Development, Open Space, Conservation and Community Facilities, Circulation, Natural Environment and Hazards, and Infrastructure and Waste Disposal.

The following policies in the Los Altos General Plan (General Plan) have been adopted for the purposes of reducing or avoiding impacts related to aesthetic resources, and are applicable to the project.

Policy	Description
CDHR 1.1	Preserve trees, especially heritage and landmark trees, and trees that protect privacy in residential neighborhoods.
CDHR 1.6	Continue to provide for site planning and architectural design review within the City, with a focus on mass, scale, character, and materials.
CDHR 1.7	Enhance neighborhood character by promoting architectural design of new homes, additions to existing homes, and residential developments that is compatible in the context of surrounding neighborhoods.
CDHR 2.2	Allow neighborhood-by-neighborhood determination of street lighting needs.
CDHR 4.3	Evaluate development applications to ensure compatibility with residential neighborhoods south of the corridor.

Los Altos Municipal Code

The City of Los Altos Municipal Code contains provisions and laws adopted by the City Council to maintain a healthy and safe community and to preserve the quality of life in Los Altos.

The City of Los Altos has adopted a Tree Protection Ordinance in Chapter 11.08 of the Municipal Code. The Tree Protection Ordinance prescribes measures for removal and replacement of trees in the City, in addition to protective actions to be taken to avoid damage to existing trees. The Tree Protection Ordinance defines a “protected tree” as:

- Any tree that is 48 inches in circumference measured at 48 inches above grade;
- Any tree designated by the historical commission as a heritage tree or any tree under official consideration by the historical commission for heritage tree designation;
- Any tree which was required by the City to be either saved or planted in conjunction with a development review application.

Trees may be designated as “heritage trees” upon application by the owner of the property on which the tree is located, a study of the proposed tree by the historical commission, and a determination of designation based on the criteria outlined in Section 12.44.030 of the Municipal Code.

Title 14 (Zoning) of the Los Altos Municipal Code provides development standards and regulations that are meant to enhance the visual quality of new development through building height limits, building density, building design and landscaping standards, setback requirements, sign regulations, open space requirements, and lighting requirements. These standards and regulations are provided for

each individual zoning district. Title 14 also outlines the design review process for new projects within the City, in addition to the required design review findings that projects must meet.

4.1.1.2 *Existing Conditions*

Project Site

The project site is located within a TPA, pursuant to SB 743.[5] The project site is located within one-half mile of a planned bus rapid transit station.[6] The project site is served by VTA Frequent Route 22 and Rapid Route 522 (see Figure 4.17-2).

The approximately 0.87-acre project site is generally rectangular shaped and includes a 12,120 square foot, one-story office building developed on the eastern portion of the project site. The office building has a flat, Mansard style roof and a façade that is comprised primarily of large windows with vertical masonry walls interspersed along the front and side of the building. Surface parking is located between the building and Distel Circle. The existing landscaping on-site is comprised of 19 trees (eight of which are protected trees) with a variety of shrubs along the perimeter of the site and building. There are an additional eight trees (five of which are protected trees) adjacent to the project site with canopies that overhang the property line. Additional information regarding the trees on- and off-site can be found in Section 0.

Views of the project site and the surrounding area are shown in Photos 1-6.

Surrounding Uses

The surrounding area in the immediate vicinity of the project site consists primarily of one- to two-story office buildings. The properties to the east and west of the project site both contain office buildings that range from one- to two-stories. There is a single-story commercial fast-food restaurant with a drive-through adjacent to the north of the project site. The property to the south of the project site has a one-story medical office building with surface parking lots. Additionally, residential uses are located to the southwest and north (on the north side of El Camino Real) of the project site. The residential buildings to the north of the project site on the north side of El Camino Real are four-stories tall, and the residential neighborhood to the southwest of the site is comprised of one- to two-story single-family houses.

Scenic Views and Resources

There are no designated scenic vistas in Los Altos.[7] The project site located along the El Camino Real corridor in Los Altos, which spans a highly developed area of the City. It is located on relatively flat land, which limits the amount of expansive views from the project site. Obstructed views of the Santa Cruz Mountains can be seen in the project vicinity, looking southwest on Distel Circle.

[5] Metropolitan Transportation Commission. Transit Priority Areas (2021). Accessed June 28, 2022. https://opendata.mtc.ca.gov/datasets/transit-priority-areas-2021-1/explore?location=37.773000%2C-122.191730%2C9.35.
[6] Bay Area Metro. "Plan Bay Area 2050 Transportation Project List." Accessed March 31, 2022. https://www.planbayarea.org/2050-plan/final-plan-bay-area-2050/final-supplemental-reports/interactive-transportation-project-list.
[7] City of Los Altos. *Initial Study/Mitigated Negative Declaration for the Los Altos General Plan Update.* November 2002. Page 12.

Photo 1: View of the project site from the eastern property boundary looking northwest

Photo 2: View of the project site from Distel Circle looking southwest

PHOTOS 1 & 2

Photo 3: View of Distel Circle from the southeast corner of the project site looking northeast

Photo 4: View of Distel Circle looking south from the northern boundary of the site

PHOTOS 3 & 4

Photo 5: View from the project site looking north towards El Camino Real

Photo 6: View from the southwest corner of Distel Circle and El Camino Real looking northwest

PHOTOS 5 & 6

Scenic Corridors and Highways

There are no state-designated scenic highways in Los Altos. Interstate 280 (I-280) from the San Mateo County line to State Route (SR) 17, which includes segments in Los Altos, is an eligible, but not officially designated, State Scenic Highway.[8]

In Santa Clara County, the one state-designated scenic highway is SR 9 from the Santa Cruz County line to the Los Gatos city limit. Eligible State Scenic Highways (not officially designated) include SR 17 from the Santa Cruz County line to SR 9, SR 35 from Santa Cruz County line to SR 9, I-280 from the San Mateo County line to SR 17, and the entire length of SR 152 within the County.

[8] California Department of Transportation. "Scenic Highways." Accessed March 28, 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? [9] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not result in significant aesthetic impacts. **(Less than Significant Impact)**

Implementation of the proposed project would result in changes to the built environment compared to existing conditions. The project is a residential development located on an infill site (i.e., located in an urban area and currently developed) within a TPA (as discussed under Section 4.1.1.2 Existing Conditions). Pursuant to SB 743, (Public Resources Code section 21099[d][1]) "aesthetic and parking impacts of a residential, mixed-use residential, or employment center on an infill site within a transit priority area shall not be considered significant impacts on the environment;" therefore, the aesthetics impacts of the project are not considered significant. **(Less than Significant Impact)**

[9] Public views are those that are experienced from publicly accessible vantage points.

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[10] Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.

4.2.1.2 *Existing Conditions*

According to the Santa Clara County Important Farmland map, the project site is designated as Urban and Built-Up Land, which is defined as land with at least six structures per 10 acres. Common examples of Urban and Built-Up Land are residential, institutional, industrial, commercial, landfill, golf course, airports, and other utility uses.[11]

The project site is zoned CT (Commercial Thoroughfare) and developed with an existing single-story office building. The project site and surrounding sites are not used for agriculture, forestry or

[10] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

[11] California Natural Resources Agency. Santa Clara County Important Farmland 2016. Accessed October 27, 2021. https://www.conservation.ca.gov/dlrp/fmmp/Pages/SantaClara.aspx.

timberland, nor are they the subject of a Williamson Act contract.[12] The project site is in a developed, urban area of Los Altos. It is primarily surrounded by commercial uses and existing office space, with single-family neighborhoods to the south (refer to Figure 2.4-3).

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Impact AG-1:	The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(No Impact)**

As discussed in Section 4.2.1.2, the project site is not designated for agricultural use. Therefore, designated farmland would not be converted to non-agricultural use as a result of project implementation. **(No Impact)**

[12] County of Santa Clara. "Williamson Act and Open Space Easement". September 17, 2018. Accessed October 27, 2021. https://www.sccgov.org/sites/dpd/programs/wa/pages/wa.aspx.

Impact AG-2:	The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The project site is zoned CT (Commercial Thoroughfare*)* and is not zoned for agricultural use. The project site is not under a Williamson Act contract. Therefore, the project would not conflict with existing zoning for an agricultural use or a Williamson Act contract. **(No Impact)**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

The project site is not zoned, or adjacent to land zoned, for forest land, timberland, or Timberland Production. The project site is located in an urban area surrounded by existing development. Therefore, the project would not conflict with existing zoning or cause rezoning of forest land or timberland uses. **(No Impact)**

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

The project site is in an urbanized area of the City and is developed with an office building and surface parking. There is no existing forest land near the site. Therefore, no forest land would be lost as a result of the project, nor would the project result in the conversion of existing forest land to non-forest uses. **(No Impact)**

Impact AG-5:	The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. **(No Impact)**

As described in Section 4.2.1.2, the project site and adjacent properties are not designated or used as farmland or forest land. For this reason, development of the project would not cause the conversion of farmland to non-agricultural use or forest land to non-forest use. (No Impact)

4.3 AIR QUALITY

The following discussion is based, in part, on an Air Quality and Greenhouse Gas Assessment prepared by Illingworth & Rodkin, Inc. A copy of the report, dated May 10, 2022, is attached to this Initial Study as Appendix A.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxide (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[13] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Oxide (NO_x)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Carbon Monoxide (CO)	Motor vehicle exhaust, unvented kerosene and gas space heaters, leaking chimneys and furnaces, and gas stoves	• Dizziness and confusion • Unconsciousness and death
Sulfur Oxides (SO_x)	Burning of fossil fuels by power plants, industrial processes, volcanoes, burning fossil fuels with high sulfur content	• Aggravation of respiratory illness
Lead	Ore and metals processing, piston-engine aircraft operating on leaded	• Adverse effects to the nervous system, kidney function, immune system,

[13] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

Table 4.3-1: Health Effects of Air Pollutants		
Pollutants	**Sources**	**Primary Effects**
	aviation fuel, waste incinerators, utilities, and lead-acid battery manufacturers	reproductive and developmental systems and the cardiovascular system • Neurological disorders
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[14] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

[14] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed May 17, 2022. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including O_3, NO_x, PM, CO, SO_x,, and lead.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in addition to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_x.

Regional

2017 Clean Air Plan

The BAAQMD is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD

will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[15]

Local

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended action measures.

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purposes of reducing or avoiding impacts related to air quality, and are applicable to the project.

Policies	Description
LU 8.3	Interpret and implement the General Plan to be consistent with the regional Bay Area Air Quality Management Plan, as periodically updated.
LU 8.4	Ensure location and design of development projects so as to conserve air quality and minimize direct and indirect emissions of air contaminants.

Los Altos Climate Action Plan

The City of Los Altos Climate Action Plan (LACAP) includes a goal to improve communitywide emissions efficiency by 15 percent over 2005 levels by 2020. The reduction measures included in this plan are a diverse mix of incentives, education, and regulations applicable to both new and existing development. The measures are designed to reduce emissions from each source to avoid relying on any one strategy or sector to achieve the target.

4.3.1.3 *Existing Conditions*

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM_{10} under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their

[15] Bay Area Air Quality Management District. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and apply to both construction period and operational period impacts.

The nearest sensitive receptors to the project site are the residences southwest (approximately 40 feet) and south (approximately 150 feet) of the site. Additional nearby sensitive receptors include residences to the north, east, and west of the project site and the Mountain View-Los Altos Montessori Children's Center located approximately 440 feet to the east of the project site.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
4) Result in other emissions (such as odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Los Altos has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-2.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Annual Daily Emissions (pounds/year)**	**Annual Average Emissions (tons/year)**
Criteria Air Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust-Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 $\mu g/m^3$	0.8 $\mu g/m^3$ (average)	
Notes: ppm = part per million; and $\mu g/m^3$ = micrograms per cubic meter..			

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant)**

The BAAQMD CEQA Air Quality Guidelines set forth criteria for determining consistency with the 2017 CAP. In general, a project is considered consistent if it: a) supports the primary goals of the 2017 CAP; b) includes relevant control measures; and c) does not interfere with implementation of the 2017 CAP control measures.

Support of Primary 2017 CAP Goals

As discussed in Section 4.3.1.2 Regulatory Framework, the goals of the 2017 CAP include 1) protecting public health by progress towards attaining air quality standards and eliminating health risk and 2) protecting the climate. If a project exceeds the BAAQMD thresholds of significance, its emissions are considered to result in significant adverse air quality impacts to the region's existing air quality conditions. Similarly, if the project exceeds the BAAQMD community health risk threshold of significance, the project would result in a community health risk. An analysis of the project's construction and operational air pollutant emissions is provided below, as well as a discussion of the project's community health risk.

Construction Period Emissions – Criteria Pollutants

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate annual emissions from construction activities. Construction emissions were modeled based on equipment list and schedule information provided by the applicant. Details about the equipment list, construction schedule, modeling, data inputs, and assumptions are included in Appendix A.

Table 4.3-3 summarizes the construction emissions for the project and shows the project's construction criteria pollutant emissions would not exceed BAAQMD thresholds.

Table 4.3-3: Construction Period Emissions

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
	(average daily emissions in pounds per day)			
2023	1.69	16.12	0.75	0.66
2024	8.80	20.94	0.97	0.91
BAAQMD Thresholds	*54*	*54*	*82*	*54*
Exceed Threshold?	**No**	**No**	**No**	**No**

The project would include the following BAAQMD best management practices identified Section 3.1.5.1 Standard Construction Measures and are as follows:

- Designate an on-site coordinator and monitor to ensure implementation of the below dust and emission control measures.
- Water all exposed surfaces at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- Cover all haul trucks transporting soil, sand, or other loose material off-site.
- Remove all visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Limit all vehicle speeds on unpaved roads to 15 mph.
- Complete pavement of all roadways, driveways, and sidewalks as soon as possible.
- Lay out building pads as soon as possible after grading unless seeding or soil binders are used.
- Maintain and properly tune all construction equipment in accordance with manufacturer's specifications. Check all equipment by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number of the on-site coordinator/monitor and telephone number and person to contact at the City of Los Altos regarding dust complaints. The on-site coordinator/monitor would respond and take corrective action within 48 hours. Post the Air District's phone number to be visible to ensure compliance with applicable regulations.
- Suspend all excavation, grading, and/or demolition activities when average wind speeds exceed 20 mph.

- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established.
- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time. Phase activities to reduce the amount of disturbed surfaces at any one time.
- Wash all trucks and equipment, including their tires, prior to leaving the site.
- Treat site accesses to a distance of 100 feet from the paved road with a 6-to-12-inch compacted layer of wood chips, mulch, or gravel.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to two minutes. Provide clear signage for construction workers at all access points.

With the incorporation of the above proposed measures, the project's construction emissions would be further reduced. Therefore, construction criteria air pollutant emissions would be less than significant. **(Less than Significant Impact)**

Operational Period Emissions – Criteria Pollutants

Operational period criteria pollutant emissions associated with the project would be generated primarily from vehicles driven by future residents, and to a lesser extent by waste disposal and daily energy and water usage. The BAAQMD developed screening criteria to provide lead agencies with an indication of whether a project could result in significant operational air quality impacts (e.g., daily or annual emissions above stated thresholds). Screening criteria are used to determine the extent of additional analysis required for a specific project. If a project is determined to be below the BAAQMD's operational screening criteria, then the project is said to have less than significant operational criteria air pollutant impacts and no further analysis is required under CEQA.

The project proposes 90 apartment units, which does not exceed the BAAQMD operational criteria air pollutants screening threshold of 90 dwelling units for an "Apartments Mid Rise" land use type. Therefore, the project would result in a less than significant air quality impact due to operational-related criteria air pollutant emissions. **(Less than Significant Impact)**

Community Health Risk

The project's community health risk impact is discussed in more detail under Impact AIR-3. In summary, the project as proposed (which includes typical, standard BAAQMD best management practices, see Section 3.1.5.1 Standard Construction Measures) would not result in health risks above BAAQMD thresholds of significance. **(Less than Significant Impact)**

Consistency with 2017 CAP Control Measures

To protect climate, the 2017 CAP includes control measures to reduce emissions of GHG emissions. As discussed in Table 4.3-4 below, the project would be consistent with all applicable measures of the 2017 CAP and would not interfere with implementation of the 2017 CAP control measures.

Table 4.3-4: Project Consistency with Bay Area 2017 CAP Applicable Control Measures

Summary of Applicable Control Measures	Consistency Discussion
Transportation Measures	
TR9 – Bicycle and Pedestrian Access and Facilities: Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	**Consistent:** The project would incorporate urban design and architectural elements that would improve pedestrian facilities and safety, including wider sidewalks, public benches, and seating areas along the sidewalk. Short- and long-term bicycle spaces would be provided in accordance with City requirements. For these reasons, the project is consistent with this measure.
TR13 – Parking Policies: Encourage parking policies and programs in local plans, e.g., reduce minimum parking requirements; limit the supply of off-street parking in transit-oriented areas; unbundle the price of parking spaces; support implementation of demand-based pricing in high-traffic areas.	**Consistent:** The project would provide a parking ratio of one parking stall per housing unit which is below minimum requirement for multiple-family dwelling units in a CT district. The project is consistent with this measure.
TR10 – Land Use Strategies: Support implementation of Plan Bay Area, maintain and disseminate information on current climate action plans and other local best practices.	**Consistent:** As discussed in Section 4.1 Aesthetics and 4.17 Transportation, the project is located within a TPA. The project would provide a 100 percent affordable housing project located on an infill site, in proximity to transit. Therefore, the project would be consistent with the development goals of Plan Bay Area. The project is consistent with this measure.
Building and Energy Measures	
BL1 – Green Buildings: Identify barriers to effective local implementation of CalGreen (Title 24) statewide building energy code; develop solutions to improve implementation/ enforcement. Engage with additional partners to target reducing emissions from specific types of buildings.	**Consistent:** The project would comply with Building Energy Efficiency Standards (Title 24), the City's Reach Code Ordinance, and the most recent CALGreen requirements. As discussed in Section 3.1.5 Construction Activities, the project would construct the ground floor with mass timber (a renewable

Table 4.3-4: Project Consistency with Bay Area 2017 CAP Applicable Control Measures

Summary of Applicable Control Measures	Consistency Discussion
	resource), and construct floors two through five with modular units which are designed to minimize material waste, construction noise, and project construction time. The project is consistent with this measure.
BL2 – Decarbonize Buildings: Explore incentives for property owners to replace their furnace, water heater or natural-gas powered appliances with zero-carbon alternatives. Update Air District guidance documents to recommend that commercial and multi-family developments install ground source heat pumps and solar hot water heaters.	**Consistent:** The project would participate in the SVCE which generates electricity for new customers from 100 percent carbon free source (as exemplified in Section 4.8 Greenhouse Gas Emissions) and, therefore, all electricity used by the project would be generated by carbon-free wind, solar, and hydroelectric sources. The project is consistent with this measure.
BL4 – Urban Heat Island Mitigation: Develop and urge adoption of a model ordinance for "cool parking" that promotes the use of cool surface treatments for new parking facilities, as well existing surface lots undergoing resurfacing. Develop and promote adoption of model building code requirements for new construction or reroofing/roofing upgrades for commercial and residential multifamily housing.	**Consistent:** Most of on-site parking is provided in parking structures located beneath the buildings, thus minimizing the urban heat island effect. The project is consistent with this measure.
EN2 – Decrease Electricity Demands: Support local government energy efficiency program via best practices, model ordinances, and technical support.	**Consistent:** The project would comply with Building Energy Efficiency Standards (Title 24), the City's Reach Code Ordinances, and the most recent CALGreen requirements. The project is consistent with this measure.
Natural and Working Lands Measures	
NW2 – Urban Tree Planting: Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations, the Air District's technical guidance, best management practices for local plans, and CEQA review.	**Consistent:** As discussed in Section 3.4 Biological Resources, all trees removed by the project would conform to the replacement requirements in the City's Tree Protection Ordinance. The project would plant a new vegetative buffer along the western boundary of the project site and new trees along the perimeter of the site. The project is consistent with this measure.
Waste Management Measures	

Table 4.3-4: Project Consistency with Bay Area 2017 CAP Applicable Control Measures	
Summary of Applicable Control Measures	**Consistency Discussion**
WA4 – Recycling and Waste Reduction: Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects.	**Consistent:** The project would comply with the City of Los Altos Demolition Permit and Construction Diversion Ordinance, which requires sixty-five percent of construction waste generated by the project is recovered and diverted from landfills. The project is consistent with this measure.
Water Conservation Measures	
WR2 – Support Water Conservation: Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	**Consistent:** The project would comply with the state's Model Water Efficient Landscape Ordinance, and use a drip irrigation system and high-efficiency appliances and fixtures. The project is consistent with this measure.

Impact AIR-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(Less than Significant Impact)**

As stated in the BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

As described in Section 4.3.2.1 Existing Conditions, the Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$. The area is also considered non-attainment for PM_{10} under the California Clean Air Act, but not the federal act. As part of an effort to attain and maintain ambient air quality standards for ozone and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. As described under Impact AIR-1, the project would not result in an exceedance of BAAQMD thresholds for these air pollutants during construction or operation. Therefore, the project would not result in a cumulatively considerable increase of any criteria pollutant for which the region is in nonattainment. **(Less than Significant Impact)**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact)**

Project impacts related to increased community risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or by

significantly exacerbating existing cumulative TAC impacts. The project would introduce new sources of TACs during construction and operation.

Community risk impacts from the project are addressed by predicting increased cancer risk, the increase in annual $PM_{2.5}$ concentrations and computing the Hazard Index (HI) for non-cancer health risks. The risk impacts from the project are the combination of risks from construction and operation sources. These sources include on-site construction activity, construction truck hauling, and increased traffic from the project. To evaluate the increased cancer risks from the project, a 30-year exposure period was used, per BAAQMD guidance, with the sensitive receptors being exposed to both project construction and operation emissions during this timeframe. The project increased cancer risk is computed by summing the project construction cancer risk and operation cancer risk contributions. Unlike, the increased maximum cancer risk, the annual PM2.5 concentration and HI values are not additive but based on the annual maximum values for the entirety of the project. The project Maximally Exposed Individual (MEI) is identified as the sensitive receptor that is most impacted by the project's construction and operation. The community risk from these two sources are discussed below.

Community Health Risk

Community Health Risk from Construction Activity

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. Although construction exhaust air pollutant emissions would not contribute substantially to existing or projected air quality violations (see Impact AIR-1), construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. Diesel exhaust particulate matter (DPM) poses both a potential health and nuisance impact to nearby receptors. A quantitative health risk assessment of the project construction activities was conducted to evaluate the potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5,}$ pursuant to the BAAQMD CEQA Air Quality Guidelines using CalEEMod and the U.S. EPA AERMOD dispersion model. Details about the community health risk modeling, data inputs, and assumptions are included in Appendix A.

Table 4.3-5 below summarizes the maximum cancer risk, $PM_{2.5}$ concentrations, and HI for project construction activities affecting the off-site residential MEI and reflects the implementation of the following construction emission control measures proposed as part of the project, which are identified in Section 3.1.5.1 Standard Construction Measures:

- Reduce diesel particulate matter emissions by 87 percent such that increased cancer risk and annual $PM_{2.5}$ concentrations from construction would be reduced below TAC significance levels is as follows:
    - Require all construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total meet U.S. Environmental Protection Agency (EPA) Tier 4 emission standards for PM (PM_{10} and $PM_{2.5}$) if feasible, otherwise,
        - If use of Tier 4 equipment is not available, alternatively use equipment that meets EPA emission standards for Tier 3 engines and include particulate

matter emissions control equivalent to California Air Resources Board (CARB) verifiable diesel emission control devices that altogether achieve an 87 percent reduction in particulate matter exhaust from the project in comparison to uncontrolled equipment; alternatively (or in combination),

- Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment.
- Power stationary cranes by electricity.
- Register all mobile diesel construction equipment used for the project with CARB through DOORS and have an assigned unique Equipment Identification Number (EIN). The vehicles EIN label will be clearly visible on the equipment so the public can use DOORS, the CARB online tool, to look up the equipment type, size, and age.

Alternatively, the applicant may develop another construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 87 percent or greater. Elements of the plan could include a combination of some of the following measures:

- Implementation of No. 1 above to use Tier 4 or alternatively fueled equipment,
- Installation of electric power lines during early construction phases to avoid use of diesel generators and compressors,
- Use of electrically-powered equipment,
- Use electric or propane/natural gas powered forklifts and aerial lifts for exterior and interior building construction
- Change in construction build-out plans to lengthen phases, and
- Application of different building methods that result in less diesel equipment usage.
- Such a construction operations plan would be subject to review by an air quality expert and approved by the City prior to construction.

These above proposed control measures are typically employed by infill development near sensitive receptors. Refer to Appendix A for details about the effectiveness of the proposed construction emission control measures. Figure 4.3-1 shows the locations of sensitive receptors near the project site and the MEI. The maximum cancer risk would occur on the first floor of a single-family residence of the project approximately 186 feet south of the project site.

Source: Illingworth & Rodkin, Inc., May 10, 2022.

OFF-SITE RECEPTORS AND MAXIMALLY EXPOSED INDIVIDUAL | FIGURE 4.3-1

Table 4.3-5: Construction Risk Impacts at Off-Site MEI			
Source	**Cancer Risk (per million)**	**Annual $PM_{2.5}$ ($\mu g/m^3$)**	**Hazard Index**
Project Construction*	6.74	0.27	<0.01
BAAQMD Single-Source Threshold	***10.0***	***0.3***	***1.0***
Significant?	*No*	*No*	*No*
***** Assumes implementation of proposed measures in Section 3.1.5.1 Standard Construction Measures			

As shown in Table 4.3-5, the project (which includes the above typical construction emission control measures) would not result in significant community health risk impacts. **(Less than Significant Impact)**

Community Health Risk from Project Operation

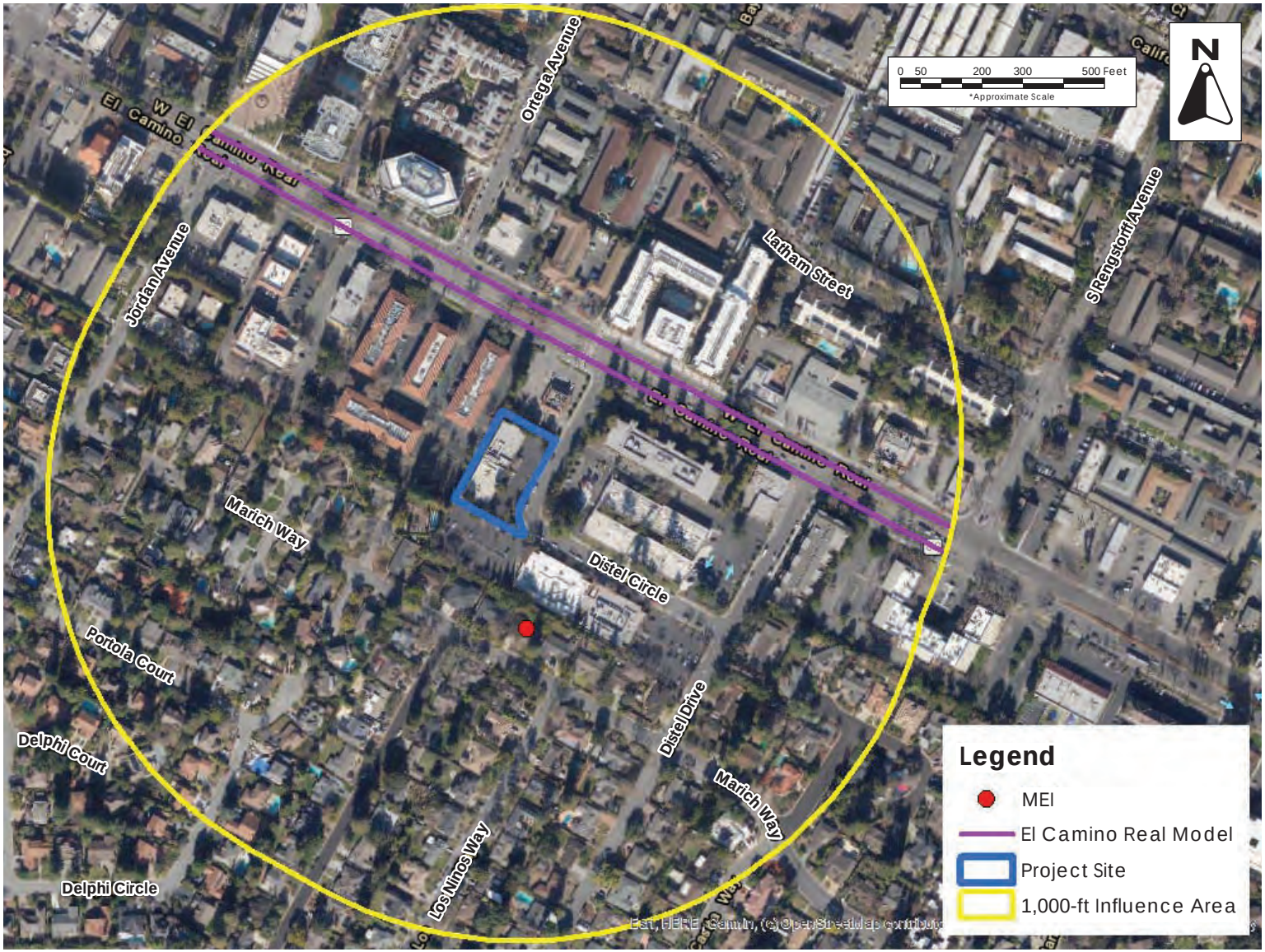
Operation of the project would generate emissions from mobile sources (i.e., traffic). While these emissions would not be as intensive at or near the site as construction activity, they would contribute to long-term effects to sensitive receptors.

The project would generate a maximum of 296 net new daily trips per day, as show in Table 4.17-1 in Section 4.17 Transportation and Traffic. Project-related traffic would be primarily light-duty vehicle traffic, which is not a source of substantial TACs or $PM_{2.5}$. Accordingly, these emissions are anticipated to result in fairly low impacts in terms of TAC or $PM_{2.5}$ exposure compared to the surrounding traffic and would therefore not be an operational TAC source. **(Less than Significant Impact)**

Combined Community Health Risk from Project Construction and Operation

Community health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors that are located within 1,000 feet of the project site. These sources include railroads, freeways or highways, busy surface streets, and existing stationary sources identified by BAAQMD. Figure 4.3-2 shows the cumulative TAC sources (i.e., construction activities at the project site and mobile sources on El Camino Real) in relation to the off-site MEI. Table 4.3-6 below reports both the project and cumulative community risk impacts at the sensitive receptors most affected by project construction and operation (i.e. the MEI) and shows that construction of the project as proposed (which includes implementation of typical construction emission control measures) when combined with surrounding TAC sources would not result in a significant cumulative community health risk impact. **(Less than Significant Impact)**

Table 4.3-6: Impacts from Combined Sources at the Off-Site MEI			
Source	**Cancer Risk (per million)**	**Annual $PM_{2.5}$ ($\mu g/m^3$)**	**Hazard Index**
Project Construction*	6.74	0.27	<0.01
El Camino Real (Average Daily Traffic 30,972)	0.89	0.08	<0.01
Combined Sources	7.63	0.35	<0.02
BAAQMD Cumulative Source Threshold	*100*	*0.8*	*10.0*
Exceed Threshold?	**No**	**No**	**No**
* Assumes implementation of proposed measures in Section 3.1.5.1 Standard Construction Measures			



Source: Illingworth & Rodkin, Inc., May 10, 2022.

PROJECT MEI AND NEARBY TAC AND $PM_{2.5}$ SOURCES | FIGURE 4.3-2

Health Effects from Criteria Pollutants

In a 2018 decision (*Sierra Club* v. *County of Fresno*), the state Supreme Court determined CEQA requires that when a project's criteria air pollutant emissions would exceed applicable thresholds and contribute a cumulatively considerable contribution to a significant cumulative regional criteria pollutant impact, the potential for the project's emissions to affect human health in the air basin must be disclosed. State and federal ambient air quality standards are health-based standards, and exceedances of those standards result in continued unhealthy levels of air pollutants.

As stated in the BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project has a less than significant impact for criteria pollutants, it is assumed to have no adverse health effect. As described previously under Impact AIR-1, the project would not exceed BAAQMD thresholds for operational and construction criteria air pollutants. **(Less than Significant Impact)**

Impact AIR-4:	The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

According to the BAAQMD CEQA Guidelines, an odor source with five or more confirmed complaints per year averaged over three years is considered to have a significant impact.[16] Construction activities for the project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. The odors from these emissions may be noticeable from time to time by adjacent receptors; however, the odors would be localized and temporary. Odors associated with the application of paints and coatings may also be noticeable on occasion by adjacent receptors. Painting and coating of the project would occur during daytime hours only, would be localized, and would be generally confined to the project site. These odors would also be temporary. Given the temporary nature of the above-described odors, exposure of sensitive receptors to these emissions would be limited and the impact is less than significant.

In addition, BAAQMD has identified a variety of land uses that produce emissions that may lead to odors and generate complaints including, but are not limited to, wastewater treatment plants, landfills, composting operations, and food manufacturing facilities. Residential uses do not typically generate objectionable odors, nor do they fall under any of the land uses identified by BAAQMD to cause objectionable odors. Based on the above reasons, the project would not result in odor emissions that would adversely affect a substantial number of people. **(Less than Significant Impact)**

4.3.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA

[16] Bay Area Air Quality Management District. California Environmental Quality Act Air Quality Guidelines. May 2017. Page 2-1.

impacts. The following discussion is included for informational purposes only because the City's General Plan has policies (LU 8.1, LU 8.4) that address existing air quality conditions affecting a proposed project.

Accordingly, a health risk assessment was completed to assess the impact of existing TAC sources on future sensitive receptors (i.e., residents) that would be present on-site. Details about the health risk modeling, data inputs, and assumptions are provided in Appendix A. The health risk assessment concluded that the future MEI at the project would not be exposed to cancer risks, annual $PM_{2.5}$ concentrations, and HI for non-cancer health risks that would exceed both the BAAQMD single-source and cumulative source thresholds. Therefore, future residents of the project would not be exposed to substantial pollutant concentrations.

4.4 BIOLOGICAL RESOURCES

The following discussion is based, in part, on an arborist report prepared by HortScience | Bartlett Consulting. The report, dated February 3, 2022, is attached to this Initial Study as Appendix B.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.[17] Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to

[17] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed November 16, 2021. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purposes of reducing or avoiding impacts related to biological resources, and are applicable to the project.

Policy	Description
CDHR 1.1	Preserve trees, especially heritage and landmark trees, and trees that protect privacy in residential neighborhoods.

Los Altos Municipal Code

The City's adopted a Tree Protection Ordinance in Chapter 11.08 of the Municipal Code prescribes measures for removal and replacement of trees in the City, in addition to protective actions to be taken to avoid damage to existing trees. The Tree Protection Ordinance defines a "protected tree" as:

- Any tree that is 48 inches in circumference measured at 48 inches above grade;
- Any tree designated by the Historical Commission as a heritage tree or any tree under official consideration by the Historical Commission for heritage tree designation;[18]
- Any tree which was required by the City to be either saved or planted in conjunction with a development review application. Any tree located within a public right-of-way.
- Any tree located on property zoned other than single-family residential.

All protected trees require a Tree Removal Permit before they can be removed based on the criteria described in Municipal Code Subsection 11.08.090.A, including tree condition, health, size, age, and preservation suitability. Based on the aforementioned criteria, the City would make a determination on the number of required replacement trees.

4.4.1.2 *Existing Conditions*

The project site is located in an urbanized area and consists of a single-story office building, paved surface parking, and sparse landscaping. Most of the site is paved with asphalt/concrete or occupied

[18] Trees may be designated as "heritage trees" upon application by the owner of the property on which the tree is located, a study of the proposed tree by the Historical Commission, and a determination of designation based on the criteria outlined in Section 12.44.030 of the Municipal Code.

by the office building. There are no wetlands, streams or riparian habitat on or adjacent to the site. The nearest waterway, Permanente Creek, is located approximately 0.7 miles east of the site. Due to the lack of sensitive habitats, developed nature of the site, and the human disturbance of the project site, special-status plant and animal species are not expected to occur on the project site.

Habitats in developed areas are extremely low in species diversity. The wildlife species most often associated with developed areas are those that are most tolerant of periodic human disturbances, including several introduced species such as European starlings, rock doves, and Norway rats. Native species that are able to utilize these habitats include western fence lizards, American robins, mourning doves, and squirrels.

The primary biological resource on the project site are trees. There are a total of 27 trees within and adjacent to the project site, including 13 trees that meet the City's definition of a "protected tree". None of the 27 trees are identified as "heritage trees". A summary of the tree species, condition, and quantity on the project sites is provided in Table 4.4-1 and the location of trees is shown on Figure 4.4-1. Additional details about the trees are included in Appendix B.

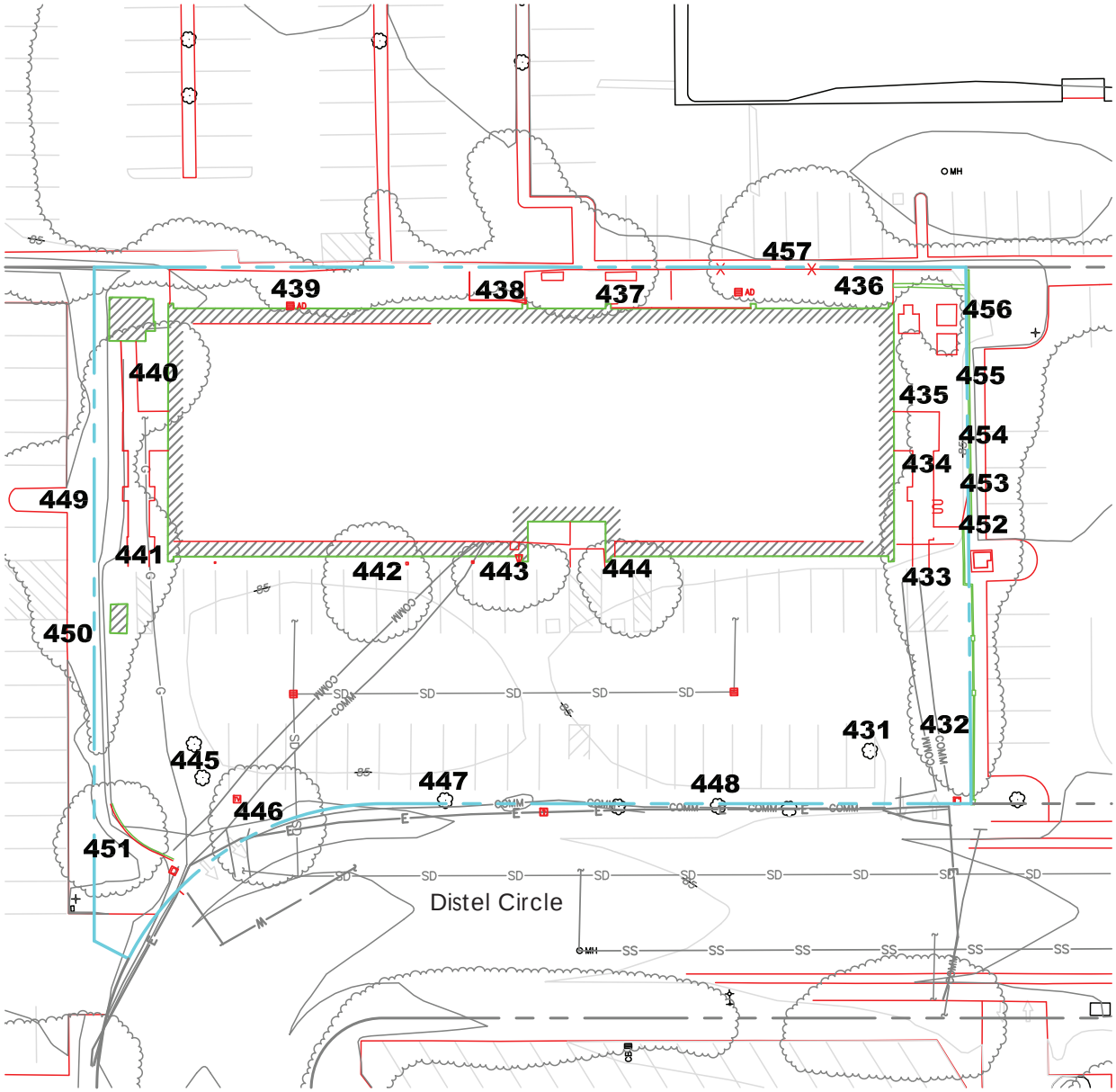
Table 4.4-1: Summary of Trees On and Adjacent to the Project Site

Tree Number	Common Name	Circumference (inches)	Condition	Protected
431*	Holly Oak	31	3	No
432*	Holly Oak	47	3	Yes
433*	Holly Oak	63	4	Yes
434*	Holly Oak	69	3	No
435*	Holly Oak	28	1	No
436*	Coast live oak	28	3	No
437*	Evergreen pear	34	3	No
438*	Evergreen pear	47	3	Yes
439*	Mexican fan palm	50	5	Yes
440*	Holly Oak	47	3	Yes
441*	Holly Oak	41	3	No
442*	African fern pine	69	4	Yes
443*	Evergreen pear	47	4	Yes
444*	Evergreen pear	44	3	No
445*	Holly Oak	25	3	No
446*	Olive	125	4	No
447*	Sweetgum	31	3	No
448*	Sweetgum	44	3	No
449^	Coast live oak	135	4	Yes

Table 4.4-1: Summary of Trees On and Adjacent to the Project Site				
Tree Number	**Common Name**	**Circumference (inches)**	**Condition**	**Protected**
450^	Holly Oak	44	3	No
451*	Coast live oak	63	5	Yes
452^	Hollywood juniper	47	3	No
453^	Hollywood juniper	50	3	Yes
454^	Coast redwood	57	3	Yes
455^	Xylosma	28	3	No
456^	Coast redwood	69	3	Yes
457^	California sycamore	75	4	Yes

Notes:
Tree Condition: 1=Poor, 5=Excellent
* Tree to be removed.
^ Tree is located off-site.
Source: HortScience | Bartlett Consulting. *Preliminary Arborist Report 420 South 2nd Street.* May 26, 2021.

The City of Los Altos has not established a habitat conservation plan or a natural community conservation plan, nor is it located within the boundaries of an approved local, regional, or state habitat conservation plan.



Source: Source: HortScience | Bartlett Consulting, September 2021.

TREE LOCATION MAP | FIGURE 4.4-1

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☐	☒	☐
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☐	☒
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact BIO-1:	The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. **(Less than Significant Impact)**

As described in section 4.4.1.2 Existing Conditions, the project site is in an urban area, fully developed, and surrounded by development. In addition, the site does not contain sensitive habitats (such as wetlands). For these reasons, special-status plant or animal species are not present on-site.

Migratory birds and/or raptors could nest in the mature trees on and adjacent to the project site. Nesting birds are among the species protected under provisions of the MBTA and California Fish and Game Code Sections 3503, 3503.5, and 2800. Development of the site during the nesting season (i.e., February 1 to August 31) could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFW and USFWS. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute an impact. Construction activities, including equipment noise and tree removal, that disturb a nesting bird or raptor on-site or immediately adjacent to the project construction zone would also constitute an impact.

The project includes standard measures to comply with the MBTA and California Fish and Game Code to protect nesting birds, which are identified in Section 3.1.5.1 Standard Construction Measures and are as follows:

- The project would schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive).
- If demolition and construction cannot be scheduled between September 1st and January 31st (inclusive), pre-construction surveys for nesting birds would be completed by a qualified ornithologist to ensure that no nests are disturbed during project implementation. This survey would be completed no more than seven days prior to the initiation of construction activities. During this survey, the ornithologist would inspect all trees and other possible nesting habitats within 250 feet (for raptors) and 100 feet (for non-raptors) of the construction areas for nests.
- If an active nest is found within 250 feet for raptors and 100 feet for non-raptors of the work areas to be disturbed by construction, the ornithologist/biologist would determine the extent of a construction free buffer zone to be established around the nest, typically 250 feet for raptors and 100 feet for other birds, to ensure that raptor or migratory bird nests are not disturbed during project construction. The no-disturbance/construction free buffer zone would remain in place until the ornithologist/biologist determines the nest is no longer active or the nesting season ends. If construction ceases for seven days or more then resumes again during the nesting season, an additional survey would be necessary to avoid impacts to active bird nests that may be present.

The project as proposed would ensure that construction of the project takes place outside of the nesting season, thus avoiding any incidental loss of fertile eggs or nestlings, or nest abandonment. Alternatively, if demolition and construction cannot be scheduled between September 1 and January 31, the project proposes to complete pre-construction surveys to identify and protect all active nests within the project's area of effect from being disturbed during construction. For these reasons, the project would not result in significant impacts to nesting birds. **(Less than Significant Impact)**

Impact BIO-2:	The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(No Impact)**

As described in Section 4.4.1.2 Existing Conditions, the project site and surrounding area are fully developed and do not contain any sensitive habitat, such as riparian habitat. The nearest waterways to the project site include Permanente Creek which is partially underground and contained within a concrete channel, located approximately 0.7 miles east, and Adobe Creek, a vegetated riparian corridor located approximately 1.1 miles to the west.[19] Given the distance to the nearest riparian corridors and intervening development between the site and the riparian corridors, implementation of the project would not adversely affect any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. **(No Impact)**

Impact BIO-3:	The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(No Impact)**

The project site does not contain state or federally protected wetlands. Therefore, the proposed project would have no impact on wetlands. **(No Impact)**

Impact BIO-4:	The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact)**

Migratory movements of animal species are most often associated with riparian corridors, and the project site is not located adjacent to any streams or waterways. The closest riparian corridor to the site (Adobe Creek) is located approximately 1.1 miles to the west of the site and would be unaffected by the proposed project (see discussion under Impact BIO-2).[20] For these reasons, the project would not interfere with migratory fish or wildlife species.

Glass windows and building facades can result in injury or mortality of birds due to bird collisions with these surfaces. The project design would consist of predominately of glass. Due to the highly urbanized nature of the project area, trees on and adjacent to the project sites are more conducive to use by urban-adapted resident birds that are widespread through urban and suburban land uses in the San Francisco Bay Area and have a high regional population. Therefore, any bird collisions resulting from the proposed project would represent a very small portion of regional populations and would not represent a substantial portion of any species. For the reasons above, the project would not

[19] The nearest section of Permanente Creek to the project site is a concrete channel and does not provide riparian habitat. The nearest section of Adobe Creek to the project site is vegetated with mature trees and is identified as hardwood woodland along the creek. Source: California Department of Forestry and Fire Protection. Vegetation (fveg) - CALFIRE FRAP [ds1327]. 2019. Accessed May 31, 2022. https://apps.wildlife.ca.gov/bios/?al=ds1327.

[20] The nearest woodland or forest habitat located along a creek is Adobe Creek located approximately 1.1 miles west of the project site. The nearest section of Permanent Creek, approximately 0.7 miles east, does not contain forest or woodland habitat. Source: California Department of Forestry and Fire Protection. Vegetation (fveg) - CALFIRE FRAP [ds1327]. 2019. Accessed May 31, 2022. https://apps.wildlife.ca.gov/bios/?al=ds1327.

substantially interfere with movement of native resident species due to avian collision with the proposed building. **(Less than Significant Impact)**

Impact BIO-5:	The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact)**

There are 27 trees on and adjacent to the project site, 13 of which meet the City's definition of a "protected tree" (i.e., measure 48 inches or greater in circumference at 48 inches above grade). The project would remove 19 trees, including eight protected trees. The trees to be removed are on identified in Table 4.4-1 and noted on Figure 4.4-1.

Prior to removal of protected trees, the project would be required to obtain a tree removal permit as required by the City's Tree Protection Ordinance. The project would also be required to conform with the replacement requirements outlined in the Los Altos Municipal Code (Chapter 11.08.090). The proposed project is not expected to result in a significant impact to trees upon implementation of the recommended tree protection measures. Therefore, the project would not conflict with the City's Tree Protection Ordinance. **(Less than Significant Impact)**

Impact BIO-6:	The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(No Impact)**

The project site is not located within an approved local, state, or national habitat conservation plan area. Thus, there would be no impact. **(No Impact)**

4.5 CULTURAL RESOURCES

The discussion in the section is based, in part, on a Cultural Resources Inventory Report prepared by Archaeological/Historical Consultants dated February 2022. This report is confidential, and a copy of the Cultural Resources Inventory Report is on file at the City.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

Code of Federal Regulations Title 36, Part 800.5(a)

CFR Title 36, Part 800.5(a) describes procedures for evaluating a project's adverse effects on cultural resources for federal undertakings. An adverse effect is found when a federal undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Examples of adverse effects are provided in CFR Title 36, Part 800.5(a)(2) and include, but are not limited to, the following:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property—including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access—that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use, or of physical features within the property's setting, that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to a Native American tribe or native Hawaiian organization; and
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[21]

Historical resources eligible for listing in the CRHR must meet the significance criteria described in Public Resources Code Section 5024.1(c) and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

[21] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed March 28, 2022. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

Local

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purposes of reducing or avoiding impacts related to cultural resources, and are applicable to the project.

Policy	Description
CDHR 6.1	Ensure that the integrity of historic structures and the parcels on which they are located are preserved through the implementation of applicable design, building, and fire codes.
CDHR 6.2	The City shall regard demolition of landmark and historic resources, listed in the Historic Resources Inventory as a last resort. Demolition would be permitted only after the City determines that the resource has lost its physical integrity, retains no reasonable economic use, that demolition is necessary to protect health, safety and welfare or that demolition is necessary to proceed with a new project where the benefits of the new project outweigh the loss of the historic resource.
CDHR 6.4	Preserve archaeological artifacts and sites found in Los Altos or mitigate disturbances to them, consistent with their intrinsic value.
CDHR 6.5	Require an archaeological survey prior to the approval of significant development projects near creeksides or identified archaeological sites.

Los Altos Municipal Code

Chapter 12.44 (Historic Preservation) establishes the criteria and process for the designation of historic resources in the City, outlines the responsibilities of the Historical Commission, and describes the permit requirements for proposed alterations to historic resources. The primary purposes of ensuring protection of irreplaceable historic resources, enhancing visual character through architectural compatibility, and encouraging appreciation of the City's past.

City of Los Altos Historic Resources Inventory

The City maintains its Historic Resource Inventory, containing historic landmark properties, historic resource properties, and designated heritage trees of local importance. There are two main types of protected structures in Los Altos: historic resources and historic landmarks. A historic landmark is a building, improvement, structure, natural feature, site or area of land that has significant historical, architectural, cultural, and/or aesthetic interest or value and is officially designated as a landmark by City Council. A historic resource is a property or structure that has been determined to be over 50 years old, retains its physical integrity, has historical, architectural, cultural, and/or aesthetic value, and is listed on the Historic Resources Inventory. The inventory was last updated in October 2012.[22]

[22] City of Los Altos. *Historic Resources Inventory*. October 2012. Accessed March 30, 2022. https://www.losaltosca.gov/sites/default/files/fileattachments/historical_commission/page/36161/hri_full_doc.pdf

4.5.1.2 *Existing Conditions*

Historic Resources

The area surrounding the project site was historically developed with agricultural and residential land uses. The project site currently contains one office building which was constructed in 1975. Because the project involves federal funding, the project constitutes a federal undertaking under Section 106 of the NHPA. Therefore, the existing structures was evaluated against the criteria of the NRHP. The evaluation concluded that the building is not a historic property, as defined in 36 CFR Part 800, because the existing structure is less than 50 years old and does not possess exceptional importance.[23,24] The project is not included on the City's Historic Resources Inventory.[25] The existing structure, therefore, does not constitute a historic resource pursuant to the CEQA Guidelines Section 15064.5.

Prehistoric Resources

A records search at the Northwest Information Center of the California Historical Resources Information System (CHRIS) was conducted to identify all recorded archaeological sites on and within one-quarter mile of the project site. The record search found no resources that have been recorded on or within one-quarter mile of the site.

Sites with prehistoric resources are typically located in relatively flat areas in proximity to sources of fresh water. The nearest waterway to the project site is Permanente Creek, which is located approximately 0.7-mile east. The project site is underlain with alluvial soils, which are typically categorized as being comprised of approximately 70 percent urbanland and 30 percent Flaskan complex soils. The Flaskan complex soils are Holocene era soils derived from alluvial fans from the nearby Permanente Creek and the urbanland soils are comprised of disturbed, modified, and fill soils. Although alluvial soils have the potential for buried prehistoric resources, the project site's distance from Permanente Creek results in the project area having low sensitivity for prehistoric resources and a low sensitivity for historic-era archaeological resources.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒

[23] The National Register guidelines state that a property less than 50 years old must possess "exceptional importance" in order to be listed on the National Register.
[24] Archaeological/Historical Consultants. *Cultural Resources Inventory Report: 330 Distel Circle, Los Altos, CA.* February 2022.
[25] City of Los Altos. *Historic Resources Inventory*. October 2012. Accessed March 30, 2022. https://www.losaltosca.gov/sites/default/files/fileattachments/historical_commission/page/36161/hri_full_doc.pdf.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Impact CUL-1:	The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

As discussed in Section 4.5.1.2 Existing Conditions, the project site and existing building are not listed or eligible for listing in the NRHP, CRHR, or City of Los Altos Historic Resource Inventory. Therefore, there would be no impact to historical resources pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

Impact CUL-2:	The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact)**

The project site has been previously disturbed and developed with the existing office building. As discussed under Section 4.5.1.2 Existing Conditions, the project site contains no known archaeological resources and has a low sensitivity for buried archaeological deposits. As such, there is a low possibility for uncovering buried archaeological resources. Project-related grading and excavation during construction could however result in significant impacts, if any unknown culturally significant archaeological resources were discovered.

The project, as proposed, includes the following standard construction-related measure identified in Section 3.1.5.1 Standard Construction Measures to reduce impacts to archaeological resources (if discovered on-site):

- In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, stop all activity within a 50-foot radius of the find until a qualified archaeologist can assess the find and provide recommendations for further treatment, if warranted. Preservation in place is the preferred treatment of an archeological resource. When preservation in place of an archeological resource is not feasible, data recovery, in accord with a data recovery plan prepared and adopted by the City, is the appropriate action. Construction and potential impacts to the area within a radius determined by the archaeologist would not recommence until the assessment is complete.

The above proposed measure, which is typically implemented by development projects, would reduce impacts to archaeological resources (if discovered on-site) to a less than significant level by stopping construction and preparing a research design and treatment plan if any archaeological resources are found thereby protecting the resource. **(Less than Significant Impact)**

Impact CUL-3:	The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact)**

Human graves are most often associated with prehistoric occupation sites. Although unlikely, it is possible that project construction activities, such as excavation and grading, could disturb as-yet undiscovered human remains at the project site.

The project, as proposed, includes the following standard construction-related measure identified in Section 3.1.5.1 Standard Construction Measures to avoid impacts to human remains (if discovered on-site):

- In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find would be stopped. The Santa Clara County Coroner would be notified and would make make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner would notify the California Native American Heritage Commission (NAHC) immediately. Once NAHC identifies the most likely descendants, the descendants would make recommendations regarding proper burial, which would be implemented in accordance with Section 15064.5 of the CEQA Guidelines.

The above proposed measure, which is typically implemented by development projects, would reduce impacts to human remains to a less than significant level by stopping work within a 50-foot radius of the find and, if the find is determined to be Native American, implement recommendations by the most likely descendants for a proper burial. **(Less than Significant Impact)**

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2 from the atmosphere through sequestration.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[26] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[27]

[26] California Building Standards Commission. "California Building Standards Code." Accessed May 13, 2022. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[27] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed May 13, 2022. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[28]

Local

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purposes of reducing or avoiding impacts related to energy, and are applicable to the project.

Policy	Description
EE 7.1	The City will encourage energy and water conservation measures to reduce energy and water consumption in residential, governmental, and commercial buildings.
EE 7.2	The City will continue to implement building and zoning standards to encourage energy and water efficiency.

Los Altos Municipal Code

Chapter 6.14 - Collection, Recycling and Disposal of Waste Generated from Deconstruction, Demolition, Construction and Renovation Projects, in the City of Los Altos Municipal Code, seeks to divert at least sixty-five (65) percent of construction and demolition debris unless the applicant is granted an infeasibility exemption.

City of Los Altos Reach Code

In 2020, the Los Altos City Council approved and adopted the Reach Code Ordinances (Reach Code) to reduce energy related GHG emissions consistent with the goals of the City of Los Altos Climate Action Plan and be consistent with Title 24 and CalGreen. The Reach Code applies to new construction projects in Los Altos, including multi-family residences. Ordinance 2020-470B requires new multi-family residential (10 or more units) construction to be outfitted with entirely electric fixtures. Ordinance 2020-471 requires EV charging infrastructure for multi-family dwellings to have

[28] California Air Resources Board. "The Advanced Clean Cars Program." Accessed May 13, 2022. https://www.arb.ca.gov/msprog/acc/acc.htm.

10 percent of dwelling units with parking space be provided with at least on Level 2 EV Ready Space, with the remaining dwelling units with parking spaces be provided with at least a Level 1 EV Ready Space.

Los Altos Climate Action Plan

The LACAP was adopted in 2013. The LACAP outlines the strategy for reducing the community's greenhouse gas emissions and is consistent with AB 32, which directed public agencies in California to support the statewide goal of reducing GHG emissions to 1990 levels by 2020.

It is anticipated that the City will update the LACAP in the next 12 to 18 months to address emission reductions beyond 2020 and set a 2030 reduction target in alignment with SB 32 and the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,790 trillion British thermal units (Btu) in the year 2019, the most recent year for which this data was available. Out of the 50 states, California is ranked second in total energy consumption and 49th in energy consumption per capita. The breakdown by sector was approximately 19 percent (1,456 trillion Btu) for residential uses, 19 percent (1,468 trillion Btu) for commercial uses, 23 percent (1,807 trillion Btu) for industrial uses, and 39 percent (3,060 trillion Btu) for transportation.[29] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2020 was consumed primarily by the non-residential sector (73 percent), followed by the residential sector consuming 27 percent. In 2020, a total of approximately 16,435 gigawatt hours (GWh) of electricity was consumed in Santa Clara County. [30]

The community-owned Silicon Valley Clean Energy (SVCE) is the electricity provider for the City of Los Altos.[31] SVCE sources the electricity and Pacific Gas and Electric Company (PG&E) delivers it to customers over their existing utility lines. Customers are automatically enrolled in the GreenStart plan, which generates its electricity from 100 percent carbon free sources (with 50 percent from solar and wind sources, and 50 percent from hydroelectric). Customers have the option to enroll in the GreenPrime plan, which generates its electricity from 100 percent renewable sources, such as wind and solar.

Natural Gas

PG&E provides natural gas services within the City of Los Altos. In 2018, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply was

[29] United States Energy Information Administration. *State Profile and Energy Estimates, 2019.* Accessed May 17, 2022. https://www.eia.gov/state/?sid=CA#tabs-2.
[30] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed May 17, 2022. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[31] Silicon Valley Clean Energy. "Frequently Asked Questions". Accessed May 17, 2022. https://www.svcleanenergy.org/faqs.

imported from other western states and Canada.[32] In 2019, residential and commercial customers in California used 33 percent of the state's natural gas, power plants used 26 percent, the industrial sector used 35 percent, and other uses used six percent.[33] Transportation accounted for one percent of natural gas use in California. In 2019, Santa Clara County used approximately two percent of the state's total consumption of natural gas.[34]

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline were sold in California.[35] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2019.[36] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026. [37,38]

Energy Use of Existing Development

The project site is currently developed with a 12,120-square foot single-story office building, paved surface parking, and sparse landscaping. Energy use of the existing development is primarily attributed to gasoline consumption of vehicles traveling to and from the site (approximately 9,300 gallons per year) and from operational energy use of the existing building through electricity (approximately 217,100 kWh per year) and natural gas (approximately 196,350 kBTU per year).[39,40]

[32] California Gas and Electric Utilities. *2019 California Gas Report Supplement*. July 2019. Page 22. https://www.socalgas.com/regulatory/documents/cgr/2019_CGR_Supplement_7-1-19.pdf.
[33] United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed May 17, 2022. https://www.eia.gov/state/?sid=CA#tabs-2.
[34] California Energy Commission. "Natural Gas Consumption by County." Accessed May 17, 2022. http://ecdms.energy.ca.gov/gasbycounty.aspx.
[35] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed May 17, 2022. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.
[36] United States Environmental Protection Agency. "The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." January 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf.
[37] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed May 17, 2022. http://www.afdc.energy.gov/laws/eisa.
[38] Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed May 17, 2022. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.
[39] Gasoline use calculated based on existing annual VMT in CalEEMod (231,545) divided by average U.S. fuel economy. Per the 2020 EPA Automotive Trends Report, the average U.S. Fuel Economy is 24.9 mpg for light-duty vehicles.
[40] Illingworth & Rodkin, Inc. *330 Distel Circle Air Quality and Greenhouse Gas Assessment*. May 17, 2022.

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact EN-1:	The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **(Less than Significant Impact)**

Energy is consumed during the construction and operational phases of the project, as discussed below.

Energy Use During Construction

The construction phase would require energy for the manufacture and transportation of building materials, preparation of the project site for grading, and the actual construction of the buildings. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

Construction of the project would require demolition, preparation of the site, grading, trenching, building construction, paving, and finishing of the building interiors. The overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the project site because of the added expense associated with renting the equipment, maintaining it, and fueling it. Further, construction of the project would occur in an urbanized area proximate to roadways, construction supplies, and workers, making it more efficient than construction occurring in outlying, undeveloped areas. For these reasons, the construction process for the project is efficient.

In addition, energy would not be wasted or used inefficiently by construction equipment, since the project would select equipment during construction that would minimize emissions (refer to Section 3.1.5.1 Standard Construction Measures). As described in Section 3.0 Project Description, the project would comply with the City of Los Altos Demolition Permit Construction Diversion Ordinance to reduce and divert construction waste. Adherence to existing regulations and programs (including Title 24 and Los Altos Reach Code summarized in Section 4.6.1.1 Regulatory Framework) would reduce energy loss resulting from the disposal of construction and demolition materials through diversion and recycling.

Energy Use During Project Operation

Operation of the proposed project would consume energy for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. As noted in Section 4.6.1.1 Regulatory Framework, the City's Reach Code prohibits natural gas infrastructure in new construction projects. Accordingly, the project's estimated electricity and gasoline use is summarized in Table 4.6-1 below.

Table 4.6-1: Estimated Energy Use of the Project

	Electricity Use (kWh/yr.)[1]	Natural Gas Use (kBtu/yr.)[1]	Gasoline (gal/yr.)[3]
A. Existing Development	217,095	196,344	9,299
B. Project	446,824	0[2]	37,375
Net Total (B-A)	**229,729**	**-196,344**	**28,076**

[1] Illingworth & Rodkin, Inc. *330 Distel Circle Air Quality and Greenhouse Gas Assessment*. May 17, 2022.

[2] Los Altos Reach Code Ordinances adopted November 10, 2020 by City Council prohibits the use of natural gas infrastructure in new buildings. Source: City of Los Altos. "Reach Codes". Accessed May 17, 2022. https://www.losaltosca.gov/communitydevelopment/page/reach-codes-0.

[3] Gasoline use calculated based on forecasted annual VMT in CalEEMod (930,640) divided by average U.S. fuel economy. Per the 2020 EPA Automotive Trends Report, the average U.S. Fuel Economy is 24.9 mpg for light-duty vehicles.

As shown in Table 4.6-1, the project would result in a net increase in energy demand for electricity and gasoline, but a net decrease in demand for natural gas in comparison with existing conditions. The project, however, would not represent a wasteful or inefficient use of energy resources because the project would comply with the Title 24, CALGreen Building Code, the City of Los Altos General Plan, and the Municipal Code. The project would also meet the energy efficiency performance requirements of the City's Reach Code. Compliance with these regulations would reduce natural gas consumption by 196,344 kBtu per year. In addition, as outlined in Section 3.1.4 Green Building Features, the project would also install solar photovoltaic panels on the rooftop and install higher efficiency appliances, lighting and HVAC systems to reduce energy consumption. Finally, as the project involves the construction and operation of conventional building types, there is nothing atypical or unusual about the project's construction or operations that would result in wasteful, inefficient, or unnecessary consumption of energy. **(Less than Significant Impact)**

Impact EN-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

As discussed above under Impact EN-1, the project would comply with the current energy efficiency standards set forth in Title 24, CALGreen Building Code, the City's Reach Code, and the City's Municipal Code. For these reasons, the project would comply with state and local plans for renewable energy and energy efficiency. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

The following analysis is based, in part, on a geotechnical engineering investigation report prepared for the proposed project by Krazan & Associates, Inc. The report, dated October 5, 2021, is included in this Initial Study as Appendix C.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The California Building Standards Code (CBC) prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and

Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Municipal Regional Permit Provision C.6.c

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo.[41] Under Provision C..6.c of the MRP, all construction sites are required to implement site-specific Best Management Practices (BMPs) in six categories. These categories are Erosion Control, Run-on and Run-off Control, Sediment Control, Active Treatment Systems, Good Site Management, and Non-Stormwater Management. These BMPs would be included in the project's erosion control plan, and would be subject to review and approval prior to construction.

Local

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to geology and soils and are applicable to the project.

Policy	Description
NEH 1.2	Avoid placement of critical facilities and high occupancy structures in areas known to be prone to ground failure during an earthquake.
NEH 1.3	Require soil analysis and erosion mitigation for all development proposed on sites known to be prone to erosion or ground failure.

4.7.1.2 *Existing Conditions*

Regional Geology

The City of Los Altos is located in the northern portion of the Coast Ranges Geomorphic Province in California. The mountain ranges in this Geomorphic Province are generally northwest trending and

[41] MRP Number CAS612008

were formed tens of millions of years ago by intense folding and faulting caused by tectonic activity between the Pacific Oceanic Plate and the North American Continental Plate.

On-Site Geological Conditions

Soils and Topography

The project site itself is located on flat land in Santa Clara Valley which spans the stretch between the Santa Cruz Mountain Range to the southwest and west and the Diablo Range to the northeast. Near-surface soil sampling performed at the site produced deposits of Holocene alluvial fan deposits consisting of sands, silt, and clays that were eroded from local mountain ranges over time.[42] The portions of project site that are developed are typified by a soil profile of one to two inches of concrete with approximately six and a half inches of aggregate base underneath. Near-surface soil samples of the limited, unpaved areas on the project site produced a profile of six to twelve inches of loose clayey sand and clayey sand with gravel. The soil below the near surface is generally comprised of four to five feet of medium dense to dense clayey sand with gravel. This soil is moderately strong, slightly compressible and has a moderate expansion potential. The soil more than five feet below the surface was comprised of predominately medium dense to very dense clayey sand and silty sand to hard sandy clay. Testing suggests that these soils are moderately strong and slightly compressible. The clayey soils on site have a moderate swell potential. Soils with a higher swell potential can see a more drastic increase in volume when water is absorbed, and this shift in volume can cause structural damage if dramatic enough.

No unique geologic features, such as serpentine rock outcrops and boulders, pinnacles, or sandstone are located on-site.

Seismicity and Seismic Hazards

As the San Francisco Bay Area contains numerous active and potentially active faults, there is a high potential for seismic events such as fault surface ruptures and ground shaking, which can cause ground failure (landslides), settlement, erosion, liquefaction, lateral spreading, and soil expansion. Faults in the region are capable of generating earthquakes of magnitude 6.7 or higher, and strong-to-very-strong ground shaking would be expected to occur at the project site during a major earthquake on one of the nearby faults. While no faults cross the project site, there are several major faults nearby (refer to Table 4.7-1).

[42] Krazan & Associates, Inc. *Geotechnical Engineering Investigation Proposed Distel Circle Apartments*, October 5, 2021. Page 3.

Table 4.7-1: Active Faults in the Vicinity of the Project Site	
Fault Name	**Distance and Direction from Project Site***
Monte Vista-Shannon	3.2 miles west
San Andreas	5.7 miles west
Hayward	13 miles northeast
Calaveras	16 miles northeast
Zaynte-Vergeles	22 miles north
San Gregorio	17 miles west
Mount Diablo Thrust	28 miles east
* Approximate distances	

During a major earthquake on a segment of one of the nearby faults, strong to severe ground shaking is expected to occur at the project site. The ground shaking intensity felt at the project site would depend on the size of the earthquake (magnitude), the distance from the site to the fault source, the directivity (focusing of earthquake energy along the fault in the direction of the rupture), and the site-specific soil conditions.

The project site is not located within a State of California Earthquake Fault Zone or a Fault-Rupture Hazard Zone.[43]

Liquefaction and Lateral Spreading

Soil liquefaction can be defined as a complete loss of strength that causes otherwise solid soil to take on the characteristics of a liquid. The types of soil most susceptible to this hazard are loose, saturated, uniformly graded, fine-grain sands that comprise the soil layer within approximately 45 to 50 feet of the ground surface. Liquefaction mostly frequently occurs under vibratory conditions, such as those created by seismic events. The project area is not located in a designated compressible soil hazard zone or a liquefaction hazard zone.[44]

Despite not being located in a designated liquefaction hazard zone, groundwater was encountered on-site at approximate depths of 31 to 36 feet below ground surface (bgs). The geotechnical investigation concluded that the top 21 feet of soil are non-liquefiable due to the absence of groundwater, and that the soils between depths of 28 to 37 feet are slightly to moderately liquefiable. Therefore, there is a moderate liquefaction potential at the project site.

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying soil toward an open or “free” face such as an open body of water, channel, or excavation. This movement is often associated with liquefaction and commonly occurs on gentle slopes in seismically active regions. Lateral spread presents a significant hazard to the integrity of buildings and other structures.

[43] Santa Clara County Planning & Development. Geologic Hazard Zones Mapping Application. 2021. Accessed May 17, 2022. https://plandev.sccgov.org/ordinances-codes/geology-and-natural-hazards/geological-maps-and-data.
[44] Santa Clara County. *Santa Clara County Geologic Hazard Zones Map*. October 2012.

There are no adjacent bodies of water, channels, or excavations in the vicinity of the site; therefore there is no potential for lateral spreading on-site.

Landslides

The project site is relatively flat and is not mapped within a state-designated Landslide Hazard Zone.

Groundwater

As mentioned above, groundwater was encountered at approximately 31 feet to 36 feet bgs. Water levels on-site may vary depending on seasonal precipitation, irrigation practices, and other climate conditions.

Paleontological Resources

Most of the City, including the project site, is situated on alluvial fan deposits of Holocene age that have a low potential to contain significant nonrenewable paleontological resources.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☐	☒
- Strong seismic ground shaking?	☐	☐	☒	☐
- Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
- Landslides?	☐	☐	☐	☒
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐

Impact GEO-1: The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. **(Less than Significant Impact)**

Fault Rupture

The project site is not located in an Alquist-Priolo Earthquake Fault Zone and no known faults cross the site, therefore, fault rupture would not occur at the site. While existing faults that are currently considered active are located within 10 miles of the site (Monte Vista-Shannon and San Andreas fault), the proposed project is located outside of their fault rupture zones. **(No Impact)**

Seismic Ground Shaking

There are several major fault lines within 30 miles of the project site that have the potential to produce earthquakes with a magnitude of 6.0 or higher. During a major earthquake on a segment of one of the nearby faults, strong to severe ground shaking is expected to occur at the project site. The ground shaking could potentially damage structures and threaten the safety of occupants in the proposed development.

The project would be required to adhere to the CBC and recommendations in the site-specific geotechnical report prepared for the project, prior to permit issuance. Additionally, the project would be required to utilize standard engineering techniques to increase the likelihood that the project could withstand minor earthquakes without damage and major earthquakes without collapse. For these reasons, the proposed project would not result in seismic (e.g., ground shaking) or seismic-related hazards (e.g., liquefaction and lateral spreading) as it would be constructed in accordance with current design and engineering standards. As such, the existing seismic hazards on the project would not be exacerbated by the project that it would impact (or worsen) off-site conditions. **(Less than Significant Impact)**

Liquefaction and Lateral Spreading

As discussed under 4.7.1.2 Existing Conditions, the project site is not subject to lateral spreading and is not located within a designated liquefaction hazard zone. However, the geotechnical investigation

concluded that the site has a moderate liquefaction potential due to the groundwater that was identified at approximate depths of 31 to 36 feet bgs. Adherence to the CBC and recommendations in the site-specific geotechnical report would reduce the risk of liquefaction at the project site to acceptable levels. **(Less than Significant Impact)**

Landslides

As discussed under 4.7.1.2 Existing Conditions, the project site is not located in a designated landslide hazard zone. The project site is relatively flat and is not located in the vicinity of steep embankments that could increase the risk of landslides affecting the site. Construction of the project would not include substantial earthwork that would create unstable slopes that would exacerbate any existing landslide risks, and there are no risks of landslides impacting the project. Accordingly, the project is not susceptible to landslides, on or off the site. **(No Impact)**

Impact GEO-2:	The project would not result in substantial soil erosion or the loss of topsoil. **(Less than Significant Impact)**

Construction activities resulting in ground disturbance related to the demolition of the existing improvements and the required excavation and construction of the proposed residential building, could result in disturbance of soils. These activities would increase exposure of soil to wind and water erosion and increase sedimentation. By implementing standard grading and best management practices as required by the CBC, in addition to the site design and post-construction treatment control measures required by the MRP (as discussed in Section 4.10), erosion and sedimentation impacts would be less than significant. Compliance with General Plan Policy NEH 1.3 and the best management practices regarding erosion control required under Provision C.6.c of the MRP (see Section 4.7.1) would reduce potential construction-related erosion impacts to less than significant. **(Less than Significant Impact)**

Impact GEO-3:	The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **(Less than Significant Impact)**

As discussed under Section 4.7.1.2 Existing Conditions and Impact GEO-1, implementation of the project has no potential for on- or off-site landslides and lateral spreading. The project site has a moderate liquefaction potential due to the presence of groundwater at depths of 31 to 36 feet bgs. Construction and operation of the project would not require dewatering; therefore, the project would not result in subsidence. As discussed under Impact GEO-1, the project, in conformance with the CBC and recommendations in the site-specific geotechnical report would reduce the risk of seismic and seismic related hazards including liquefaction and collapse to acceptable levels. **(Less than Significant Impact)**

Impact GEO-4:	The project would be located on expansive soil, as defined in the current California Building Code, however, it would not create substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

As discussed under Section 4.7.1.2 Existing Conditions, the project site is located on moderately expansive soils. Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may result over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Although expansive soils can be a hazard, adherence with the standard engineering and building practices and techniques specified in the CBC and adherence to the recommendations in the site-specific geotechnical report to reduce impacts from expansive soils to an acceptable level. The project would comply with the CBC and recommendations of the site-specific geotechnical report. **(Less than Significant Impact)**

Impact GEO-5:	The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. **(No Impact)**

The project would connect to the City's existing sanitary sewer systems are to dispose of wastewater from the project site. Therefore, the project site would not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6:	The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact)**

As described in Section 4.7.1.2 Existing Conditions, there are no unique geological features (e.g., serpentine rock outcrops) at the project site and the project site has low potential to contain significant nonrenewable paleontological resources. While unlikely, the project includes the following standard measure identified in Section 3.1.5.1 Standard Construction Measures to reduce impacts to paleontological resources (if encountered on-site):

- Should a unique paleontological resource be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet would cease and the Planning and Building Director notified immediately. A qualified paleontologist would be retained to evaluate the find and prescribe action measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while action for paleontological resources is implemented. Upon completion of the paleontological assessment, a report would be prepared and submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology would also be submitted to the City.

The above proposed measure, which is typically implemented by development projects, would reduce impacts to paleontological resources (if discovered on-site) to a less than significant level by halting work in the vicinity of the find, assessing the find, and implementing actions to preserve the paleontological resource. **(Less than Significant Impact)**

4.8 GREENHOUSE GAS EMISSIONS

The following discussion is based, in part, on an Air Quality and Greenhouse Gas Assessment prepared by Illingworth & Rodkin, Inc. A copy of the report, dated May 10, 2022, is attached to this Initial Study as Appendix A.

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO_2 equivalents (CO_2e). The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2 and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF_6 emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.2 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as Assembly Bill (AB) 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO_2e ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2050. Plan Bay Area 2050 establishes a course for reducing per capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations, was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[45] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[46]

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Regional

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

Los Altos Climate Action Plan

The LACAP was adopted in 2013. The LACAP outlines the strategy for reducing the community's greenhouse gas emissions and is consistent with AB 32, which directed public agencies in California to support the statewide goal of reducing GHG emissions to 1990 levels by 2020.

[45] California Building Standards Commission. "California Building Standards Code." Accessed May 13, 2022. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[46] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed May 13, 2022. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

It is anticipated that the City will update the LACAP in the next 12 to 18 months to address emission reductions beyond 2020 and set a 2030 reduction target in alignment with SB 32 and the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030.

Los Altos Reach Code

In 2020, the Los Altos City Council approved and adopted the Reach Code Ordinances (Reach Code) to reduce energy related GHG emissions consistent with the goals of the City of Los Altos Climate Action Plan. The Reach Code applies to new construction projects in Los Altos, including multi-family residences. Ordinance 2020-470B requires new multi-family residential (10 or more units) construction to be outfitted with entirely electric fixtures. Ordinance 2020-471 requires EV charging infrastructure for multi-family dwellings to have 10 percent of dwelling units with parking space be provided with at least on Level 2 EV Ready Space, with the remaining dwelling units with parking spaces be provided with at least a Level 1 EV Ready Space.

4.8.1.3 *Existing Conditions*

The existing office use generates GHG emissions primarily from vehicular travel to and from the site. GHG emissions are also generated through building heating and cooling, electricity use, and solid waste disposal.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

The BAAQMD's CEQA Air Quality Guidelines do not use quantified thresholds for projects that are in a jurisdiction with a qualified GHG reduction plan (i.e., a Climate Action Plan). The plan has to address emissions associated with the period that the project would operate (e.g., beyond year 2020). The City's adopted a CAP that addresses requirements recommended in the BAAQMD CEQA Guidelines; however, the currently adopted CAP does not address recent State goals to reduce emissions 40 percent below 1990 levels by 2030. For quantified emissions, BAAQMD recommended a GHG threshold of 1,100 metric tons or 4.6 metric tons (MT) per capita to meet the state's AB 32 2020 GHG targets. Operation of the project would occur beyond 2020, so a threshold that addresses a future target is appropriate.

The below assessment uses a "Substantial Progress" efficiency metric of 2.8 MT CO_2e/year/service population and a bright-line threshold of 660 MT CO_2e/year based on the GHG reduction goals of EO B-30-15. The service population metric of 2.8 is calculated for 2030 based predictions from

BAAQMD.[47] The 2030 bright-line threshold is a 40 percent reduction of the 2020 1,100 MT CO_{2e}/year threshold.

Impact GHG-1:	The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

Construction Emissions

Short-term GHG emissions from the construction phase of the project would consist primarily of heavy equipment exhaust, worker travel, materials delivery, and solid waste disposal. Neither the City of Los Altos nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions. BAAQMD encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

GHG emissions from the project's construction-related activities are estimated to be approximately 977 metric tons of CO_2e for the total construction period. The project includes the following BAAQMD best management practices identified in Section 3.1.5.1 Standard Construction Measures that would reduce GHG emissions during construction:

- Designate an on-site coordinator and monitor to ensure implementation of the below dust and emission control measures.
- Water all exposed surfaces at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- Cover all haul trucks transporting soil, sand, or other loose material off-site.
- Remove all visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Limit all vehicle speeds on unpaved roads to 15 mph.
- Complete pavement of all roadways, driveways, and sidewalks as soon as possible.
- Lay out building pads as soon as possible after grading unless seeding or soil binders are used.
- Maintain and properly tune all construction equipment in accordance with manufacturer's specifications. Check all equipment by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number of the on-site coordinator/monitor and telephone number and person to contact at the City of Los Altos regarding dust complaints. The on-site coordinator/monitor would respond and take corrective action within 48 hours. Post the Air District's phone number to be visible to ensure compliance with applicable regulations.
- Suspend all excavation, grading, and/or demolition activities when average wind speeds exceed 20 mph.

[47] Bay Area Air Quality Management District. *CLE International 12th Annual Super-Conference CEQA Guidelines, Case Law and Policy Update*. May 2014.

- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established.
- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time. Phase activities to reduce the amount of disturbed surfaces at any one time.
- Wash all trucks and equipment, including their tires, prior to leaving the site.
- Treat site accesses to a distance of 100 feet from the paved road with a 6-to-12-inch compacted layer of wood chips, mulch, or gravel.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to two minutes. Provide clear signage for construction workers at all access points.

Because construction would be temporary (approximately 20 months) and would not result in a permanent increase in emissions, and the fact that the project includes measures that would reduce GHG emissions during construction, the project would not result in a significant GHG impact from construction emissions. **(Less than Significant Impact)**

Operational Emissions

The CalEEMod model, along with the project vehicle trip generation rates, was used to estimate daily emissions associated with operation of project. As shown in Table 4.8-1, the net annual emissions resulting from operation of the project compared to existing conditions are predicted to be 241 metric tons (MT) of CO_2e in 2025 and 214 MT of CO_{2e} in 2030. Given the project's service population (i.e., number of residents) of 245, the emissions per service population would be 1.4 and 1.3 MT CO_{2e}/year/service population for the years 2025 and 2030, respectively.

To be considered significant, the project must exceed both the GHG significance threshold in metric tons per year and the service population significance threshold. As shown in Table 4.8-1, the 2025 and 2030 emissions would not exceed the 2030 "bright-line" threshold of 660 MT of CO_{2e}/year and would not exceed the "substantial progress" efficiency metric of 2.8 MT CO_2e/year/service population. For a more detailed breakdown of emissions in Table 4.8-1, refer to Appendix A. Therefore, the proposed project would have a less than significant operational GHG emissions impact. **(Less than Significant Impact)**

Table 4.8-1: Annual Project GHG Emissions (CO_2e) in Metric Tons and Per Capita		
	2025	**2030**
Total (MT CO_{2e}/year)	345	318
Project Net Emissions	241 MT CO_{2e}/year	214 MT CO_{2e}/year
Significance Threshold 660 MT CO_{2e}/year	**No**	**No**
Service Population Emissions (MT CO_{2e}/year/service population)	1.4	1.3
Significance Threshold 2.8 in 2030	**No**	**No**
Note: Existing total annual GHG emissions (CO2e) is 104 metric tons per year. Source: Illingworth & Rodkin, Inc. *330 Distel Circle Air Quality and Greenhouse Gas Assessment.* May 17, 2022.		

Impact GHG-2: The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

SB 32

As discussed in Impact GHG-1, the project would be not exceed the "bright line" and "substantial progress" thresholds. Therefore, the project would not impede achieving the state's SB 32 2030 GHG reduction target. **(Less than Significant Impact)**

SB 375

As discussed in Section 4.1.1.2, the project is located within a TPA. The project would support the transit-oriented development of the site to a within one-half mile of a planned bus rapid transit station.[48]

Los Altos Climate Action Plan

The City's LAACP supports the statewide goal of reducing GHG emissions to 1990 levels by 2020. Operation of the project would occur beyond 2020, therefore GHG emissions were quantified using the CalEEMod model. As discussed under Impact GHG-1, the project's 2030 emissions would not exceed the "substantial progress" efficiency metric of 2.8 MT CO2e/year/service population. **(Less than Significant Impact)**

[48] Bay Area Metro. "Plan Bay Area 2050 Transportation Project List." Accessed March 31, 2022. https://www.planbayarea.org/2050-plan/final-plan-bay-area-2050/final-supplemental-reports/interactive-transportation-project-list.

2017 Clean Air Plan

As discussed in detail under Impact AIR-1 in Section 4.3 Air Quality, the project is consistent with all applicable 2017 CAP measures and would not interfere with implementation of the 2017 CAP control measures. **(Less than Significant Impact)**

City of Los Altos Reach Code

The Reach Code applies to new construction projects in Los Altos. As discussed in Section 4.6 Energy, the project would comply with the Reach Code by excluding new natural gas infrastructure. The Reach Code would require the project be consistent with Title 24 and CalGreen standards. **(Less than Significant Impact)**

VMT

SB 743 establishes criteria for determining the significance of transportation impacts using a VMT intended to promote the reduction of GHG emissions, among other things. As discussed in Impact TRN-2, the project would have a less than significant VMT impact, pursuant to the City's Draft VMT policy and CEQA Guidelines Section 15064.3, subdivision (b), which states projects located within a one-half mile of a planned major transit stop (i.e., bus rapid transit along El Camino Real) are presumed to have a less than significant VMT impact. **(Less than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following analysis is based, in part, on a Phase I Environmental Site Assessment Report prepared by PIERS Environmental Services, Inc. The report, dated August 30, 2021, is included in this Initial Study as Appendix D.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and
- Long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life-threatening. These actions can be completed only at sites listed on the EPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[49]

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[50]

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous

[49] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed November 19, 2021. https://www.epa.gov/superfund/superfund-cercla-overview.
[50] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed November 19, 2021. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.

substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[51]

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Santa Clara County Department of Environmental Health reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by the Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Regional and Local

Municipal Regional Permit Provision C.12.f

Polychlorinated biphenyls (PCBs) were produced in the United States between 1955 and 1978 and used in hundreds of industrial and commercial applications, including building and structure

[51] California Environmental Protection Agency. “Cortese List Data Resources.” Accessed November 19, 2021. https://calepa.ca.gov/sitecleanup/corteselist/.

materials such as plasticizers, paints, sealants, caulk, and wood floor finishes. In 1979, the EPA banned the production and use of PCBs due to their potential harmful health effects and persistence in the environment. PCBs can still be released to the environment today during demolition of buildings that contain legacy caulks, sealants, or other PCB-containing materials.

With the adoption of the San Francisco Bay Region MRP by the San Francisco Bay Regional Water Quality Control Board on November 19, 2015, Provision C.12.f requires that permittees develop an assessment methodology for applicable structures planned for demolition to ensure PCBs do not enter municipal storm drain systems.[52] Municipalities throughout the Bay Area are currently modifying demolition permit processes and implementing PCB screening protocols to comply with Provision C.12.f. Buildings constructed between 1950 and 1980 that are proposed for demolition must be screened for the presence of PCBs prior to the issuance of a demolition permit. Single-family houses and wood-frame structures are exempt from these requirements.

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to hazards and hazardous materials and are applicable to the project.

Policy	Description
NEH 3.1	Cooperate with and participate in development of the policies and future programs of the Santa Clara County Health Department and the California Legislature.
NEH 3.2	Support the management of hazardous materials contamination and abatement by public and private agencies.
NEH 6.1	Maintain an updated Emergency Preparedness Plan. The plan should increase public awareness of natural hazards and hazards associated with human activity and of methods to avoid or mitigate the effects of these hazards, and should ensure that critical facilities will function during and after a disaster.

Los Altos Municipal Code

Chapter 10.08 - Sewer System Protection Regulations, in the City of Los Altos Municipal Code, seeks to protect the citizens of Los Altos through prevention and control of unauthorized discharges of hazardous materials. Chapter 10.08 includes several hazardous materials regulations, such as requiring construction sites to maintain a spill response plan, prohibiting the storage of materials next to storm drains, and prohibiting the disposal of hazardous materials in an area that may eventually lead to pollution reaching the sewer system.

The City of Los Altos adopted Ordinance 2019-456, which added Chapter 6.15 Managing Polychlorinated Biphenyls to the Municipal Code. Chapter 6.15 of the Municipal Code outlines the City's regulations for the disposal of Polychlorinated Biphenyls (PCBs) in buildings constructed

[52] California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.* November 2015.

between 1950 and 1980. [53] In order to obtain a demolition permit, the project must conduct a Priority Building Materials Screening Assessment and submit results of the screening to the City. If PCBs are present in one or more of the Priority Building Materials (based on the above screening assessment), the project must comply with all related applicable federal and state law, including the Federal Clean Water Act, the California Porter-Cologne Water Quality Control Act, and the Municipal Regional Stormwater Permit Order No. R2-2015-0049.

City of Los Altos Emergency Operations Plan

The City of Los Altos updated its Emergency Operations Plan (EOP) in March 2016. The City of Los Altos EOP outlines the City's framework for managing a variety of hazards such as natural disasters and human-caused events. The EOP describes organizational structures, roles and responsibilities, policies, and protocols for providing emergency support. The EOP details the City's mitigation strategies, preparedness planning, short and long-term recovery strategies, and the operating procedures for the Emergency Operations Center (EOC). It also details the jurisdictional structure for responding to emergencies when the response may require regional, state, or federal coordination.

4.9.1.2 *Existing Conditions*

Site History

The existing one-story office building was constructed in 1975. Prior to 1975, the project site (and other surrounding properties) had been used for agricultural purposes before they were cleared for urban development. An orchard that was previously located on the project site was cleared during the 1950s. Since the building was constructed, it has been used as office space for various tenants.

Potential On-Site Sources of Contamination

No environmental concerns, vapor encroachment conditions, Recognized Environmental Concerns (RECs), Historic RECs (HRECs), or Controlled RECs (CRECs) were identified by the Phase I ESA in connection with the project site and past uses.[54] The project site is not on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 (Cortese List).

The soils on the project site may contain residual pesticide contamination from past agricultural activities if the soils have not been previously excavated during construction of the existing building. According to the Phase I ESA, an Asbestos Survey Report was completed in 2008 on-site. All samples from the building tested negative for asbestos; therefore, it was determined that the existing building had no ACMs present. Given the age of the building on-site, PCBs and lead-based paint could be present in the building materials.

[53] City of Los Altos. "Ordinance No. 2019-456." July 3, 2019. Accessed June 1, 2 022. https://www.losaltosca.gov/sites/default/files/fileattachments/ordinance/70801/2019-05-14_19-456.pdf .

[54] A Recognized Environmental Condition refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property; due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

Off-Site Sources of Contamination

Federal and state databases were searched to determine the potential for the project site to be affected by releases from off-site sources of contamination within one mile of the project site. The Phase I ESA identified several sites within the vicinity of the project site that are listed on various regulatory databases. Of the 23 sites listed in the Treatment, Storage, and Disposal Sites database, 20 are located down- or cross-gradient to the project site, and do not present a contamination risk to the project site. The two sites that are up-gradient of the project site are located approximately 1,586 and 3,283 feet to the southeast, which is sufficient distance to result in a low chance of groundwater contamination under the project site. None of these sites were determined to pose an environmental concern to the project site due to their location and distance from the site. Of the ten sites within one mile of the project site listed on the Leaking Underground Storage Tank (LUST) Database, only one was located close enough to be of potential concern. This case was closed in 1996 and does not present any environmental concern to the project site.

Wildland Fires

The project site is located in a highly urbanized area that is not within a wildland urban interface area or a very high fire hazard severity zone.[55,56]

Proximity to an Airport

The project site is not located within an airport land use plan. Moffett Federal Airfield, a joint civil-military airport, is the closest airport and it is located approximately three miles northeast of the project site.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

[55] California Department of Forestry and Fire Protection. *Santa Clara County Fire Hazard Safety Zone Map – State Responsibility Area*. November 2007.
[56] California Department of Forestry and Fire Protection. *Santa Clara County Fire Hazard Safety Zone Map – Local Responsibility Area.* October 2008.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact HAZ-1:	The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

Construction of the project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and fluids. All hazardous materials would be transported, contained, stored, used, and disposed of in accordance with manufacturers' instructions and would be handled in compliance with all applicable standards and regulations. Construction-related hazardous materials use would be temporary, and does not constitute routine transport, use, or disposal.

After construction is completed, the proposed residential development would include the on-site use and storage of cleaning supplies and maintenance chemicals in small quantities (oil, paint, pesticides, etc.). These materials would be managed in accordance with existing laws and regulations that ensure that the routine transport, storage, use, and disposal of these materials would result in a significant hazard to the public or environment. **(Less than Significant Impact)**

Impact HAZ-2:	The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact)**

Soil Contamination

As discussed in Section 4.9.1.2, the project site was historically used an orchard up until the 1950s. Due to the agricultural history, there is a potential that shallow soil contain residual organochlorine

pesticides and/or pesticide-based metals such as arsenic and lead from historic pesticide application. If pesticides are present and not mitigated, construction of the project could result in exposure of construction workers, adjacent properties and future site workers to pesticide contamination.

The project plans would include the following standard measures identified in Section 3.1.5.1 Standard Construction Measures to reduce potential impacts related to soil contamination on-site.

- Prior to issuance of demolition or grading permits, the project applicant would prepare a Site Management Plan (SMP) to guide activities during demolition, excavation, and initial construction to ensure that potentially contaminated soils are identified, characterized, removed, and disposed of properly. The purpose of the SMP is to establish appropriate management practices for handling impacted soil or other materials that may be encountered during construction activities. The SMP would provide the protocols for sampling of in-place soil to facilitate the profiling of the soil for appropriate off-site disposal or reuse, and for construction worker safety, dust mitigation during construction and potential exposure of contaminated soil to future users of the site. The soil profiling would include (but not limited to) the collection of shallow soil samples (upper one-foot) and analyses for lead and organochlorine pesticides. The soil profiling would be performed prior to any significant earthwork.

  If there are no contaminants identified on the project sites that exceed applicable screening levels for construction workers and residential users published by the Regional Water Quality Control Board, Department of Toxic Substances Control, and/or Environmental Protection Agency, the SMP does not need to be submitted to an oversight agency and only submitted to the City prior to construction earthwork activities. If contaminants are identified at concentrations exceeding applicable screening levels, the project applicant would obtain regulatory oversight from the Santa Clara County Department of Environmental Health (or Department of Toxic Substances Control) under their Site Cleanup Program. A copy of the SMP and any soil sampling and resting results would be submitted to the Director of Community Development.

The above proposed measures, which are typically implemented by development projects, would reduce impacts regarding upset and accident conditions involving the release of hazardous materials into the environment to a less than significant level by requiring sampling prior to the issuance of grading permits and implementation of a SMP or RAP if contaminated soils are identified. **(Less than Significant Impact)**

Polychlorinated Biphenyls, Lead-Based Paint, and Asbestos-Containing Materials

As discussed in Section 4.9.1.2 Existing Conditions, the existing office building on-site was constructed in 1975, which indicates that PCBs may be present in the building materials. Pursuant to the MRP Provision C.12.f and Los Altos Municipal Code Chapter 6.15, the project would be required to perform a screening to test for the presence of PCBs. If building materials are found to have PCBs in excess of regulatory limits, that information would be required to be reported to the appropriate agencies and the material would be disposed of properly to prevent accidental release into the environment.

The construction date of the building also indicates that lead-based paint could be present in building materials. Pursuant to local, state, and federal laws, a lead-based paint survey would be completed by a qualified professional to determine the presence of lead-based paint on the structure for demolition. The survey would be completed prior to demolition of the existing structure.

As discussed in Section 4.9.1.2 Existing Conditions, an Asbestos Survey Report was completed in 2008 which determined that the existing building had no ACMs present. Based on these findings, there would be no risk of accidental release of ACMs that would result from project implementation.

During construction, the project would also comply with Chapter 10.08 of Los Altos Municipal Code, which requires that a spill response plan be maintained to prevent accidental discharge of hazardous materials. Based on this discussion, compliance with local, state, and federal regulations would reduce the risk involving the release of hazardous materials into the environment due to reasonably foreseeable upset and accident conditions to a less than significant level. **(Less than Significant Impact)**

Impact HAZ-3:	The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Less than Significant Impact)**

The closest school to the project site is Mountain View-Los Altos Montessori Children's Center located approximately 440 feet east of the project site at 2246 West El Camino Real in Mountain View. As discussed under Impact HAZ-2, the project as proposed and in compliance with existing regulations (including Chapter 10.08 of Los Altos Municipal Code), would not result in hazardous materials impacts. For this reason, the project would not significantly impact the nearby preschool. **(Less than Significant Impact)**

Impact HAZ-4:	The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. **(No Impact)**

As discussed in Section 4.9.1.2, the project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. **(No Impact)**

Impact HAZ-5:	The project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(No Impact)**

As discussed in Section 4.9.1.2 Existing Conditions, the project site is not located within an airport land use plan or within two miles of an airport. Therefore, the proposed project would not result in safety hazard or noise impacts due to airport activities. **(No Impact)**

Impact HAZ-6:	The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

The City of Los Altos has an Emergency Operations Plan (EOP) that outlines the City's framework for managing a variety of hazards such as natural disasters and human-caused events. The project would be designed in accordance with current building and fire codes and regulations and would not impair implementation of or physically interfere with the EOP, including its operating procedures. In addition, as discussed in Section 4.15 Public Services, while the project would incrementally increase the demand on fire and police protection services, the City would still provide adequate response times for police and fire protection services emergencies, consistent with General Plan Policy OSCCF 6.3. **(Less than Significant Impact)**

Impact HAZ-7:	The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **(No Impact)**

As discussed under Section 4.9.1.2 Existing Conditions, the project site is not located within a wildland urban interface area or a very high fire hazard severity zone. Therefore, the project would not expose people or structures, either directly or indirectly, to an increased significant risk of loss, injury, or death involving wildland fires. **(No Impact)**

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction and filed with the RWQCB by the project sponsor. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality. For newly constructed projects which disturb less than one acre of land and are not part of a larger development plan, projects would implement control measures to reduce construction stormwater runoff through compliance with local stormwater ordinance, installation of sufficiently sized retention basins on-site, and stormwater filters at the stormwater collection point such as wattle or other method approved by the City.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the MRP in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo.[57] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65

[57] MRP Number CAS612008

percent impervious. As described in Section 4.9.1.1 Regulatory Framework, Provision C.12f of the MRP requires the co-permittee agencies to implement a control program for PCBs that reduces PCBs loads by a specified amount during the term of the permit, thereby making substantial progress toward achieving the urban runoff PCBs wasteload allocation in the Basin Plan by March 2030.

The Santa Clara Valley Urban Runoff Pollution Prevention Program prepared the Green Stormwater Infrastructure Handbook to support the municipalities' green infrastructure plans required by MRP.

2021 Groundwater Management Plan

The 2021 Groundwater Management Plan (GWMP) describes the Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, which are located entirely in Santa Clara County. Valley Water manages a diverse water supply portfolio, with sources including groundwater, local surface water, imported water, and recycled water. About half of the county's water supply comes from local sources and the other half comes from imported sources. Imported water includes the District's State Water Project and Central Valley contract supplies and supplies delivered by the San Francisco Public Utilities Commission (SFPUC) to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by the District's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water and in-lieu recharge through the provision of treated surface water, acquisition of supplemental water supplies, and water conservation and recycling.[58]

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges to storm drains or surface waters within its region under the NPDES program and Waste Discharge Requirements.

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating impacts on hydrology and water quality and are applicable to the project:

Policy	Description
IWD 3.1	Control surface runoff water discharges into the stormwater system to comply with the National Pollutant Discharge Elimination System Permit and the receiving water limitations assigned by the California Regional Water Quality Control Board.
IWD 3.3	Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible maximize on-site infiltration of storm water runoff.

[58] Valley Water. *2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2021.

Policy	Description
IWD 3.4	Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite.

Los Altos Municipal Code

The City's Municipal Code Chapter 10.16 requires new development to implement permanent stormwater pollution prevention measures, including source control requirements, site design and treatment requirements and prevention consistent with the requirements of the RWQCB.

4.10.1.2 *Existing Conditions*

The project site is predominantly covered by impervious surfaces (building and paved areas). Pervious areas on-site consist of landscaping located in parking lot planters and along the site frontage and perimeter. The project site has 30,498 square feet (sf) of impervious surfaces (approximately 80 percent of the site).[59]

Hydrology and Drainage

Four creeks are located within the City of Los Altos, including Adobe Creek, Stevens Creek, Permanente Creek, and Hale Creek. The closest creek to the project site is Permanente Creek, located approximately 0.7 miles east of the site. The project site is located in the Adobe drainage basin, an approximately 1.8 square mile area which drains to Adobe Creek via a network of connecting stormwater pipes.[60]

Stormwater from the project site is collected by on-site storm drain inlets and conveyed to the existing 12-inch reinforced concrete pipe storm drain line in Distel Circle. Stormwater is then conveyed north through the City's drainage system and discharged, untreated, into Adobe Creek. Adobe Creek flows to the San Francisco Bay.

Groundwater

The project site is located in the Santa Clara Plain groundwater subbasin. Groundwater is likely present at the project site at depths of approximately 31 feet to 36 feet bgs. Water levels on-site may vary depending on seasonal precipitation, irrigation practices, and other climate conditions.

Flooding

The project site is not located in a 100-year floodplain, according to FEMA Flood Insurance Rate Maps for Santa Clara County.[61] The project site is located in a Flood Zone X.[62] Zone X is designated

[59] Barker, Ryan. Project Engineer, BKF Engineers. Personal Correspondence. April, 7, 2022.
[60] City of Los Altos. *Stormwater Master Plan.* Figure 1-1: City of Los Altos Drainage Areas. April 2016.
[61] Federal Emergency Management Agency. Flood Insurance Rate Map: Santa Clara County Panel 38 of 830. Map Number 06085C0038H. May 18, 2009.
[62] Ibid.

as areas of 0.2 percent annual chance flood, areas of one percent annual chance flood with average depths of less than one foot or with drainage areas of less than one square mile, and areas protected by levees from one percent annual chance floods.[63]

Seiches, Tsunamis, and Mudflows

A seiche is defined as a standing wave generated by rapid displacement of water within an enclosed body of water (such as a reservoir, lake, or bay) due to an earthquake that triggers land movement within the water body or land sliding into or beneath the water body. There are no landlocked bodies of water near the project site that would affect the site in the event of a seiche.

A tsunami is a large tidal wave caused by an underwater earthquake or volcanic eruption. Tsunamis affecting the Bay Area can result from offshore earthquakes within the Bay Area. Tsunami inundation maps for Santa Clara County show that the project site is not within a tsunami inundation area.[64]

A mudflow is the rapid movement of a large mass of mud formed from loose soil and water. The project area is flat and there are no hillsides in proximity that would affect the site in the event of a mudflow.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
- result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐

[63] Federal Emergency Management Agency. *Flood Insurance Rate Map Number 06085C0038H.* May 18, 2009. Accessed March 9, 2022.
[64] California Geological Survey. *Santa Clara County Tsunami Inundation Maps.* Accessed March 9, 2022. https://www.conservation.ca.gov/cgs/tsunami/maps/santa-clara.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
- substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
- impede or redirect flood flows?	☐	☐	☒	☐
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Construction Impacts

Construction activities, such as grading and excavation, have the potential to result in temporary impacts to surface water quality in adjacent waterways. When disturbance to the soil occurs, sediments may be dislodged and discharged into the storm drainage system when surface runoff flows across the site. The proposed project would disturb approximately 0.87 acres, which is below the one-acre threshold requiring compliance with the NPDES Construction General Permit. As such, the project would be subject to CALGreen requirements which require projects that disturb less than one acre to implement control measures to reduce construction stormwater. **(Less than Significant Impact)**

Post-Construction Impacts

The project would add or replace more than 10,000 square feet of impervious surface area, and would therefore require conformance with Provision C.3 of the MRP. To comply with Provision C.3, the project includes landscaping and the treatment control measures (i.e., bioretention areas, permeable paving, and storm drain treatment unit) to reduce the rates, volumes, and pollutant loads of runoff from the project. Therefore, the project would have a less than significant impact on post-construction water quality. **(Less than Significant Impact)**

Impact HYD-2:	The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(Less than Significant Impact)**

Groundwater has been encountered at approximate depths of 31 to 36 feet bgs. Development of the proposed project would include excavation to construct below-grade parking, as well as trenching for new utility connections. Project-related grading and excavation, which would extend eight feet below-grade, would not encounter the water table. As such, the project would not require dewatering during construction or operation.

The project would rely on existing sources of water and the City's existing water delivery system. Although the project would increase the demand for water within the City, this increase would not result in a substantial depletion of aquifers relied upon for local water supplies (see discussion under Impact UTL-2 in Section 4.19 Utilities and Service Systems). The project site is not located within or adjacent to any groundwater recharge facilities used by Valley Water.[65] Implementation of the project would increase the amount of pervious surfaces on-site compared to existing conditions, thereby, increasing the amount of rainfall infiltration on-site. For these reasons, the project would not substantially deplete groundwater supply or interfere with groundwater recharge. **(Less than Significant Impact)**

Impact HYD-3:	The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Less than Significant Impact)**

There are no waterways on-site. As discussed under Section 4.10.1.2 Existing Conditions, the project site is mostly impervious. The project would reduce the amount of impervious surface area on the site by 1,473 sf (or approximately 4 percent) from 30,495 to 29,022 sf.[66,67] The project would include site design and post-construction treatment control measures in compliance with the MRP (as previously discussed under Impact HYD-1) and the City's permanent stormwater control standards (Municipal Code Section 10.16).

The project would reduce runoff volumes compared to existing conditions; therefore, it is concluded that the project would not result in off-site flooding and the existing public storm drain system would continue to have capacity to treat runoff from the site. According to Figure 1-2: City of Los Altos Drainage Issues located in the City's Stormwater Master Plan, the nearest Problem Spot is

[65] Valley Water. *2021 Groundwater Management Plan*. Figure 1-3. 2016. Accessed November 29, 2021. https://www.valleywater.org/your-water/where-your-water-comes/groundwater/sustainable.
[66] Barker, Ryan. Project Engineer, BKF Engineers. Personal Correspondence. April 7, 2022.
[67] Barker, Ryan. Project Engineer, BKF Engineers. Personal Correspondence. July 6, 2022.

approximately 0.24 miles south of the project site and located up flow of the project site.[68] Therefore the project would not increase the amount of surface runoff from the site nor exceed the capacity of existing or planned stormwater drainage systems.

Based on the above discussion, the project would not substantially alter the drainage pattern of the site or area. **(Less than Significant Impact)**

Impact HYD-4:	The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

As discussed under Impact HAZ-1 in Section 4.9 Hazards and Hazardous Materials, no hazardous materials besides limited amounts of cleaning supplies, maintenance chemicals, and herbicides and pesticides for landscape maintenance would be routinely stored or used by the project. As discussed in Section 4.10.1.2, the project site is within Flood Zone X, where there is a 0.2 percent annual chance of flooding. Due to the project site's inland location and distance from large bodies of water (i.e., the San Francisco Bay), it is not subject to seiche or tsunami hazards.

Additionally, the project would be required to comply with Provision C.3 of the MRP requirements to reduce the impacts of stormwater runoff on post-construction water quality (refer to Impact HYD-1. For these reasons, the project would result in a less than significant risk for releasing pollutants due to inundation. **(Less than Significant Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

San Francisco Bay Basin Plan

As discussed under Impact HYD-1, the project would comply with Provision C.3 of the MRP. Thus, the project would not conflict with or obstruct implementation of the San Francisco Bay Basin Plan.

2021 Groundwater Management Plan

As discussed in 4.10.1.2 , the project site is within the Santa Clara Plain groundwater subbasin, and this subbasin has not been identified in the GMP as being overdrafted. Implementation of the project would not interfere with any actions set forth by Valley Water in its GMP in regards to groundwater recharge, transport of groundwater, and/or groundwater quality. In addition, as discussed under Impact HYD-2, the project would not substantially decrease groundwater supplies or substantially interfere with groundwater recharge. **(Less than Significant Impact)**

[68]City of Los Altos. *Stormwater Master Plan*. Figure Page 1-4. https://www.losaltosca.gov/sites/default/files/fileattachments/public_works/page/31841/swmp_4.27.16.pdf

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating land use impacts and are applicable to the proposed project:

Policy	Description
LU 4.6	Continue to review development proposals to ensure a balance between development rights and impact on surrounding residential neighborhoods.

Los Altos Municipal Code

Title 14 of the Municipal Code contains the Zoning Code, where standards for growth and development in the City are codified. The Zoning Code is the primary tool for implementing the policies of the General Plan and addressing physical development standards and criteria for the City. Government Code Section 65860 requires municipalities to maintain consistency between their zoning ordinance and their adopted General Plan. One of the purposes of zoning is to implement the land use designations set forth in the General Plan. Although the two are distinct documents, the Los Altos General Plan and Zoning Code are closely related, and state law mandates that zoning regulations be consistent with the General Plan maps and policies.

4.11.1.2 *Existing Conditions*

As described in Section 2.6 General Plan Designation and Zoning District, the General Plan designation for the project site is Thoroughfare Commercial. This designation provides for retail, service and office uses that typically rely on automobile traffic and attract customers from a citywide and/or regional trade area. The City allows commercial mixed-use with housing or residential-only development within this land use designation.[69] High-density residential land uses that provide affordable housing are also encouraged within this designation.

The project site is zoned CT (Commercial Thoroughfare). Specific purposes of the CT District include encouraging a variety of residential developments (including affordable housing), promoting the economic and commercial success of Los Altos, buffering the impacts of commercial and multi-family land uses on neighboring residential properties, and allowing for mixed uses of commercial and residential. Multiple-family housing and single-room occupancy housing projects are conditional uses in this district. The maximum permitted residential density in the CT District is 38 du/ac.

[69] City of Los Altos. *2015-2023 Housing Element.* May 26, 2015. Accessed November 29, 2021. https://www.losaltosca.gov/sites/default/files/fileattachments/community_development/page/73841/2015-2023_los_altos_housing_element_final.pdf.

The project site is currently developed with an office building and associated improvements. Surrounding land uses include office uses to the east and west, a commercial fast-food restaurant followed by El Camino Real to the north, and a medical office building to the southwest of the site. Additionally, residential uses are located southwest and north (on the north side of El Camino Real) of the site. Office and commercial uses are the predominant land uses along the El Camino Real corridor in the vicinity of the project site. An aerial photograph of the project site and the surrounding land uses is shown on Figure 2.4-3.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	☐	☐	☒	☐
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Impact LU-1: The project would not physically divide an established community. **(Less than Significant Impact)**

A physical division of an established community typically refers to the construction of a physical feature (such as a wall, roadway, or railroad tracks) or the removal of a means of access (such as a local roadway or bridge) that would impair mobility within an existing community or between communities.

The project would redevelop site with a residential use. The project would not construct physical features or close an existing street that would impair mobility. For these reasons, the project would not physically divide an established community. **(Less than Significant Impact)**

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

The proposed residential use is allowed under the existing Thoroughfare Commercial General Plan land use designation and CT zoning. As described in Section 3.0 Project Description, the project would utilize the State Density Bonus Law and the City's Affordable Housing Ordinance to exceed the allowed density and maximum building height.

With the exception of the requested incentives for increased density and building height, which are permitted per the State Density Bonus Law and the City's Affordable Housing Ordinance, the project would meet all required site standards, including setbacks and buffer zones between adjacent land uses. The City of Los Altos' design review process for Multiple-Family Residential developments

would ensure that the final design and site layout of the project is consistent with all applicable design findings and CT District specific design controls.

In addition, the project would be designed to comply with the City's noise regulations, as described in Section 4.13, Noise and Vibration. For the reasons discussed above, implementation of the proposed project would be consistent with established land use plans, policies, and regulations. **(Less than Significant Impact)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

4.12.1.2 *Existing Conditions*

The City of Los Altos exists on the very deep alluvial soils in the Santa Clara Valley formed from erosion of the nearby Santa Cruz Mountains to the west. As a result of this process, the topography of the project area is relatively flat and there are no significant mineral resources within the City of Los Alto Planning Area.[70]

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

[70] City of Los Altos. Los Alto General Plan 2020 Initial/Mitigated Negative Declaration. November 2002. Page 32.

Impact MIN-1:	The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

As discussed in Section 4.12.1.2 Existing Conditions, there are no mineral resources on the project site. Therefore, development of the project would not result in the loss of availability of a mineral resource. **(No Impact)**

Impact MIN-2:	The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. **(No Impact)**

There are no identified mineral resource recovery sites located on-site. Therefore, the project would not result in the loss of a locally important mineral resource recovery site. **(No Impact)**

4.13 NOISE

The following discussion is based on a Noise and Vibration Assessment completed by Illingworth & Rodkin, Inc. The report dated May 10, 2022, is attached as Appendix E.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, DNL, or CNEL.[71] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

[71] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

4.13.1.2 *Regulatory Framework*

State and Local

California Building Standards Code

The CBC establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates that interior noise levels attributable to exterior sources not exceed 45 L_{dn}/CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA DNL noise contour for a freeway or expressway, railroad, or industrial source.

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purposes of reducing or avoiding impacts related to noise, and are applicable to the project.

Policy	Description
NEH 7.2	Enforce the following maximum acceptable noise levels for new construction of various noise-sensitive uses in an existing noise environment. • 60 dBA CNEL is the maximum acceptable outdoor noise exposure level for single-family residential areas. • 65 dBA CNEL is the maximum acceptable outdoor noise exposure level for multiple-family residential areas. • 70 dBA CNEL is the maximum acceptable outdoor noise exposure level for schools (public and private), libraries, churches, hospitals, nursing homes, parks, commercial, and recreation areas. Excepted from these standards are golf courses, stables, water recreation, and cemeteries.
NEH 7.3	Work to achieve indoor noise levels not exceeding 45 dBA CNEL in the event that outdoor acceptable noise exposure levels cannot be achieved by various noise attenuation mitigation measures.
NEH 7.5	Require reasonable mitigation measures to reduce noise levels to those determined to be acceptable in the event that significant increased noise levels will result from an improvement to the circulation system.
NEH 7.9	Minimize stationary noise sources and noise emanating from construction activities.

Los Altos Municipal Code

Chapter 6.16 of the City's Municipal Code contains standards and regulations to control unnecessary, excessive, and annoying noise and vibration within the City. Specifically, Section 6.16.50 of the Los Altos Municipal Code establishes exterior noise limits for various zoning districts, as shown in Table 4.13-1.

Table 4.13-1: Exterior Noise Limits		
Receiving Land Use Category	**Time Period**	**Noise Level (dBA)[1]**
All R1 Zoning Districts	10:00 p.m. – 7:00 a.m. 7:00 a.m. – 10:00 p.m.	45 55
All R3 Zoning Districts	10:00 p.m. – 7:00 a.m. 7:00 a.m. – 10:00 p.m.	50 55
All OA Zoning Districts	10:00 p.m. – 7:00 a.m. 7:00 a.m. – 10:00 p.m.	55 60
All C Zoning Districts	10:00 p.m. – 7:00 a.m. 7:00 a.m. – 10:00 p.m.	60 65
Notes: [1] Levels not to be exceeded more than 30 minutes in any hour		

The Municipal Code prohibits the production of noise on one property that would (i) exceed the noise standard on any other property for a cumulative period of more than thirty minutes in any hour; (ii) exceed the noise standard plus five dB on any other property for a cumulative period of more than fifteen minutes in any hour; (iii) exceed the noise standard plus 10 dB on any other property for a cumulative period of more than five minutes in any hour; (iv) exceed the noise standard plus 15 dB on any other property for a cumulative period of more than one minute in any hour; or (vi) exceed the noise standard plus 20 dB or the maximum measured ambient on any other property for any period of time.

The City's Municipal Code states that if the measured ambient level exceeds the maximum permissible noise level within any of the first four noise limit categories, the allowable noise exposure standard shall be increased in five dB increments in each category as appropriate to encompass or reflect such ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level. If the noise measurement occurs on a property adjacent to a zone boundary, the noise level limit applicable to the lower noise zone, plus five dB is the applicable noise limit.

To ensure that unnecessary or excessive noise disturbances from specific activities and equipment are avoided, the Noise Control Ordinance sets noise thresholds for musical instruments, loudspeakers, loading and unloading, construction and demolition, and air-conditioning equipment (Section 6.16.070). Exceeding those thresholds is considered a prohibited act and would constitute a violation of the Ordinance.

4.13.1.3 *Existing Conditions*

The primary noise sources in the project vicinity include vehicular traffic along El Camino Real and Distel Circle and associated with nearby parking and occasional aircraft flyovers.

The project site is currently developed with an office building and associated improvements. Surrounding land uses include office uses to the east and west, a commercial fast-food restaurant

followed by El Camino Real to the north, and a medical office building to the southwest of the site. Additionally, residential uses are located southwest and north (on the north side of El Camino Real) of the site.

The existing noise environment was quantified through three short-term noise measurements (ST-1, ST-2, ST-3) and five long-term measurements (LT-1 and LT-2) taken on March 22, 2022 and March 24, 2022. Noise measurement locations and a summary of the noise measurements are shown on Figure 4.13-1.

Typical hourly average noise levels at the project site and adjacent parcels ranged from 46 to 65 dBA L_{eq} during the day and from 43 to 60 dBA L_{eq} at night.

NOISE MEASUREMENT LOCATIONS | FIGURE 4.13-1

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

A significant impact would be identified if project construction or operations would result in a substantial temporary or permanent increase in ambient noise levels at sensitive receivers in excess of the local noise standards contained in the Los Altos General Plan or Municipal Code, as follows:

- **Operational Noise in Excess of Standards.** A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan or Municipal Code. The City of Los Altos limits sound levels generated by air-conditioning or air-handling equipment to 50 dBA at residential property lines. Other operational noise sources, such as vehicle trips and circulation, are limited to the levels specified in Table 4.13-2.

- **Permanent Noise Increase.** A significant impact would be identified if traffic generated by the project would substantially increase noise levels at sensitive receivers in the vicinity. A substantial increase would occur if: a) the noise level increase is five dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) the noise level increase is three dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.

- **Temporary Noise Increase.** A significant temporary noise impact would be identified if construction would occur outside of the hours specified in the Municipal Code or if construction noise levels were to exceed the City's construction noise limits at adjacent noise sensitive land uses. Construction occurring during allowable hours is limited to 75 dBA in single-family residential areas (all R1 Zoning Districts), 80 dBA in multi-family residential areas (all R3 Zoning Districts), and 85 dBA in commercial areas (all OA and C Zoning Districts).

The City of Los Altos does not specify a construction vibration limit. For structural damage, Caltrans recommends a vibration limit of 0.5 in/sec PPV for new residential and modern commercial/industrial structures, 0.3 in/sec PPV for older residential structures, and a limit of 0.25 in/sec PPV for historic and some old buildings. The 0.3 in/sec PPV vibration limit would be applicable to properties in the vicinity of the project site.

Impact NOI-1:	The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. **(Less than Significant Impact)**

Temporary Construction Noise

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. Most demolition and construction noise falls within the range of 77 to 90 dBA at a distance of 50 feet from the source.

Construction of the project is planned to occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, over a period of 20 months. A detailed list of equipment expected to be used during each phase of construction was provided by the applicant. The Federal Highway Administration (FHWA)'s Roadway Construction Noise Model (RCNM) was used to calculate the hourly average noise levels for each phase of construction, assuming the two loudest pieces of construction equipment would operate simultaneously. Table 4.13-2 shows the calculated construction noise levels at the nearest property lines from operation of the two loudest pieces of construction equipment. Construction noise levels would be anticipated to exceed the single-family residential limit of 75 dBA when there is heavy construction activity within about 140 feet of the residential property to the southwest, and would not exceed the commercial limit of 85 dBA.

Table 4.13-2: Calculated Construction Noise Levels at Nearest Property Lines					
Phase	**Calculated Hourly Average L_{eq} (dBA)**				
	Noise Level at 50 feet	**Northwest Commercial (60 feet)**	**Northeast Commercial (60 feet)**	**Southeast Commercial (170 ft)**	**Southwest Residential (60 feet)**
Demolition	85	83	83	74	83
Site Preparation	84	82	82	73	82
Grading/ Excavation	86	84	84	75	84
Trenching/ Foundation	82	80	80	71	80
Building Exterior	82	80	80	71	80
Building Interior/ Architectural Coating	77	75	75	66	75
Paving	83	81	81	72	81
Notes: *Denotes two loudest pieces of construction equipment per phase					

The project would include the following standard measures identified in Section 3.1.5.1 Construction Measures to reduce temporary construction noise:

- Limit construction activities to the hours between 7:00 a.m. and 5:30 p.m., Monday through Friday, and on Saturdays between 9:00 a.m. and 3:00 p.m., in accordance with the City's Municipal Code. Prohibit construction on Sundays and holidays unless permission is granted with a development permit or other planning approval.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Strictly prohibit unnecessary idling of internal combustion engines.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors., Use adequate muffling (with enclosures where feasible and appropriate) to reduce noise levels at the adjacent sensitive receptors if noise-generating equipment must be located near receptors. Face enclosure openings or venting away from sensitive receptors.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Erect a temporary noise barrier along the northeast and southeast property lines of the residence at 311 Marich Way. Design the barrier to achieve a minimum nine-dBA of noise reduction for ground level activities and five-dBA of noise reduction from upper-level activities in order to reduce construction noise levels in the rear yard to 75 dBA Leq or less.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and implement reasonable measures to correct the problem. The telephone number for the disturbance coordinator at the construction site shall be conspicuously posted and include the notice sent to neighbors regarding the construction schedule.

The above proposed measures, which are typically implemented by development projects, would reduce temporary construction noise levels to less than significant by using best available noise suppression devices and techniques. **(Less than Significant Impact)**

Permanent Operational Noise

Project-Generated Traffic

A significant impact from project generated traffic would result if project generated traffic were to result in a permanent noise level increase of five dBA CNEL or greater in a residential area where the resulting in a noise environment would continue to be 60 dBA CNEL or less.

A permanent noise level increase of three dBA CNEL would be expected if a project would double existing traffic volumes along a roadway. Based on a review of the Transportation Analysis prepared for the project (refer to Appendix F), the project would not double existing traffic volumes, and at most would result in a noise level increase of 0.2 dBA CNEL. Since operation of the project would not result in a permanent five dBA DNL increase in ambient noise levels, the project would not substantially increase ambient noise levels. **(Less than Significant Impact)**

Parking

As discussed in Section 3.1.2 Site Access and Parking, the project would utilize mechanical parking lifts to stack up to three cars per stall. Based on noise measurements collected for a similar parking lift system, average sound level for an operational cycle are estimated to be 63 to 66 dBA L_{eq} with a maximum instantaneous noise level of 74 to 76 dBA L_{max} occurring when the upper lift came to rest at the lower position.

Based on the noise data collected during the operation of similar mechanical lifts, the nearest single-family residential receptor to the southwest would be exposed to average sound levels of 39 dBA L_{eq} assuming up to 20-minutes of mechanical lift noise per hour, and maximum sound levels up to 54 dBA L_{max}. These noise levels would be audible, but would not exceed the City of Los Altos standards for average or maximum noise level events. **(Less than Significant Impact)**

Mechanical Equipment

The project would include mechanical equipment, such as heating, ventilation, and air conditioning systems (HVAC). Based on the project plans, solar panels and air conditioning equipment (air-cooled condensing units) would be located on the southwestern side of the rooftop, about 120 feet from the nearest residential land use to the southwest. Typical residential air-cooled condensing units generate noise levels ranging from 50 to 60 dBA at 50 feet from the equipment, depending on the equipment selected. Noise from the rooftop equipment located is calculated to generate noise levels of up to 39 to 49 dBA L_{eq} at the closest residential property line and nearest residential building. The projected noise levels are calculated to be below the property line limit but could exceed the limit at the nearest residential building façade by up to four dBA. Consistent with General Plan Policy 7.3 in the Natural Environment and Hazards Element, the project would be required to implement the following

- Prior to the issuance of building permits, air conditioning or air handling equipment would be selected and/or designed to reduce noise levels on adjacent residences to meet the City's requirements. The project applicant would retain a qualified acoustical consultant to review the selected equipment to determine it would comply with the City's 45 dBA L_{eq} residential noise limit at the nearest residential building. Noise reduction measures, if required, would include but are not limited to selection of quieter equipment and/or installation of noise barriers such as roof screens.

Implementation of the above City requirement would ensure that the project's mechanical equipment is selected to comply with the City's 45 dBA Leq residential noise limit at the nearest residential building. **(Less than Significant Impact)**

Overall Operational Noise

The overall increase in noise levels attributable to the project would result primarily from vehicles in the parking garage and mechanical equipment noise sources. Operational noise levels from the parking lifts are calculated to reach 46 dBA CNEL, and operational noise levels from the mechanical equipment are assumed to be maintained at 45 dBA CNEL or less. The overall project generated noise level would be 49 dBA CNEL. When added to the existing CNEL measured as part of the noise survey (53 dBA CNEL), the noise environment at the nearest sensitive receptor is calculated to increase by up to one dBA CNEL. The increase in the CNEL noise level would not be detectable and would be below the five dBA CNEL threshold that defines a substantial permanent noise increase. **(Less than Significant Impact)**

Impact NOI-2:	The project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used in the vicinity of nearby sensitive land uses. Construction activities would include demolition, site preparation, grading and excavation, trenching and foundation, building (exterior), interior/ architectural coating, and paving. Pile driving is proposed.

Based on typical vibration levels from construction equipment, project construction-related vibration levels would not exceed 0.3 in/sec PPV at the nearest structures. Project construction vibration levels,

therefore, would not be excessive and cause cosmetic damage to buildings. **(Less than Significant Impact)**

Impact NOI-3:	The project would not be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. **(No Impact)**

The project is not located within two miles of a public airport or in the vicinity of a private airstrip and, therefore, would not expose people residing or working in the project area to excessive aircraft noise levels. **(No Impact)**

4.13.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City has policies (including General Plan Policies NEH 7.2 and 7.3 identified in Section 4.13.1.2 Regulatory Framework) that address existing noise conditions affecting a proposed project.

Future Exterior Noise Environment

The proposed building would face Distel Circle. The primary outdoor use area is a courtyard located on the second story on the rear side (south side) of the building, enclosed by four residential levels on the north, east, and south sides. The acoustical shielding provided by the building would reduce the noise level in the courtyard to 55 dBA CNEL or less in the common outdoor use area, which is below the City's maximum acceptable outdoor noise exposure level for multiple-family residential areas. The project also includes private balconies, however, private balconies are excluded from the City's exterior noise assessment.

Future Interior Noise Environment

General Plan Policy NEH 7.3 and CBC requires indoor levels not exceed 45 dBA CNEL. Interior noise levels would vary depending upon the design of the buildings and the selected construction materials and methods. Standard residential construction provides approximately 15 dBA of exterior-to-interior noise reduction, assuming the windows are partially open for ventilation. Standard construction with the windows closed provides approximately 20 to 25 dBA of noise reduction in interior spaces.

Conditions of Approval:

- Provide a suitable form of forced-air mechanical ventilation, as determined by the local building official, for all residential units so that windows can be closed at the discretion of the occupants to control environmental noise.

- During final project design, the project applicant would retain a qualified acoustical specialist to prepare a detailed acoustical design review confirming that the design would result in interior noise levels at or below 45 dBA CNEL in all habitable rooms in the residential units.

Implementation of the above Condition of Approval would ensure that interior noise levels are reduced to acceptable levels by allowing for closing the windows to control noise. Depending on exterior noise levels, a combination of forced-air mechanical ventilation and sound-rated windows and doors may be required to meet interior noise levels.

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[72] The City of Los Altos Housing Element and related land use policies were last updated on May 26, 2015.

Regional and Local

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified Priority Development Areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.[73]

ABAG allocates regional housing needs to each city and county within the San Francisco Bay Area, based on statewide goals. These allocations are designed to lay the foundation for Plan Bay Area 2050's long-term envisioned growth pattern for the region. ABAG also develops a series of forecasts and models to project the growth of population, housing units, and jobs in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Forecasting and Modeling Report, which is a technical overview of the of the growth forecasts and land use models upon which Plan Bay Area 2050 is based.

[72] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed November 29, 2021. http://hcd.ca.gov/community-development/housing-element/index.shtml.

[73] Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

4.14.1.2 *Existing Conditions*

As of January 2021, the City of Los Altos had a total population of approximately 30,510 residents.[74] In 2040 it is estimated that the City will have approximately 32,800 residents.[75]

The project site is currently used as an office building and provides no housing.

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact POP-1:	The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). **(Less than Significant Impact)**

A project can induce substantial population growth by proposing new housing beyond projected or planned development levels, generating demand for housing as a result of new businesses, extending roads or other infrastructure to previously undeveloped areas, or removing obstacles to population growth (e.g., expanding capacity of a wastewater treatment plant beyond that necessary to serve planned growth).

The project proposes 90 residential units. Assuming the City average household size of 2.72 people per dwelling unit, the proposed project would increase the local population by approximately 245 persons.[76] The project is consistent with the site's General Plan designation, which allows for high-density residential land uses like the proposed project. For this reason, the project would not result in unplanned residential development in the City. Further, the project would be adequately served by existing infrastructure and would not extend roads or other infrastructure. For these reasons, the

[74] State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2021*. Sacramento, California, May 2021. Accessed November 29, 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.
[75] City of Los Altos. *City of Los Altos 2015-2023 Housing Element*. May 26, 2015.
[76] 90 units multiplied by an average of 2.72 persons per household in Los Altos (source: State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2020*. Sacramento, California, May 2021.) = 245.

project would not directly or indirectly induce substantial unplanned growth in the area. **(Less than Significant Impact)**

Impact POP-2:	The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

There are no housing units or residences on-site. Therefore, implementation of the project would not displace existing residents from the project site that would necessitate the construction of housing elsewhere. **(No Impact)**

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

California Fire Code

The California Fire Code (CFC), as specified in Title 24, Part 9 of the California Code of Regulations (Title 24), contains regulations and accepted practices for safeguarding life and property from the hazards of fire and explosion, dangerous conditions related to the storage, handling, and use of hazardous materials, and hazardous conditions that may occur in the use or occupancy of buildings.[77] Title 24 is updated approximately every three years.[78] The most recent version of Title 24 went into effect on January 1, 2020.

[77] ICC Digital Codes. "2019 California Fire Code, Title 24, Part 9." Accessed May 31, 2022. Available at: https://codes.iccsafe.org/content/CAFC2019JUL21S/chapter-1-scope-and-administration.
[78] California Building Standards Commission. "California Building Standards Code." Accessed May 13, 2022. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

Local

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purpose of avoiding or reducing public service impacts and are applicable to the project:

Policy	Description
OSCCF 1.4	Require park dedication, public open space, or require fees in lieu thereof, for all new subdivisions and multi-family residential development in Los Altos.
OSCCF 6.1	Promote community order by preventing criminal activity, enforcing laws, and meeting community service demands.
OSCCF 6.3	Provide response times for police and fire protection services emergencies that are comparable to similar jurisdictions in Santa Clara County.
OSCCF 6.4	Continue cooperative mutual aid agreements with nearby jurisdictions to ensure rapid and sufficient response to emergency situations.
OSCCF 9.2	Work with private developers to offer cultural activities within the community, such as a community theater and cinema.

Los Altos Municipal Code

The City of Los Altos has established a Parkland Dedication Ordinance (Chapter 13.24.010 of the Municipal Code) which requires residential subdivisions to dedicate land for park or recreational purposes, or pay a fee in-lieu thereof, as a condition of approval for the final subdivision or parcel map. The intent of the ordinance is to allow development to occur within the City in a manner that meets the City's parks and recreation goals.

Los Altos Parks Plan

The Los Altos Parks Plan, adopted in May of 2012, is intended to create a clear set of goals, policies, and objectives that will provide direction to the City Council and City staff for the development, improvement, and enhancement of the City's park system for the next twenty to thirty years. The Parks Plan was designed to parallel the General Plan's Open Space, Conservation, and Facilities Element by providing specific direction and recommendations related to parks in Los Altos.

4.15.1.2 *Existing Conditions*

Fire and Police Protection Services

The City of Los Altos contracts with the Santa Clara County Fire District for fire and emergency medical services. There are two fire stations in Los Altos: Almond Fire Station located at 10 Almond Avenue; and Loyola Fire Station located at 765 Fremont Avenue. The closest station to the project site is the Almond Fire Station, located approximately 0.9 miles southwest of the site.

Police protection services for the project site are provided by the Los Altos Police Department, headquartered at 1 North San Antonio Road, approximately 1.0 miles south of the site. The Department has 30 sworn officers, five reserve officers, and 17 professional civilian staff.

Schools

The project site is located in the Los Altos School District and Mountain View-Los Altos Union High School District. Elementary school students in the project area attend Almond Elementary School, located approximately 0.8 miles south of the project site. Middle school students in the project area attend Egan Junior High School, located approximately 0.4 miles west of the project site.[79] High school students in the project area attend Los Altos High School, located approximately 1.2 miles southeast of the project site.[80]

As of 2021, Almond Elementary School is over capacity by 34 students.[81] There are portable classrooms that currently provide additional educational space in addition to permanent educational facilities.[82] Future construction activity of permanent buildings is planned through Measure N bond program funding.[83] Egan Junior High School has the capacity to accommodate an additional 57 students.[84]

As of 2021, Los Altos High School is over capacity by 570 students.[85] There are portable classrooms that currently provide educational space that is in addition to permanent education facilities. Future construction activity of permanent classroom facilities is underway through Measure E bond program funding.[86]

Parks

The City provides and maintains developed parkland and open space to serve its residents. Residents of Los Altos are served by community park facilities, neighborhood parks, playing fields, and community centers. The City's Department of Recreation and Community Services is responsible for development, operation, and maintenance of all City park facilities.

[79] Los Altos School District. "Boundaries Accessed December 6, 2021. https://www.lasdschools.org/District/2103-Boundaries.html.
[80] Mountain View-Los Altos Union High School District. "School Boundaries". Accessed December 6, 2021. https://www.mvla.net/About-MVLA/District-Information/General-Information/Maps-and-Directions/index.html.
[81] Current enrollment at Almond Elementary School is 359 students with a school facility capacity of 325 students resulting in overcapacity of 34 students. Enrollment Source: California Department of Education. Data Quest, 2020-2021 Enrollment, Almond Elementary Report. Accessed May 17, 2022.; Capacity Source: Kenyon, Randy. Assistant Superintendent-Business Services, LASD. Personal Communication. May 17, 2022.
[82] Source: Kenyon, Randy. Assistant Superintendent-Business Services, Los Altos School District. May 19, 2022.
[83] Ibid.
[84] Current enrollment at Egan Junior High School is 493 students with a school facility capacity of 550 students resulting in additional space for 57 students. Enrollment Source: California Department of Education. Data Quest, 2020-2021 Enrollment, Egan Elementary Report. Accessed May 17, 2022. Capacity Source: Kenyon, Randy. Assistant Superintendent-Business Services, LASD. Personal Communication. May 17, 2022.
[85] Current enrollment at Los Altos High School is 2,136 students with a school capacity of 1,566 students resulting in an overcapacity of 570 students. Enrollment Source: California Department of Education. Data Quest, 2020-2021 Enrollment, Los Altos High Report. Accessed May 17, 2022.; Capacity Source: Aguilar, Irene. Assistant to the Associate Superintendent-Business Services, Mountain View Los Altos High School District. Personal Communication. March 17, 2022.
[86] Aguilar, Irene. Assistant to the Associate Superintendent-Business Services, Mountain View Los Altos High School District. Personal Communication. May 18, 2022.

The project site is proximate to a number of public parks. The closest public park is Klein Park in the City of Mountain View, located approximately 1,000 feet north of the site. Other park facilities in the vicinity include Gemello Park in the City of Mountain View, approximately 0.3-mile southeast of the site; Rengstorff Park in the City of Mountain View, approximately 0.5-mile northwest of the site; and Castro Park in the City of Mountain View, approximately 0.6-mile east of the site. The closest public park in the City of Los Altos is Village Park, approximately 1.1 miles southwest of the site.

Libraries

The City of Los Altos is served by the Santa Clara County Library District. The closest libraries to the project site include Los Altos Library, approximately 1.1 miles southeast of the site, and Woodland Branch Library, located in approximately 1.7 miles south of the site.

Community Centers

There are two community centers located in Los Altos: Grant Park Community Center located at 1575 Holt Avenue, approximately four miles southeast of the project site and Hillview Community Center located at 97 Hillview Avenue, approximately 1.1 miles southwest of the project site.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☒	☐
4) Parks?	☐	☐	☒	☐
5) Other Public Facilities?	☐	☐	☒	☐

Impact PS-1:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. **(Less than Significant Impact)**

The development of the project would incrementally increase the local population and associated demand on fire protection services. The incremental increase in demand, however, would not, by itself, require new facilities or expansion of existing facilities to provide adequate fire protection services. The project would comply with General Plan Policies OSCCF 6.1, 6.3, and 6.4 which require that community service demands are met, response times for police and fire protection are comparable to similar jurisdictions within Santa Clara County, and that the City continue to work with nearby jurisdictions to provide sufficient emergency services. In addition, the project would be constructed in compliance with the current iterations of the CBC and the CFC to ensure the building is fire safe. The project would be reviewed by the Santa Clara County Fire District to ensure applicable Fire Code standards to reduce potential fire hazards are included in the project design when construction permits are issued, including sprinklers and smoke detectors. For these reasons, the project would not significantly impact fire protection services. **(Less than Significant Impact)**

Impact PS-2:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. **(Less than Significant Impact)**

The project site is currently served by the Los Altos Police Department. Similar to fire protection services, the proposed project would incrementally increase the demand for police protection services at the project site. The incremental increase in demand for police protection services would not require new or expanded police protection facilities in order to maintain acceptable emergency service. As discussed in Impact PS-1, the project would comply with General Plan Policies OSCCF 6.1, 6.3, and 6.4, which would ensure adequate police protection services.

The project would be constructed in conformance with current codes and the project design would be reviewed by the Los Altos Police Department to ensure that it incorporates appropriate safety features to minimize criminal activity. For these reasons, the project would not significantly impact police protection services. **(Less than Significant Impact)**

Impact PS-3:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. **(Less than Significant Impact)**

The project would develop 90 multi-family residential units. Based on the student generation rate of 0.09 for elementary schools and junior high schools from the Los Altos School District, the project would generate about nine new elementary and middle school students .[87] Based on the student generation rate of 0.312 students per unit for the Mountain View Los Altos High School District, the project would generate about 29 new high school students.[88]

As stated above in Section 4.15.1.2 Existing Conditions, Almond Elementary School is over capacity by 34 students and Egan Junior High School has an existing capacity for an additional 57 students. Both Almond Elementary School and Egan Junior High School would be able to accommodate the existing student enrollment and the project-generated students with existing facilities.[89]

As stated above, the project would generate 29 new high school students. Los Altos High School is currently utilizing portable classrooms to meet their enrollment capacity and would continue to do so regardless of the project. New construction funded by Measure E bond program would build permanent classrooms to accommodate additional students.[90] Los Altos High School has adequate capacity to meet the project's demand.

As described above, the project itself would not trigger the need to construct or expand school facilities. The project is required to pay school impact fees in accordance with California Government Code Section 65996 to mitigate its impact to local school facilities to a less than significant level. **(Less than Significant Impact)**

[87] Source: Kenyon, Randy. Assistant Superintendent-Business Services, Los Altos School District. May 17, 2022.
[88] Source: Jack Schreder & Associates, Inc. Level I Developer Fee Study for Mountain View Los Altos High School District. July 27, 2020.
[89] Source: Kenyon, Randy. Assistant Superintendent-Business Services, Los Altos School District. May 17, 2022.
[90] Environmental review pursuant to CEQA for the Los Altos High School Expansion Project (SCH Number 2011092005) was completed in June 2019.

Impact PS-4:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks. **(Less than Significant Impact)**

The new residents from the project would incrementally increase the use of existing recreational facilities in the project area. The proposed project would include approximately 12,750 square feet of on-site outdoor amenity space that would be partially offset the project's demand on park facilities. Per a MOU by the City of Los Altos and the County of Santa Clara, the project would receive a 100 percent discount on park in lieu fees. The project's MOU by the City and County would allow the project's exemption from pay impact fees for applicable park improvements, including park in lieu fees, and therefore would not result in a significant impact on parks. **(Less than Significant Impact)**

Impact PS-5:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities. **(Less than Significant Impact)**

New residents of the project would incrementally increase the use of nearby libraries and community centers, including the Los Altos Library, Grant Park Community Center, and Hillview Community Center. This incremental increase, however, would not necessitate the construction of new facilities or the expansion of existing facilities. For these reasons, the proposed project would not result in significant impacts to libraries, community centers, or other public facilities. (Less than Significant Impact)

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Local

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purposes of avoiding or reducing recreation impacts and are applicable to the project:

Policy	Description
OSCCF 1.4	Require park dedication, public open space, or require fees in lieu thereof, for all new subdivisions and multi-family residential development in Los Altos.
OSCCF 4.1	Provide adequate level of maintenance for City parks, open space, and public property to ensure safety, aesthetics, and recreational enjoyment for Los Altos residents.

Los Altos Municipal Code

The City of Los Altos has established a Parkland Dedication Ordinance (Chapter 13.24.010 of the Municipal Code) requiring residential subdivisions to dedicate land for park or recreational purposes, or pay a fee in-lieu thereof, as a condition of approval for the final subdivision or parcel map. The intent of the ordinance is to allow development to occur within the City in a manner that meets the City's parks and recreation goals.

Los Altos Parks Plan

The Los Altos Parks Plan, adopted in May of 2012, is intended to create a clear set of goals, policies, and objectives that will provide direction to the City Council and City staff for the development, improvement, and enhancement of the City's park system for the next twenty to thirty years. The Parks Plan was designed to parallel the General Plan's Open Space, Conservation, and Facilities Element by providing specific direction and recommendations related to parks in Los Altos.

4.16.1.2 *Existing Conditions*

The City of Los Altos' Department of Recreation and Community Services is responsible for maintaining various parks and recreation facilities, as well as managing special interest programs and classes, senior programs, and community events. Overall, the City maintains a total of 19 parks, nature preserves, gyms, youth centers, and community centers that serve the community.

As described in Section 4.15 Public Services, nearby recreational facilities include Klein Park, Gemello Park, Rengstorff Park, Castro Park, Village Park, Grant Park Community Center, and Hillview Community Center.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Impact REC-1:	The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **(Less than Significant Impact)**

As discussed under Impact PS-4 in Section 4.15 Public Services, the project would result in new residents on the project site that would incrementally increase demand on park and other recreational facilities. The project's on-site outdoor amenity space, including interior courtyard and

and compliance with the City's Park Dedication Ordinance (Chapter 13.24.010 of the Municipal Code) would reduce its impact on parks and recreational facilities to a less than significant level. **(Less than Significant Impact)**

Impact REC-2:	The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact)**

The proposed project would include approximately 12,750 square feet of outdoor amenity space on-site that could include landscaping, lounge areas, a children's play space, vegetable gardens, and outdoor game areas. The physical impacts of these outdoor amenity spaces are evaluated as part of the project in this Initial Study. As discussed throughout this Initial Study, no significant impacts

would occur as a result of the project. As discussed in Impact PS-4, the project's MOU by the City and County of Santa Clara would allow the project's exemption from paying park in lieu fees. For these reasons, the project would not require the construction of new recreational facilities with the potential to adversely affect the environment. **(Less than Significant Impact)**

4.17 TRANSPORTATION

The following is based, in part, on a Transportation Analysis (TA) prepared by Hexagon Transportation Consultants, Inc. dated July 19, 2022. This report is attached as Appendix F to this Initial Study.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Congestion Management Program

VTA oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to transportation and traffic and are applicable to the proposed project.

Policy	Description
CE 2.4	Require development projects to mitigate their respective traffic and parking impacts by implementing practical and feasible street improvements
CE 2.6	Implement and require developers to implement street improvements that accommodate and encourage the use of non-automobile travel modes including walking, bicycling, and transit.
CE 2.17	Maintain adequate emergency access for all land uses.
CE 2.20	Enhance driving safety in the community.

Los Altos Municipal Code

Title 14 of the City's Municipal Code consists of the City's zoning ordinance, which contains the development standards and land use regulations that guide development within Los Altos. Chapter 14.74 of the zoning ordinance describes the off-street parking and loading requirements for each zoning district in the City. These standards include the number of off-street parking spaces required, the number of loading spaces required, the required parking space dimensions, and the required driveway dimensions.

Los Altos Bicycle Transportation Plan

The City's Bicycle Transportation Plan was adopted in 2012 with the stated goals of increasing the amount of bicycling in the City, improving access to bicycle infrastructure for students, improving commute routes and end-of-trip accommodations, and establishing Los Altos as a biking destination. The Bicycle Transportation Plan provides a detailed analysis of existing infrastructure conditions, evaluates the needs of the community, provides potential improvements to be implemented, and outlines funding possibilities.

Los Altos Pedestrian Master Plan

The City's Pedestrian Master Plan was adopted in 2015 to evaluate the existing pedestrian infrastructure in the City and recommend strategies and actions to improve pedestrian facilities. The Pedestrian Master Plan provides an analysis of existing infrastructure and safety conditions, evaluates the needs of the community, provides potential policy and project recommendations, outlines cost estimates and funding possibilities, and provides a strategy for evaluating and prioritizing the potential improvements in the Master Plan.

Neighborhood Traffic Management

In 1999, the City of Los Altos established a comprehensive neighborhood traffic management program (NTMP), which has been periodically updated since then. The most recently updated NTMP

from 2005 specifies a process for implementing traffic calming measures designed to reduce or manage volumes and travel speeds on local streets.

Los Altos Complete Streets Master Plan

The Complete Streets Master Plan is intended to build from the Bicycle and Pedestrian Master Plans that were previously adopted by the City. The Master Plan provides recommendations and strategies for developing a comprehensive bicycle and pedestrian network that facilitates easy and safe circulation throughout the City. The Master Plan outlines the existing conditions in the City, recommends improvements for the existing infrastructure, provides the Safe Routes to School Plan, and describes a strategy for evaluating and prioritizing suggested improvements**.**

Los Altos Draft VMT Policy

SB 743 requires local jurisdictions to implement a VMT policy that can utilize analysis of VMT for proposed projects to determine the significance of transportation impacts. The City does not currently have an adopted VMT policy. The City has a Draft VMT Policy that establishes screening criteria to identify projects (including 100 percent affordable) which are presumed to result in a less than significant VMT impact and are not required to prepare a VMT analysis. In lieu of an adopted policy, the City has developed an Interim VMT Policy to comply with state requirements. The Interim VMT Policy establishes procedures to evaluate projects based on their description, characteristics, and location. If a project is 15 percent below the regional average, a project is considered to not have a significant environmental impact.

4.17.1.2 *Existing Conditions*

Roadway Network

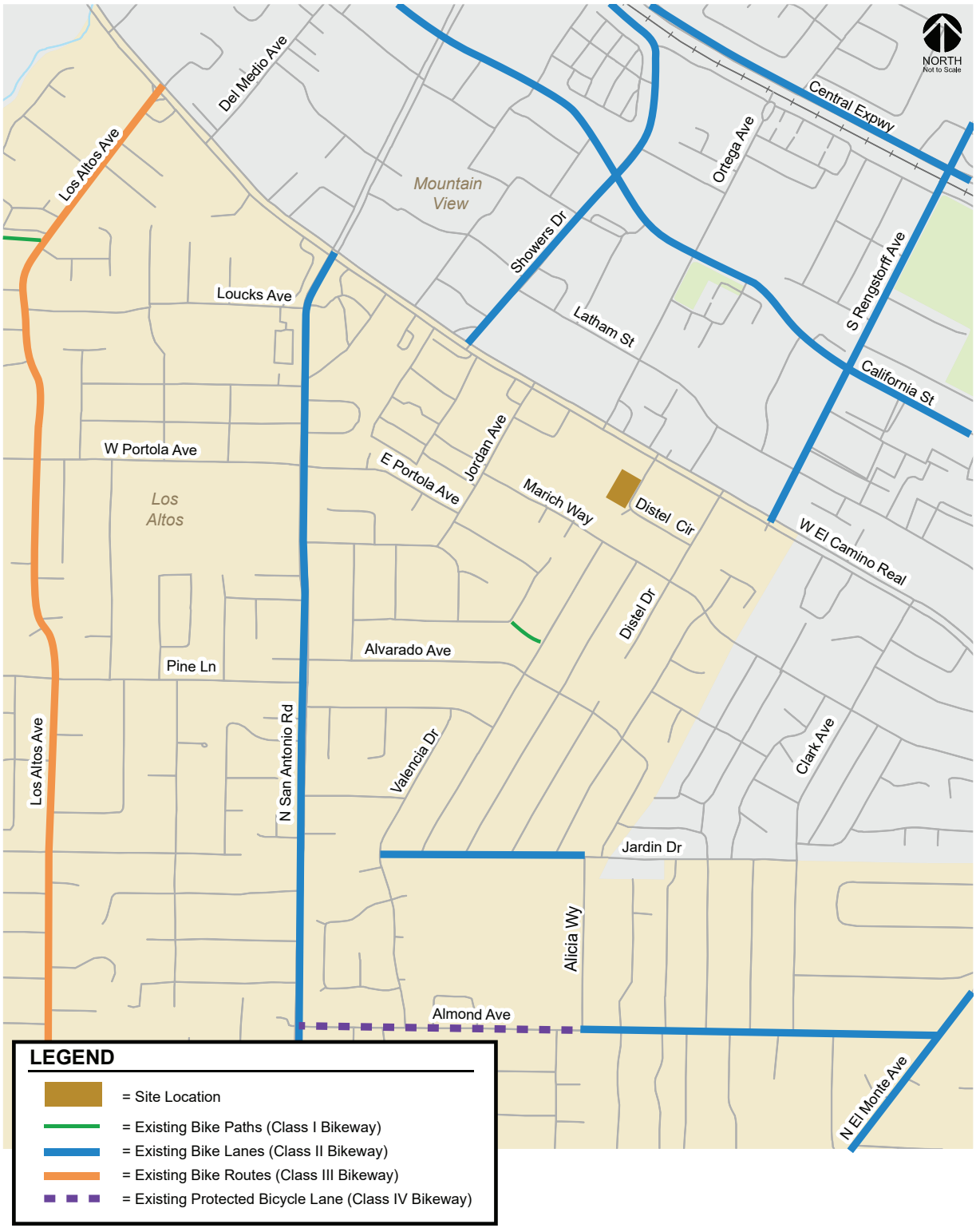
Regional and local roadways providing access to the project site are described below. Additional detail about the existing roadway network is provided in Appendix F.

- SR 82, also known as El Camino Real, is a north-south arterial that extends from Daly City in the north to San Jose in the South. Within the Los Altos city limits, El Camino Real is primarily an east-west roadway. El Camino Real provides access to the project site via Distel Circle.
- San Antonio Road is a north-south arterial road that extends northward from Foothill Expressway to US 101. In the vicinity of the project site, it is four lanes wide and has landscaped medians with left-turn pockets at intersections.
- Distel Drive is a north-south local street that extends southward from El Camino Real and ends in a cul-de-sac south of Marich Way. In the vicinity of the project site, it is two lanes wide and parking is allowed on both sides of the street.
- Rengstorff Avenue is a north-south arterial that extends northward from El Camino Real to Charleston Road. In the vicinity of the project site, it is four lanes wide, has a left turning lanes at intersections, and a landscaped median.
- Distel Circle is an L-shaped local street connecting El Camino Real to Distel Drive. It is two lanes wide. It provides direct access to the project site.

Bicycle Facilities

Existing bicycle facilities within the project vicinity are shown on Figure 4.17-1. Bicycle facilities within the vicinity of the project site consist of Class I through IV facilities. These are described more below.

- Class I Bicycle Facilities (multi-use paths or bike trails) are off-street, two-way bikeways physically separated from motor vehicle traffic. The closest Class I bike paths in the vicinity of the project site are located between Delphi Circle and Panchita Way and between Los Altos Avenue and Arastradero Road.
- Class II Bicycle Facilities (unprotected bike lanes) provide dedicated on-street space for bicyclists in the roadway, and are delineated with painted pavement stripes and symbols on the roadways surface. The segments of Class II bike lanes closest to the project site are located along North San Antonio Road, Showers Drive, South Rengstorff Avenue, and California Street.
- Class III Bicycle Facilities are roadways shared between bicycles and vehicles where the lanes are wide enough, and the number of vehicles is low enough for both bicycles and vehicles to share the road. The closest Class III bike route to the project site is located along Los Altos Avenue between Edith Avenue and El Camino Real.
- Class IV Bicycle Facilities (protected bike lanes) are for the exclusive use of bicycles and include a vertical or grade separation between the bikeway and motor vehicle traffic. The closest protected bike lane to the project site is located along Almond Avenue between San Antonio Road and Alicia Way.



Source: Hexagon Transportation Consultants, Inc., April 6, 2022.

EXISTING BICYCLE FACILITIES | FIGURE 4.17-1

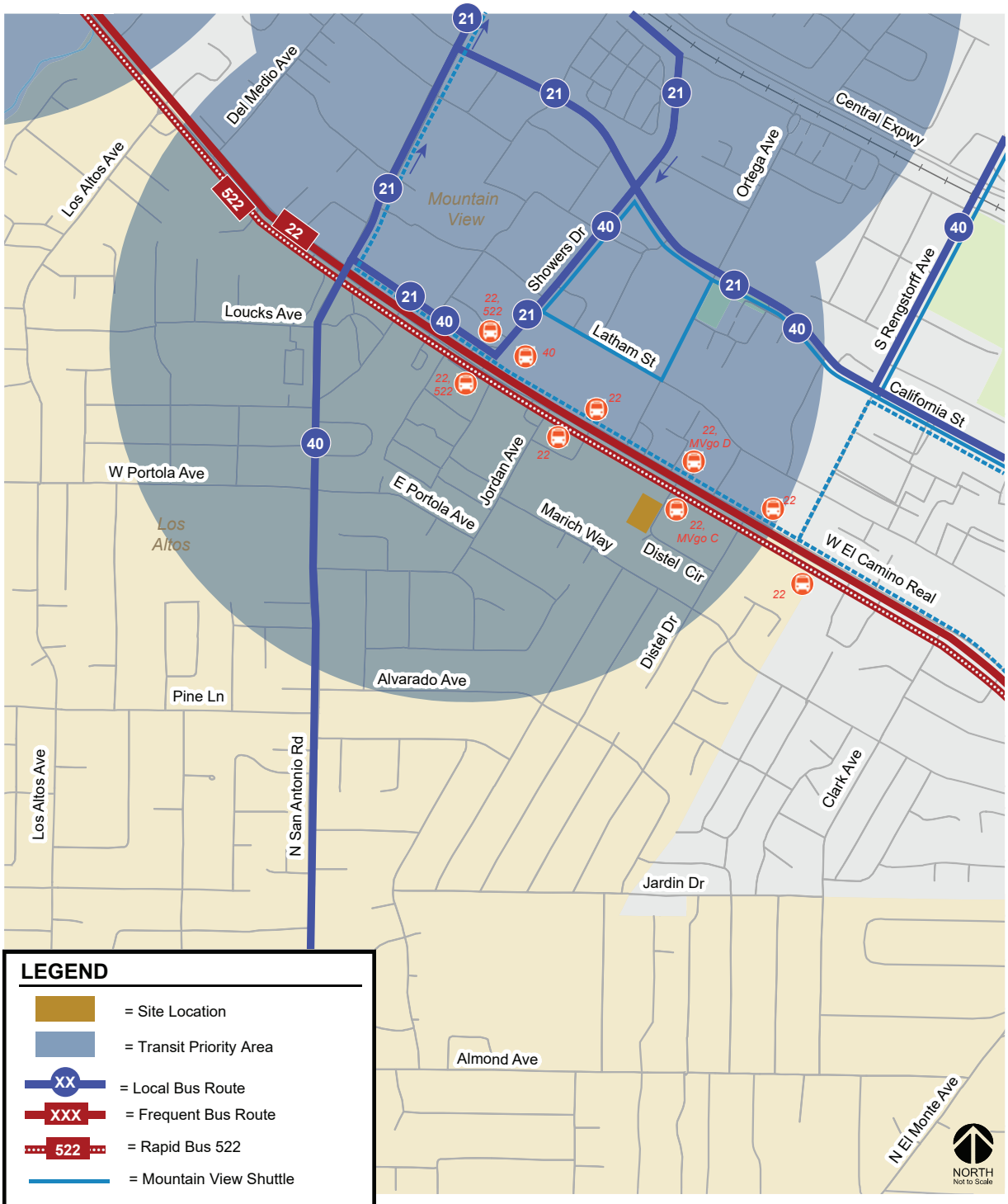
Pedestrian Facilities

The streets in the immediate vicinity of the project site, Distel Circle, Distel Drive, El Camino Real, Los Altos Avenue, San Antonio Road, Del Medio Avenue, Showers Drive, Jordan Avenue, Ortega Avenue, Rengstorff Avenue, and Almond Avenue all have continuous sidewalks on both sides of the street. Continuous sidewalks are not present along other nearby streets, including Portola Avenue and Marich Way. The signalized intersections near the project site have crosswalks with pedestrian signals. The City has installed a hybrid beacon signal that allows pedestrians to safely cross El Camino Real at the intersection of El Camino Real and Distel Circle.

Transit Facilities

Existing bus transit service to the project site is provided by the Santa Clara Valley Transportation Authority (VTA) and the City of Mountain View, as shown on Figure 4.17-2**.**. One frequent bus route (22/522), two local bus routes (Route 21 and 40), and two free shuttles serve the project area. The nearest bus stop to the project site is located on El Camino Real, approximately 220 feet northeast of the project site. The operational details of existing transit facilities are provided in Table 4.17-1.

Table 4.17-1: Existing Transit Facilities Operational Details				
Bus Route	**Route Description**	**Closest Stop (Distance to Project Site)**	**Weekday Hours of Operation[1]**	**Headway (minutes)[1]**
Rapid Bus 522	Palo Alto Transit Center – Eastridge Transit Center	0.5-mile	5:22 AM to 11:11 PM	10 to 20
Frequent Bus 22	Palo Alto Transit Center – Eastridge Transit Center	300 feet	4:25 AM to 3:01 AM	10 to 15
Local Bus 21	Palo Alto Transit Center – Santa Clara Transit Center	0.3-mile	5:37 AM to 8:49 PM	30
Local Bus 40	Foothill College – Mountain View Transit Center	0.4-mile	6:25 AM to 10:28 PM	30
Mountain View Community Shuttle	Mountain View Downtown Transit Center - Whisman Road - Middlefield Road - Rengstorff Park - Senior Center	0.5-mile	10:00 AM to 5:55 PM	30
Mountain View Go (MVgo)	Route C/D: Mountain View Transit Center - San Antonio Road - El Camino Real - Shoreline Boulevard - Charleston Road - Garcia Avenue	300 feet	Route C Morning: 6:35 AM to 9:52 AM	15
			Route C Evening: 3:32 PM to 7:56 PM	60
		300 feet	Route D Morning: 6:40 AM to 10:05 AM	40
			Route D Evening: 2:49 PM to 8:03 PM	45



Source: Hexagon Transportation Consultants, Inc.; ArcGIS Map Viewer, 2022.

EXISTING TRANSIT SERVICES AND TRANSIT PRIORITY AREAS | FIGURE 4.17-2

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☐	☒	☐
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
4) Result in inadequate emergency access?	☐	☐	☒	☐

Impact TRN-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Less than Significant Impact)**

Roadway System

While a project's effect on automobile delay is no longer considered an impact under CEQA, local jurisdictions have roadway LOS standards. As discussed in Section 4.17.3 Non-CEQA Effects and in more detail in Appendix F, the results of the LOS analysis show that, under near-term and cumulative conditions, several signalized intersections would have a substandard LOS with or without the project being constructed. Although these intersections would have a substandard LOS in the future, the increase in average critical delay would not be greater than four seconds. **(Less than Significant Impact)**

Bicycle Facilities

As discussed in Section 4.17.1.2, Class I, II, III, and IV bicycle facilities are located in the vicinity of the project site. These bicycle facilities would be unchanged by implementation of the project. Therefore, the project would not conflict with a program, plan, ordinance, or policy addressing the bicycle circulation system. **(Less than Significant Impact)**

Pedestrian Facilities

As discussed in Section 4.17.1.2, pedestrian facilities in immediate site vicinity include continuous sidewalks on both sides of most of the streets, crosswalks with pedestrian signals at signalized intersections, and a hybrid beacon signal at the intersection of El Camino Real and Distel Circle. As discussed in Section 3.1.2 Site Access and Parking, the project proposes to widen the sidewalk in front of the site from five feet wide to 14 feet wide and replace the existing gutters and curbs, install new landscaping and streetlighting, and construct a plaza for pedestrian use on the southeast corner

of the site. For these reasons, the project would not conflict with a program, plan, ordinance, or policy addressing the pedestrian circulation system. **(Less than Significant Impact)**

would ensure

Transit Facilities

As discussed in Section 4.17.1.2 and shown on Figure 4.17-2, the project site is well served by transit services that operate in the nearby vicinity. The City of Mountain View is in the process of implementing the El Camino Real Streetscape Plan which includes a new "Bus Bulb" at the bus stop located at the intersection of Distel Circle and El Camino Real. This improvement would widen the sidewalk at the bus stop location, allowing for additional space for pedestrians. The proposed project would not interfere with the implementation of this planned improvement. The project would result in a slight increase in demand for transit services; however, this increase would be accommodated by existing transit facilities. Therefore, the project would not conflict with a program, plan, ordinance, or policy addressing the transit circulation system. **(Less than Significant Impact)**

Impact TRN-2:	The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less than Significant Impact)**

This question pertains specifically to VMT as the means of analyzing transportation impacts of a project. As described in Section 4.17.1.1 Regulatory Framework, the City does not currently have an adopted VMT policy. The City's Draft VMT Policy establishes several screening criteria for projects that are expected to result in a less than significant transportation impact under CEQA. Per the City's Draft VMT Policy, projects with 100 percent affordable housing (such as the proposed project) are presumed to have a less than significant impact and are not required to prepare a VMT analysis. Although the Draft VMT Policy is not in effect, the project would screen out of the significance thresholds of the draft policy.

Since the City's Draft VMT Policy has not been adopted, the project is subject to the City's Interim VMT Policy which sets a threshold of significance for residential VMT per capita at 15 percent below the regional average of 13.95 VMT per capita (or 11.86). Per the Santa Clara County VMT evaluation tool, the project site is located within an area with a residential VMT per capita of 9.51 without the project, which is below the threshold set forth in the City's Interim VMT Policy.[91] Therefore, the project would also be screened out from further analysis using the Interim VMT Policy threshold.

In addition, pursuant to CEQA Guidelines Section 15064.3, subdivision (b), land use projects within one-half mile of an existing major transit stop or a stop along a high-quality transit corridor are designated at TPAs and presumed to result in a less than significant transportation impact.[92] As shown in Figure 4.17-2, the project site is within one-half mile of a major transit stop along El

[91] Santa Clara Valley Transportation Authority. Santa Clara Countywide VMT Evaluation Tool – Version 2. Accessed July 19, 2022. https://vmttool.vta.org/.
[92] Office of Planning and Research. "CEQA Review of Housing Projects Technical Advisory." Accessed March 28, 2022. https://opr.ca.gov/docs/20190208-TechAdvisory-Review_of_Housing_Exemptions.pdf.

Camino Real.[93] For this reason, and given the project would screen out of both the City'sDraft VMT Policy and Interim VMT policy, the project is presumed to have a less than significant transportation impact regarding VMT, consistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less than Significant Impact)**

Impact TRN-3:	The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

Access to the project site is currently provided via Distel Circle by two separate two-way driveways which lead to the surface parking area in front of the existing office building. The proposed project would remove the southern driveway and replace the northern driveway with a new 23-foot wide, two-way driveway that would lead to the parking garage of the proposed structure. The dimensions of the driveway would exceed the minimum width requirement of 18 feet established in Chapter 14.74 of the Los Altos Municipal Code. In order to ensure adequate sight distance for vehicles entering and exiting the driveway, it is recommended that on-street parking be prohibited 40 feet south and 35 feet north of the driveway entrance along the western side of Distel Circle to increase the level of visibility motorists would have while approaching the driveway.

As shown on Figure 2.4-3, the project site is surrounded by a mix of land uses, including office, commercial, and residential. The proposed residential use is not a new land use in the area. The project, therefore, does not propose a use that is incompatible with the existing mix of uses in the project area or propose a use that would bring unusual equipment on the roadways (e.g., farm equipment). For this reason, the project would not result in a significant impact due to incompatible uses. **(Less than Significant Impact)**

Impact TRN-4:	The project would not result in inadequate emergency access. **(Less than Significant Impact)**

Emergency vehicles access to the project site would be provided via the new two-way driveway. The proposed development would be reviewed for consistency with applicable California Building Code and Fire Code requirements for access and safety. As such, the proposed project would have a less than significant emergency access impact. **(Less than Significant Impact)**

4.17.3 Non-CEQA Effects

Level of Service

As noted above in Section 4.17.1.2, a project's effects on LOS shall no longer be considered an impact on the environment. This discussion on LOS is included because the City has adopted LOS goals, outside of the CEQA process. The LOS Standards for the studied intersections range from D to E, and an operation deficiency would be attributed to the project if the additional trips caused by project implementation would result in an increase in average delay at signalized study intersections by more than four seconds. In the event a project causes an LOS deficiency, the City has discretion

[93] Metropolitan Transportation Commission. Transit Priority Areas (2021). Accessed June 28, 2022. https://opendata.mtc.ca.gov/datasets/transit-priority-areas-2021-1/explore?location=37.773000%2C-122.191730%2C9.35.

whether to require a project to improve the level of service, and the relevant question under CEQA is whether those improvements would result in adverse physical changes to the environment, not whether LOS has degraded below the condition considered acceptable.

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. Trips generated by the existing developments located at the project site are then subtracted from project-generated trips to determine the project's true effect on intersection LOS. The project would generate 296 net new trips, including 14 during the AM peak hour and 24 during the PM peak hour. More information on how project trip generation was calculated, and a summary of the trip generation rates can be found in Appendix F.

The results of the LOS analysis show that, measured against applicable municipal and CMP LOS standards, all signalized study intersections are currently operating at an acceptable LOS during the morning and afternoon peak hours. Under near-term and cumulative conditions, several signalized intersections would have a substandard LOS with or without the project being constructed. Although these intersections would have a substandard LOS in the future, the increase in average critical delay would not be greater than four seconds, which is the threshold for determining whether a project's trips would contribute to an operation deficiency. Extensive details about the Non-CEQA LOS analysis, including methodology, trip generation, trip distribution, trip assignment, and a summary of the existing, near-term, and cumulative plus project LOS conditions are included in Appendix F.

Unsignalized Intersection Analysis

The City of Los Altos does not have an established LOS standard for unsignalized intersections. Two of the unsignalized intersections (San Antonio Road/ Jordan Avenue and Distel Circle/ El Camino Real) in the project vicinity operate at an unacceptable level under existing conditions; therefore, a signal warrant check was conducted for these intersections. The analysis concluded that the signal warrant is not met at either intersection with or without the addition of project traffic. In addition, the availability of signalized intersections in the project vicinity that can be used by motorists negates the potential need for signalization of these intersections.

Intersection Queuing

An intersection queuing analysis was completed for the project for the following turn movements:

- westbound left-turn from El Camino Real onto Distel Circle
- westbound left-turn from El Camino Real onto Distel Drive

Under existing and near-term conditions with project traffic, the queue for the westbound left-turn from El Camino Real onto Distel Circle was projected to be less than the available storage capacity during peak hours. During the AM peak period, the westbound left-turn from El Camino Real onto Distel Drive has an existing deficiency where the queue exceeds the storage capacity by one car. As the project would result in fewer inbound trips during the AM peak period due to the change in land use, it would not contribute to this existing deficiency.

Parking Assessment

Vehicle Parking

According to the parking analysis included in Appendix F, the project is estimated to require 89 parking spaces. As discussed in Section 3.1.2 , the project would provide a total of 90 vehicle parking spaces in the ground-level garage. The garage would provide 84 parking spaces in 33 mechanical lift parking stalls, which provide multiple parking spaces per stall by stacking two cars vertically, and in some cases, with a third car stacked in a pit area below grade. The parking stall dimensions, drive aisle width, and height of the garage meet all applicable City standards and would adequately serve the proposed parking configuration.

Bicycle Parking

Per the Bike Technical Guidelines provided by the VTA, it is recommended that the project provide a minimum of 30 Class I (long-term secured) and six Class II (short-term) bicycle parking spaces. The project includes a total of 45 Class I bicycle parking spaces in a secure storage room on the ground floor of the building. These spaces can be accessed through the garage or the lobby area. The project would provide six Class II bicycle spaces.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a TCR, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the CRHR, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

There are no known TCRs on the project sites.[94] As discussed in Section 4.5 Cultural Resources, the project site is not archaeologically sensitive.

[94] Archaeological/Historical Consultants. *Cultural Resources Inventory Report*. February 2022. Page 9.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☐	☒	☐
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Impact TCR-1: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(Less than Significant Impact)**

A Sacred Lands File Search was conducted through the Native American Heritage Commission (NAHC) for the project site in January 2022, the search result was negative. There are no known TCRs on-site.

As previously discussed in Section 4.5 Cultural Resources, there are no known archeological resources on-site and the site has a low possibility for uncovering archeological resources. The project, as proposed, includes the following standard construction-related measure identified in Section 3.1.5.1 Standard Construction Measures to reduce impacts to archaeological resources (if discovered on-site):

- In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, all activity within a 50-foot radius of the find would be stopped until a qualified archaeologist can assess the find and provide recommendations for further treatment, if warranted. Preservation in place is the

preferred treatment of an archeological resource. When preservation in place of an archeological resource is not feasible, data recovery, in accord with a data recovery plan prepared and adopted by the City, is the appropriate action. Construction and potential impacts to the area within a radius determined by the archaeologist would not recommence until the assessment is complete.

The above proposed measure, which is typically implemented by development projects, would reduce impacts to archaeological resources (including TCRs if discovered on-site) to a less than significant level by stopping construction and preparing a research design and treatment plan if any archaeological resources are found, thereby protecting the resource. Therefore, the project would not cause a substantial adverse change to a TCR. **(Less than Significant Impact)**

Impact TCR-2:	The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. **(Less than Significant Impact)**

As discussed above under Impact TCR-1, there are no known TCRs on-site and project as proposed would not result in significant impacts to TCRs. **(Less than Significant Impact)**

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. California Water Service adopted its most recent UWMP for the Los Altos Suburban District in June 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

AB 1826

AB 1826 requires that multi-family residential buildings with five or more dwelling units implement an organic waste recycling program to divert organic waste generated on-site. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupants.

Regional and Local

Countywide Integrated Waste Management Plan

Pursuant to AB 939, solid waste facility compliance requires that each county prepare and adopt a Countywide Integrated Waste Management Plan. The Santa Clara County Integrated Waste Management Plan (CIWMP) was approved in 1996 and contains goals, policies, and objectives aimed to ensure an effective and efficient integrated waste management system. Public Resources Code Sections 41770 and 41822, and Title 24, California Code of Regulations Section 18788 require that each countywide or regional agency integrated waste management plan (CIWMP/RAIWMP), and elements thereof, be reviewed, revised (if necessary), and submitted to the CalRecycle every five years. The last such review was completed in 2016 and concluded that despite population growth, solid waste diversion has increased, Santa Clara County has adequate disposal capacity (i.e., greater than 15 years), and no revisions to the CIWMP are warranted.[95]

Los Altos General Plan

The following policies in the City's General Plan have been adopted for the purpose of avoiding or reducing impacts on utilities and service systems and are applicable to the project:

Policy	Description
IWD 1.3	Review development proposals to determine whether adequate water pressure exists for existing and new development.
IWD 2.2	Review development proposals to ensure that if a project is approved, adequate sewage collection and treatment capacity is available to support such proposals.
IWD 4.1	Continue to work with infrastructure providers to ensure that the community's current and future infrastructure needs are met.

[95] California Department of Resources Recycling and Recovery. *Five-Year CIWMP/RAIWMP Review Report Template*. October 27, 2016.

Policy	Description
IWD 4.2	Maintain accurate records of infrastructure usage and needed infrastructure improvements.
IWD 4.3	Continue to require utilities in new developments to be placed underground.

Los Altos Municipal Code

Chapter 6.12 of the City's Municipal Code outlines the requirements for enrolling in solid waste collection services, proper waste storage, mandatory recycling programs for both commercial and residential properties, and enforcement procedures. Chapter 6.14 of the Municipal Code details the City's requirements for disposing of solid waste that is generated during the demolition of existing structures and the construction of new buildings in the City. Projects that are valued at $25,000 or more must divert at least 65 percent of the construction and demolition debris associated with the project from landfills in order to help the City achieve their overall waste diversion goal of 78 percent

4.19.1.2 *Existing Conditions*

Water Supply

The project site is served by the California Water Service Company (Cal Water) and is located within Cal Water's Los Altos Suburban (LAS) District. Water supply for the project site is sourced from a combination of groundwater and purchased water. Approximately 21 percent of the LAS District's provided water comes from primary groundwater production and 79 percent comes from water purchases from the Valley Water, sourced from underground aquifers, reservoirs, and the San Joaquin-Sacramento River Delta. The LAS District system includes 297 miles of mains, 65 booster pumps, and 46 storage tanks.[96] The LAS District 2020 UWMP found that Cal Water has more than sufficient well capacity to meet the demands unserved by Valley Water purchases through 2045.

The project site is currently developed with an office use that has an estimated water demand of approximately 3.47 million gallons per year, or 9,500 gallons per day.[97] Water is supplied to the project site by an existing eight-inch water main in Distel Circle.

Sanitary Sewer/Wastewater Treatment

The City of Los Altos' Department of Public Works is responsible for the wastewater collection system within the City. Wastewater is conveyed to the Palo Alto Regional Water Pollution Control Plant (PARWQCP) for treatment and disposal. The PARWQCP serves the wastewater management needs of the communities of Palo Alto, Los Altos, Mountain View, East Palo Alto, Los Altos Hills, Stanford University, and East Palo Alto Sanitary District. The City owns and maintains the collection system within the City and its sphere of influence and the trunk sewer that connects the City to the

[96] California Water Service Company. "2020 Urban Water Management Plan – Los Altos Suburban District". Accessed November 23, 2021. https://www.calwater.com/docs/uwmp2020/LAS_2020_UWMP_FINAL.pdf.
[97] California Emissions Estimator Model. *Appendix D – Table 9.1 Water Use Rates*. September 2016.

PARWQCP master metering station. The City's collection system includes approximately 140 miles of sewer pipes, most of which are six-inch and eight-inch vitrified clay pipe.[98]

The PARWQCP has an annual treatment capacity of 39 million gallons per day (mgd), with the municipalities of Los Altos, Mountain View, and Los Altos Hills estimated to generate 4,045 acre-feet per year, or 3.6 mgd of the plant's treatment capacity (nine percent). The PARWQCP currently receives approximately 17 mgd from all its customers.[99] The PARQQCP, therefore, has approximately 22 mgd of treatment capacity available.

The existing office building is estimated to generate approximately 2.95 million gallons of wastewater per year, or 8,100 gallons per day.[100] An existing six-inch sanitary sewer main in Distel Circle serves the project site.

Storm Drainage

Runoff from the project site flows into the City of Los Altos' municipal storm drainage system via an existing two-inch reinforced concrete storm drainpipe in Distel Circle. The existing on-site storm drainage system captures and conveys runoff from the project site to the City's storm drain system. Flows from the project site are discharged to Adobe Creek and ultimately, the San Francisco Bay.[101]

Solid Waste

Solid waste collection in the City of Los Altos is provided by Mission Trail Waste Systems through a contract with the City. Mission Trail Waste Systems provides residential, commercial, and industrial collection services for garbage, recycling, and organics for the City. Mission Trail Waste Systems operates a transfer station at 1313 Memorex Drive in Santa Clara. Solid waste generated in the City is disposed of at Newby Island Sanitary Landfill (NISL) in the City of San José. As of June 2022, Newby Island Landfill had approximately 12.8 million cubic yards of capacity remaining and an estimated closure year of 2035.[102]

It is estimated that the existing office use generates approximately 11.27 tons of solid waste per year.[103]

[98] City of Los Altos. "Public Works – Sanitary Sewer." Accessed November 23, 2021. https://www.losaltosca.gov/publicworks/page/sanitary-sewer-0.
[99] California Water Service. *2020 Urban Water Management Plan Los Altos Suburban District.* June 2021. Accessed November 23, 2021. https://www.calwater.com/docs/uwmp2020/LAS_2020_UWMP_FINAL.pdf.
[100] Based on the California Emissions Estimator Model (CalEEMod) standard wastewater generation rate of 85 percent of total water usage. CalEEMod is a statewide land use emissions computer model designed to quantify criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects.
[101] City of Los Altos. "Stormwater Master Plan – Appendix A: Drainage Basins." Accessed November 23, 2021. https://www.losaltosca.gov/publicworks/page/stormwater-master-plan.
[102] Huber, Rachelle. Environmental Manager, Republic Services, Inc. Personal Communication. June 2, 2022.
[103] Illingworth & Rodkin, Inc. *330 Distel Circle Air Quality and Greenhouse Gas Assessment*. May 17, 2022.

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

Water Facilities

The proposed project would connect to an existing eight-inch water main in Distel Circle via new six-inch lateral lines in order to provide domestic water to the residences. Lateral connections to water lines in nearby streets would be established during grading and result in minimal impacts. **(Less than Significant Impact)**

Sanitary Sewer Facilities/Wastewater Treatment

The project would connect to the City's existing sanitary sewer system. The existing sanitary sewer lines in Distel Circle would be utilized by the project to convey wastewater flows from the project to the PARWQCP. It is estimated that the project would generate 22,265 gpd of wastewater, which is a

net increase in 14,173 gpd of wastewater compared to existing conditions. The City requires confirmation there is sufficient capacity in the existing sewer lines serving the site and downstream to accommodate project flows.

Conditions of Approval:

- The project applicant shall submit a Sewage Capacity Study with calculations showing that the City's existing sewer line will not exceed two-thirds full due to the project's sewer loads. For any segment that is calculated to exceed two-thirds full for average daily flow or for any segment that the flow is surcharged in the main due to peak flow, the applicant shall replace the sewer line with a larger sewer line.

Implementation of the above Condition of Approval would require the construction of any additional sewer mains, sewer lines, and lateral connections to ensure sewer flow would not exceed two-thirds full for average daily flow. Installation of the sewer lines for the new building would occur during grading and result in minimal impacts. The availability of treatment capacity at the PARWQCP is discussed under Impact UTL-3, and the analysis concluded that there is adequate capacity at the PARWQCP to handle the increase in wastewater generated by the project. **(Less than Significant Impact)**

Storm Drainage Facilities

As discussed in 4.10 Hydrology and Water Quality, the project would reduce impervious surface area on-site compared to existing conditions, resulting in a corresponding reduction of site runoff. The project would utilize a bioretention area, storm drain treatment unit, and permeable pavement to treat stormwater runoff. Based on the project's Stormwater Control Plan, the project would meet the affordable housing development criteria from the MRP. As a result, the existing storm drainage system would continue to be able to accommodate runoff from the project site. Therefore, the proposed project would not require the construction or relocation of storm drainage facilities, aside from the lateral connections to the existing 12-inch storm drain line in Distel Circle. **(Less than Significant Impact)**

Electric Power, Natural Gas, and Telecommunication Facilities

The site is currently served by electric power, natural gas, and telecommunication utilities. The proposed redevelopment of the site would not require the expansion of these utilities. Therefore, the proposed project would not result in a significant impact from construction or relocation of new or expanded electric power, natural gas, or telecommunication facilities. **(Less than Significant Impact)**

Impact UTL-2:	The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

The existing uses on the project site have a water demand of approximately 3.47 million gallons per year. The proposed project would result in water demand of approximately 9.56 million gallons per

year, resulting in a net increase in water demand of 6.09 million gallons per year.[104] The estimated water use of the project is likely conservative (i.e., over estimated) because the project would be required to adhere to the 2019 CALGreen Code and Chapter 12.36 of the Municipal Code, which includes water efficient landscape regulations.

Water is supplied to the LAS District by the Santa Clara Valley Water District. The CalWater LAS District did not identify any substantial supply deficiencies through 2040 in its UWMP. The average annual water demand in the District between 2016 and 2020 was 11,568 acre-feet per year (3.77 billion gallons). The District estimates that annual water demand in its jurisdiction would increase to 14,197 acre-feet per year (4.63 billion gallons) by the year 2045.[105] This increase in demand would be met by the estimated equivalent amount of supply water. Under single and multiply dry year scenarios, there would be no supply deficiencies. With implementation of water shortage contingency measures outlined in the LAS District UWMP, the LAS District is expected to meet the City of Los Altos' water demands in normal, single-dry, and multiple-dry year scenarios. The LAS District UWMP utilized General Plan land uses and projected development patterns (including the proposed project) to forecast local and regional water demands; therefore, the increase in water demand generated by the project has already been accounted for in the UWMP forecast. Based on this discussion, the project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

Impact UTL-3:	The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

Wastewater generated by the project would be conveyed to and treated at the PARWQCP. It is estimated that the project would generate 22,265 gpd of wastewater, which is a net increase in 14,173 gpd (or 0.014 mgd) of wastewater compared to existing conditions.[106] The PARWQCP has approximately 22 mgd of treatment capacity available.[107] Therefore, the increase in wastewater generated by the project (0.014 mgd) would not exceed the available treatment capacity (22 mgd) at the PARWQCP. **(Less than Significant Impact)**

[104] California Emissions Estimator Model. *Appendix D – Table 9.1 Water Use Rates.* September 2016.
[105] California Water Service Company. "2020 Urban Water Management Plan – Los Altos Suburban District". Table 7-2. June 2021.
[106] Illingworth & Rodkin. Air Quality and Greenhouse Gas Assessment, 330 Distel Circle Residential Project. May 10, 2022.
[107] California Water Service Company. "2020 Urban Water Management Plan – Los Altos Suburban District". June 2021. Accessed November 23, 2021. https://www.calwater.com/docs/uwmp2020/LAS_2020_UWMP_FINAL.pdf.

Impact UTL-4:	The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

The project is estimated to generate approximately 41.4 tons of solid waste per year.[108] This amounts to a net increase of 30.13 tons of solid waste per year compared to the waste generated by the existing office building on the site.[109] Given NISL's remaining capacity (12.8 million cubic yards) and the project's net increase in solid waste generation (30.13 tons per year, which is equivalent to 32.6 cubic yards per year), there is sufficient capacity at NISL to serve the project.[110] **(Less than Significant Impact)**

Impact UTL-5:	The project would be compliant with federal, state, or local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

The project's compliance with the Chapter 6.12 of the Municipal Code would ensure that project operation meets state and federal solid waste statutes and regulations. Additionally, the project would be required to collect, recycle and dispose of waste generated from construction and demolition activities per Municipal Code Chapter 6.14. During project operation, green waste, organics, and recycling collection would be provided by Mission Trail Waste Systems. For these reasons, the project would comply with AB 939, AB 32, AB 341, SB 1383, and AB 1826 and the City's 78 percent waste diversion goal. Therefore, the proposed project would not conflict with federal, state, and local solid waste statutes and regulations. **(Less than Significant Impact)**

[108] CalEEMod. *Appendix D – Table 10.1 Solid Waste Disposal Rates.* September 2016.
[109] Existing solid waste disposed on the project site equals 11.27 tons per year. The project proposes to generate waste at 41.4 tons of solid waste per year, which equals an increase in 30.13 tons of solid waste per year. Source: Illingworth & Rodkin, Inc. *330 Distel Circle Air Quality and Greenhouse Gas Assessment*. May 17, 2022.
[110] Cubic yards based on a compaction rate of 1,850 pounds per cubic yard.

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZs), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

4.20.1.2 *Existing Conditions*

The project site is in an urban area surrounded by existing development. The project site is not located near wildlands that could present a fire hazard. The site is not located within an identified Very High Fire Hazard Severity Zone in an SRA or a LRA.[111,112]

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒

[111] California Department of Forestry and Fire Protection. *Santa Clara County Fire Hazard Safety Zone Map – Local Responsibility Area.* October 2008.

[112] California Department of Forestry and Fire Protection. *Santa Clara County Fire Hazard Safety Zone Map – State Responsibility Area*. November 2007.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

The project site is not located in or near SRA or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Impact MFS-1:	The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact)**

As discussed in prior sections of this Initial Study, the project as proposed (including the measures identified in Section 3.1.5.1 Standard Construction Measures) would not degrade the quality of the environment. As discussed in Section 4.4 Biological Resources, the project as proposed (which includes measures to protect nesting birds if found on- or adjacent to the site during construction activities) would not substantially affect biological resources. As discussed in Section 4.5 Cultural Resources, the project as proposed (which includes measures to protect unknown archaeological resources and TCRs if encountered on-site) would not eliminate important examples of California history or prehistory. **(Less than Significant Impact)**

Impact MFS-2:	The project does not have impacts that are individually limited, but cumulatively considerable. **(Less than Significant Impact)**

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

As discussed in Sections 4.1, 4.2, 4.12, and 4.20, the project would result in no impact to aesthetics, agricultural or forestry resources, mineral resources, or wildfire. Therefore, the project would not contribute to a cumulative impact to these resources.

In general, an individual project's impact on broader resources including air quality, energy, GHGs, and VMT are evaluated at a cumulative level. That is, if a project results in a significant impact to air quality (specifically criteria air pollutants), energy, GHG, and VMT, the project would be considered to have a significant cumulative impact to those resources. As discussed in Sections 4.3, 4.6, 4.8, and 4.17, the project would not result in significant (individual and cumulative) impacts to those resources.

The project would result in less than significant impacts to biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, population and housing, public services, recreational facilities, transportation, tribal cultural resources, and utilities and service systems without the imposition of mitigation measures. Future cumulative development (including the project) would be required to comply the MBTA, Fish and Game Code, and CEQA to avoid and/or minimize impacts to nesting birds. Additionally, cumulative projects would conform to the City's Tree Protection Ordinance, which requires replacement of protected trees. As a result, the cumulative projects would not result in significant cumulative impacts to biological resources. Future cumulative development would be subject to federal, state, and local regulations pertaining to the protection of cultural resources. As a result, the cumulative projects would not result in significant cumulative impacts to archaeological resources. Future development would adhere to the CBC and recommendations of a site-specific geotechnical report; therefore, cumulative projects would not result in a significant cumulative impact to geology and soils. Cumulative projects would be required to comply with all applicable standards and regulations put in place to minimize impacts from the transport, use, storage, and disposal of hazardous materials. Therefore, the cumulative projects would not result in a significant cumulative impact due to routine transport, use, or disposal of hazardous materials. Additionally, cumulative projects would be subject to the MRP Provision C.12.f and Los Altos Municipal Code Chapter 6.15, and other local, state, and federal laws that require PCB screening and lead-based paint surveys. Therefore, cumulative projects would not result in a significant cumulative impact to hazards and hazardous materials. Future cumulative projects would be subject to the NPDES Construction General Permit or CalGreen requirements, which require control measures to reduce construction stormwater. Cumulative projects that add or replace more than 10,000 square feet of impervious surface area, and would be required to conform with Provision C.3 of the MRP and the City's Municipal Code. As

such, cumulative hydrology and water quality impacts would be less than significant. Land uses in the City are regulated through the General Plan. Future cumulative projects would be subject to the City's design review process to ensure the final site designs and layout are consistent with the City's General Plan and other relevant standards. Growth in the City is guided by the City's General Plan. Project's that are consistent with the General Plan are assumed to be consistent with the growth projections of the General Plan. Future cumulative projects would be reviewed during the design review process for consistency with the General Plan and to ensure the cumulative development does not remove obstacles that would result in unplanned growth. Future development project would comply with General Plan Policies OSCCF 6.1, 6.3, and 6.4 which would ensure adequate police and fire protection services. Additionally, cumulative residential development would be required to pay school impact fees in accordance with California Government Code Section 65996. For these reasons, cumulative projects would not contribute to a cumulative significant public services and recreation impact. Future cumulative projects would be required to confirm sufficient water supply and wastewater treatment capacity and would to detail the exact locations for all utility connections and utility plans as part of the design review process. Therefore, cumulative projects would not result in a significant cumulative utility and service impact.

Given the above considerations, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact. **(Less than Significant Cumulative Impact)**

Impact MFS-3:	The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact)**

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality, geology and soils, hazards and hazardous materials, and noise. As discussed in Sections 4.3, 4.7, 4.9, and 4.13, the project as proposed (including the measures identified in Section 3.1.5.1 Standard Construction Measures) would not result in significant impacts pertaining to those resources. No substantial adverse effects on human beings would result from the project. **(Less than Significant Impact)**

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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Environmental Hazard Consultants

SECTION 7.0 ACRONYMS AND ABBREVIATIONS

2017 CAP	Bay Area 2017 Clean Air Plan
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ac	Acres
ACM	Asbestos-Containing Material
AMI	Area Median Income
BAAQMD	Bay Area Air Quality Management District
bgs	Below Ground Surface
Btu	British Thermal Units
CAL FIRE	California Department of Forestry and Fire Protection
Cal Water	California Water Service Company
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Cal/OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CCR	California Code of Regulations
C&D	Construction and Demolition
CDFW	California Department of Fish and Wildlife
CE	Categorical Exemption
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	Chlorofluorocarbons
CFR	Code of Federal Regulations
CGS	California Geological Survey
CNEL	Community Noise Equivalent Level
CMP	Congestion Management Program
CO	Carbon Monoxide

CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalents
CRHR	California Register of Historical Resources
CT	Commercial Thoroughfare
CUPA	Certified Unified Program Agency
dB	Decibel
dBA	A-Weighted Decibel
DNL	Day-Night Level
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
du	Dwelling Unit
EIN	Equipment Identification Number Equipment Identification Number
EIR	Environmental Impact Report
EO	Executive Order
EPA	United States Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GWh	Gigawatt Hours
GWP	Global Warming Potential
HFC	Hydrofluorocarbons
HI	Hazard Index
HSWA	Federal Hazardous and Solid Waste Amendments
HUD	California Department of Housing and Urban Development
HVAC	Heating, Ventilation, And Air Conditioning Systems
in	Inch
LACAP	City of Los Altos Climate Action Plan
LAS	Los Altos Suburban
LASD	Los Altos School District
L_{dn}	Average Equivalent Sound Level Over a 24 Hour Period
L_{eq}	Average Energy Level Intensity of Noise Over a Given Period of Time

L_{max}	Maximum A-weighted noise level during a measurement period
LOS	Level of Service
LT	Long-term
MBTA	Migratory Bird Treaty Act
MEI	Maximally Exposed Individual
mgd	Million Gallons Per Day
MND	Mitigated Negative Declaration
MT	Metric Ton
MTC	Metropolitan Transportation Commission
NAHC	California Native American Heritage Commission
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NO_x	Nitrogen Oxides
N_2O	Nitrous Oxide
NO_2	Nitrogen Dioxide
NOD	Notice of Determination
NOE	Notice of Exemption
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NTMP	Neighborhood Traffic Management Program
O_3	Ozone
OITC	Outdoor-Indoor Transmission Class
OPR	Governor's Office of Planning and Research
PARWQCP	Palo Alto Regional Water Pollution Control Plant
PCBs	Polychlorinated Biphenyls
PDA	Priority Development Area
PFCs	Perfluorocarbons
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Coarse Particulate Matter
PPM	Part per Million
PPV	Peak Particle Velocity

RAP	Removal Action Plan
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Need Allocation
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
sec	Second
SF_6	Sulfur Hexafluoride
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SMP	Site Management Plan
SMHA	Seismic Hazards Mapping Act
SO_x	Sulfur Oxides
SR	State Route
ST	Short-term
STC	Sound Transmission Class
SVCE	Silicon Valley Clean Energy
SWRCB	State Water Resource Control Board
TA	Transportation Analysis
TAC	Toxic Air Contaminant
TCR	Tribal Cultural Resources
TPA	Transit Priority Area
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VdB	Vibration Decibels
VMT	Vehicle Miles Traveled
VTA	Santa Clara Valley Transportation Authority

330 DISTEL CIRCLE RESIDENTIAL PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT

Los Altos, California

May 10, 2022

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Introduction

The purpose of this report is to address air quality, community health risk, and greenhouse gas (GHG) impacts associated with residential project located at 330 Distel Circle in Los Altos, California. The air quality impacts and GHG emissions would be associated with the demolition of the existing land uses at the site, construction of new building and infrastructure, and operation of the project. Air pollutant and GHG emissions associated with the construction and operation of the project were estimated using appropriate computer models. In addition, the potential project health risk impact (includes construction and operation) and the impacts of existing toxic air contaminant (TAC) sources affecting the nearby and proposed sensitive receptors were evaluated. This analysis addresses those issues following the guidance provided by the Bay Area Air Quality Management District (BAAQMD).[1]

Project Description

The project site is approximately 0.87-acres and currently developed with an approximately 12,120 square foot (sf) single-story office building, landscaping, and surface parking. The project would demolish existing office building and associated surface parking to construct a new five-story apartment building. The apartment building would include ninety, 100 percent affordable apartment units. Parking would be provided in a ground-level podium parking garage containing a total of 90 vehicle parking spaces.

Setting

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$).

Air Pollutants of Concern

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_X). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels

[1] Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017.

aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. The most recent Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines were published in February of 2015.[2] See *Attachment 1* for a detailed description of the community risk modeling methodology used in this assessment.

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. For cancer risk assessments, infants and children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children.

The closest sensitive receptors to the project site are the residents in the single-family homes to the southwest and south of the site. There are other single-and multi-family residences to the north, east, and west of the site at further distances. In addition, there are children at the Mountain View-Los Altos Montessori Children's Center (2-6 years old) to the northeast of the site. This project would also introduce new sensitive receptors (i.e., residents).

[2] OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

Regulatory Agencies

Federal Regulations

The United States Environmental Protection Agency (EPA) sets nationwide emission standards for mobile sources, which include on-road (highway) motor vehicles such trucks, buses, and automobiles, and non-road (off-road) vehicles and equipment used in construction, agricultural, industrial, and mining activities (such as bulldozers and loaders). The EPA also sets nationwide fuel standards. California also has the ability to set motor vehicle emission standards and standards for fuel used in California, as long as they are the same or more stringent than the Federal standards.

In the past decade the EPA has established a number of emission standards for on- and non-road heavy-duty diesel engines used in trucks and other equipment. This was done in part because diesel engines are a significant source of nitrogen oxides, or NO_X, and particulate matter (PM_{10} and $PM_{2.5}$) and because the EPA has identified diesel particulate matter as a probable carcinogen. Implementation of the heavy-duty diesel on-road vehicle standards and the non-road diesel engine standards are estimated to reduce PM and NO_X emissions from diesel engines up to 95 percent in 2030 when the heavy-duty vehicle fleet is completely replaced with newer heavy-duty vehicles that comply with these emission standards.[3]

In concert with the diesel engine emission standards, the EPA has also substantially reduced the amount of sulfur allowed in diesel fuels. The sulfur contained in diesel fuel is a significant contributor to the formation of particulate matter in diesel-fueled engine exhaust. The new standards reduced the amount of sulfur allowed by 97 percent for highway diesel fuel (from 500 parts per million by weight [ppmw] to 15 ppmw), and by 99 percent for off-highway diesel fuel (from about 3,000 ppmw to 15 ppmw). The low sulfur highway fuel (15 ppmw sulfur), also called ultra-low sulfur diesel (ULSD) is currently required for use by all vehicles in the U.S.

All of the above Federal diesel engine and diesel fuel requirements have been adopted by California, in some cases with modifications making the requirements more stringent or the implementation dates sooner.

State Regulations

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles[4]. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, a significant component of the plan involves application of emission control strategies to existing diesel

[3] USEPA, 2000. *Regulatory Announcement, Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements*. EPA420-F-00-057. December.

[4] California Air Resources Board, 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.

vehicles and equipment. Many of the measures of the Diesel Risk Reduction Plan have been approved and adopted, including the Federal on-road and non-road diesel engine emission standards for new engines, as well as adoption of regulations for low sulfur fuel in California.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. CARB regulations require on-road diesel trucks to be retrofitted with particulate matter controls or replaced to meet 2010 or later engine standards that have much lower DPM and $PM_{2.5}$ emissions. This regulation will substantially reduce these emissions between 2013 and 2023. While new trucks and buses will meet strict federal standards, this measure is intended to accelerate the rate at which the fleet either turns over so there are more cleaner vehicles on the road or is retrofitted to meet similar standards. With this regulation, older, more polluting trucks would be removed from the roads sooner.

CARB has also adopted and implemented regulations to reduce DPM and NO_X emissions from in-use (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks, etc.). The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce particulate matter and NO_X exhaust emissions by requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment in order to achieve specified fleet-averaged emission rates. Implementation of this regulation, in conjunction with stringent Federal off-road equipment engine emission limits for new vehicles, will significantly reduce emissions of DPM and NO_X in the future.

Bay Area Air Quality Management District (BAAQMD)

BAAQMD has jurisdiction over an approximately 5,600-square mile area, commonly referred to as the San Francisco Bay Area (Bay Area). The District's boundary encompasses nine San Francisco Bay Area counties, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County, southwestern Solano County, and southern Sonoma County.

BAAQMD is the lead agency in developing plans to address attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The District also has permit authority over most types of stationary equipment utilized for the proposed project. The BAAQMD is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

BAAQMD's Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area.[5] The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in

[5] See BAAQMD: https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program , accessed 2/18/2021.

California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program is being implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses will be used to focus emission reduction measures in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. Overburdened communities are areas located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0 implemented by OEHHA, as having an overall CalEnviroScreen score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.[6] The BAAQMD has identified six communities as impacted: Concord, Richmond/San Pablo, Western Alameda County, San José, Redwood City/East Palo Alto, and Eastern San Francisco. The project site is not within a CARE area and not within a BAAQMD overburdened area as identified by CalEnviroScreen since the Project site is scored at the one percentile.

The BAAQMD *California Environmental Quality Act (CEQA) Air Quality Guidelines*[7] were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for TACs, odors, and greenhouse gas (GHG) emissions. *Attachment 1* includes detailed community risk modeling methodology.

City of Los Altos General Plan 2002-2020

The City of Los Altos General Plan 2002-2020 includes goals, policies, and actions to reduce exposure of the City's sensitive population to exposure of air pollution, toxic air contaminants, and GHG emissions. The following goals, policies, and actions are applicable to the proposed project:

Goal 8: Maintain or improve air quality in Los Altos.

Policy 8.1: Support the principles of reducing air pollutants through land use, transportation, and energy use planning.

Policy 8.2: Encourage transportation modes that minimize contaminant emissions from motor vehicle use.

Policy 8.3: Interpret and implement the General Plan to be consistent with the regional Bay Area Air Quality Management Plan, as periodically updated.

[6] See BAAQMD: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20210722_01_appendixd_mapsofoverburdenedcommunities-pdf.pdf?la=en , accessed 10/1/2021.
[7] Bay Area Air Quality Management District, 2011. *CEQA Air Quality Guidelines*. May. (Updated May 2017)

Policy 8.4: Ensure location and design of development projects so as to conserve air quality and minimize direct and indirect emissions of air contaminants.

Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA and these significance thresholds were contained in the District's 2011 *CEQA Air Quality Guidelines*. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. The thresholds were challenged through a series of court challenges and were mostly upheld. BAAQMD updated the *CEQA Air Quality Guidelines* in 2017 to include the latest significance thresholds that were used in this analysis are summarized in Table 1. Community risks are considered significant if they exceed these levels.

Table 1. BAAQMD CEQA Significance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (Exhaust)	82	15
$PM_{2.5}$	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards	**Single Sources Within 1,000-foot Zone of Influence**	**Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental annual $PM_{2.5}$	0.3 µg/m^3	0.8 µg/m^3	
Greenhouse Gas Emissions			
Land Use Projects – direct and indirect emissions	Compliance with a Qualified GHG Reduction Strategy OR 1,100 metric tons annually or 4.6 metric tons per capita (for 2020) *		

Note: ROG = reactive organic gases, NOx = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less. GHG = greenhouse gases.

*BAAQMD does not have a recommended post-2020 GHG threshold.

NEPA/HUD Significance Thresholds

The Federal Clean Air Act governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. At the Federal level, the United States Environmental Protection Agency (USEPA) administers the Clean Air Act. The California Clean Air Act is administered by the CARB at the State level and by the Air Quality Management Districts at the regional and local levels. BAAQMD regulates air quality at the regional level, which includes the nine-county Bay Area.

The federal Clean Air Act requires each state to identify areas that have ambient air quality in violation of federal standards. States are required to develop, adopt, and implement a state implementation plan (SIP) to achieve, maintain, and enforce federal ambient air quality standards in these nonattainment areas. SIP elements are developed on a pollutant-by-pollutant basis whenever one or more air quality standards are being violated. In California, local and regional air pollution control agencies have primary responsibility for developing SIPs, generally in coordination with local and regional land use and transportation planning agencies. BAAQMD is the responsible regional air pollution control agency in the San Francisco Bay Area.

An area's compliance with national ambient air quality standards under the Clean Air Act is categorized as nonattainment, attainment (better than national standards), unclassifiable, or attainment/cannot be classified. The unclassified designation includes attainment areas that comply with federal standards, as well as areas for which monitoring data are lacking. Unclassified areas are treated as attainment areas for most regulatory purposes. Simple attainment designations generally are used only for areas that transition from nonattainment status to attainment status. Areas that have been reclassified from nonattainment to attainment of federal air quality standards are automatically considered maintenance areas, although this designation is seldom noted in status listings. The San Francisco Bay Area is designated as nonattainment for the federal 8-hour ozone standard and the 24-hour $PM_{2.5}$ standard. The San Francisco Bay Area is designated as attainment or unclassified for the other national ambient air quality standards.

With respect to the state ambient air quality standards, California classifies areas as attainment, nonattainment, nonattainment-transitional, or unclassified. The San Francisco Bay Area is designated as nonattainment for the state ozone, inhalable particulate matter (PM_{10}), and $PM_{2.5}$ standards and as attainment or unclassified for the other state ambient air quality standards. The predominant regulation that guides assessment of air quality impacts of federal actions is the General Conformity Rule, established under the Clean Air Act (Section 176(c)(4)). The General Conformity Rule ensures that the actions taken by federal agencies in nonattainment and maintenance areas do not interfere with a state's plans to meet national standards for air quality. The project area is located within the San Francisco Bay Area Air Basin, which is designated as a nonattainment area for the federal 8-hour ozone standard and the federal $PM_{2.5}$ standard. The air basin is designated as a maintenance area with respect to the federal carbon monoxide (CO) standards.

In keeping with the General Conformity Rule process, this assessment applies the appropriate *de minimis* thresholds of the Rule as they apply to the San Francisco Bay Area Air Basin for ozone

precursors, $PM_{2.5}$, and CO. The *de minimis* thresholds for these three pollutants in the San Francisco Bay Area Air Basin are 100 tons per year for each pollutant or precursor pollutant (i.e., NOx, ROG, and $PM_{2.5}$).

AIR QUALITY IMPACTS AND MITIGATION MEASURES

Impact AIR-1: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM_{10} under the California Clean Air Act, but not the federal act. The area has attained both State and Federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for O_3, $PM_{2.5}$ and PM_{10}, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NOx), PM_{10}, and $PM_{2.5}$ and apply to both construction period and operational period impacts.

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from on-site construction activity, construction vehicle trips, and evaporative emissions. The project land use types, size, and anticipated construction schedule were input to CalEEMod. The CARB EMission FACtors 2021 (EMFAC2021) model was used to predict emissions from construction traffic, which includes worker travel, vendor trucks, and haul trucks.[8] The CalEEMod model output along with construction inputs are included in *Attachment 2* and EMFAC2021 vehicle emissions modeling outputs are included in *Attachment 3*.

CalEEMod Inputs

Land Use Inputs

The proposed project land uses were entered into CalEEMod as described in Table 2.

Table 2. Summary of Project Land Use Inputs

Project Land Uses	Size	Units	Square Feet (sf)	Acreage
Apartments Mid Rise	90	Dwelling Units	97,970	0.87
Enclosed Parking with Elevator	90	Parking Spaces	18,130	

Construction Inputs

CalEEMod computes annual emissions for construction that are based on the project type, size, and acreage. The model provides emission estimates for both on-site and off-site construction

[8] See CARB's EMFAC2021 Emissions Inventory at https://arb.ca.gov/emfac/emissions-inventory

activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic.

The CalEEMod model generates a default set of construction assumptions for "typical construction site scenarios"; however, these are not appropriate for a project like this that involves demolition, excavation, and vertical construction on a relatively small site.[9] For this project, the construction build-out scenario, including equipment list and schedule, were based on project-specific construction information provided by the project applicant. The project construction equipment worksheet provided by the applicant included the schedule for each phase (included in *Attachment 2*). Within each phase, the quantity of equipment to be used along with the average hours per day and total number of workdays was based on provided information. The construction schedule assumed that the earliest possible start date would be January 2023 and the project would be built out over a period of approximately 20 months or 583 construction workdays. The earliest year of operation was assumed to be 2025.

Construction Truck Traffic Emissions

Construction would produce traffic in the form of worker trips and truck traffic. The traffic-related emissions are based on worker and vendor trip estimates produced by CalEEMod and haul trips that were computed based on the estimate of demolition material to be exported, soil material imported and/or exported to the site, and the estimate of cement and asphalt truck trips. CalEEMod provides daily estimates of worker and vendor trips for each applicable phase. The total trips for those were computed by multiplying the daily trip rate by the number of days in that phase. Haul trips for demolition and grading were estimated from the provided demolition and grading volumes and assuming each truck could carry 10 tons per load. The number of concrete and asphalt total round haul trips were provided for the project and converted to total one-way trips, assuming two trips per delivery.

The latest version of the CalEEMod model is based on the older version of the CARB EMFAC2017 motor vehicle emission factor model. This model has been superseded by the EMFAC2021 model; however, CalEEMod has not been updated to include EMFAC2021. The construction traffic information was combined with EMFAC2021 motor vehicle emissions factors. EMFAC2021 provides aggregate emission rates in grams per mile for each vehicle type. The vehicle mix for this study was based on CalEEMod defaults, where worker trips are assumed to be comprised of light-duty autos (EMFAC category LDA) and light duty trucks (EMFAC category LDT1 and LDT2). Vendor trips are comprised of delivery and large trucks (EMFAC category MHDT and HHDT) and haul trips, including cement trucks, are comprised of large trucks (EMFAC category HHDT). Travel distances are based on CalEEMod default lengths, which are 10.8 miles for worker travel, 7.3 miles for vendor trips and 20 miles for hauling (demolition material export and soil import/export). Since CalEEMod does not address cement or asphalt trucks, these were treated as vendor travel distances. Each trip was assumed to include an idle time of 5 minutes. Emissions associated with vehicle starts were also included. On-road emission rates

[9] SCAQMD. 2005. S*ample Construction Scenarios for Projects Less than Five Acres in Size* February. Note that this is the supporting report used to develop CalEEMod default construction inputs (see Appendix E – Technical Source Documentation of the CalEEMod User's Guide).

from the years 2023-2024 for Santa Clara County was used. Table 3 provides the traffic inputs that were combined with the EMFAC2021 emission database to compute vehicle emissions.

Table 3. Construction Traffic Data Used for EMFAC2021 Model Runs

CalEEMod Run/Land Uses and Construction Phase	Trips by Trip Type			Notes
	Total Worker[1]	Total Vendor[1]	Total Haul[2]	
Vehicle mix[1]	50% LDA 25% LDT1 25% LDT2	50% MHDT 50% HHDT	100% HHDT	
Trip Length (miles)	10.8	7.3	20.0 (Demo/Soil) 7.3 (Cement/Asphalt)	CalEEMod default distance with 5-min truck idle time.
Demolition	900	-	290	9,500-sf existing building and 1,233 tons pavement demolition. Default worker trips.
Site Preparation	1,350	-	-	CalEEMod default worker trips.
Grading	840	-	16	125-cy soil export. CalEEMod default worker trips.
Trenching	1,500	-	-	CalEEMod default worker trips.
Building Construction	8,640	1,560	150	75 cement truck round trips. CalEEMod default worker and vendor trips.
Interior Construction	840	-	-	CalEEMod default worker trips.
Paving	3,000	-	156	650-cy asphalt hauling. CalEEMod default worker trips.

Notes: [1] Based on 2023-2024 EMFAC2021 light-duty vehicle fleet mix for Santa Clara County.
[2] Includes demolition and grading trips estimated by CalEEMod based on amount of material to be removed. Cement and asphalt trips estimated based on data provided by the applicant.

Summary of Computed Construction Emissions

Average daily emissions were annualized for each year of construction by dividing the annual construction emissions by the number of active workdays during that year. Table 4 shows the unmitigated annualized average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project. As indicated in Table 4, predicted unmitigated annualized project construction emissions would not exceed the BAAQMD significance thresholds during any year of construction. In addition, the calculated construction period emissions would not exceed the NEPA de minimis thresholds.

Table 4. Construction Period Emissions - Unmitigated

Year	ROG	NOx	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Construction Emissions Per Year (Tons)				
2023	0.31	2.93	0.13	0.12
2024	0.97	2.30	0.11	0.10
NEPA De Minimis Thresholds	*100*	*100*	*None*	*100*
Average Daily Construction Emissions Per Year (pounds/day)				
2023 (364 construction workdays)	1.69	16.12	0.72	0.66
2024 (219 construction workdays)	8.80	20.94	0.97	0.91
BAAQMD Thresholds (pounds per day)	*54* lbs./day	*54* lbs./day	*82* lbs./day	*54* lbs./day
Exceed Threshold?	No	No	No	No

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less-than-significant if best management practices are implemented to reduce these emissions. *Mitigation Measure AQ-1 would implement BAAQMD-recommended standard and enhanced best management practices* needed to control $PM_{2.5}$ concentrations at nearby sensitive receptors.

Mitigation Measure AQ-1: Implement BAAQMD-Recommended Standard and Enhanced Measures to Control Particulate Matter Emissions during Construction.

Measures to reduce fugitive dust (i.e., $PM_{2.5}$) emissions from construction are recommended to and ensure that health impacts to nearby sensitive receptors are minimized. During any construction period ground disturbance, the applicant shall ensure that the project contractor implements both basic and additional measures to control dust and exhaust. Implementation of the dust control measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following standard and enhanced best management practices:

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
7. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
8. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
9. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.

10. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
11. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
12. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
13. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
14. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
15. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes. Clear signage shall be provided for construction workers at all access points.

Effectiveness of Mitigation Measure AQ-1

Mitigation Measure AQ-1 represents standard and enhanced mitigation measures that would achieve greater than an 80 percent reduction in on-site fugitive $PM_{2.5}$ emissions. These measures are consistent with recommendations in the BAAMQD CEQA Guidance for providing "best management practices" to control construction emissions.

Operational Period Emissions

Operational air emissions from the project would be generated primarily from autos driven by future residents. Evaporative ROG emissions from architectural coatings and maintenance products (classified as consumer products) are also associated with these types of projects. CalEEMod was used to estimate emissions from operation of the proposed project assuming full build-out.

CalEEMod Inputs

Land Uses

The project land uses were input to CalEEMod as described above for the construction period modeling.

Model Year

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest year of full operation would be 2025 if construction begins in 2023. Emissions associated with build-out later than 2025 would be lower.

Traffic Information

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific daily trip generation rate provided by the traffic consultant was entered into the model.[10] The project would produce approximately 433 daily trips. When considering the *Housing Near Major Bus Stop Reduction* adjustments and the 131 existing use trips applied in the traffic analysis, the project would then produce 296 net daily trips. The daily trip generation was calculated using the size of the project and the adjusted total automobile trips. The Saturday and Sunday trip rates were adjusted by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate with the project-specific daily weekday trip rate. The default trip lengths and trip types specified by CalEEMod were used.

EMFAC2021 Adjustment

The vehicle emission factors and fleet mix used in CalEEMod are based on EMFAC2017, which is an older CARB emission inventory for on road and off-road mobile sources. Since the release of CalEEMod Version 2020.4.0, new emission factors have been produced by CARB. EMFAC2021 became available for use in January 2021. It includes the latest data on California's car and truck fleets and travel activity. The CalEEMod default vehicle emission factors and fleet mix were updated using the emission rates and fleet mix from EMFAC2021. On road emission rates from 2025 Santa Clara County were used (See *Attachment 3*). More details about the updates in emissions calculation methodologies and data are available in the EMFAC2021 Technical Support Document.[11]

Energy

CalEEMod defaults for energy use were used, which include the 2019 Title 24 Building Standards. GHG emissions modeling includes those indirect emissions from electricity consumption. The model has a default rate of 2 pounds of CO_2 per megawatt of electricity produced, which is based on Silicon Valley Clean Energy (SVCE) 2019 emissions rate.

The City of Los Altos adopted reach code ordinances in November 2020 that promotes building electrification and prohibits the use of natural gas infrastructure in new buildings.[12] This ordinance applies to any new residential and commercial construction starting January 26, 2021. All project natural gas use was set to zero and assigned to electricity use in CalEEMod.

Wood-Burning Devices

CalEEMod default inputs assume new residential construction would include woodburning fireplaces and stoves. The project would not include wood-burning devices, as these devices are

[10] Email correspondence with Natalie Noyes, AICP, Senior Project Manager, David J. Powers & Associates, Inc., March 15, 2022. Attachment: *Hexagon Transportation Consultants 330 Distel Trip Gen_1.21.2022.pdf.*
[11] See CARB 2021: https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msei-modeling-tools-emfac
[12] City of Los Altos, 2020. "Reach Codes", November. Web: https://www.losaltosca.gov/communitydevelopment/page/reach-codes-0

prohibited by BAAQMD Regulation 6, Rule 3.[13] Therefore, the number of woodstoves and woodburning fireplaces in CalEEMod were set to zero.

Other Inputs

Default model assumptions for emissions associated with solid waste generation and water/wastewater use were applied to the project. Water/wastewater use was changed to 100 percent aerobic/anerobic conditions to represent wastewater treatment plant conditions, as the project site would not send wastewater to septic tanks or facultative lagoons.

Existing Uses

The existing site consist of a single-story office building and associated surface parking. A CalEEMod model run was developed to compute emissions from use of the existing land uses in 2022. Inputs for the existing conditions scenario included 12,120-sf entered as "General Office Building" and 0.59 acres entered as "Parking Lot". The existing trip generation rates and other inputs were applied to the existing modeling in the same manner described for the proposed project.

Summary of Computed Operational Emissions

Annual emissions were predicted using CalEEMod and daily emissions were estimating assuming 365 days of operation. Table 5 shows unmitigated net average daily operational emissions of ROG, NO_X, total PM_{10}, and total $PM_{2.5}$ during operation of the project. The unmitigated operational period emissions would not exceed the BAAQMD significance thresholds. In addition, the calculated operational period emissions would not exceed the NEPA de minimis thresholds.

Table 5. Operational Period Emissions

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$
2025 Annual Project Operational Emissions (*tons/year*)	0.71	0.17	0.32	0.08
2022 Existing Use Emissions (*tons/year*)	0.12	0.06	0.08	0.02
Net Annual Emissions (*tons/year*)	0.59	0.11	0.24	0.06
BAAQMD Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
NEPA De Minimis Thresholds (tons/year)	*100 tons*	*100 tons*	*None*	*100 tons*
Exceed Threshold?	*No*	*No*	*No*	*No*
2025 Daily Project Operational Emissions (*pounds/day*)[1]	3.21	0.60	1.32	0.35
BAAQMD Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.
Exceed Threshold?	*No*	*No*	*No*	*No*
Notes: [1]Assumes 365-day operation.				

Impact AIR-2: Expose sensitive receptors to substantial pollutant concentrations?

Project impacts related to increased community risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or by significantly exacerbating existing cumulative TAC impacts. This project would introduce new

[13] Bay Area Air Quality Management District, https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-6-rule-3/documents/20191120_r0603_final-pdf.pdf?la=en

sources of TACs during construction (i.e., on-site construction and truck hauling emissions) and operation (i.e., mobile and stationary sources).

Project construction activity would generate dust and equipment exhaust that would affect nearby sensitive receptors. The project would not include the installation of any stationary TAC emissions sources (i.e., generators) but would generate some traffic consisting of mostly light-duty gasoline-powered vehicles, which would produce TAC and air pollutant emissions.
Project impacts to existing sensitive receptors were addressed for temporary construction activities and long-term operational conditions. There are also several sources of existing TACs and localized air pollutants in the vicinity of the project. The impact of the existing sources of TAC was also assessed in terms of the cumulative risk that includes the project contribution, as well as the risk on the new sensitive receptors introduced by the project.

Community Risk Methodology for Construction

Community risk impacts were addressed by predicting increased cancer risk, the increase in annual $PM_{2.5}$ concentrations and computing the Hazard Index (HI) for non-cancer health risks. The risk impacts from the project are the combination of risks from construction and operation sources. These sources include on-site construction activity, construction truck hauling, and increased traffic from the project. To evaluate the increased cancer risks from the project, a 30-year exposure period was used, per BAAQMD guidance,[14] with the sensitive receptors being exposed to both project construction and operation emissions during this timeframe.

The project increased cancer risk is computed by summing the project construction cancer risk and operation cancer risk contributions. Unlike, the increased maximum cancer risk, the annual $PM_{2.5}$ concentration and HI values are not additive but based on the annual maximum values for the entirety of the project. The project maximally exposed individual (MEI) is identified as the sensitive receptor that is most impacted by the project's construction and operation.

The methodology for computing community risks impacts is contained in *Attachment 1*. This involved the calculation of TAC and $PM_{2.5}$ emissions, dispersion modeling of these emissions, and computations of cancer risk and non-cancer health effects.

Modeled Sensitive Receptors

Receptors for this assessment included locations where sensitive populations would be present for extended periods of time (i.e., chronic exposures). This includes the existing residences surrounding the site and the students at the school to the northeast of the project site, as shown in Figure 1. Residential receptors are assumed to include all receptor groups (i.e., third trimester, infants, children, and adults) with almost continuous exposure to project emissions. Community risks were also computed for children at the Mountain View-Los Altos Montessori Children's Center (2-6 years old).

[14] BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines.* December 2016.

Community Health Risk from Project Construction

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impacts associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. Diesel exhaust (i.e., DPM) poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$.[15] This assessment included dispersion modeling to predict the off-site and on-site concentrations resulting from project construction, so that increased cancer risks and non-cancer health effects could be evaluated.

Construction Emissions

The CalEEMod and EMFAC2021 models provided total annual PM_{10} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles, with total DPM emissions from all construction stages estimated to be 0.23 tons (463 pounds). The on-road emissions are a result of haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. A trip length of half a mile was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. Fugitive $PM_{2.5}$ dust emissions were calculated by CalEEMod and EMFAC2021 to be 0.36 tons (723 pounds) for the overall construction period.

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and $PM_{2.5}$ concentrations at sensitive receptors (i.e., residences, school) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects. [16,17] Emission sources for the construction site were grouped into two categories: exhaust emissions of DPM and fugitive $PM_{2.5}$ dust emissions.

Combustion equipment DPM exhaust emissions were modeled as a series of point sources with a nine-foot release height (construction equipment exhaust stack height) placed at 20 feet (6 meter) intervals throughout the construction site. This resulted in 107 individual point sources being used to represent mobile equipment DPM exhaust emissions in the construction area, with DPM emissions occurring throughout the project construction site. In addition, the following stack

[15] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.
[16] BAAQMD, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en
[17] BAAQMD, 2020, *BAAQMD Health Risk Assessment Modeling Protocol.* December. Web: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?la=en

parameters were used: a vertical release, a stack diameter of 2.5 inches, an exhaust temperature of 918˚F, and an exit velocity of 309 feet per second. Since these are point sources, plume rise is calculated by the AERMOD dispersion model. Emissions from vehicle travel on- and off-site were also distributed among the point sources throughout the site. The locations of the point sources used for the modeling are identified in Figure 1.

For modeling fugitive $PM_{2.5}$ emissions, an area source was used with a near-ground level release height of 7 feet (2 meters). Fugitive dust emissions at construction sites come from a variety of sources, including truck and equipment travel, grading activities, truck loading (with loaders) and unloading (rear or bottom dumping), loaders and excavators moving and transferring soil and other materials, etc. All of these activities result in fugitive dust emissions at various heights at the point(s) of generation. Once generated, the dust plume will tend to rise as it moves downwind across the site and exit the site at a higher elevation than when it was generated. For all these reasons, a 7-foot release height was used as the average release height across the construction site. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources.

The modeling used a five-year data set (2013-2017) of hourly meteorological data from the Moffett Federal Airfield that was prepared for use with the AERMOD model by BAAQMD. Construction emissions were modeled as occurring daily between 7:00 a.m. to 4:00 p.m., when the majority of construction activity would occur as provided by the applicant. Annual DPM and $PM_{2.5}$ concentrations from construction activities during the 2023-2024 period were calculated using the model. DPM and $PM_{2.5}$ concentrations were calculated at nearby sensitive receptors. Receptor heights of 5 feet (1.5 meters) and 15 feet (4.5 meters) were used to represent the breathing height on the first and second floors of nearby single- and multi-family residences.[18] A receptor height of 3 feet (1 meter) was used to represent the breathing height of children at the school.

Summary of Construction Community Risk Impacts

The maximum increased cancer risks were calculated using the modeled TAC concentrations combined with the OEHHA guidance for age sensitivity factors and exposure parameters as recommended by BAAQMD, as described in *Attachment 1*. Non-cancer health hazards and maximum $PM_{2.5}$ concentrations were also calculated and identified. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Third trimester, infant, child, and adult exposures were assumed to occur at all residences during the entire construction period. Children at the school were assumed to be 2-6 years old. The child (ages 2 through 16 years old) cancer risk parameters were used to calculate the increased cancer risk for the school students.

The maximum modeled annual $PM_{2.5}$ concentration was calculated based on combined exhaust and fugitive concentrations. The maximum computed HI values was based on the ratio of the maximum DPM concentration modeled and the chronic inhalation reference exposure level of 5 $\mu g/m^3$.

[18] Bay Area Air Quality Management District, 2012, Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0. May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

The maximum modeled annual DPM and $PM_{2.5}$ concentrations were identified at nearby sensitive receptors to find the maximally exposed individuals (MEI). Results of this assessment indicated that the construction MEI was located on the first floor (5 feet above ground) of a single-family residence to the south of the project. The location of the MEI and nearby sensitive receptors are shown in Figure 1. Table 6 summarizes the maximum cancer risks, $PM_{2.5}$ concentrations, and health hazard indexes for project related construction activities. *Attachment 4* to this report includes the emission calculations used for the construction modeling and the cancer risk calculations.

Additionally, modeling was conducted to predict the cancer risks, non-cancer health hazards, and maximum $PM_{2.5}$ concentrations associated with construction activities at the nearby school. The maximum increased cancer risks were adjusted using child exposure parameters for receptors at the school. The unmitigated cancer risk, $PM_{2.5}$ concentration, and HI at the nearby school does not exceed their respective BAAQMD single-source significance thresholds.

Community Risks from Project Operation

Stationary equipment that could emit substantial TACs (e.g., emergency generators) are not planned for this project. Diesel powered vehicles are the primary concern with local traffic-generated TAC impacts. Per BAAQMD recommended risks and methodology, a road with less than 10,000 total vehicle per day is considered a low-impact source of TACs.[19] This project would generate 433 daily trips or 296 net daily trips when taking into account the existing office land use.[20] The project traffic would be dispersed on the roadway system with a majority of the trips being from light-duty vehicles (i.e., passenger automobiles), which is a fraction of 10,000 daily vehicles. In addition, projects with the potential to cause or contribute to increased cancer risk from traffic include those that have attract high numbers of diesel-powered on road trucks or use off-road diesel equipment on site, such as a distribution center, a quarry, or a manufacturing facility, may potentially expose existing or future planned receptors to substantial cancer risk levels and/or health hazards. This is not a project of concern for non-BAAQMD permitted mobile sources. Therefore, emissions from project traffic are considered negligible and not included within this analysis.

Summary of Project-Related Community Risks at the Off-Site Project MEI

For this project, the sensitive receptor identified in Figure 1 as the construction MEI is also the project MEI. At this location, the MEI would be exposed to emissions from 2 years of construction. The annual $PM_{2.5}$ concentration and HI values are based on an annual maximum risk for the entirety of the project.

As shown in Table 6, the unmitigated maximum cancer risks and annual $PM_{2.5}$ concentration from construction activities at the MEI location would exceed the respective BAAQMD single-source

[19] BAAQMD, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

[20] Email correspondence with Natalie Noyes, AICP, Senior Project Manager, David J. Powers & Associates, Inc., March 15, 2022. Attachment: *Hexagon Transportation Consultants 330 Distel Trip Gen_1.21.2022.pdf.*

significance thresholds. However, with the incorporation of the *Mitigation Measure AQ-1 and AQ-2*, the mitigated cancer risk and annual $PM_{2.5}$ concentration would no longer exceed the BAAQMD single-source significance thresholds. The unmitigated HI at the MEI does not exceed its respective BAAQMD single-source significance threshold.

Table 6. Construction Risk Impacts at the Off-Site Receptors

Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction	Unmitigated	**72.13 (infant)**	**1.53**	0.05
	Mitigated*	6.74 (infant)	0.27	<0.01
BAAQMD Single-Source Threshold		***10***	***0.3***	***1.0***
Exceed Threshold?	Unmitigated	***Yes***	***Yes***	*No*
	Mitigated*	*No*	*No*	*No*
Most Affected School Student Receptors – Mountain View-Los Altos Montessori Children's Center				
Project Construction	Unmitigated	1.53 (child)	0.06	<0.01
BAAQMD Single-Source Threshold		***10***	***0.3***	***1.0***
Exceeds Threshold?	Unmitigated	*No*	*No*	*No*

* Construction equipment with Tier 4 engines, electric cranes, and enhanced BMPs as Mitigation.

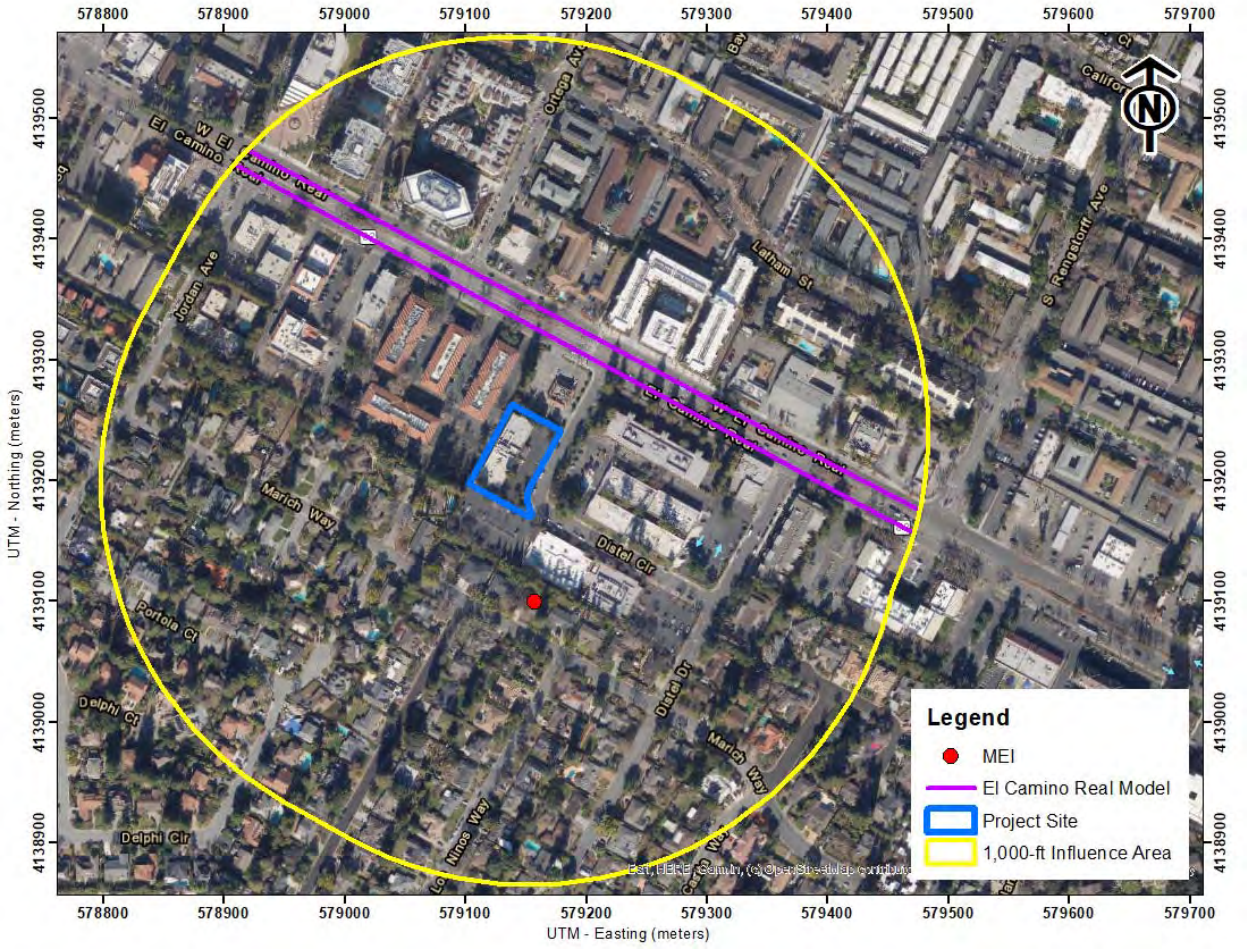
Figure 1. Locations of Project Construction Site, DPM Point Sources, Off-Site Sensitive Receptors, and Maximum TAC Impact Locations (MEI)

Cumulative Community Risks of all TAC Sources at the Off-Site Project MEI

Community health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors that are located within 1,000 feet of the project site (i.e., influence area). These sources include rail lines, freeways or highways, busy surface streets, and stationary sources identified by BAAQMD.

A review of the project area and based on provided traffic information indicated that traffic on El Camion Real would exceed 10,000 vehicles per day. Other nearby streets would have less than 10,000 vehicles per day. A review of BAAQMD's stationary source map website identified no stationary sources with the potential to affect the project MEI. Figure 2 shows the location of the sources affecting the MEI. Community risk impacts from these sources upon the MEI are reported in Table 7. Details of the modeling and community risk calculations are included in *Attachment 5*.

Figure 2. Project Site and Nearby TAC and $PM_{2.5}$ Sources



Local Roadways – El Camino Real

A refined analysis of potential health impacts from vehicle traffic on the El Camino Real was conducted. This refined analysis involved predicting emissions for the traffic volume and mix of

vehicle types on the roadway near the project site and using an atmospheric dispersion model to predict exposure to TACs. The associated cancer risks were then computed based on the modeled exposures. *Attachment 1* includes a description of how community risk impacts, including cancer risk are computed.

Traffic Emissions Modeling

This analysis involved the development of DPM, organic TACs, and $PM_{2.5}$ emissions for traffic on El Camino Real using the Caltrans version of the CARB EMFAC2017 emissions model, known as CT-EMFAC2017. CT-EMFAC2017 provides emission factors for mobile source criteria pollutants and TACs, including DPM. Emission processes modeled include running exhaust for DPM, $PM_{2.5}$ and total organic compounds (TOG), running evaporative losses for TOG, and tire and brake wear and fugitive road dust for $PM_{2.5}$. All $PM_{2.5}$ emissions from all vehicles were used, rather than just the $PM_{2.5}$ fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce $PM_{2.5}$. Additionally, $PM_{2.5}$ emissions from vehicle tire and brake wear and from re-entrained roadway dust were included in these emissions. DPM emissions are projected to decrease in the future and are reflected in the CT-EMFAC2017 emissions data. Inputs to the model include region (Santa Clara County), type of road (major/collector), truck percentage for non-state highways in Santa Clara County (3.51 percent),[21] traffic mix assigned by CT-EMFAC2017 for the county, year of analysis (2023 – construction start year), and season (annual).

In order to estimate TAC and $PM_{2.5}$ emissions over the 30-year exposure period used for calculating the increased cancer risks for sensitive receptors at the MEI and project site, the CT-EMFAC2017 model was used to develop vehicle emission factors for the year 2023 (construction start year). Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CT-EMFAC2017. Year 2023 emissions were conservatively assumed as being representative of future conditions over the time period that cancer risks are evaluated since overall vehicle emissions, and in particular diesel truck emissions, will decrease in the future.

The average daily traffic (ADT) on El Camino Real was based on AM and PM peak-hour background plus project traffic volumes for the nearby roadway provided by the project's traffic consultant.[22] The calculated ADT on El Camino Real was 30,972 vehicles. Average hourly traffic distributions for Santa Clara County roadways were developed using the EMFAC model,[23] which were then applied to the ADT volumes to obtain estimated hourly traffic volumes and emissions for the roadway. For all hours of the day, other than during peak AM and PM periods, an average speed of 35 mph on El Camino Real was assumed for all vehicles based on posted speed limit

[21] Bay Area Air Quality Management District, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

[22] Email correspondence with Nick Towstopiat, Assistant Project Manager, David J. Powers & Associates, Inc., April 13, 2022. Attachment: *330 Distel Circle Volume Spreadsheet - AirQuality.xlsx.*

[23] The Burden output from EMFAC2007, a previous version of CARB's EMFAC model, was used for this since the current web-based version of EMFAC2014 does not include Burden type output with hour-by-hour traffic volume information.

signs on the roadway. Traffic speeds during the peak AM and PM periods were assumed to be 10 miles per hour slower (i.e., 25 mph) to account for commute congestion and the amount of access in the area.

Dispersion Modeling

Dispersion modeling of TAC and $PM_{2.5}$ emissions was conducted using the EPA AERMOD air quality dispersion model, which is recommended by the BAAQMD for this type of analysis.[24] TAC and $PM_{2.5}$ emissions from traffic on El Camino Real within about 1,000 feet of the project site was evaluated with the model. Emissions from vehicle traffic were modeled in AERMOD using a series of volume sources along a line (line volume sources), with line segments used to represent the opposing travel lanes on each roadway. The same meteorological data used in the construction dispersion modeling were used in the roadway modeling. Other inputs to the model included road geometry, hourly traffic emissions, and receptor locations and heights. Annual TAC and $PM_{2.5}$ concentrations at the project MEI for 2023 from traffic on the roadway were calculated using receptor heights of 5 feet (1.5 meters) to represent the breathing heights on the first floor of the nearby single-family residence.

Computed Cancer and Non-Cancer Health Impacts

The cancer risk, $PM_{2.5}$ concentration, and HI impacts from El Camino Real on the project MEI are shown in Table 7. Figure 2 shows the roadway links used for the modeling. Details of the emission calculations, dispersion modeling, and cancer risk calculations for the receptors with the maximum cancer risk from the roadways' traffic are provided in *Attachment 5.*

<u>BAAQMD Permitted Stationary Sources</u>

Permitted stationary sources of air pollution near the project site were identified using BAAQMD's *Permitted Stationary Sources 2018* GIS website,[25] which identifies the location of nearby stationary sources and their estimated risk and hazard impacts, including emissions and adjustments to account for new OEHHA guidance. No sources within the project's 1,000-foot influence area were identified using this tool.

<u>Summary of Cumulative Risks at the Project MEI</u>

Table 7 reports both the project and cumulative community risk impacts at the sensitive receptors most affected by project construction (i.e., the MEI). The project would have an exceedance with respect to community risk caused by project construction activities, since the maximum unmitigated cancer risk and annual $PM_{2.5}$ concentration exceed the BAAQMD single-source thresholds. With the implementation of *Mitigation Measure AQ-1 and AQ-2*, the project's cancer risk and $PM_{2.5}$ concentration would be lowered to levels below the single-source thresholds. The annual HI risk values, which include unmitigated and mitigated, do not exceed the single-source

[24] BAAQMD. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May 2012
[25] BAAQMD, https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65

threshold. In addition, the combined unmitigated cancer risk and HI values and the mitigated $PM_{2.5}$ concentration would not exceed their respective cumulative thresholds.

Table 7. Cumulative Community Risk Impacts at the Project MEI

Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Impacts				
Project Construction	Unmitigated	**72.13 (infant)**	**1.53**	0.05
	Mitigated	6.74 (infant)	0.27	<0.01
BAAQMD Single-Source Threshold		***10***	***0.3***	***1.0***
Exceed Threshold?	Unmitigated	***Yes***	***Yes***	*No*
	Mitigated	*No*	*No*	*No*
Cumulative Impacts				
El Camino Real, ADT 30,972		0.89	0.08	<0.01
Combined Sources	Unmitigated	73.02	**1.61**	<0.06
	Mitigated	7.63	0.35	<0.02
BAAQMD Cumulative Source Threshold		***100***	***0.8***	***10.0***
Exceed Threshold?	Unmitigated	*No*	***Yes***	*No*
	Mitigated	*No*	*No*	*No*

Mitigation Measure AQ-2: Use construction equipment that has low diesel particulate matter exhaust emissions.

Implement a feasible plan to reduce diesel particulate matter emissions by 87 percent such that increased cancer risk and annual $PM_{2.5}$ concentrations from construction would be reduced below TAC significance levels is as follows:

1. All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 emission standards for PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise,

    a. If use of Tier 4 equipment is not available, alternatively use equipment that meets U.S. EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB verifiable diesel emission control devices that altogether achieve an 87 percent reduction in particulate matter exhaust from the Project in comparison to uncontrolled equipment; alternatively (or in combination),

2. Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment.

3. Stationary cranes shall be powered by electricity.

4. All mobile diesel construction equipment used for the project shall be registered with CARB through DOORS and have an assigned unique Equipment Identification Number (EIN). The vehicles EIN label shall be clearly visible on the equipment so the public can use DOORS, the CARB online tool, to look up the equipment type, size, and age.

Alternatively, the applicant may develop another construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 87 percent or greater. Elements of the plan could include a combination of some of the following measures:

- Implementation of No. 1 above to use Tier 4 or alternatively fueled equipment,
- Installation of electric power lines during early construction phases to avoid use of diesel generators and compressors,
- Use of electrically-powered equipment,
- Forklifts and aerial lifts used for exterior and interior building construction shall be electric or propane/natural gas powered,
- Change in construction build-out plans to lengthen phases, and
- Application of different building methods that result in less diesel equipment usage.

Such a construction operations plan would be subject to review by an air quality expert and approved by the City prior to construction.

Effectiveness of Mitigation Measure AQ-1 and AQ-2

CalEEMod was used to compute emissions associated with this mitigation measure assuming that all equipment met U.S. EPA Tier 4 interim engines standards, electric cranes, and enhanced BAAQMD best management practices for construction were included. With these measures implemented, the project's construction cancer risk levels (assuming infant exposure) would be reduced by 91 percent to 6.74 chances per million and $PM_{2.5}$ concentrations would be reduced by 83 percent to 0.27 $\mu g/m^3$. A plan that reduces DPM emissions by 87 percent would reduce cancer risk to about 9.38 chances per million. As a result, the project's construction risk impacts would be reduced to levels below the BAAQMD single-source threshold.

Non-CEQA: On-Site Community Risk Assessment for TAC Sources - New Project Residences

The City's El Camino Real Precise Plan Mitigation Measure AIR-2 requires new residential/sensitive receptors projects within 500 feet of El Camino Real to conduct an evaluation of potential health risk exposure for the new sensitive receptors and incorporate effective mitigation into project designs to avoid significant risks to health and safety required when new residential uses are proposed near existing sources of TACs. BAAQMD's recommended thresholds for health risks and hazards, shown in Table 1, are used to evaluate on-site exposure for new residents. A health risk assessment was completed to determine the impacts existing TAC sources would have on the new proposed sensitive receptors (residents) that that project would introduce. The same TAC sources identified above were used in this health risk assessment.[26] Figure 3 shows the on-site sensitive receptors in relation to the nearby TAC sources. All on-site community task results are listed in Table 8. *Attachment 5* includes the dispersion modeling and risk calculations for TAC source impacts upon the proposed on-site sensitive receptors.

[26] The extent this analysis considers *existing* air quality issues in relation to the impact on *future residents* of the Project, it does so for informational purposes only pursuant to the judicial decisions in *CBIA v. BAAQMD* (2015) 62 Cal.4th 369, 386 and *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473, which confirm that the impacts of the existing environment on a project are excluded from CEQA.

Local Roadways – El Camino Real

The roadway analysis for the project residents was conducted in the same manner as described above for the off-site MEI. However, year 2025 (operational year) emission factors were conservatively assumed as being representative of future conditions, instead of 2023 (construction start year). An analysis based on 2025 resulted in an increase of ADT on El Camino Real to 31,580 vehicles. On-site receptors were placed throughout the project area and were spaced every 20 feet (6 meters). Project residences would be located on the second floor and higher of the proposed new building. Roadway impacts were modeled at receptor heights of 22 feet (6.6 meters) and 32 feet (9.9 meters) representing sensitive receptors on the second and third floors (first and second residential levels) of the future residential building based on provided project plans. Project sensitive receptors higher than the third floor would have roadway impacts less than those on the third floor. The portions of El Camino Real included in the modeling are shown in Figure 3 along with the on-site receptor locations where impacts were modeled.

Maximum increased cancer risks were calculated for the residents at the project site using the maximum modeled TAC concentrations. A 30-year exposure period was used in calculating cancer risks assuming the residents would include third trimester pregnancy and infants/children and were assumed to be in the new buildings for 24 hours per day for 350 days per year. The highest impacts from El Camino Real occurred at a second-floor (first residential level) receptor in the northeast corner of the building closest to the roadway. Cancer risks associated with the roadway are greatest closest to the roadway and decrease with distance from the road. The roadway community risk impacts at the project site are shown in Table 8. Details of the emission calculations, dispersion modeling, and cancer risk calculations are contained in *Attachment 5*.

Stationary Sources

The stationary source screening analysis for the new project sensitive receptors was conducted in the same manner as described above for the construction MEI. No sources were located within the project's 1000-foot influence area.

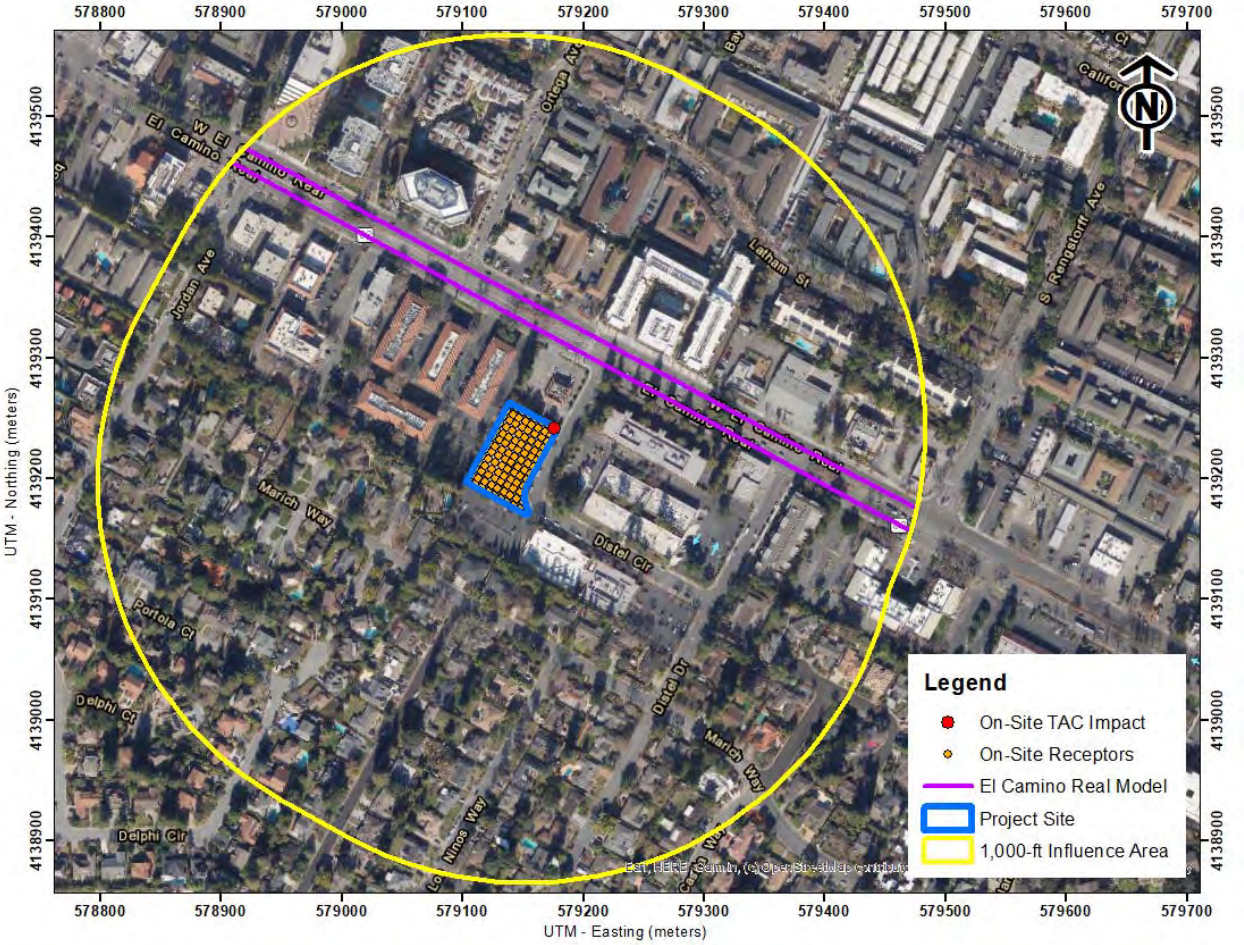
Cumulative Community Health Risk at Project Site

Community risk impacts from the combined sources upon the project site are reported in Table 8. The TAC sources are compared against the BAAQMD single-source threshold and then combined and compared against the BAAQMD cumulative-source threshold. As shown, the cancer risk, $PM_{2.5}$ concentration, and HI from the nearby sources do not exceed their single-source or cumulative-source thresholds.

Table 8. Impacts from Combined Sources to Project Site Receptors

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
El Camino Real, ADT 31,580	1.82	0.17	<0.01
BAAQMD Single-Source Threshold	***10***	***0.3***	***1.0***
Exceed Threshold?	*No*	*No*	*No*
BAAQMD Cumulative Source Threshold	***100***	***0.8***	***10.0***
Exceed Threshold?	*No*	*No*	*No*

Figure 3. Locations of Project Site, On-Site Residential Receptors, Roadway Segments Evaluated, and Maximum Roadway TAC Impacts



GREENHOUSE GAS EMISSIONS

Setting

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2, CH_4, and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO_2 being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO_2 equivalents (CO_2e).

An expanding body of scientific research supports the theory that global climate change is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

Recent Regulatory Actions for GHG Emissions

Executive Order S-3-05 – California GHG Reduction Targets

Executive Order (EO) S-3-05 was signed by Governor Arnold Schwarzenegger in 2005 to set GHG emission reduction targets for California. The three targets established by this EO are as follows: (1) reduce California's GHG emissions to 2000 levels by 2010, (2) reduce California's GHG emissions to 1990 levels by 2020, and (3) reduce California's GHG emissions by 80 percent below 1990 levels by 2050.

Assembly Bill 32 – California Global Warming Solutions Act (2006)

Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, codified the State's GHG emissions target by directing CARB to reduce the State's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, CEC, California Public Utilities Commission (CPUC), and Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05, which has a target of reducing GHG emissions 80 percent below 1990 levels.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State's main strategies to reduce GHGs from business-as-usual emissions projected in 2020 back down to 1990 levels. Business-as-usual (BAU) is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 million metric tons (MMT) of CO_2e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector- or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT of CO_2e. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT of CO_2e. Thus, an estimated reduction of 80 MMT of CO_2e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

Executive Order B-30-15 & Senate Bill 32 GHG Reduction Targets – 2030 GHG Reduction Target

In April 2015, Governor Brown signed EO B-30-15, which extended the goals of AB 32, setting a greenhouse gas emissions target at 40 percent of 1990 levels by 2030. On September 8, 2016, Governor Brown signed Senate Bill (SB) 32, which legislatively established the GHG reduction target of 40 percent of 1990 levels by 2030. In November 2017, CARB issued *California's 2017 Climate Change Scoping Plan*.[27] While the State is on track to exceed the AB 32 scoping plan 2020 targets, this plan is an update to reflect the enacted SB 32 reduction target.

SB 32 was passed in 2016, which codified a 2030 GHG emissions reduction target of 40 percent below 1990 levels. CARB is currently working on a second update to the Scoping Plan to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32. The proposed Scoping Plan Update was published on January 20, 2017 as directed by SB 32 companion legislation AB 197. The mid-term 2030 target is considered critical by CARB on the path to obtaining an even deeper GHG emissions target of 80 percent below 1990 levels by 2050, as directed in Executive

[27] California Air Resource Board, 2017. *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Targets.* November. Web: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf

Order S-3-05. The Scoping Plan outlines the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure, providing a blueprint to continue driving down GHG emissions and obtain the statewide goals.

The new Scoping Plan establishes a strategy that will reduce GHG emissions in California to meet the 2030 target (note that the AB 32 Scoping Plan only addressed 2020 targets and a long-term goal). Key features of this plan are:

- Cap and Trade program places a firm limit on 80 percent of the State's emissions;
- Achieving a 50-percent Renewable Portfolio Standard by 2030 (currently at about 29 percent statewide);
- Increase energy efficiency in existing buildings;
- Develop fuels with an 18-percent reduction in carbon intensity;
- Develop more high-density, transit-oriented housing;
- Develop walkable and bikeable communities;
- Greatly increase the number of electric vehicles on the road and reduce oil demand in half;
- Increase zero-emissions transit so that 100 percent of new buses are zero emissions;
- Reduce freight-related emissions by transitioning to zero emissions where feasible and near-zero emissions with renewable fuels everywhere else; and
- Reduce "super pollutants" by reducing methane and hydrofluorocarbons or HFCs by 40 percent.

In the updated Scoping Plan, CARB recommends statewide targets of no more than 6 metric tons (MT) CO_2e per capita (statewide) by 2030 and no more than 2 metric tons CO_2e per capita by 2050. The statewide per capita targets account for all emissions sectors in the State, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 statewide target under SB 32 and the longer-term State emissions reduction goal of 80 percent below 1990 levels by 2050.

Executive Order B-55-18 – Carbon Neutrality

In 2018, a new statewide goal was established to achieve carbon neutrality as soon as possible, but no later than 2045, and to maintain net negative emissions thereafter. CARB and other relevant state agencies are tasked with establishing sequestration targets and create policies/programs that would meet this goal.

Senate Bill 375 – California's Regional Transportation and Land Use Planning Efforts (2008)

California enacted legislation (SB 375) to expand the efforts of AB 32 by controlling indirect GHG emissions caused by urban sprawl. SB 375 provides incentives for local governments and applicants to implement new conscientiously planned growth patterns. This includes incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The legislation also allows applicants to bypass certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Development of more alternative transportation options that would reduce vehicle trips and miles traveled, along with traffic congestion, would be encouraged. SB 375 enhances CARB's ability to reach the AB 32

goals by directing the agency in developing regional GHG emission reduction targets to be achieved from the transportation sector for 2020 and 2035. CARB works with the metropolitan planning organizations (e.g. Association of Bay Area Governments [ABAG] and Metropolitan Transportation Commission [MTC]) to align their regional transportation, housing, and land use plans to reduce vehicle miles traveled and demonstrate the region's ability to attain its GHG reduction targets. A similar process is used to reduce transportation emissions of ozone precursor pollutants in the Bay Area.

Senate Bill 350 - Renewable Portfolio Standards

In September 2015, the California Legislature passed SB 350, which increases the states Renewables Portfolio Standard (RPS) for content of electrical generation from the 33 percent target for 2020 to a 50 percent renewables target by 2030.

Senate Bill 100 – Current Renewable Portfolio Standards

In September 2018, SB 100 was signed by Governor Brown to revise California's RPS program goals, furthering California's focus on using renewable energy and carbon-free power sources for its energy needs. The bill would require all California utilities to supply a specific percentage of their retail sales from renewable resources by certain target years. By December 31, 2024, 44 percent of the retails sales would need to be from renewable energy sources, by December 31, 2026 the target would be 40 percent, by December 31, 2017 the target would be 52 percent, and by December 31, 2030 the target would be 60 percent. By December 31, 2045, all California utilities would be required to supply retail electricity that is 100 percent carbon-free and sourced from eligible renewable energy resource to all California end-use customers.

California Building Standards Code – Title 24 Part 11 & Part 6

The California Green Building Standards Code (CALGreen Code) is part of the California Building Standards Code under Title 24, Part 11.[28] The CALGreen Code encourages sustainable construction standards that involve planning/design, energy efficiency, water efficiency resource efficiency, and environmental quality. These green building standard codes are mandatory statewide and are applicable to residential and non-residential developments. The most recent CALGreen Code (2019 California Building Standard Code) was effective as of January 1, 2020.

The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the California Energy Commission (CEC). This code includes design requirements to conserve energy in new residential and non-residential developments, while being cost effective for homeowners. This Energy Code is enforced and verified by cities during the planning and building permit process. The current energy efficiency standards (2019 Energy Code) replaced the 2016 Energy Code as of January 1,2020. Under the 2019 standards, single-family homes are predicted to be 53 percent more efficient than homes built under the 2016 standard due more stringent energy-efficiency standards and mandatory installation of solar photovoltaic

[28] See: https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen#:~:text=CALGreen%20is%20the%20first%2Din,to%201990%20levels%20by%202020.

systems. For nonresidential developments, it is predicted that these buildings will use 30 percent less energy due to lightening upgrades.[29]

CEC studies have identified the most aggressive electrification scenario as putting the building sector on track to reach the carbon neutrality goal by 2045.[30] Installing new natural gas infrastructure in new buildings will interfere with this goal. To meet the State's goal, communities have been adopting "Reach" codes that prohibit natural gas connections in new and remodeled buildings.

Requirements for electric vehicle (EV) charging infrastructure are set forth in Title 24 of the California Code of Regulations and are regularly updated on a 3-year cycle. The CALGreen standards consist of a set of mandatory standards required for new development, as well as two more voluntary standards known as Tier 1 and Tier 2. The CalGreen standards have recently been updated (2022 version) to require deployment of additional EV chargers in various building types, including multifamily residential and nonresidential land uses. They include requirements for both EV capable parking spaces and the installation of Level 2 EV supply equipment for multifamily residential and nonresidential buildings. The 2022 CALGreen standards include requirements for both EV readiness and the actual installation of EV chargers. The 2022 CALGreen standards include both mandatory requirements and more aggressive voluntary Tier 1 and Tier 2 provisions. Providing EV charging infrastructure that meets current CALGreen requirements will not be sufficient to power the anticipated more extensive level of EV penetration in the future that is needed to meet SB 30 climate goals.

SB 743 Transportation Impacts

Senate Bill 743 required lead agencies to abandon the old "level of service" metric for evaluating a project's transportation impacts, which was based solely on the amount of delay experienced by motor vehicles. In response, the Governor's Office of Planning and Research (OPR) developed a VMT metric that considered other factors such as reducing GHG emissions and developing multimodal transportation[31]. A VMT-per-capita metric was adopted into the CEQA Guidelines Section 15064.3 in November 2017. Given current baseline per-capita VMT levels computed by CARB in the 2030 Scoping Plan of 22.24 miles per day for light-duty vehicles and 24.61 miles per day for all vehicle types, the reductions needed to achieve the 2050 climate goal are 16.8 percent for light-duty vehicles and 14.3 percent for all vehicle types combined. Based on this analysis (as well as other factors), OPR recommended using a 15-percent reduction in per capita VMT as an appropriate threshold of significance for evaluating transportation impacts.

[29] See: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf
[30] California Energy Commission. 2021. F*inal Commission Report: California Building Decarbonization Assessment. Publication Number CEC-400-2021-006-CMF*.August
[31] Governor's Office of Planning and Research. 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December.

Federal and Statewide GHG Emissions

The U.S. EPA reported that in 2018, total gross nationwide GHG emissions were 6,676.6 million metric tons (MMT) carbon dioxide equivalent (CO_2e).[32] These emissions were lower than peak levels of 7,416 MMT that were emitted in 2007. CARB updates the statewide GHG emission inventory on an annual basis where the latest inventory includes 2000 through 2017 emissions.[33] In 2017, GHG emissions from statewide emitting activities were 424 MMT. The 2017 emissions have decreased by 14 percent since peak levels in 2004 and are 7 MMT below the 1990 emissions level and the State's 2020 GHG limit. Per capita GHG emissions in California have dropped from a 2001 peak of 14.1 MT per person to 10.7 MT per person in 2017. The most recent Bay Area emission inventory was computed for the year 2011.[34] The Bay Area GHG emission were 87 MMT. As a point of comparison, statewide emissions were about 444 MMT in 2011

Los Altos Climate Action Plan and Climate Action and Adaptation Plan

The City of Los Altos adopted a Climate Action Plan (CAP)[35] in 2013 that included a goal to improve communitywide emissions efficiency by 15 percent over 2005 levels by 2020. In 2022 the City of Los Altos developed a Climate Action and Adaptation Plan (CAAP),[36] which assesses the impacts of Los Altos on the climate, how Los Altos can reduce its impact on the climate and how Los Altos can adapt to the changing climate. The CAAP proposes a strategic roadmap of strategies goals, and actions to help reduce GHG emissions in order to reach a goal of Carbon Neutrality by 2035.

To implement and monitor the success of the CAP, the City of Los Altos requires all new projects to comply with their CAP checklist. This document helps city planners ensure that the new project would be consistent with the City's GHG reduction goals. A project must incorporate all the Best management Practices (BMPs) identified in the checklist. This project's CAP checklist is included in *Attachment 6*. However, the CAP and CAAP are not qualified GHG reductions plan and do not have specific metric ton or service population GHG threshold for project-level construction or operation. Therefore, the BAAQMD's CEQA Air Quality Guideline's thresholds are used.

BAAQMD GHG Significance Thresholds

The BAAQMD's CEQA Air Quality Guidelines do not use quantified thresholds for projects that are in a jurisdiction with a qualified GHG reductions plan (i.e., a Climate Action Plan). The plan

[32] United States Environmental Protection Agency, 2020. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2018*. April. Web: https://www.epa.gov/sites/production/files/2020-04/documents/us-ghg-inventory-2020-main-text.pdf

[33] CARB. 2019. *2019 Edition, California Greenhouse Gas Emission Inventory: 2000 – 2017*. Web: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf

[34] BAAQMD. 2015. *Bay Area Emissions Inventory Summary Report: Greenhouse Gases Base Year 2011*. January. Web: http://www.baaqmd.gov/~/media/files/planning-and-research/emission-inventory/by2011_ghgsummary.pdf accessed Nov. 26, 2019.

[35] PMC. City of Los Altos Climate Action Plan. December 2013.

[36] City of Los Altos. *Los Altos Climate Action and Adaptation Plan*. 2022. Web: https://www.losaltosca.gov/sites/default/files/fileattachments/community_development/page/39021/los_altos_caap_final_combined.pdf

has to address emissions associated with the period that the project would operate (e.g., beyond year 2020). For quantified emissions, the guidelines recommended a GHG threshold of 1,100 metric tons or 4.6 metric tons (MT) per capita. These thresholds were developed based on meeting the 2020 GHG targets set in the scoping plan that addressed AB 32. Development of the project would occur beyond 2020, so a threshold that addresses a future target is appropriate.

Although BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a "Substantial Progress" efficiency metric of 2.8 MT CO_2e/year/service population and a bright-line threshold of 660 MT CO_2e/year based on the GHG reduction goals of EO B-30-15. The service population metric of 2.8 is calculated for 2030 based on the 1990 inventory and the projected 2030 statewide population and employment levels.[37] The 2030 bright-line threshold is a 40 percent reduction of the 2020 1,100 MT CO_2e/year threshold. Evidence published by the State indicates the AB 32 goal of reducing statewide GHG emissions to 1990 levels was met prior to 2020. Current State plans are to further reduce emissions to 40% below 1990 levels by 2030. Assuming statewide emissions are at 1990 levels or lower in 2020, it would be logical to reduce the BAAQMD-recommended threshold for meeting the AB 32 threshold by 40% to develop a threshold for 2030.

Impact GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy and water usage, and solid waste disposal. Emissions for the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

CalEEMod Modeling

CalEEMod was used to predict GHG emissions from operation of the site assuming full build-out of the project. The project land use types and size and other project-specific information were input to the model, as described above within the operational period emissions. CalEEMod output is included in *Attachment 2*.

Service Population Emissions

The project service population efficiency rate is based on the number of future residents. For this project, the number of future residents was estimated by multiplying the total number of units (i.e., 90 units) by the persons per household rate for the City of Los Altos found in the California Department of Finance Population and Housing Estimate report.[38] Using the 2.72-person per

[37] Bay Area Air Quality Management District, 2016. *CLE International 12th Annual Super-Conference CEQA Guidelines, Case Law and Policy Update*. December.
[38] State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2010-2020*. Sacramento, California. Available at: https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2021/

household 2020 rate, the number of future residents was estimated to be 245 residents. This total service population was used to calculate the per capita emissions.

Construction Emissions

GHG emissions associated with construction were computed to be 977 MT of CO_2e for the total construction period. These are the emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

Operational Emissions

The CalEEMod model, along with the project vehicle trip generation rates, was used to estimate daily emissions associated with operation of the fully developed site under the proposed project. As shown in Table 9, the net annual emissions resulting from operation of the proposed project are predicted to be 241 MT of CO_2e in 2025 and 214 MT of CO_2e in 2030. The service population emission for the year 2025 and 2030 are predicted to be 1.4 and 1.3 MT/CO_{2e}/year/service population, respectively.

To be considered an exceedance, the project must exceed both the GHG significance threshold in metric tons per year and the service population significance threshold in the future year of 2030. As shown in Table 8, the project would not exceed the annual emissions bright-line threshold of 660 MT CO_2e/year in 2030 and would not exceed the per service population threshold of 2.8 MT of CO_2e/year/service population in 2030. In addition, the project completed the City's CAP checklist for new developments included in *Attachment 6*. Therefore, the project would not exceed thresholds for GHG emissions.

Table 9. Annual Project GHG Emissions (CO_2e) in Metric Tons and Per Capita

Source Category	Existing Land Use	Proposed Project	
	2022	2025	2030
Area	0	1	1
Energy Consumption	11	0	0
Mobile	84	319	292
Solid Waste Generation	6	21	21
Water Usage	3	4	4
Total (MT CO_{2e}/year)	104	345	318
Net Emissions		241 MT CO_{2e}/year	214 MT CO_{2e}/year
Significance Threshold			***660 MT CO_2e/year***
Service Population Emissions (MT CO_{2e}/year/service population)		1.4	1.3
Significance Threshold			***2.8 in 2030***

Impact GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The proposed building would be constructed in conformance with CALGreen and the Title 24 Building Code, which requires high-efficiency water fixtures, water-efficient irrigation systems, and compliance with current energy efficacy standards. To avoid interference with statewide GHG reduction measures identified in CARB's Scoping Plan and SB 100 goals, the Project should include the following measures:

1. Avoid construction of new natural gas connections for the residential building,
    - Conforms – compliance with City Reach Code would prohibit natural gas infrastructure in new buildings.
2. Avoid wasteful or inefficient use of electricity,
    - Conforms – would meet CALGreen Building Standards Code requirements that are considered to be energy efficient.
3. Include electric vehicle charging infrastructure that meets current Building Code CALGreen Tier 2 compliance, and
    - Conforms – project would provide electric vehicle charging infrastructure.
4. Reduce VMT per capita by 15 percent over baseline conditions.
    - Unknown – check with project traffic analysis.

Supporting Documentation

Attachment 1 is the methodology used to compute community risk impacts, including the methods to compute lifetime cancer risk from exposure to project emissions.

Attachment 2 includes the CalEEMod output for project construction and operational criteria air pollutant and GHG emissions. The operational outputs for existing and 2030 uses are also included in this attachment. Also included are any modeling assumptions.

Attachment 3 includes the EMFAC2021 emissions modeling. The input files for these calculations are voluminous and are available upon request in digital format.

Attachment 4 is the construction health risk assessment. AERMOD dispersion modeling files for these assessments, which are quite voluminous, are available upon request and would be provided in digital format.

Attachment 5 includes the cumulative community risk calculations, modeling results, and health risk calculations from sources affecting the MEI and new project sensitive receptors.

Attachment 6 includes the City's CAP New Development Checklist for the project.

Attachment 1: Health Risk Calculation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.[39] These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.[40] This HRA used the 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.[41] Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs is calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency and duration of exposure. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day) or liters per kilogram of body weight per 8-hour period for the case of worker or school child exposures. As recommended by the BAAQMD for residential exposures, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th percentile breathing rates for child and adult exposures. For children at schools and daycare facilities, BAAQMD recommends using the 95th percentile 8-hour breathing rates. Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of

[39] OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.
[40] CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.
[41] BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. December 2016.

30 years for sources with long-term emissions (e.g., roadways). For workers, assumed to be adults, a 25-year exposure period is recommended by the BAAQMD. For school children a 9-year exposure period is recommended by the BAAQMD.

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

Cancer Risk (per million) = $CPF \times Inhalation\ Dose \times ASF \times ED/AT \times FAH \times 10^6$

Where:

CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air} \times DBR^* \times A \times (EF/365) \times 10^{-6}$

Where:

C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
8HrBR = 8-hour breathing rate (L/kg body weight-8 hours)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

* An 8-hour breathing rate (8HrBR) is used for worker and school child exposures.

The health risk parameters used in this evaluation are summarized as follows:

Parameter	*Exposure Type* →	Infant		Child	Adult
	Age Range →	3rd Trimester	0<2	2 < 16	16 - 30
DPM Cancer Potency Factor $(mg/kg\text{-}day)^{-1}$		1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day) 80th Percentile Rate		273	758	572	261
Daily Breathing Rate (L/kg-day) 95th Percentile Rate		361	1,090	745	335
8-hour Breathing Rate (L/kg-8 hours) 95th Percentile Rate		-	1,200	520	240
Inhalation Absorption Factor		1	1	1	1
Averaging Time (years)		70	70	70	70
Exposure Duration (years)		0.25	2	14	14*
Exposure Frequency (days/year)		350	350	350	350*
Age Sensitivity Factor		10	10	3	1
Fraction of Time at Home (FAH)		0.85-1.0	0.85-1.0	0.72-1.0	0.73*

Non-Cancer Hazards

Non-cancer health risk is usually determined by comparing the predicted level of exposure to a chemical to the level of exposure that is not expected to cause any adverse effects (reference exposure level), even to the most susceptible people. Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu g/m^3$).

Annual $PM_{2.5}$ Concentrations

While not a TAC, fine particulate matter ($PM_{2.5}$) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for $PM_{2.5}$ (project level and cumulative) are in terms of an increase in the annual average concentration. When considering $PM_{2.5}$ impacts, the contribution from all sources of $PM_{2.5}$ emissions should be included. For projects with potential impacts from nearby local roadways, the $PM_{2.5}$ impacts should include those from vehicle exhaust emissions, $PM_{2.5}$ generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Attachment 2: CalEEMod Modeling Inputs and Outputs

Air Quality/Noise Construction Information Data Request

Project Name: 330 Distel Circle

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size
- 90 Dwelling Units
- 0.87 total project acres disturbed
- 72720 s.f. residential
- 0 s.f. retail
- 0 s.f. office/commercial
- 10,500 s.f. building amenty
- 18130 s.f. parking garage — 90 spaces
- ____ s.f. parking lot — ____ spaces

Construction Hours 7 am to 330 pm

Pile Driving? Y/N? N

Project include on-site GENERATOR OR FIRE PUMP during project OPERATION? Y/N? N

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: _____

Fuel Type: _____

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
	Demolition	**Start Date:**	**1/3/2023**	**Total phase:**	**60**			**Overall Import/Export Volumes**
		End Date:	**3/3/2023**					
1	Concrete/Industrial Saws	81	0.73	8	60	8	28382	**Demolition Volume**
2	Excavators	158	0.38	8	60	8	57638	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	247	0.4	8	60	8	47424	(*or* total tons to be hauled)
2	Tractors/Loaders/Backhoes	97	0.37	8	60	8	34454	**9500 sq ft bldg**
	Other Equipment?						0	**150 tons**
							0	Any pavement demolished and hauled? **1233 tons**
	Site Preparation	**Start Date:**	**3/4/2023**	**Total phase:**	**90**			
		End Date:	**6/4/2023**					
2	Graders	187	0.41	8	90	8	110405	
2	Rubber Tired Dozers	247	0.4	8	90	8	142272	
2	Tractors/Loaders/Backhoes	97	0.37	8	90	8	51682	
	Other Equipment?						0	
							0	
	Grading / Excavation	**Start Date:**	**6/5/2023**	**Total phase:**	**30**			
		End Date:	**7/5/2023**					**Soil Hauling Volume**
4	Excavators	158	0.38	8	30	8	57638	Export volume = **125** cubic yards?
2	Graders	187	0.41	8	30	8	36802	Import volume = **0** cubic yards?
1	Rubber Tired Dozers	247	0.4	8	30	8	23712	
2	Concrete/Industrial Saws	81	0.73	8	30	8	28382	
2	Tractors/Loaders/Backhoes	97	0.37	8	30	8	17227	
	Other Equipment?						0	
							0	
	Trenching/Foundation	**Start Date:**	**7/5/2023**	**Total phase:**	**150**			
		End Date:	**12/5/2023**					
2	Tractor/Loader/Backhoe	97	0.37	8	150	8	86136	
2	Excavators	158	0.38	8	150	8	144096	
	Other Equipment?						0	
							0	
	Building - Exterior	**Start Date:**	**12/6/2023**	**Total phase:**	**120**			**Cement Trucks? 75 Total Round-Trips**
		End Date:	**4/6/2023**					
3	Cranes	231	0.29	8	120	8	192931	Electric? (Y/N) N Otherwise assumed diesel
2	Forklifts	89	0.2	8	120	8	34176	Liquid Propane (LPG)? (Y/N) N Otherwise Assumed diesel
1	Generator Sets	84	0.74	8	120	8	59674	Or temporary line power? (Y/N) ___
2	Tractors/Loaders/Backhoes	97	0.37	8	120	8	68909	
2	Welders	46	0.45	8	120	8	39744	
	Other Equipment?						0	
							0	
	Building - Interior/Architectural Coating	**Start Date:**	**4/7/2024**	**Total phase:**	**60**			
		End Date:	**6/7/2024**					
10	Air Compressors	78	0.48	8	60	8	179712	
2	Aerial Lift	63	0.31	8	60	8	18749	
	Other Equipment?						0	
							0	
	Paving	**Start Date:**	**6/8/2024**	**Total phase:**	**60**			
		Start Date:	**8/8/2024**					
4	Cement and Mortar Mixers	9	0.56	8	60	8	9677	
4	Pavers	132	0.42	8	60	8	106445	**Asphalt? 650 cubic yards or 55 round trips?**
4	Paving Equipment	130	0.36	8	60	8	89856	
4	Rollers	80	0.38	8	60	8	58368	
4	Tractors/Loaders/Backhoes	97	0.37	8	60	8	68909	
	Other Equipment?						0	
							0	
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						
							0	
							0	
							0	
							0	
							0	

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horsepower or load factor, as appropriate

Complete one sheet for each project component

Traffic Consultant Trip Gen						CalEEMod Default		
Land Use		**Size**	**Daily Trips**	**New Trips**	**Weekday Trip Gen**	**Weekday**	**Sat**	**Sun**
Apartmetns Mid Rise	du	90	433	424	***4.71***	5.44	4.91	4.09
Housing Near Bus Stop Reduction	2%		*-9*			*Rev*	***4.25***	***3.54***
Existing								
Office	ksf	12.12	131	128	***10.56***	9.74	2.21	0.7
Housing Near Bus Stop Reduction	2%		*-3*			*Rev*	***2.40***	***0.76***

330 Distel - ITE Trip Generation Estimates

Land Use	ITE Land Use Code	Reduction %	Size	Daily Rate	Daily Trip
Affordable Housing - Income Limits	223		90 Dwelling Units	4.810	433
Housing near a Major Bus Stop		*2%*			*-9*
General Office Building	710		-12,120 Square Feet	10.840	-131
Employment near a Major Bus Stop		*2%*			*3*
Net Project Trips					**296**

Source: ITE Trip Generation Manual, 11th Edition 2021

Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	**CO2e**	
Year	Tons				MT	
Construction Equipment						
2023	0.29	2.89	0.13	0.12	462.11	
2024	0.96	2.27	0.10	0.10	426.01	
EMFAC						
2023	0.02	0.04	0.004	0.002	55.85	
2024	0.01	0.03	0.002	0.001	33.05	
Total Construction Emissions by Year						
2023	0.31	2.93	0.13	0.12	517.96	
2024	0.97	2.30	0.11	0.10	459.06	
	Total Construction Emissions					
Tons	1.27	5.23	0.24	0.22	977.02	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2023	1.69	16.12	0.72	0.66		**364**
2024	8.80	20.94	0.97	0.91		**219**
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		
	Total Construction Emissions					
Pounds	10.49	37.06	1.69	1.56	0.00	
Average	4.36	17.93	0.81	0.75	0.00	583.00
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Operational Criteria Air Pollutants						
Unmitigated	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons					
Total	0.71	0.17	0.32	0.08		
	Existing Use Emissions					
Total	0.12	0.06	0.08	0.02		
	Net Annual Operational Emissions					
Tons/year	0.59	0.11	0.24	0.06		
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**		
	Average Daily Emissions					
Pounds Per Day	3.21	0.60	1.32	0.35		
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Category	**CO2e**			
	Project	Existing	Project 2030	Existing
Area	1.12	0.00	1.12	0.00
Energy	0.41	10.74	0.41	10.74
Mobile	318.54	84.25	291.28	84.25
Waste	20.82	5.67	20.82	5.67
Water	3.64	2.95	3.64	2.95
TOTAL	344.53	103.60	317.27	103.60
Net GHG Emissions		240.93		213.67
Service Population	245			
Per Capita Emissions		1.41		1.30

	90	units
CA DOF 2020 =	2.72	pphh

Date: 4/14/2022 1:0

Agenda Item # 10.

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

330 Distel Circle, Los Altos

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	90.00	Space	0.00	18,130.00	0
Apartments Mid Rise	90.00	Dwelling Unit	0.87	97,970.00	257

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2025
Utility Company	Silicon Valley Clean Energy				
CO2 Intensity (lb/MWhr)	2	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Provided land uses - construction sheet and plans

Construction Phase - Provided construction schedule

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Trips and VMT - EMFAC2021 0 trip adjustment, pavement demo = 1,233 tons, build const = 75 cement truck round trips, paving = 650-cy asphalt

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - existing building demo = 9,500-sf

Grading - grading = 125-cy export

Vehicle Trips - provided trip gen w/ adjustments

Vehicle Emission Factors - EMFAC2021 vehicle emission factors Santa Clara Co 2025

Woodstoves - no fireplaces

Energy Use - reach code - all electric no natural gas

Water And Wastewater - wastewater treatment 100% aerobic, no septic tanks of lagoons

Construction Off-road Equipment Mitigation - Enhanced BMPs, Tier 4 interim and electric crane mitigation

Fleet Mix - EMFAC2021 fleet mix Santa Clara Co 2025

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	NumDays	100.00	120.00
tblConstructionPhase	NumDays	10.00	60.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	NumDays	1.00	90.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblEnergyUse	NT24E	3,054.10	3,055.00
tblEnergyUse	NT24NG	3,155.00	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblEnergyUse	T24E	70.89	72.42
tblEnergyUse	T24NG	5,226.68	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	13.50	0.00
tblFireplaces	NumberNoFireplace	3.60	0.00
tblFireplaces	NumberWood	15.30	0.00
tblFleetMix	HHD	6.3770e-003	7.4400e-003
tblFleetMix	HHD	6.3770e-003	7.4400e-003
tblFleetMix	LDA	0.57	0.53
tblFleetMix	LDA	0.57	0.53
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.1580e-003	5.7400e-003
tblFleetMix	LHD2	5.1580e-003	5.7400e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	2.7200e-003	2.5850e-003
tblFleetMix	MH	2.7200e-003	2.5850e-003
tblFleetMix	MHD	8.0300e-003	9.4250e-003
tblFleetMix	MHD	8.0300e-003	9.4250e-003
tblFleetMix	OBUS	8.9300e-004	1.0570e-003

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tblFleetMix	OBUS	8.9300e-004	1.0570e-003
tblFleetMix	SBUS	9.0000e-004	6.8400e-004
tblFleetMix	SBUS	9.0000e-004	6.8400e-004
tblFleetMix	UBUS	3.7200e-004	4.1300e-004
tblFleetMix	UBUS	3.7200e-004	4.1300e-004
tblGrading	MaterialExported	0.00	125.00
tblLandUse	LandUseSquareFeet	36,000.00	18,130.00
tblLandUse	LandUseSquareFeet	90,000.00	97,970.00
tblLandUse	LotAcreage	0.81	0.00
tblLandUse	LotAcreage	2.37	0.87
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	43.00	0.00
tblTripsAndVMT	HaulingTripNumber	16.00	0.00
tblTripsAndVMT	VendorTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	28.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	72.00	0.00
tblTripsAndVMT	WorkerTripNumber	14.00	0.00
tblTripsAndVMT	WorkerTripNumber	50.00	0.00
tblVehicleEF	HHD	0.02	0.23
tblVehicleEF	HHD	0.05	0.12
tblVehicleEF	HHD	6.32	5.18
tblVehicleEF	HHD	0.41	0.76
tblVehicleEF	HHD	5.9250e-003	6.8500e-004
tblVehicleEF	HHD	1,030.26	813.97
tblVehicleEF	HHD	1,386.58	1,586.83
tblVehicleEF	HHD	0.05	0.02
tblVehicleEF	HHD	0.16	0.13
tblVehicleEF	HHD	0.22	0.25
tblVehicleEF	HHD	6.0000e-006	1.4000e-005
tblVehicleEF	HHD	5.35	4.06
tblVehicleEF	HHD	2.67	1.77
tblVehicleEF	HHD	2.32	2.75
tblVehicleEF	HHD	2.5050e-003	2.0970e-003
tblVehicleEF	HHD	0.06	0.08
tblVehicleEF	HHD	0.04	0.04

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tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	2.3970e-003	2.0000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8870e-003	8.7820e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	2.0000e-006	1.6100e-004
tblVehicleEF	HHD	8.6000e-005	4.8000e-005
tblVehicleEF	HHD	0.43	0.33
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	3.8000e-005	4.3200e-004
tblVehicleEF	HHD	2.0000e-006	0.00
tblVehicleEF	HHD	9.5860e-003	7.0990e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.0000e-006	1.6100e-004
tblVehicleEF	HHD	8.6000e-005	4.8000e-005
tblVehicleEF	HHD	0.49	0.59
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	0.08	0.14
tblVehicleEF	HHD	3.8000e-005	4.3200e-004
tblVehicleEF	HHD	3.0000e-006	0.00
tblVehicleEF	LDA	1.5230e-003	1.8410e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.49	0.61
tblVehicleEF	LDA	2.00	2.71
tblVehicleEF	LDA	226.89	240.29
tblVehicleEF	LDA	48.21	62.25
tblVehicleEF	LDA	3.7350e-003	3.8850e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.15	0.22
tblVehicleEF	LDA	0.04	7.1370e-003
tblVehicleEF	LDA	1.2360e-003	1.1200e-003
tblVehicleEF	LDA	1.6250e-003	1.8490e-003
tblVehicleEF	LDA	0.02	2.4980e-003
tblVehicleEF	LDA	1.1380e-003	1.0310e-003
tblVehicleEF	LDA	1.4940e-003	1.7000e-003
tblVehicleEF	LDA	0.03	0.26
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.03	0.00
tblVehicleEF	LDA	5.5720e-003	6.9420e-003
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.18	0.27
tblVehicleEF	LDA	2.2440e-003	2.3750e-003
tblVehicleEF	LDA	4.7700e-004	6.1500e-004
tblVehicleEF	LDA	0.03	0.26
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.03	0.00
tblVehicleEF	LDA	8.1000e-003	0.01
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.19	0.30
tblVehicleEF	LDT1	3.1240e-003	5.5770e-003
tblVehicleEF	LDT1	0.05	0.10
tblVehicleEF	LDT1	0.77	1.31
tblVehicleEF	LDT1	2.16	4.86
tblVehicleEF	LDT1	272.37	321.80
tblVehicleEF	LDT1	58.50	84.48

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tblVehicleEF	LDT1	5.2980e-003	8.6270e-003
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.06	0.11
tblVehicleEF	LDT1	0.20	0.36
tblVehicleEF	LDT1	0.04	9.2190e-003
tblVehicleEF	LDT1	1.5310e-003	1.8130e-003
tblVehicleEF	LDT1	1.9900e-003	2.7500e-003
tblVehicleEF	LDT1	0.02	3.2270e-003
tblVehicleEF	LDT1	1.4090e-003	1.6690e-003
tblVehicleEF	LDT1	1.8300e-003	2.5290e-003
tblVehicleEF	LDT1	0.07	0.56
tblVehicleEF	LDT1	0.13	0.16
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.01	0.02
tblVehicleEF	LDT1	0.07	0.44
tblVehicleEF	LDT1	0.25	0.50
tblVehicleEF	LDT1	2.6950e-003	3.1810e-003
tblVehicleEF	LDT1	5.7900e-004	8.3500e-004
tblVehicleEF	LDT1	0.07	0.56
tblVehicleEF	LDT1	0.13	0.16
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.07	0.44
tblVehicleEF	LDT1	0.27	0.54
tblVehicleEF	LDT2	2.6570e-003	2.5920e-003
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.69	0.78
tblVehicleEF	LDT2	2.60	3.42
tblVehicleEF	LDT2	290.83	333.60

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tblVehicleEF	LDT2	63.01	85.20
tblVehicleEF	LDT2	5.2770e-003	5.6510e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.23	0.31
tblVehicleEF	LDT2	0.04	8.8600e-003
tblVehicleEF	LDT2	1.3020e-003	1.2920e-003
tblVehicleEF	LDT2	1.6610e-003	2.0610e-003
tblVehicleEF	LDT2	0.02	3.1010e-003
tblVehicleEF	LDT2	1.1980e-003	1.1890e-003
tblVehicleEF	LDT2	1.5270e-003	1.8950e-003
tblVehicleEF	LDT2	0.06	0.28
tblVehicleEF	LDT2	0.11	0.08
tblVehicleEF	LDT2	0.06	0.00
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.21
tblVehicleEF	LDT2	0.26	0.35
tblVehicleEF	LDT2	2.8770e-003	3.2980e-003
tblVehicleEF	LDT2	6.2400e-004	8.4200e-004
tblVehicleEF	LDT2	0.06	0.28
tblVehicleEF	LDT2	0.11	0.08
tblVehicleEF	LDT2	0.06	0.00
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.06	0.21
tblVehicleEF	LDT2	0.29	0.39
tblVehicleEF	LHD1	4.8220e-003	5.1940e-003
tblVehicleEF	LHD1	7.2910e-003	7.2220e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.18	0.20

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tblVehicleEF	LHD1	0.66	0.82
tblVehicleEF	LHD1	1.01	2.16
tblVehicleEF	LHD1	8.77	8.60
tblVehicleEF	LHD1	764.47	764.97
tblVehicleEF	LHD1	11.28	17.60
tblVehicleEF	LHD1	7.4300e-004	6.3700e-004
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	0.57	0.59
tblVehicleEF	LHD1	0.29	0.42
tblVehicleEF	LHD1	8.5700e-004	6.8500e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.8070e-003	9.4200e-003
tblVehicleEF	LHD1	9.0910e-003	0.01
tblVehicleEF	LHD1	2.3900e-004	2.0600e-004
tblVehicleEF	LHD1	8.2000e-004	6.5600e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.4520e-003	2.3550e-003
tblVehicleEF	LHD1	8.6510e-003	0.01
tblVehicleEF	LHD1	2.2000e-004	1.8900e-004
tblVehicleEF	LHD1	1.8120e-003	0.12
tblVehicleEF	LHD1	0.07	0.03
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.4400e-004	0.00
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	0.19	0.17
tblVehicleEF	LHD1	0.06	0.11
tblVehicleEF	LHD1	8.5000e-005	8.4000e-005

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tblVehicleEF	LHD1	7.4620e-003	7.4710e-003
tblVehicleEF	LHD1	1.1200e-004	1.7400e-004
tblVehicleEF	LHD1	1.8120e-003	0.12
tblVehicleEF	LHD1	0.07	0.03
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	9.4400e-004	0.00
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.19	0.17
tblVehicleEF	LHD1	0.07	0.12
tblVehicleEF	LHD2	2.9270e-003	3.0230e-003
tblVehicleEF	LHD2	6.3420e-003	6.4550e-003
tblVehicleEF	LHD2	7.0910e-003	0.01
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	0.56	0.53
tblVehicleEF	LHD2	0.57	1.20
tblVehicleEF	LHD2	13.74	13.69
tblVehicleEF	LHD2	740.94	811.00
tblVehicleEF	LHD2	7.36	9.64
tblVehicleEF	LHD2	1.7280e-003	1.6800e-003
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.68	0.81
tblVehicleEF	LHD2	0.16	0.23
tblVehicleEF	LHD2	1.4520e-003	1.3890e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.2200e-004	9.1000e-005

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tblVehicleEF	LHD2	1.3890e-003	1.3290e-003
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	2.6970e-003	2.6660e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.1200e-004	8.4000e-005
tblVehicleEF	LHD2	9.1300e-004	0.06
tblVehicleEF	LHD2	0.04	0.02
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.8500e-004	0.00
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	7.1520e-003	7.8120e-003
tblVehicleEF	LHD2	7.3000e-005	9.5000e-005
tblVehicleEF	LHD2	9.1300e-004	0.06
tblVehicleEF	LHD2	0.04	0.02
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.8500e-004	0.00
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	MCY	0.32	0.16
tblVehicleEF	MCY	0.25	0.18
tblVehicleEF	MCY	18.37	12.31
tblVehicleEF	MCY	9.09	7.97
tblVehicleEF	MCY	210.00	187.27
tblVehicleEF	MCY	60.43	47.31
tblVehicleEF	MCY	0.07	0.04
tblVehicleEF	MCY	0.02	7.6910e-003

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tblVehicleEF	MCY	1.14	0.56
tblVehicleEF	MCY	0.27	0.13
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.0310e-003	1.9250e-003
tblVehicleEF	MCY	2.9300e-003	3.4640e-003
tblVehicleEF	MCY	5.0400e-003	4.2000e-003
tblVehicleEF	MCY	1.8970e-003	1.7990e-003
tblVehicleEF	MCY	2.7510e-003	3.2530e-003
tblVehicleEF	MCY	0.90	3.86
tblVehicleEF	MCY	0.67	3.56
tblVehicleEF	MCY	0.48	0.00
tblVehicleEF	MCY	2.18	1.02
tblVehicleEF	MCY	0.52	3.76
tblVehicleEF	MCY	1.92	1.31
tblVehicleEF	MCY	2.0780e-003	1.8510e-003
tblVehicleEF	MCY	5.9800e-004	4.6800e-004
tblVehicleEF	MCY	0.90	0.09
tblVehicleEF	MCY	0.67	3.56
tblVehicleEF	MCY	0.48	0.00
tblVehicleEF	MCY	2.71	1.24
tblVehicleEF	MCY	0.52	3.76
tblVehicleEF	MCY	2.09	1.42
tblVehicleEF	MDV	2.9890e-003	3.3070e-003
tblVehicleEF	MDV	0.06	0.09
tblVehicleEF	MDV	0.72	0.87
tblVehicleEF	MDV	2.79	3.62
tblVehicleEF	MDV	351.34	401.56
tblVehicleEF	MDV	74.92	101.74
tblVehicleEF	MDV	6.9960e-003	7.5950e-003

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tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.06	0.09
tblVehicleEF	MDV	0.26	0.38
tblVehicleEF	MDV	0.04	8.9720e-003
tblVehicleEF	MDV	1.3680e-003	1.3100e-003
tblVehicleEF	MDV	1.7330e-003	2.0690e-003
tblVehicleEF	MDV	0.02	3.1400e-003
tblVehicleEF	MDV	1.2620e-003	1.2070e-003
tblVehicleEF	MDV	1.5940e-003	1.9020e-003
tblVehicleEF	MDV	0.07	0.34
tblVehicleEF	MDV	0.12	0.09
tblVehicleEF	MDV	0.06	0.00
tblVehicleEF	MDV	0.01	0.01
tblVehicleEF	MDV	0.06	0.26
tblVehicleEF	MDV	0.31	0.45
tblVehicleEF	MDV	3.4720e-003	3.9670e-003
tblVehicleEF	MDV	7.4100e-004	1.0060e-003
tblVehicleEF	MDV	0.07	0.34
tblVehicleEF	MDV	0.12	0.09
tblVehicleEF	MDV	0.06	0.00
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.06	0.26
tblVehicleEF	MDV	0.34	0.49
tblVehicleEF	MH	8.5740e-003	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.80	1.11
tblVehicleEF	MH	1.94	2.37
tblVehicleEF	MH	1,472.19	1,680.13
tblVehicleEF	MH	17.63	22.07

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tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.26	1.49
tblVehicleEF	MH	0.24	0.30
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	2.5000e-004	2.9600e-004
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2830e-003	3.3090e-003
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	2.3000e-004	2.7200e-004
tblVehicleEF	MH	0.58	30.56
tblVehicleEF	MH	0.05	7.99
tblVehicleEF	MH	0.21	0.00
tblVehicleEF	MH	0.06	0.08
tblVehicleEF	MH	0.01	0.19
tblVehicleEF	MH	0.09	0.11
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	1.7400e-004	2.1800e-004
tblVehicleEF	MH	0.58	30.56
tblVehicleEF	MH	0.05	7.99
tblVehicleEF	MH	0.21	0.00
tblVehicleEF	MH	0.08	0.10
tblVehicleEF	MH	0.01	0.19
tblVehicleEF	MH	0.10	0.12
tblVehicleEF	MHD	3.6170e-003	0.01
tblVehicleEF	MHD	1.5120e-003	9.5360e-003
tblVehicleEF	MHD	8.8700e-003	8.3140e-003

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tblVehicleEF	MHD	0.39	0.67
tblVehicleEF	MHD	0.21	0.30
tblVehicleEF	MHD	1.02	1.00
tblVehicleEF	MHD	70.85	158.59
tblVehicleEF	MHD	1,065.91	1,213.65
tblVehicleEF	MHD	8.98	8.21
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.14	0.16
tblVehicleEF	MHD	7.2880e-003	5.8580e-003
tblVehicleEF	MHD	0.40	0.86
tblVehicleEF	MHD	1.45	1.01
tblVehicleEF	MHD	1.70	1.40
tblVehicleEF	MHD	3.2300e-004	1.7620e-003
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	7.0640e-003	0.01
tblVehicleEF	MHD	1.1300e-004	1.0100e-004
tblVehicleEF	MHD	3.0900e-004	1.6850e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	6.7520e-003	0.01
tblVehicleEF	MHD	1.0400e-004	9.3000e-005
tblVehicleEF	MHD	3.5500e-004	0.02
tblVehicleEF	MHD	0.02	5.6030e-003
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	1.8800e-004	0.00
tblVehicleEF	MHD	0.01	0.03
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	6.7200e-004	1.4720e-003
tblVehicleEF	MHD	0.01	0.01

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tblVehicleEF	MHD	8.9000e-005	8.1000e-005
tblVehicleEF	MHD	3.5500e-004	0.02
tblVehicleEF	MHD	0.02	5.6030e-003
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	1.8800e-004	0.00
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	OBUS	7.0670e-003	7.5140e-003
tblVehicleEF	OBUS	3.3170e-003	9.5930e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.60	0.52
tblVehicleEF	OBUS	0.39	0.44
tblVehicleEF	OBUS	1.79	1.87
tblVehicleEF	OBUS	94.25	87.04
tblVehicleEF	OBUS	1,303.83	1,366.10
tblVehicleEF	OBUS	14.82	14.86
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.13	0.16
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.39	0.36
tblVehicleEF	OBUS	1.46	0.97
tblVehicleEF	OBUS	1.10	0.99
tblVehicleEF	OBUS	1.2700e-004	4.0400e-004
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	7.4740e-003	0.02
tblVehicleEF	OBUS	1.4700e-004	1.3100e-004
tblVehicleEF	OBUS	1.2200e-004	3.8700e-004
tblVehicleEF	OBUS	0.06	0.02

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tblVehicleEF	OBUS	7.1370e-003	0.01
tblVehicleEF	OBUS	1.3500e-004	1.2100e-004
tblVehicleEF	OBUS	1.0870e-003	0.07
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	4.8600e-004	0.00
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.09	0.09
tblVehicleEF	OBUS	8.9500e-004	8.2300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.0870e-003	0.07
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.06	0.05
tblVehicleEF	OBUS	4.8600e-004	0.00
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.09	0.10
tblVehicleEF	SBUS	0.06	0.08
tblVehicleEF	SBUS	5.7290e-003	0.09
tblVehicleEF	SBUS	5.1560e-003	4.8980e-003
tblVehicleEF	SBUS	2.37	1.69
tblVehicleEF	SBUS	0.47	0.86
tblVehicleEF	SBUS	0.74	0.67
tblVehicleEF	SBUS	345.98	189.05
tblVehicleEF	SBUS	1,037.30	1,017.84
tblVehicleEF	SBUS	4.26	3.78
tblVehicleEF	SBUS	0.05	0.02
tblVehicleEF	SBUS	0.13	0.13

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tblVehicleEF	SBUS	5.0100e-003	4.3540e-003
tblVehicleEF	SBUS	3.34	1.35
tblVehicleEF	SBUS	4.41	2.41
tblVehicleEF	SBUS	0.90	0.49
tblVehicleEF	SBUS	3.3290e-003	1.2090e-003
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	5.1000e-005	4.1000e-005
tblVehicleEF	SBUS	3.1850e-003	1.1550e-003
tblVehicleEF	SBUS	0.32	0.02
tblVehicleEF	SBUS	2.7110e-003	2.6430e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	4.7000e-005	3.8000e-005
tblVehicleEF	SBUS	5.9800e-004	0.03
tblVehicleEF	SBUS	5.7950e-003	7.7750e-003
tblVehicleEF	SBUS	0.26	0.19
tblVehicleEF	SBUS	2.6700e-004	0.00
tblVehicleEF	SBUS	0.08	0.05
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.2940e-003	1.7180e-003
tblVehicleEF	SBUS	9.9090e-003	9.4580e-003
tblVehicleEF	SBUS	4.2000e-005	3.7000e-005
tblVehicleEF	SBUS	5.9800e-004	0.03
tblVehicleEF	SBUS	5.7950e-003	7.7750e-003
tblVehicleEF	SBUS	0.38	0.30
tblVehicleEF	SBUS	2.6700e-004	0.00
tblVehicleEF	SBUS	0.09	0.15

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tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	UBUS	1.66	0.50
tblVehicleEF	UBUS	1.6700e-003	3.7330e-003
tblVehicleEF	UBUS	12.57	5.88
tblVehicleEF	UBUS	0.14	0.52
tblVehicleEF	UBUS	1,657.49	1,082.15
tblVehicleEF	UBUS	1.39	3.18
tblVehicleEF	UBUS	0.28	0.17
tblVehicleEF	UBUS	1.1100e-003	6.1420e-003
tblVehicleEF	UBUS	0.71	0.30
tblVehicleEF	UBUS	0.01	0.04
tblVehicleEF	UBUS	0.07	0.12
tblVehicleEF	UBUS	0.03	0.04
tblVehicleEF	UBUS	5.2020e-003	5.6850e-003
tblVehicleEF	UBUS	1.5000e-005	1.2000e-005
tblVehicleEF	UBUS	0.03	0.04
tblVehicleEF	UBUS	8.3320e-003	0.01
tblVehicleEF	UBUS	4.9760e-003	5.4350e-003
tblVehicleEF	UBUS	1.4000e-005	1.1000e-005
tblVehicleEF	UBUS	2.4000e-005	0.01
tblVehicleEF	UBUS	2.0100e-004	3.7860e-003
tblVehicleEF	UBUS	1.1000e-005	0.00
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	4.0000e-005	7.9870e-003
tblVehicleEF	UBUS	6.9810e-003	0.01
tblVehicleEF	UBUS	0.01	8.8540e-003
tblVehicleEF	UBUS	1.4000e-005	3.1000e-005
tblVehicleEF	UBUS	2.4000e-005	0.01

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tblVehicleEF	UBUS	2.0100e-004	3.7860e-003
tblVehicleEF	UBUS	1.1000e-005	0.00
tblVehicleEF	UBUS	1.70	0.57
tblVehicleEF	UBUS	4.0000e-005	7.9870e-003
tblVehicleEF	UBUS	7.6430e-003	0.01
tblVehicleTrips	ST_TR	4.91	4.25
tblVehicleTrips	SU_TR	4.09	3.54
tblVehicleTrips	WD_TR	5.44	4.71
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	1.80	0.00
tblWoodstoves	NumberNoncatalytic	1.80	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

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2023	0.2903	2.8864	2.7085	5.2400e-003	0.7563	0.1271	0.8837	0.3612	0.1181	0.4793	0.0000	458.7035	458.7035	0.1364	0.0000	462.1137
2024	0.9562	2.2712	2.8685	4.9200e-003	0.0000	0.1039	0.1040	0.0000	0.0985	0.0985	0.0000	423.5841	423.5841	0.0971	0.0000	426.011
Maximum	**0.9562**	**2.8864**	**2.8685**	**5.2400e-003**	**0.7563**	**0.1274**	**0.8837**	**0.3612**	**0.1181**	**0.4793**	**0.0000**	**458.7035**	**458.7035**	**0.1364**	**0.0000**	**462.1137**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0842	1.8348	3.2785	5.0200e-003	0.2950	9.16E-03	0.3041	0.0704	9.1600e-003	0.0796	0.0000	438.9318	438.9318	0.1300	0.0000	442.1822
2024	0.7657	1.7024	2.7889	4.1000e-003	0.0000	0.0123	0.0123	0.0000	0.0123	0.0123	0.0000	352.1049	352.1049	0.0740	0.0000	353.9539
Maximum	**0.7657**	**1.8348**	**3.2785**	**5.0200e-003**	**0.2950**	**0.0123**	**0.3041**	**0.0704**	**0.0123**	**0.0796**	**0.0000**	**438.9318**	**438.9318**	**0.1300**	**0.0000**	**442.1822**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**31.81**	**31.42**	**-8.79**	**10.24**	**61.00**	**90.74**	**67.97**	**80.50**	**90.11**	**84.10**	**0.00**	**10.34**	**10.34**	**12.64**	**0.00**	**10.36**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-3-2023**	**4-2-2023**	0.9634	0.5378
2	**4-3-2023**	**7-2-2023**	1.3487	0.6618
3	**7-3-2023**	**10-2-2023**	0.3422	0.3618
4	**10-3-2023**	**1-2-2024**	0.5450	0.3678
5	**1-3-2024**	**4-2-2024**	1.0333	0.4613

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6	**4-3-2024**	**7-2-2024**	1.6620	1.5339
7	**7-3-2024**	**9-30-2024**	0.5093	0.4628
		Highest	1.6620	1.5339

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4733	7.7000e-003	0.6685	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0500e-003	0.0000	1.1194
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.4054	0.4054	0.0000	0.0000	0.4054
Mobile	0.2372	0.1649	1.5114	3.4000e-003	0.3153	2.3600e-003	0.3177	0.0786	2.2000e-003	0.0808	0.0000	313.7092	313.7092	0.0173	0.0148	318.5427
Waste						0.0000	0.0000		0.0000	0.0000	8.4038	0.0000	8.4038	0.4967	0.0000	20.8201
Water						0.0000	0.0000		0.0000	0.0000	2.0746	0.0405	2.1152	7.1400e-003	4.5100e-003	3.6382
Total	**0.7104**	**0.1726**	**2.1799**	**3.4400e-003**	**0.3153**	**6.0700e-003**	**0.3214**	**0.0786**	**5.9100e-003**	**0.0846**	**10.4785**	**315.2483**	**325.7268**	**0.5221**	**0.0193**	**344.5258**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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Area	0.4733	7.7000e-003	0.6685	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0500e-003	0.0000	1.1194
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.4054	0.4054	0.0000	0.0000	0.4054
Mobile	0.2372	0.1649	1.5114	3.4000e-003	0.3153	2.3600e-003	0.3177	0.0786	2.2000e-003	0.0808	0.0000	313.7092	313.7092	0.0173	0.0148	318.5427
Waste						0.0000	0.0000		0.0000	0.0000	8.4038	0.0000	8.4038	0.4967	0.0000	20.8201
Water						0.0000	0.0000		0.0000	0.0000	2.0746	0.0405	2.1152	7.1400e-003	4.5100e-003	3.6382
Total	**0.7104**	**0.1726**	**2.1799**	**3.4400e-003**	**0.3153**	**6.0700e-003**	**0.3214**	**0.0786**	**5.9100e-003**	**0.0846**	**10.4785**	**315.2483**	**325.7268**	**0.5221**	**0.0193**	**344.5258**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2023	3/3/2023	7	60	
2	Site Preparation	Site Preparation	3/4/2023	6/1/2023	7	90	
3	Grading	Grading	6/5/2023	7/4/2023	7	30	
4	Trenching	Trenching	7/5/2023	12/1/2023	7	150	
5	Building Construction	Building Construction	12/6/2023	4/3/2024	7	120	
6	Architectural Coating	Architectural Coating	4/7/2024	6/5/2024	7	60	
7	Paving	Paving	6/8/2024	8/6/2024	7	60	

Acres of Grading (Site Preparation Phase): 180

Acres of Grading (Grading Phase): 45

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Acres of Paving: 0

Residential Indoor: 198,389; Residential Outdoor: 66,130; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,088

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Graders	2	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	2	8.00	81	0.73
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Excavators	2	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	3	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Aerial Lifts	2	8.00	63	0.31
Architectural Coating	Air Compressors	10	8.00	78	0.48
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36

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Paving	Rollers	4	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	12	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	20	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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Category	tons/yr										MT/yr					
Fugitive Dust					4.6800e-003	0.0000	4.6800e-003	7.1000e-004	0.0000	7.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0510	0.4764	0.5323	9.4000e-004		0.0226	0.0226		0.0211	0.0211	0.0000	82.2734	82.2734	0.0222	0.0000	82.8281
Total	**0.0510**	**0.4764**	**0.5323**	**9.4000e-004**	**4.6800e-003**	**0.0226**	**0.0273**	**7.1000e-004**	**0.0211**	**0.0218**	**0.0000**	**82.2734**	**82.2734**	**0.0222**	**0.0000**	**82.8281**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	tons/yr										MT/yr					
Fugitive Dust					1.8200e-003	0.0000	1.8200e-003	1.4000e-004	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0156	0.3523	0.6273	9.4000e-004		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	82.2733	82.2733	0.0222	0.0000	82.8280
Total	**0.0156**	**0.3523**	**0.6273**	**9.4000e-004**	**1.8200e-003**	**1.4800e-003**	**3.3000e-003**	**1.4000e-004**	**1.4800e-003**	**1.6200e-003**	**0.0000**	**82.2733**	**82.2733**	**0.0222**	**0.0000**	**82.8280**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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Category	tons/yr										MT/yr					
Fugitive Dust					0.6374	0.0000	0.6374	0.3082	0.0000	0.3082	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1098	1.1984	0.6327	1.6400e-003		0.0493	0.0493		0.0453	0.0453	0.0000	144.4682	144.4682	0.0467	0.0000	145.6363
Total	**0.1098**	**1.1984**	**0.6327**	**1.6400e-003**	**0.6374**	**0.0493**	**0.6867**	**0.3082**	**0.0453**	**0.3536**	**0.0000**	**144.4682**	**144.4682**	**0.0467**	**0.0000**	**145.6363**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	tons/yr										MT/yr					
Fugitive Dust					0.2486	0.0000	0.2486	0.0601	0.0000	0.0601	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.4812	0.9350	1.6400e-003		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	144.4680	144.4680	0.0467	0.0000	145.6361
Total	**0.0286**	**0.4812**	**0.9350**	**1.6400e-003**	**0.2486**	**2.6800e-003**	**0.2513**	**0.0601**	**2.6800e-003**	**0.0628**	**0.0000**	**144.4680**	**144.4680**	**0.0467**	**0.0000**	**145.6361**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	tons/yr										MT/yr					
Fugitive Dust					0.1142	0.0000	0.1142	0.0522	0.0000	0.0522	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4630	0.4695	9.2000e-004		0.0200	0.0200		0.0187	0.0187	0.0000	80.2534	80.2534	0.0215	0.0000	80.7918
Total	**0.0477**	**0.4630**	**0.4695**	**9.2000e-004**	**0.1142**	**0.0200**	**0.1342**	**0.0522**	**0.0187**	**0.0709**	**0.0000**	**80.2534**	**80.2534**	**0.0215**	**0.0000**	**80.7918**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	tons/yr										MT/yr					
Fugitive Dust					0.0445	0.0000	0.0445	0.0102	0.0000	0.0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.3302	0.5945	9.2000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	80.2533	80.2533	0.0215	0.0000	80.7917
Total	**0.0147**	**0.3302**	**0.5945**	**9.2000e-004**	**0.0445**	**1.4400e-003**	**0.0460**	**0.0102**	**1.4400e-003**	**0.0116**	**0.0000**	**80.2533**	**80.2533**	**0.0215**	**0.0000**	**80.7917**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	tons/yr										MT/yr					
Off-Road	0.0510	0.4627	0.8234	1.2400e-003		0.0227	0.0227		0.0209	0.0209	0.0000	109.0911	109.0911	0.0353	0.0000	109.9731
Total	**0.0510**	**0.4627**	**0.8234**	**1.2400e-003**		**0.0227**	**0.0227**		**0.0209**	**0.0209**	**0.0000**	**109.0911**	**109.0911**	**0.0353**	**0.0000**	**109.9731**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-Road	0.0200	0.5447	0.9390	1.2400e-003		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003	0.0000	109.0909	109.0909	0.0353	0.0000	109.9730
Total	**0.0200**	**0.5447**	**0.9390**	**1.2400e-003**		**2.0300e-003**	**2.0300e-003**		**2.0300e-003**	**2.0300e-003**	**0.0000**	**109.0909**	**109.0909**	**0.0353**	**0.0000**	**109.9730**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0309	0.2859	0.2507	5.0000e-004		0.0128	0.0128		0.0121	0.0121	0.0000	42.6174	42.6174	0.0107	0.0000	42.8844

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.0309**	**0.2859**	**0.2507**	**5.0000e-004**		**0.0128**	**0.0128**		**0.0121**	**0.0121**	**0.0000**	**42.6174**	**42.6174**	**0.0107**	**0.0000**	**42.8844**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.4200e-003	0.1264	0.1828	2.7000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003	0.0000	22.8462	22.8462	4.2900e-003	0.0000	22.9534
Total	**5.4200e-003**	**0.1264**	**0.1828**	**2.7000e-004**		**1.5300e-003**	**1.5300e-003**		**1.5300e-003**	**1.5300e-003**	**0.0000**	**22.8462**	**22.8462**	**4.2900e-003**	**0.0000**	**22.9534**

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1047	0.9627	0.8961	1.8000e-003		0.0413	0.0413		0.0387	0.0387	0.0000	154.0929	154.0929	0.0384	0.0000	155.0530
Total	**0.1047**	**0.9627**	**0.8961**	**1.8000e-003**		**0.0413**	**0.0413**		**0.0387**	**0.0387**	**0.0000**	**154.0929**	**154.0929**	**0.0384**	**0.0000**	**155.0530**

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0196	0.4569	0.6607	9.9000e-004		5.5200e-003	5.5200e-003		5.5200e-003	5.5200e-003	0.0000	82.6140	82.6140	0.0153	0.0000	82.9962
Total	**0.0196**	**0.4569**	**0.6607**	**9.9000e-004**		**5.5200e-003**	**5.5200e-003**		**5.5200e-003**	**5.5200e-003**	**0.0000**	**82.6140**	**82.6140**	**0.0153**	**0.0000**	**82.9962**

Mitigated Construction Off-Site

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6934					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0744	0.5191	0.7896	1.2900e-003		0.0249	0.0249		0.0249	0.0249	0.0000	110.9817	110.9817	8.6100e-003	0.0000	111.1971
Total	**0.7678**	**0.5191**	**0.7896**	**1.2900e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**	**0.0000**	**110.9817**	**110.9817**	**8.6100e-003**	**0.0000**	**111.1971**

Unmitigated Construction Off-Site

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6934					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.4806	0.8094	1.2900e-003		3.9000e-003	3.9000e-003		3.9000e-003	3.9000e-003	0.0000	110.9816	110.9816	8.6100e-003	0.0000	111.1969
Total	**0.7177**	**0.4806**	**0.8094**	**1.2900e-003**		**3.9000e-003**	**3.9000e-003**		**3.9000e-003**	**3.9000e-003**	**0.0000**	**110.9816**	**110.9816**	**8.6100e-003**	**0.0000**	**111.1969**

Mitigated Construction Off-Site

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0836	0.7895	1.1828	1.8300e-003		0.0378	0.0378		0.0349	0.0349	0.0000	158.5095	158.5095	0.0501	0.0000	159.7609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0836**	**0.7895**	**1.1828**	**1.8300e-003**		**0.0378**	**0.0378**		**0.0349**	**0.0349**	**0.0000**	**158.5095**	**158.5095**	**0.0501**	**0.0000**	**159.7609**

Unmitigated Construction Off-Site

330 Distel Circle, Los Altos - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0284	0.7649	1.3188	1.8300e-003		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	158.5093	158.5093	0.0501	0.0000	159.7607
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0284**	**0.7649**	**1.3188**	**1.8300e-003**		**2.8500e-003**	**2.8500e-003**		**2.8500e-003**	**2.8500e-003**	**0.0000**	**158.5093**	**158.5093**	**0.0501**	**0.0000**	**159.7607**

Mitigated Construction Off-Site

Date: 4/14/2022 1:0

Agenda Item # 10.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2372	0.1649	1.5114	3.4000e-003	0.3153	2.3600e-003	0.3177	0.0786	2.2000e-003	0.0808	0.0000	313.7092	313.7092	0.0173	0.0148	318.5427
Unmitigated	0.2372	0.1649	1.5114	3.4000e-003	0.3153	2.3600e-003	0.3177	0.0786	2.2000e-003	0.0808	0.0000	313.7092	313.7092	0.0173	0.0148	318.5427

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	423.90	382.50	318.60	930,640	930,640
Enclosed Parking with Elevator	0.00	0.00	0.00		
Total	423.90	382.50	318.60	930,640	930,640

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.528224	0.040364	0.230108	0.128589	0.023276	0.005740	0.009425	0.007440	0.001057	0.000413	0.022096	0.000684	0.002585
Enclosed Parking with Elevator	0.528224	0.040364	0.230108	0.128589	0.023276	0.005740	0.009425	0.007440	0.001057	0.000413	0.022096	0.000684	0.002585

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.4054	0.4054	0.0000	0.0000	0.4054
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.4054	0.4054	0.0000	0.0000	0.4054
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

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Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	348197	0.3159	0.0000	0.0000	0.3159
Enclosed Parking with Elevator	98627.2	0.0895	0.0000	0.0000	0.0895
Total		**0.4054**	**0.0000**	**0.0000**	**0.4054**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	348197	0.3159	0.0000	0.0000	0.3159

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Enclosed Parking with Elevator	98627.2	0.0895	0.0000	0.0000	0.0895
Total		**0.4054**	**0.0000**	**0.0000**	**0.4054**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4733	7.7000e-003	0.6685	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0500e-003	0.0000	1.1194
Unmitigated	0.4733	7.7000e-003	0.6685	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0500e-003	0.0000	1.1194

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0693					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Consumer Products	0.3838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0201	7.7000e-003	0.6685	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0500e-003	0.0000	1.1194
Total	**0.4733**	**7.7000e-003**	**0.6685**	**4.0000e-005**		**3.7100e-003**	**3.7100e-003**		**3.7100e-003**	**3.7100e-003**	**0.0000**	**1.0932**	**1.0932**	**1.0500e-003**	**0.0000**	**1.1194**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0693					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0201	7.7000e-003	0.6685	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0500e-003	0.0000	1.1194
Total	**0.4733**	**7.7000e-003**	**0.6685**	**4.0000e-005**		**3.7100e-003**	**3.7100e-003**		**3.7100e-003**	**3.7100e-003**	**0.0000**	**1.0932**	**1.0932**	**1.0500e-003**	**0.0000**	**1.1194**

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.1152	7.1400e-003	4.5100e-003	3.6382
Unmitigated	2.1152	7.1400e-003	4.5100e-003	3.6382

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.86386 / 3.69678	2.1152	7.1400e-003	4.5100e-003	3.6382
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2.1152**	**7.1400e-003**	**4.5100e-003**	**3.6382**

Mitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.86386 / 3.69678	2.1152	7.1400e-003	4.5100e-003	3.6382
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2.1152**	**7.1400e-003**	**4.5100e-003**	**3.6382**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.4038	0.4967	0.0000	20.8201
Unmitigated	8.4038	0.4967	0.0000	20.8201

8.2 Waste by Land Use

Unmitigated

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	41.4	8.4038	0.4967	0.0000	20.8201
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**8.4038**	**0.4967**	**0.0000**	**20.8201**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	41.4	8.4038	0.4967	0.0000	20.8201
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**8.4038**	**0.4967**	**0.0000**	**20.8201**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	12.12	1000sqft	0.28	12,120.00	0
Parking Lot	0.59	Acre	0.59	25,700.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Silicon Valley Clean Energy				
CO2 Intensity (lb/MWhr)	2	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Traffic provided existing land use

Construction Phase - Existing use - no construction

Off-road Equipment - Existing use - no construction

Grading -

Vehicle Trips - provided trip gen w/ reductions

Vehicle Emission Factors - EMFAC2021 vehicle emission factors Santa Clara Co 2022

Fleet Mix - EMFAC2021 fleet mix Santa Clara Co 2022

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	6.4120e-003	7.0510e-003

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tblFleetMix	HHD	6.4120e-003	7.0510e-003
tblFleetMix	LDA	0.57	0.54
tblFleetMix	LDA	0.57	0.54
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.19	0.22
tblFleetMix	LDT2	0.19	0.22
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	4.9710e-003	5.4180e-003
tblFleetMix	LHD2	4.9710e-003	5.4180e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	2.9050e-003	2.8740e-003
tblFleetMix	MH	2.9050e-003	2.8740e-003
tblFleetMix	MHD	8.0870e-003	9.3840e-003
tblFleetMix	MHD	8.0870e-003	9.3840e-003
tblFleetMix	OBUS	9.3900e-004	1.0660e-003
tblFleetMix	OBUS	9.3900e-004	1.0660e-003
tblFleetMix	SBUS	9.3900e-004	6.7800e-004
tblFleetMix	SBUS	9.3900e-004	6.7800e-004
tblFleetMix	UBUS	3.9800e-004	4.2400e-004
tblFleetMix	UBUS	3.9800e-004	4.2400e-004
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00

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tblVehicleEF	HHD	0.02	0.21
tblVehicleEF	HHD	0.05	0.13
tblVehicleEF	HHD	5.94	4.98
tblVehicleEF	HHD	0.53	0.80
tblVehicleEF	HHD	5.8680e-003	4.3700e-004
tblVehicleEF	HHD	1,105.70	879.58
tblVehicleEF	HHD	1,510.66	1,666.15
tblVehicleEF	HHD	0.05	0.03
tblVehicleEF	HHD	0.17	0.14
tblVehicleEF	HHD	0.24	0.27
tblVehicleEF	HHD	1.2000e-005	2.4000e-005
tblVehicleEF	HHD	5.92	4.48
tblVehicleEF	HHD	3.51	2.39
tblVehicleEF	HHD	2.05	2.43
tblVehicleEF	HHD	3.3620e-003	2.4760e-003
tblVehicleEF	HHD	0.06	0.08
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	3.2170e-003	2.3640e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8730e-003	8.7800e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	3.0000e-006	3.3600e-004
tblVehicleEF	HHD	1.5200e-004	1.0000e-004
tblVehicleEF	HHD	0.43	0.33
tblVehicleEF	HHD	2.0000e-006	0.00
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	8.1000e-005	9.0000e-004
tblVehicleEF	HHD	3.0000e-006	1.0000e-006

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tblVehicleEF	HHD	0.01	7.8120e-003
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	3.0000e-006	3.3600e-004
tblVehicleEF	HHD	1.5200e-004	1.0000e-004
tblVehicleEF	HHD	0.49	0.57
tblVehicleEF	HHD	2.0000e-006	0.00
tblVehicleEF	HHD	0.15	0.16
tblVehicleEF	HHD	8.1000e-005	9.0000e-004
tblVehicleEF	HHD	3.0000e-006	1.0000e-006
tblVehicleEF	LDA	2.2480e-003	2.6200e-003
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.61	0.76
tblVehicleEF	LDA	2.22	3.32
tblVehicleEF	LDA	249.80	259.94
tblVehicleEF	LDA	52.94	67.21
tblVehicleEF	LDA	4.5590e-003	4.9100e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.19	0.26
tblVehicleEF	LDA	0.04	7.2330e-003
tblVehicleEF	LDA	1.4180e-003	1.2910e-003
tblVehicleEF	LDA	1.8170e-003	2.0630e-003
tblVehicleEF	LDA	0.02	2.5320e-003
tblVehicleEF	LDA	1.3060e-003	1.1890e-003
tblVehicleEF	LDA	1.6710e-003	1.8970e-003
tblVehicleEF	LDA	0.04	0.30
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.00

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tblVehicleEF	LDA	8.7510e-003	0.01
tblVehicleEF	LDA	0.03	0.23
tblVehicleEF	LDA	0.23	0.35
tblVehicleEF	LDA	2.4710e-003	2.5700e-003
tblVehicleEF	LDA	5.2400e-004	6.6400e-004
tblVehicleEF	LDA	0.04	0.30
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.00
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.03	0.23
tblVehicleEF	LDA	0.26	0.38
tblVehicleEF	LDT1	4.8360e-003	7.7670e-003
tblVehicleEF	LDT1	0.07	0.12
tblVehicleEF	LDT1	1.06	1.69
tblVehicleEF	LDT1	2.43	6.09
tblVehicleEF	LDT1	297.63	336.81
tblVehicleEF	LDT1	63.89	89.97
tblVehicleEF	LDT1	7.1620e-003	0.01
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.09	0.16
tblVehicleEF	LDT1	0.25	0.43
tblVehicleEF	LDT1	0.04	9.2260e-003
tblVehicleEF	LDT1	1.9010e-003	2.1970e-003
tblVehicleEF	LDT1	2.3990e-003	3.2560e-003
tblVehicleEF	LDT1	0.02	3.2290e-003
tblVehicleEF	LDT1	1.7490e-003	2.0230e-003
tblVehicleEF	LDT1	2.2060e-003	2.9940e-003
tblVehicleEF	LDT1	0.09	0.65
tblVehicleEF	LDT1	0.17	0.18

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tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.09	0.53
tblVehicleEF	LDT1	0.34	0.63
tblVehicleEF	LDT1	2.9450e-003	3.3300e-003
tblVehicleEF	LDT1	6.3200e-004	8.8900e-004
tblVehicleEF	LDT1	0.09	0.65
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.03	0.05
tblVehicleEF	LDT1	0.09	0.53
tblVehicleEF	LDT1	0.37	0.69
tblVehicleEF	LDT2	3.6070e-003	3.3830e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.85	0.95
tblVehicleEF	LDT2	2.87	4.09
tblVehicleEF	LDT2	324.07	355.64
tblVehicleEF	LDT2	70.13	91.49
tblVehicleEF	LDT2	6.6840e-003	7.0200e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.29	0.38
tblVehicleEF	LDT2	0.04	8.8860e-003
tblVehicleEF	LDT2	1.4330e-003	1.4300e-003
tblVehicleEF	LDT2	1.7980e-003	2.2210e-003
tblVehicleEF	LDT2	0.02	3.1100e-003
tblVehicleEF	LDT2	1.3190e-003	1.3160e-003
tblVehicleEF	LDT2	1.6530e-003	2.0420e-003
tblVehicleEF	LDT2	0.06	0.31

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tblVehicleEF	LDT2	0.13	0.09
tblVehicleEF	LDT2	0.06	0.00
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.23
tblVehicleEF	LDT2	0.33	0.44
tblVehicleEF	LDT2	3.2060e-003	3.5150e-003
tblVehicleEF	LDT2	6.9400e-004	9.0400e-004
tblVehicleEF	LDT2	0.06	0.31
tblVehicleEF	LDT2	0.13	0.09
tblVehicleEF	LDT2	0.06	0.00
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.23
tblVehicleEF	LDT2	0.36	0.48
tblVehicleEF	LHD1	5.3430e-003	5.7150e-003
tblVehicleEF	LHD1	9.3450e-003	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	0.19	0.20
tblVehicleEF	LHD1	0.84	1.06
tblVehicleEF	LHD1	1.13	2.14
tblVehicleEF	LHD1	9.02	8.91
tblVehicleEF	LHD1	808.85	817.34
tblVehicleEF	LHD1	12.12	18.22
tblVehicleEF	LHD1	7.3500e-004	6.4300e-004
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.03	0.04
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.82	0.85
tblVehicleEF	LHD1	0.34	0.48
tblVehicleEF	LHD1	8.0800e-004	6.6800e-004

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tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.7110e-003	9.3800e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.7000e-004	2.7200e-004
tblVehicleEF	LHD1	7.7300e-004	6.3900e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.4280e-003	2.3450e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.4800e-004	2.5000e-004
tblVehicleEF	LHD1	2.1470e-003	0.14
tblVehicleEF	LHD1	0.08	0.04
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.0820e-003	0.00
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.21	0.20
tblVehicleEF	LHD1	0.08	0.13
tblVehicleEF	LHD1	8.8000e-005	8.7000e-005
tblVehicleEF	LHD1	7.9010e-003	7.9900e-003
tblVehicleEF	LHD1	1.2000e-004	1.8000e-004
tblVehicleEF	LHD1	2.1470e-003	0.14
tblVehicleEF	LHD1	0.08	0.04
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.0820e-003	0.00
tblVehicleEF	LHD1	0.12	0.13
tblVehicleEF	LHD1	0.21	0.20
tblVehicleEF	LHD1	0.09	0.14
tblVehicleEF	LHD2	3.2840e-003	3.4590e-003
tblVehicleEF	LHD2	7.5540e-003	8.3140e-003
tblVehicleEF	LHD2	9.2300e-003	0.01

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tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.66	0.68
tblVehicleEF	LHD2	0.67	1.26
tblVehicleEF	LHD2	14.10	13.96
tblVehicleEF	LHD2	782.55	858.12
tblVehicleEF	LHD2	8.09	10.56
tblVehicleEF	LHD2	1.7430e-003	1.6790e-003
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.00	1.12
tblVehicleEF	LHD2	0.19	0.27
tblVehicleEF	LHD2	1.4080e-003	1.3340e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.4100e-004	1.2800e-004
tblVehicleEF	LHD2	1.3470e-003	1.2760e-003
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	2.6820e-003	2.6520e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3000e-004	1.1700e-004
tblVehicleEF	LHD2	1.1650e-003	0.08
tblVehicleEF	LHD2	0.05	0.02
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.8300e-004	0.00
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.07

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tblVehicleEF	LHD2	1.3500e-004	1.3400e-004
tblVehicleEF	LHD2	7.5590e-003	8.2760e-003
tblVehicleEF	LHD2	8.0000e-005	1.0400e-004
tblVehicleEF	LHD2	1.1650e-003	0.08
tblVehicleEF	LHD2	0.05	0.02
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.8300e-004	0.00
tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.08
tblVehicleEF	MCY	0.33	0.17
tblVehicleEF	MCY	0.26	0.19
tblVehicleEF	MCY	19.19	13.58
tblVehicleEF	MCY	9.00	8.11
tblVehicleEF	MCY	210.27	188.98
tblVehicleEF	MCY	61.40	50.91
tblVehicleEF	MCY	0.07	0.04
tblVehicleEF	MCY	0.02	8.7610e-003
tblVehicleEF	MCY	1.15	0.61
tblVehicleEF	MCY	0.27	0.15
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	1.9370e-003	1.8910e-003
tblVehicleEF	MCY	3.1610e-003	3.7730e-003
tblVehicleEF	MCY	5.0400e-003	4.2000e-003
tblVehicleEF	MCY	1.8120e-003	1.7720e-003
tblVehicleEF	MCY	2.9780e-003	3.5560e-003
tblVehicleEF	MCY	0.91	3.98
tblVehicleEF	MCY	0.70	3.56
tblVehicleEF	MCY	0.50	0.00

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tblVehicleEF	MCY	2.23	1.16
tblVehicleEF	MCY	0.56	3.73
tblVehicleEF	MCY	1.95	1.44
tblVehicleEF	MCY	2.0810e-003	1.8680e-003
tblVehicleEF	MCY	6.0800e-004	5.0300e-004
tblVehicleEF	MCY	0.91	0.09
tblVehicleEF	MCY	0.70	3.56
tblVehicleEF	MCY	0.50	0.00
tblVehicleEF	MCY	2.75	1.38
tblVehicleEF	MCY	0.56	3.73
tblVehicleEF	MCY	2.13	1.57
tblVehicleEF	MDV	4.4780e-003	4.8960e-003
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.95	1.15
tblVehicleEF	MDV	3.30	4.56
tblVehicleEF	MDV	392.54	430.32
tblVehicleEF	MDV	84.08	109.88
tblVehicleEF	MDV	9.1410e-003	0.01
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	0.36	0.51
tblVehicleEF	MDV	0.04	9.0680e-003
tblVehicleEF	MDV	1.5860e-003	1.5330e-003
tblVehicleEF	MDV	2.0110e-003	2.4040e-003
tblVehicleEF	MDV	0.02	3.1740e-003
tblVehicleEF	MDV	1.4630e-003	1.4130e-003
tblVehicleEF	MDV	1.8500e-003	2.2100e-003
tblVehicleEF	MDV	0.07	0.37
tblVehicleEF	MDV	0.14	0.10

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tblVehicleEF	MDV	0.07	0.00
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.07	0.29
tblVehicleEF	MDV	0.42	0.60
tblVehicleEF	MDV	3.8800e-003	4.2510e-003
tblVehicleEF	MDV	8.3200e-004	1.0860e-003
tblVehicleEF	MDV	0.07	0.37
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.07	0.00
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.07	0.29
tblVehicleEF	MDV	0.46	0.66
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.34	2.06
tblVehicleEF	MH	2.25	2.79
tblVehicleEF	MH	1,557.00	1,702.83
tblVehicleEF	MH	19.21	23.70
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.43	1.65
tblVehicleEF	MH	0.25	0.30
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	2.9100e-004	3.7000e-004
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2700e-003	3.2840e-003
tblVehicleEF	MH	0.02	0.03

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tblVehicleEF	MH	2.6800e-004	3.4000e-004
tblVehicleEF	MH	0.79	36.75
tblVehicleEF	MH	0.07	10.29
tblVehicleEF	MH	0.27	0.00
tblVehicleEF	MH	0.08	0.11
tblVehicleEF	MH	0.02	0.24
tblVehicleEF	MH	0.10	0.12
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.9000e-004	2.3400e-004
tblVehicleEF	MH	0.79	36.75
tblVehicleEF	MH	0.07	10.29
tblVehicleEF	MH	0.27	0.00
tblVehicleEF	MH	0.10	0.15
tblVehicleEF	MH	0.02	0.24
tblVehicleEF	MH	0.11	0.14
tblVehicleEF	MHD	3.4370e-003	0.01
tblVehicleEF	MHD	5.6390e-003	0.01
tblVehicleEF	MHD	9.4480e-003	9.6820e-003
tblVehicleEF	MHD	0.37	0.65
tblVehicleEF	MHD	0.48	0.50
tblVehicleEF	MHD	1.16	1.24
tblVehicleEF	MHD	75.81	165.30
tblVehicleEF	MHD	1,131.31	1,248.40
tblVehicleEF	MHD	9.18	9.14
tblVehicleEF	MHD	0.01	0.03
tblVehicleEF	MHD	0.15	0.16
tblVehicleEF	MHD	6.8530e-003	6.0820e-003
tblVehicleEF	MHD	0.56	1.04
tblVehicleEF	MHD	2.06	1.57

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tblVehicleEF	MHD	1.38	1.28
tblVehicleEF	MHD	1.2350e-003	3.0390e-003
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.2000e-004	1.2200e-004
tblVehicleEF	MHD	1.1810e-003	2.9080e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.1000e-004	1.1200e-004
tblVehicleEF	MHD	4.4800e-004	0.03
tblVehicleEF	MHD	0.02	7.7870e-003
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	2.2200e-004	0.00
tblVehicleEF	MHD	0.09	0.06
tblVehicleEF	MHD	0.02	0.06
tblVehicleEF	MHD	0.05	0.06
tblVehicleEF	MHD	7.1900e-004	1.5400e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	9.1000e-005	9.0000e-005
tblVehicleEF	MHD	4.4800e-004	0.03
tblVehicleEF	MHD	0.02	7.7870e-003
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	2.2200e-004	0.00
tblVehicleEF	MHD	0.11	0.08
tblVehicleEF	MHD	0.02	0.06
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	OBUS	7.1700e-003	7.5570e-003
tblVehicleEF	OBUS	5.7850e-003	9.7900e-003
tblVehicleEF	OBUS	0.02	0.02

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tblVehicleEF	OBUS	0.56	0.49
tblVehicleEF	OBUS	0.59	0.64
tblVehicleEF	OBUS	1.92	2.13
tblVehicleEF	OBUS	95.82	85.25
tblVehicleEF	OBUS	1,365.97	1,420.91
tblVehicleEF	OBUS	15.56	16.62
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.14	0.16
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.47	0.39
tblVehicleEF	OBUS	1.73	1.21
tblVehicleEF	OBUS	1.02	0.91
tblVehicleEF	OBUS	7.1500e-004	4.5900e-004
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	1.3700e-004	1.4800e-004
tblVehicleEF	OBUS	6.8400e-004	4.3900e-004
tblVehicleEF	OBUS	0.06	0.02
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	1.2600e-004	1.3600e-004
tblVehicleEF	OBUS	1.0630e-003	0.07
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	4.6800e-004	0.00
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.09	0.10
tblVehicleEF	OBUS	9.1000e-004	8.0800e-004
tblVehicleEF	OBUS	0.01	0.01

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tblVehicleEF	OBUS	1.5400e-004	1.6400e-004
tblVehicleEF	OBUS	1.0630e-003	0.07
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.06	0.05
tblVehicleEF	OBUS	4.6800e-004	0.00
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.10	0.11
tblVehicleEF	SBUS	0.05	0.07
tblVehicleEF	SBUS	6.5710e-003	0.09
tblVehicleEF	SBUS	4.5790e-003	4.6880e-003
tblVehicleEF	SBUS	2.08	1.62
tblVehicleEF	SBUS	0.54	0.95
tblVehicleEF	SBUS	0.68	0.67
tblVehicleEF	SBUS	347.47	195.36
tblVehicleEF	SBUS	1,071.12	1,071.28
tblVehicleEF	SBUS	3.82	3.71
tblVehicleEF	SBUS	0.05	0.03
tblVehicleEF	SBUS	0.14	0.14
tblVehicleEF	SBUS	4.2030e-003	3.9880e-003
tblVehicleEF	SBUS	3.61	1.51
tblVehicleEF	SBUS	5.09	2.99
tblVehicleEF	SBUS	0.77	0.47
tblVehicleEF	SBUS	4.2010e-003	1.5740e-003
tblVehicleEF	SBUS	0.74	0.05
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	4.3000e-005	3.8000e-005
tblVehicleEF	SBUS	4.0190e-003	1.5050e-003

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tblVehicleEF	SBUS	0.32	0.02
tblVehicleEF	SBUS	2.7350e-003	2.7340e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	3.9000e-005	3.5000e-005
tblVehicleEF	SBUS	4.9600e-004	0.02
tblVehicleEF	SBUS	4.8020e-003	6.8000e-003
tblVehicleEF	SBUS	0.23	0.18
tblVehicleEF	SBUS	2.0400e-004	0.00
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	9.5330e-003	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	3.3050e-003	1.7820e-003
tblVehicleEF	SBUS	0.01	9.9600e-003
tblVehicleEF	SBUS	3.8000e-005	3.7000e-005
tblVehicleEF	SBUS	4.9600e-004	0.02
tblVehicleEF	SBUS	4.8020e-003	6.8000e-003
tblVehicleEF	SBUS	0.33	0.29
tblVehicleEF	SBUS	2.0400e-004	0.00
tblVehicleEF	SBUS	0.11	0.17
tblVehicleEF	SBUS	9.5330e-003	0.02
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	UBUS	1.38	0.35
tblVehicleEF	UBUS	2.8070e-003	4.6630e-003
tblVehicleEF	UBUS	10.37	4.12
tblVehicleEF	UBUS	0.14	0.48
tblVehicleEF	UBUS	1,606.76	1,102.90
tblVehicleEF	UBUS	1.64	3.31
tblVehicleEF	UBUS	0.27	0.17
tblVehicleEF	UBUS	1.4400e-003	7.1480e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	UBUS	0.73	0.33
tblVehicleEF	UBUS	0.02	0.05
tblVehicleEF	UBUS	0.07	0.11
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	5.2780e-003	6.2180e-003
tblVehicleEF	UBUS	2.0000e-006	8.0000e-006
tblVehicleEF	UBUS	0.03	0.04
tblVehicleEF	UBUS	8.3320e-003	8.1210e-003
tblVehicleEF	UBUS	5.0490e-003	5.9460e-003
tblVehicleEF	UBUS	2.0000e-006	8.0000e-006
tblVehicleEF	UBUS	1.9400e-004	0.02
tblVehicleEF	UBUS	2.9870e-003	5.6250e-003
tblVehicleEF	UBUS	1.2200e-004	0.00
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	7.6400e-004	0.01
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.01	9.4760e-003
tblVehicleEF	UBUS	1.6000e-005	3.3000e-005
tblVehicleEF	UBUS	1.9400e-004	0.02
tblVehicleEF	UBUS	2.9870e-003	5.6250e-003
tblVehicleEF	UBUS	1.2200e-004	0.00
tblVehicleEF	UBUS	1.41	0.42
tblVehicleEF	UBUS	7.6400e-004	0.01
tblVehicleEF	UBUS	0.01	0.02
tblVehicleTrips	ST_TR	2.21	2.40
tblVehicleTrips	SU_TR	0.70	0.76
tblVehicleTrips	WD_TR	9.74	10.56

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0559	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-004	2.3000e-004	0.0000	0.0000	2.40E-04
Energy	1.0600e-003	9.6200e-003	8.0800e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.6746	10.6746	2.0000e-004	1.9000e-004	10.7369
Mobile	0.0671	0.0532	0.4512	9.0000e-004	0.0785	6.8000e-004	0.0791	0.0196	6.4000e-004	0.0202	0.0000	82.9025	82.9025	5.0200e-003	4.1000e-003	84.249
Waste						0.0000	0.0000		0.0000	0.0000	2.2877	0.0000	2.2877	0.1352	0.0000	5.6677
Water						0.0000	0.0000		0.0000	0.0000	0.6834	0.0148	0.6982	0.0702	1.6600e-003	2.9469
Total	**0.124**	**0.0628**	**0.4594**	**9.6000e-004**	**0.0785**	**1.4100e-003**	**0.0799**	**0.0196**	**1.3700e-003**	**0.0209**	**2.9711**	**93.5921**	**96.5632**	**0.2106**	**5.9500e-003**	**103.6007**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0559	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-004	2.3000e-004	0.0000	0.0000	2.4000e-004
Energy	1.0600e-003	9.6200e-003	8.0800e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.6746	10.6746	2.0000e-004	1.9000e-004	10.7369

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Mobile	0.0671	0.0532	0.4512	9.0000e-004	0.0785	6.8000e-004	0.0791	0.0196	6.4000e-004	0.0202	0.0000	82.9025	82.9025	5.0200e-003	4.1000e-003	84.2490
Waste						0.0000	0.0000		0.0000	0.0000	2.2877	0.0000	2.2877	0.1352	0.0000	5.6677
Water						0.0000	0.0000		0.0000	0.0000	0.6834	0.0148	0.6982	0.0702	1.6600e-003	2.9469
Total	**0.1240**	**0.0628**	**0.4594**	**9.6000e-004**	**0.0785**	**1.4100e-003**	**0.0799**	**0.0196**	**1.3700e-003**	**0.0209**	**2.9711**	**93.5921**	**96.5632**	**0.2106**	**5.9500e-003**	**103.6007**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0671	0.0532	0.4512	9.0000e-004	0.0785	6.8000e-004	0.0791	0.0196	6.4000e-004	0.0202	0.0000	82.9025	82.9025	5.0200e-003	4.1000e-003	84.2490
Unmitigated	0.0671	0.0532	0.4512	9.0000e-004	0.0785	6.8000e-004	0.0791	0.0196	6.4000e-004	0.0202	0.0000	82.9025	82.9025	5.0200e-003	4.1000e-003	84.2490

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	127.99	29.09	9.21	231,545	231,545
Parking Lot	0.00	0.00	0.00		
Total	127.99	29.09	9.21	231,545	231,545

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.537284	0.044282	0.222640	0.123915	0.022851	0.005418	0.009384	0.007051	0.001066	0.000424	0.022133	0.000678	0.002874
Parking Lot	0.537284	0.044282	0.222640	0.123915	0.022851	0.005418	0.009384	0.007051	0.001066	0.000424	0.022133	0.000678	0.002874

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.1970	0.1970	0.0000	0.0000	0.1970
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.1970	0.1970	0.0000	0.0000	0.1970

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

NaturalGas Mitigated	1.0600e-003	9.6200e-003	8.0800e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4777	10.4777	2.0000e-004	1.9000e-004	10.5399
NaturalGas Unmitigated	1.0600e-003	9.6200e-003	8.0800e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4777	10.4777	2.0000e-004	1.9000e-004	10.5399

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	196344	1.0600e-003	9.6200e-003	8.0800e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4777	10.4777	2.0000e-004	1.9000e-004	10.5399
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.0600e-003**	**9.6200e-003**	**8.0800e-003**	**6.0000e-005**		**7.3000e-004**	**7.3000e-004**		**7.3000e-004**	**7.3000e-004**	**0.0000**	**10.4777**	**10.4777**	**2.0000e-004**	**1.9000e-004**	**10.5399**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	196344	1.0600e-003	9.6200e-003	8.0800e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4777	10.4777	2.0000e-004	1.9000e-004	10.5399
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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Total		**1.0600e-003**	**9.6200e-003**	**8.0800e-003**	**6.0000e-005**		**7.3000e-004**	**7.3000e-004**		**7.3000e-004**	**7.3000e-004**	**0.0000**	**10.4777**	**10.4777**	**2.0000e-004**	**1.9000e-004**	**10.5399**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	208100	0.1888	0.0000	0.0000	0.1888
Parking Lot	8995.14	8.1600e-003	0.0000	0.0000	8.1600e-003
Total		**0.1970**	**0.0000**	**0.0000**	**0.1970**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	208100	0.1888	0.0000	0.0000	0.1888
Parking Lot	8995.14	8.1600e-003	0.0000	0.0000	8.1600e-003
Total		**0.1970**	**0.0000**	**0.0000**	**0.1970**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0559	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-004	2.3000e-004	0.0000	0.0000	2.4000e-004
Unmitigated	0.0559	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-004	2.3000e-004	0.0000	0.0000	2.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0490					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-004	2.3000e-004	0.0000	0.0000	2.4000e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.0559**	**0.0000**	**1.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3000e-004**	**2.3000e-004**	**0.0000**	**0.0000**	**2.4000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0490					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-004	2.3000e-004	0.0000	0.0000	2.4000e-004
Total	**0.0559**	**0.0000**	**1.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3000e-004**	**2.3000e-004**	**0.0000**	**0.0000**	**2.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated	0.6982	0.0702	1.6600e-003	2.9469
Unmitigated	0.6982	0.0702	1.6600e-003	2.9469

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.15413 / 1.32028	0.6982	0.0702	1.6600e-003	2.9469
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.6982**	**0.0702**	**1.6600e-003**	**2.9469**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.15413 / 1.32028	0.6982	0.0702	1.6600e-003	2.9469
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.6982**	**0.0702**	**1.6600e-003**	**2.9469**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.2877	0.1352	0.0000	5.6677
Unmitigated	2.2877	0.1352	0.0000	5.6677

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	11.27	2.2877	0.1352	0.0000	5.6677
Parking Lot	0	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total		**2.2877**	**0.1352**	**0.0000**	**5.6677**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	11.27	2.2877	0.1352	0.0000	5.6677
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2.2877**	**0.1352**	**0.0000**	**5.6677**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

Date: 4/13/2022 4:2

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	90.00	Dwelling Unit	0.87	97,970.00	257
Enclosed Parking with Elevator	90.00	Space	0.00	18,130.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2030
Utility Company	Silicon Valley Clean Energy				
CO2 Intensity (lb/MWhr)	2	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Provided land uses - construction sheet and plans

Construction Phase - Provided construction schedule

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Grading - grading = 125-cy export

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - existing building demo = 9,500-sf

Trips and VMT - EMFAC2021 0 trip adjustment, pavement demo = 1,233 tons, build const = 75 cement truck round trips, paving = 650-cy asphalt

Vehicle Trips - provided trip gen w/ adjustments

Vehicle Emission Factors - EMFAC2021 vehicle emission factors Santa Clara Co 2030

Fleet Mix - EMFAC2021 fleet mix Santa Clara Co 2030

Woodstoves - no fireplaces

Energy Use - reach code - all electric no natural gas

Water And Wastewater - wastewater treatment 100% aerobic, no septic tanks of lagoons

Construction Off-road Equipment Mitigation - Enhanced BMPs, Tier 4 interim and electric crane mitigation

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	NumDays	100.00	120.00
tblConstructionPhase	NumDays	10.00	60.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	NumDays	1.00	90.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	PhaseEndDate	6/22/2023	6/5/2024
tblConstructionPhase	PhaseEndDate	6/8/2023	4/3/2024
tblConstructionPhase	PhaseEndDate	1/16/2023	3/3/2023

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tblConstructionPhase	PhaseEndDate	1/19/2023	7/4/2023
tblConstructionPhase	PhaseEndDate	6/15/2023	8/6/2024
tblConstructionPhase	PhaseEndDate	1/17/2023	6/1/2023
tblConstructionPhase	PhaseStartDate	6/16/2023	4/7/2024
tblConstructionPhase	PhaseStartDate	1/20/2023	12/6/2023
tblConstructionPhase	PhaseStartDate	1/18/2023	6/5/2023
tblConstructionPhase	PhaseStartDate	6/9/2023	6/8/2024
tblConstructionPhase	PhaseStartDate	1/17/2023	3/4/2023
tblEnergyUse	NT24E	3,054.10	3,055.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	70.89	72.42
tblEnergyUse	T24NG	5,226.68	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	13.50	0.00
tblFireplaces	NumberNoFireplace	3.60	0.00
tblFireplaces	NumberWood	15.30	0.00
tblFleetMix	HHD	6.1320e-003	7.8440e-003
tblFleetMix	HHD	6.1320e-003	7.8440e-003
tblFleetMix	LDA	0.58	0.51
tblFleetMix	LDA	0.58	0.51
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.18	0.24
tblFleetMix	LDT2	0.18	0.24
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.3980e-003	6.1700e-003

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tblFleetMix	LHD2	5.3980e-003	6.1700e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.14
tblFleetMix	MDV	0.12	0.14
tblFleetMix	MH	2.5260e-003	2.2720e-003
tblFleetMix	MH	2.5260e-003	2.2720e-003
tblFleetMix	MHD	8.2190e-003	9.6590e-003
tblFleetMix	MHD	8.2190e-003	9.6590e-003
tblFleetMix	OBUS	8.5200e-004	1.0640e-003
tblFleetMix	OBUS	8.5200e-004	1.0640e-003
tblFleetMix	SBUS	8.3700e-004	6.8100e-004
tblFleetMix	SBUS	8.3700e-004	6.8100e-004
tblFleetMix	UBUS	3.3500e-004	3.9600e-004
tblFleetMix	UBUS	3.3500e-004	3.9600e-004
tblGrading	MaterialExported	0.00	125.00
tblLandUse	LandUseSquareFeet	90,000.00	97,970.00
tblLandUse	LandUseSquareFeet	36,000.00	18,130.00
tblLandUse	LotAcreage	2.37	0.87
tblLandUse	LotAcreage	0.81	0.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators

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tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	43.00	0.00

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tblTripsAndVMT	HaulingTripNumber	16.00	0.00
tblTripsAndVMT	VendorTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	28.00	0.00
tblTripsAndVMT	WorkerTripNumber	72.00	0.00
tblTripsAndVMT	WorkerTripNumber	50.00	0.00
tblTripsAndVMT	WorkerTripNumber	14.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleEF	HHD	0.02	0.20
tblVehicleEF	HHD	0.05	0.09
tblVehicleEF	HHD	6.28	5.00
tblVehicleEF	HHD	0.41	0.63
tblVehicleEF	HHD	6.6850e-003	8.7300e-004
tblVehicleEF	HHD	930.05	719.71
tblVehicleEF	HHD	1,226.35	1,395.93
tblVehicleEF	HHD	0.05	9.4370e-003
tblVehicleEF	HHD	0.15	0.12
tblVehicleEF	HHD	0.19	0.22
tblVehicleEF	HHD	2.0000e-006	4.0000e-006
tblVehicleEF	HHD	5.20	3.81
tblVehicleEF	HHD	2.52	1.45
tblVehicleEF	HHD	2.31	2.60
tblVehicleEF	HHD	2.1460e-003	1.7380e-003
tblVehicleEF	HHD	0.06	0.08
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	2.0530e-003	1.6560e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9050e-003	8.7860e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	1.0000e-006	4.0000e-005
tblVehicleEF	HHD	5.8000e-005	1.3000e-005
tblVehicleEF	HHD	0.42	0.31
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	2.5000e-005	1.1400e-004
tblVehicleEF	HHD	2.0000e-006	0.00
tblVehicleEF	HHD	8.6530e-003	6.2150e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	1.0000e-006	4.0000e-005
tblVehicleEF	HHD	5.8000e-005	1.3000e-005
tblVehicleEF	HHD	0.49	0.54
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	0.07	0.10
tblVehicleEF	HHD	2.5000e-005	1.1400e-004
tblVehicleEF	HHD	2.0000e-006	0.00
tblVehicleEF	LDA	9.5900e-004	1.2510e-003
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.40	0.48
tblVehicleEF	LDA	1.69	2.09
tblVehicleEF	LDA	199.86	218.64
tblVehicleEF	LDA	42.17	55.99
tblVehicleEF	LDA	3.1760e-003	3.1650e-003
tblVehicleEF	LDA	0.02	0.03

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.12	0.18
tblVehicleEF	LDA	0.04	7.0780e-003
tblVehicleEF	LDA	9.1600e-004	8.3800e-004
tblVehicleEF	LDA	1.2750e-003	1.4820e-003
tblVehicleEF	LDA	0.02	2.4770e-003
tblVehicleEF	LDA	8.4300e-004	7.7100e-004
tblVehicleEF	LDA	1.1720e-003	1.3620e-003
tblVehicleEF	LDA	0.02	0.23
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.00
tblVehicleEF	LDA	3.2350e-003	4.3400e-003
tblVehicleEF	LDA	0.02	0.17
tblVehicleEF	LDA	0.12	0.20
tblVehicleEF	LDA	1.9770e-003	2.1610e-003
tblVehicleEF	LDA	4.1700e-004	5.5400e-004
tblVehicleEF	LDA	0.02	0.23
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.00
tblVehicleEF	LDA	4.6990e-003	6.3290e-003
tblVehicleEF	LDA	0.02	0.17
tblVehicleEF	LDA	0.13	0.22
tblVehicleEF	LDT1	1.6710e-003	3.2730e-003
tblVehicleEF	LDT1	0.04	0.07
tblVehicleEF	LDT1	0.53	0.90
tblVehicleEF	LDT1	1.82	3.41
tblVehicleEF	LDT1	241.46	296.02
tblVehicleEF	LDT1	51.55	76.24
tblVehicleEF	LDT1	3.7700e-003	5.8700e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.03	0.07
tblVehicleEF	LDT1	0.15	0.27
tblVehicleEF	LDT1	0.04	9.1380e-003
tblVehicleEF	LDT1	1.0550e-003	1.2600e-003
tblVehicleEF	LDT1	1.4610e-003	2.0740e-003
tblVehicleEF	LDT1	0.02	3.1980e-003
tblVehicleEF	LDT1	9.7000e-004	1.1590e-003
tblVehicleEF	LDT1	1.3440e-003	1.9070e-003
tblVehicleEF	LDT1	0.05	0.47
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	0.04	0.00
tblVehicleEF	LDT1	6.4760e-003	0.01
tblVehicleEF	LDT1	0.06	0.36
tblVehicleEF	LDT1	0.15	0.34
tblVehicleEF	LDT1	2.3890e-003	2.9260e-003
tblVehicleEF	LDT1	5.1000e-004	7.5400e-004
tblVehicleEF	LDT1	0.05	0.47
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	0.04	0.00
tblVehicleEF	LDT1	9.4480e-003	0.02
tblVehicleEF	LDT1	0.06	0.36
tblVehicleEF	LDT1	0.17	0.37
tblVehicleEF	LDT2	1.7260e-003	1.8780e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.55	0.64
tblVehicleEF	LDT2	2.25	2.73
tblVehicleEF	LDT2	249.80	304.99
tblVehicleEF	LDT2	53.79	77.16

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tblVehicleEF	LDT2	4.0490e-003	4.5010e-003
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.17	0.25
tblVehicleEF	LDT2	0.04	8.8380e-003
tblVehicleEF	LDT2	1.0100e-003	9.8900e-004
tblVehicleEF	LDT2	1.3400e-003	1.6580e-003
tblVehicleEF	LDT2	0.02	3.0930e-003
tblVehicleEF	LDT2	9.3000e-004	9.1000e-004
tblVehicleEF	LDT2	1.2320e-003	1.5240e-003
tblVehicleEF	LDT2	0.05	0.25
tblVehicleEF	LDT2	0.09	0.06
tblVehicleEF	LDT2	0.05	0.00
tblVehicleEF	LDT2	6.5290e-003	6.8650e-003
tblVehicleEF	LDT2	0.05	0.19
tblVehicleEF	LDT2	0.18	0.27
tblVehicleEF	LDT2	2.4710e-003	3.0150e-003
tblVehicleEF	LDT2	5.3200e-004	7.6300e-004
tblVehicleEF	LDT2	0.05	0.25
tblVehicleEF	LDT2	0.09	0.06
tblVehicleEF	LDT2	0.05	0.00
tblVehicleEF	LDT2	9.4890e-003	0.01
tblVehicleEF	LDT2	0.05	0.19
tblVehicleEF	LDT2	0.20	0.29
tblVehicleEF	LHD1	4.1480e-003	4.3350e-003
tblVehicleEF	LHD1	5.1950e-003	4.0280e-003
tblVehicleEF	LHD1	9.0230e-003	0.02
tblVehicleEF	LHD1	0.18	0.18
tblVehicleEF	LHD1	0.47	0.54

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tblVehicleEF	LHD1	0.89	2.05
tblVehicleEF	LHD1	8.25	7.81
tblVehicleEF	LHD1	698.55	665.93
tblVehicleEF	LHD1	10.09	15.88
tblVehicleEF	LHD1	7.2900e-004	5.8900e-004
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	0.05	0.04
tblVehicleEF	LHD1	0.30	0.31
tblVehicleEF	LHD1	0.23	0.33
tblVehicleEF	LHD1	9.1500e-004	6.6600e-004
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	9.9010e-003	9.3430e-003
tblVehicleEF	LHD1	7.0190e-003	9.1890e-003
tblVehicleEF	LHD1	2.1000e-004	1.3400e-004
tblVehicleEF	LHD1	8.7500e-004	6.3700e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.4750e-003	2.3360e-003
tblVehicleEF	LHD1	6.6710e-003	8.7610e-003
tblVehicleEF	LHD1	1.9300e-004	1.2300e-004
tblVehicleEF	LHD1	1.4030e-003	0.09
tblVehicleEF	LHD1	0.05	0.02
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	7.7200e-004	0.00
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.18	0.12
tblVehicleEF	LHD1	0.04	0.08
tblVehicleEF	LHD1	8.0000e-005	7.6000e-005
tblVehicleEF	LHD1	6.8120e-003	6.4980e-003

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tblVehicleEF	LHD1	1.0000e-004	1.5700e-004
tblVehicleEF	LHD1	1.4030e-003	0.09
tblVehicleEF	LHD1	0.05	0.02
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	7.7200e-004	0.00
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.18	0.12
tblVehicleEF	LHD1	0.05	0.09
tblVehicleEF	LHD2	2.5050e-003	2.5080e-003
tblVehicleEF	LHD2	5.3390e-003	4.4570e-003
tblVehicleEF	LHD2	4.8110e-003	8.7200e-003
tblVehicleEF	LHD2	0.13	0.14
tblVehicleEF	LHD2	0.49	0.38
tblVehicleEF	LHD2	0.48	1.11
tblVehicleEF	LHD2	13.00	13.36
tblVehicleEF	LHD2	679.81	713.03
tblVehicleEF	LHD2	6.44	8.54
tblVehicleEF	LHD2	1.6660e-003	1.6800e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.38	0.50
tblVehicleEF	LHD2	0.12	0.18
tblVehicleEF	LHD2	1.5020e-003	1.4560e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.0600e-004	5.7000e-005
tblVehicleEF	LHD2	1.4370e-003	1.3930e-003

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tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	2.7110e-003	2.6340e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.8000e-005	5.2000e-005
tblVehicleEF	LHD2	6.4200e-004	0.05
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	0.00
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	1.2400e-004	1.2800e-004
tblVehicleEF	LHD2	6.5570e-003	6.8600e-003
tblVehicleEF	LHD2	6.4000e-005	8.4000e-005
tblVehicleEF	LHD2	6.4200e-004	0.05
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.7400e-004	0.00
tblVehicleEF	LHD2	0.11	0.10
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	MCY	0.32	0.14
tblVehicleEF	MCY	0.25	0.16
tblVehicleEF	MCY	17.61	11.05
tblVehicleEF	MCY	9.20	7.83
tblVehicleEF	MCY	209.76	185.58
tblVehicleEF	MCY	59.23	42.83
tblVehicleEF	MCY	0.07	0.04
tblVehicleEF	MCY	0.02	6.3410e-003

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tblVehicleEF	MCY	1.14	0.51
tblVehicleEF	MCY	0.27	0.10
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.1380e-003	1.9970e-003
tblVehicleEF	MCY	2.8620e-003	3.4160e-003
tblVehicleEF	MCY	5.0400e-003	4.2000e-003
tblVehicleEF	MCY	1.9940e-003	1.8640e-003
tblVehicleEF	MCY	2.6760e-003	3.1970e-003
tblVehicleEF	MCY	0.89	3.68
tblVehicleEF	MCY	0.63	3.56
tblVehicleEF	MCY	0.47	0.00
tblVehicleEF	MCY	2.13	0.89
tblVehicleEF	MCY	0.46	3.78
tblVehicleEF	MCY	1.88	1.13
tblVehicleEF	MCY	2.0760e-003	1.8350e-003
tblVehicleEF	MCY	5.8600e-004	4.2300e-004
tblVehicleEF	MCY	0.89	0.08
tblVehicleEF	MCY	0.63	3.56
tblVehicleEF	MCY	0.47	0.00
tblVehicleEF	MCY	2.67	1.09
tblVehicleEF	MCY	0.46	3.78
tblVehicleEF	MCY	2.04	1.23
tblVehicleEF	MDV	1.7720e-003	2.0970e-003
tblVehicleEF	MDV	0.04	0.07
tblVehicleEF	MDV	0.54	0.66
tblVehicleEF	MDV	2.29	2.78
tblVehicleEF	MDV	301.13	364.04
tblVehicleEF	MDV	63.46	91.48
tblVehicleEF	MDV	5.2660e-003	5.4050e-003

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tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.18	0.27
tblVehicleEF	MDV	0.04	8.8920e-003
tblVehicleEF	MDV	1.0200e-003	9.7100e-004
tblVehicleEF	MDV	1.3440e-003	1.6080e-003
tblVehicleEF	MDV	0.02	3.1120e-003
tblVehicleEF	MDV	9.4000e-004	8.9400e-004
tblVehicleEF	MDV	1.2360e-003	1.4780e-003
tblVehicleEF	MDV	0.06	0.28
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.06	0.00
tblVehicleEF	MDV	6.8620e-003	8.0910e-003
tblVehicleEF	MDV	0.05	0.21
tblVehicleEF	MDV	0.20	0.30
tblVehicleEF	MDV	2.9760e-003	3.5970e-003
tblVehicleEF	MDV	6.2800e-004	9.0400e-004
tblVehicleEF	MDV	0.06	0.28
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.06	0.00
tblVehicleEF	MDV	9.9460e-003	0.01
tblVehicleEF	MDV	0.05	0.21
tblVehicleEF	MDV	0.22	0.33
tblVehicleEF	MH	5.0270e-003	6.0740e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.31	0.37
tblVehicleEF	MH	1.64	1.92
tblVehicleEF	MH	1,350.27	1,656.25
tblVehicleEF	MH	15.54	20.13

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tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.06	1.28
tblVehicleEF	MH	0.24	0.30
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1200e-004	2.3300e-004
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2970e-003	3.3360e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.9500e-004	2.1400e-004
tblVehicleEF	MH	0.35	20.30
tblVehicleEF	MH	0.03	4.90
tblVehicleEF	MH	0.14	0.00
tblVehicleEF	MH	0.04	0.05
tblVehicleEF	MH	5.8500e-003	0.12
tblVehicleEF	MH	0.07	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	1.5400e-004	1.9900e-004
tblVehicleEF	MH	0.35	20.30
tblVehicleEF	MH	0.03	4.90
tblVehicleEF	MH	0.14	0.00
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	5.8500e-003	0.12
tblVehicleEF	MH	0.08	0.10
tblVehicleEF	MHD	3.8320e-003	0.02
tblVehicleEF	MHD	1.0340e-003	9.4650e-003
tblVehicleEF	MHD	8.3830e-003	6.5780e-003

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tblVehicleEF	MHD	0.41	0.63
tblVehicleEF	MHD	0.15	0.16
tblVehicleEF	MHD	0.87	0.72
tblVehicleEF	MHD	65.10	143.38
tblVehicleEF	MHD	993.45	1,074.54
tblVehicleEF	MHD	8.55	6.79
tblVehicleEF	MHD	9.3710e-003	0.02
tblVehicleEF	MHD	0.12	0.14
tblVehicleEF	MHD	7.7400e-003	4.7600e-003
tblVehicleEF	MHD	0.34	0.73
tblVehicleEF	MHD	1.43	0.58
tblVehicleEF	MHD	1.69	1.22
tblVehicleEF	MHD	1.6200e-004	6.5500e-004
tblVehicleEF	MHD	0.13	0.04
tblVehicleEF	MHD	7.0060e-003	5.4200e-003
tblVehicleEF	MHD	1.1200e-004	8.2000e-005
tblVehicleEF	MHD	1.5500e-004	6.2600e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	6.6960e-003	5.1780e-003
tblVehicleEF	MHD	1.0300e-004	7.6000e-005
tblVehicleEF	MHD	2.8900e-004	0.01
tblVehicleEF	MHD	0.01	3.4200e-003
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.6800e-004	0.00
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.1800e-004	1.3200e-003
tblVehicleEF	MHD	9.4800e-003	0.01

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	8.5000e-005	6.7000e-005
tblVehicleEF	MHD	2.8900e-004	0.01
tblVehicleEF	MHD	0.01	3.4200e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	1.6800e-004	0.00
tblVehicleEF	MHD	0.01	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	OBUS	7.0980e-003	7.5210e-003
tblVehicleEF	OBUS	2.1970e-003	0.01
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.64	0.55
tblVehicleEF	OBUS	0.26	0.29
tblVehicleEF	OBUS	1.58	1.46
tblVehicleEF	OBUS	97.36	89.81
tblVehicleEF	OBUS	1,210.85	1,245.37
tblVehicleEF	OBUS	13.46	12.02
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.12	0.15
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.43	0.33
tblVehicleEF	OBUS	1.45	0.83
tblVehicleEF	OBUS	1.13	0.93
tblVehicleEF	OBUS	1.4200e-004	3.1100e-004
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	7.8820e-003	0.01
tblVehicleEF	OBUS	1.5600e-004	1.1800e-004
tblVehicleEF	OBUS	1.3600e-004	2.9700e-004
tblVehicleEF	OBUS	0.06	0.02

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tblVehicleEF	OBUS	7.5260e-003	0.01
tblVehicleEF	OBUS	1.4400e-004	1.0900e-004
tblVehicleEF	OBUS	1.0620e-003	0.07
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	4.8700e-004	0.00
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	0.08	0.07
tblVehicleEF	OBUS	9.2400e-004	8.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.3300e-004	1.1900e-004
tblVehicleEF	OBUS	1.0620e-003	0.07
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.06	0.05
tblVehicleEF	OBUS	4.8700e-004	0.00
tblVehicleEF	OBUS	0.02	0.05
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	SBUS	0.07	0.08
tblVehicleEF	SBUS	4.4040e-003	0.09
tblVehicleEF	SBUS	6.3380e-003	5.2160e-003
tblVehicleEF	SBUS	2.93	1.82
tblVehicleEF	SBUS	0.37	0.72
tblVehicleEF	SBUS	0.86	0.67
tblVehicleEF	SBUS	337.48	181.81
tblVehicleEF	SBUS	970.50	941.81
tblVehicleEF	SBUS	5.06	3.93
tblVehicleEF	SBUS	0.04	0.02

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	6.4910e-003	4.8480e-003
tblVehicleEF	SBUS	2.71	1.09
tblVehicleEF	SBUS	3.09	1.57
tblVehicleEF	SBUS	1.18	0.52
tblVehicleEF	SBUS	2.0480e-003	7.4600e-004
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	8.5750e-003
tblVehicleEF	SBUS	6.8000e-005	4.6000e-005
tblVehicleEF	SBUS	1.9600e-003	7.1300e-004
tblVehicleEF	SBUS	0.32	0.02
tblVehicleEF	SBUS	2.6690e-003	2.6100e-003
tblVehicleEF	SBUS	0.02	8.1870e-003
tblVehicleEF	SBUS	6.2000e-005	4.2000e-005
tblVehicleEF	SBUS	8.7000e-004	0.04
tblVehicleEF	SBUS	8.3040e-003	9.3350e-003
tblVehicleEF	SBUS	0.32	0.20
tblVehicleEF	SBUS	4.1400e-004	0.00
tblVehicleEF	SBUS	0.06	0.04
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	3.2190e-003	1.6390e-003
tblVehicleEF	SBUS	9.2880e-003	8.7390e-003
tblVehicleEF	SBUS	5.0000e-005	3.9000e-005
tblVehicleEF	SBUS	8.7000e-004	0.04
tblVehicleEF	SBUS	8.3040e-003	9.3350e-003
tblVehicleEF	SBUS	0.46	0.32
tblVehicleEF	SBUS	4.1400e-004	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	0.07	0.13
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	UBUS	1.86	0.63
tblVehicleEF	UBUS	2.1860e-003	2.5020e-003
tblVehicleEF	UBUS	14.11	7.38
tblVehicleEF	UBUS	0.14	0.53
tblVehicleEF	UBUS	1,668.67	969.99
tblVehicleEF	UBUS	1.40	3.03
tblVehicleEF	UBUS	0.28	0.15
tblVehicleEF	UBUS	1.2560e-003	4.5820e-003
tblVehicleEF	UBUS	0.71	0.26
tblVehicleEF	UBUS	0.02	0.03
tblVehicleEF	UBUS	0.07	0.15
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	5.1160e-003	4.8220e-003
tblVehicleEF	UBUS	1.5000e-005	1.3000e-005
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	8.3320e-003	0.01
tblVehicleEF	UBUS	4.8930e-003	4.6090e-003
tblVehicleEF	UBUS	1.4000e-005	1.2000e-005
tblVehicleEF	UBUS	6.1000e-005	7.0380e-003
tblVehicleEF	UBUS	8.1400e-004	2.0980e-003
tblVehicleEF	UBUS	3.6000e-005	0.00
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	1.7600e-004	7.8780e-003
tblVehicleEF	UBUS	9.2610e-003	8.3780e-003
tblVehicleEF	UBUS	0.01	7.3890e-003
tblVehicleEF	UBUS	1.4000e-005	3.0000e-005

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tblVehicleEF	UBUS	6.1000e-005	7.0380e-003
tblVehicleEF	UBUS	8.1400e-004	2.0980e-003
tblVehicleEF	UBUS	3.6000e-005	0.00
tblVehicleEF	UBUS	1.90	0.69
tblVehicleEF	UBUS	1.7600e-004	7.8780e-003
tblVehicleEF	UBUS	0.01	9.1730e-003
tblVehicleTrips	ST_TR	4.91	4.25
tblVehicleTrips	SU_TR	4.09	3.54
tblVehicleTrips	WD_TR	5.44	4.71
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	1.80	0.00
tblWoodstoves	NumberNoncatalytic	1.80	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Area	0.4732	7.6900e-003	0.6673	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0400e-003	0.0000	1.1193
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.4054	0.4054	0.0000	0.0000	0.4054
Mobile	0.1927	0.1220	1.2200	3.1100e-003	0.3153	1.8200e-003	0.3172	0.0786	1.7000e-003	0.0803	0.0000	287.1255	287.1255	0.0136	0.0128	291.284
Waste						0.0000	0.0000		0.0000	0.0000	8.4038	0.0000	8.4038	0.4967	0.0000	20.8201
Water						0.0000	0.0000		0.0000	0.0000	2.0746	0.0405	2.1152	7.1400e-003	4.5100e-003	3.6382
Total	**0.6659**	**0.1296**	**1.8873**	**3.1500e-003**	**0.3153**	**5.5300e-003**	**0.3209**	**0.0786**	**5.4100e-003**	**0.0841**	**10.4785**	**288.6645**	**299.1430**	**0.5184**	**0.0173**	**317.2670**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4732	7.6900e-003	0.6673	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0400e-003	0.0000	1.1193
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.4054	0.4054	0.0000	0.0000	0.4054
Mobile	0.1927	0.1220	1.2200	3.1100e-003	0.3153	1.8200e-003	0.3172	0.0786	1.7000e-003	0.0803	0.0000	287.1255	287.1255	0.0136	0.0128	291.2840
Waste						0.0000	0.0000		0.0000	0.0000	8.4038	0.0000	8.4038	0.4967	0.0000	20.8201
Water						0.0000	0.0000		0.0000	0.0000	2.0746	0.0405	2.1152	7.1400e-003	4.5100e-003	3.6382
Total	**0.6659**	**0.1296**	**1.8873**	**3.1500e-003**	**0.3153**	**5.5300e-003**	**0.3209**	**0.0786**	**5.4100e-003**	**0.0841**	**10.4785**	**288.6645**	**299.1430**	**0.5184**	**0.0173**	**317.2670**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2

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Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1927	0.1220	1.2200	3.1100e-003	0.3153	1.8200e-003	0.3172	0.0786	1.7000e-003	0.0803	0.0000	287.1255	287.1255	0.0136	0.0128	291.2840
Unmitigated	0.1927	0.1220	1.2200	3.1100e-003	0.3153	1.8200e-003	0.3172	0.0786	1.7000e-003	0.0803	0.0000	287.1255	287.1255	0.0136	0.0128	291.2840

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	423.90	382.50	318.60	930,640	930,640
Enclosed Parking with Elevator	0.00	0.00	0.00		
Total	423.90	382.50	318.60	930,640	930,640

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.514977	0.035448	0.239576	0.135703	0.024260	0.006170	0.009659	0.007844	0.001064	0.000396	0.021950	0.000681	0.002272
Enclosed Parking with Elevator	0.514977	0.035448	0.239576	0.135703	0.024260	0.006170	0.009659	0.007844	0.001064	0.000396	0.021950	0.000681	0.002272

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.4054	0.4054	0.0000	0.0000	0.4054
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.4054	0.4054	0.0000	0.0000	0.4054
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

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	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

330 Distel Circle, Los Altos - 2030 - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	348197	0.3159	0.0000	0.0000	0.3159
Enclosed Parking with Elevator	98627.2	0.0895	0.0000	0.0000	0.0895
Total		**0.4054**	**0.0000**	**0.0000**	**0.4054**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	348197	0.3159	0.0000	0.0000	0.3159
Enclosed Parking with Elevator	98627.2	0.0895	0.0000	0.0000	0.0895
Total		**0.4054**	**0.0000**	**0.0000**	**0.4054**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4732	7.6900e-003	0.6673	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0400e-003	0.0000	1.1193
Unmitigated	0.4732	7.6900e-003	0.6673	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0400e-003	0.0000	1.1193

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0693					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0200	7.6900e-003	0.6673	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0400e-003	0.0000	1.1193
Total	**0.4731**	**7.6900e-003**	**0.6673**	**4.0000e-005**		**3.7100e-003**	**3.7100e-003**		**3.7100e-003**	**3.7100e-003**	**0.0000**	**1.0932**	**1.0932**	**1.0400e-003**	**0.0000**	**1.1193**

Mitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0693					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0200	7.6900e-003	0.6673	4.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	1.0932	1.0932	1.0400e-003	0.0000	1.1193
Total	**0.4731**	**7.6900e-003**	**0.6673**	**4.0000e-005**		**3.7100e-003**	**3.7100e-003**		**3.7100e-003**	**3.7100e-003**	**0.0000**	**1.0932**	**1.0932**	**1.0400e-003**	**0.0000**	**1.1193**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.1152	7.1400e-003	4.5100e-003	3.6382
Unmitigated	2.1152	7.1400e-003	4.5100e-003	3.6382

7.2 Water by Land Use

Unmitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.86386 / 3.69678	2.1152	7.1400e-003	4.5100e-003	3.6382
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2.1152**	**7.1400e-003**	**4.5100e-003**	**3.6382**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.86386 / 3.69678	2.1152	7.1400e-003	4.5100e-003	3.6382
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2.1152**	**7.1400e-003**	**4.5100e-003**	**3.6382**

8.0 Waste Detail

8.1 Mitigation Measures Waste

330 Distel Circle, Los Altos - 2030 - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.4038	0.4967	0.0000	20.8201
Unmitigated	8.4038	0.4967	0.0000	20.8201

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	41.4	8.4038	0.4967	0.0000	20.8201
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**8.4038**	**0.4967**	**0.0000**	**20.8201**

Mitigated

Date: 4/13/2022 4:2

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	41.4	8.4038	0.4967	0.0000	20.8201
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**8.4038**	**0.4967**	**0.0000**	**20.8201**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment 3: EMFAC2021 Calculations

Summary of Construction Traffic Emissions (EMFAC2021)

Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2	CH4	N2O	CO2e
					Tons							*Metric Tons*		
Criteria Pollutants														
2023	0.0165	0.0445	0.1826	0.0006	0.0420	0.0039	0.0459	0.0063	0.0015	0.0079	54.5580	0.0027	0.0041	55.8491
2024	0.0093	0.0254	0.1026	0.0003	0.0253	0.0023	0.0277	0.0038	0.0009	0.0047	32.2933	0.0015	0.0024	33.0499
Toxic Air Contaminants (0.5 Mile Trip Length)														
2023	0.0143	0.0132	0.0580	0.0000	0.0020	0.0002	0.0022	0.0003	0.0001	0.0004	4.2365	0.0012	0.0007	4.4726
2024	0.0082	0.0077	0.0329	0.0000	0.0012	0.0001	0.0013	0.0002	0.0001	0.0002	2.5056	0.0007	0.0004	2.6436

CalEEMod Construction Inputs

Phase	CalEEMod WORKER TRIPS	CalEEMod VENDOR TRIPS	Total Worker Trips	Total Vendor Trips	CalEEMod HAULING TRIPS	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	*Worker VMT*	*Vendor VMT*	*Hauling VMT*
Demolition	15	0	900	0	290	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	9720	0	5800
Site Preparation	15	0	1350	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	14580	0	0
Grading	28	0	840	0	16	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	9072	0	320
Trenching	10	0	1500	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	16200	0	0
Building Construction	72	13	8640	1560	150	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	93312	11388	1095
Architectural Coating	14	0	840	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	9072	0	0
Paving	50	0	3000	0	156	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	32400	0	1138.8

Number of Days Per Year					
2023	1/3/23	12/31/23	363	364	
2024	1/1/24	8/6/24	219	219	
			582	**583**	***Total Workdays***

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	1/3/2023	3/3/2023	7	60
Site Preparation	3/4/2023	6/1/2023	7	90
Grading	6/5/2023	7/4/2023	7	30
Trenching	7/5/2023	12/1/2023	7	150
Building Construction	12/6/2023	4/3/2024	7	120
Architectural Coating	4/7/2024	6/5/2024	7	60
Paving	6/8/2024	8/6/2024	7	60

Category		Mix %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNLS	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust PM10	PM10_PM BW	PM10_PM TW	PM10_IDLEX	PM10_RUNEX	PM10_STREX	Road Dust PM25	PM25_PM BW	PM25_PM TW	PM25_IDLEX	PM25_RUNEX	PM25_STREX	CO2_NBIO_IDLEX	CO2_NBIO_RUNEX	CO2_NBIO_STREX	CH4_IDLEX	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX
																														19	22	23	8	9	10						
Hauling	HHDT	100.0	1	0.000287604	8.55424E-05	0.332404817	0	0.01953334	0.00077057	5.28839E-07	4.1629787	1.930480649	2.692504026	5.211988	0.79481483	0.000555	0.00746083	0.0148834	2.65981E-07		0.081444	0.035123	0.002283	0.025833	9.98684E-07		0.028506	0.008781	0.002179	0.0247116	9.183E-07	850.51039	1643.0479	0.0269048	0.235881	0.125647179	9.74075E-08	0.136898	0.262148415	2.46823E-05
	MHD	0.0	0	0.028424515	0.006961572	0.027529656	0	0.04434978	0.05660825	0.052337336	0.9240436	1.219274528	1.396113281	0.673566	0.40377012	1.152494	0.00150213	0.011767743	8.73526E-05	0.299	0.045469	0.012	0.002542	0.014931	0.000112942	0.04499	0.015914	0.003	0.002431	0.0142769	0.0001038	161.33734	1239.5984	8.8359741	0.012943	0.009906777	0.009245497	0.024829	0.159885109	0.006096523
Vendor	HHDT	50.0	0.5	0.000143802	4.27712E-05	0.166202408	0	0.00976667	0.00038529	2.6442E-07	2.0814893	0.965240325	1.346252013	2.605994	0.39740742	0.000277	0.00373041	0.007441725	1.32991E-07		0.040722	0.017561	0.001142	0.012916	4.99342E-07		0.014253	0.00439	0.001089	0.0123558	4.591E-07	425.2552	821.52395	0.0134524	0.11794	0.06282359	4.87037E-08	0.068449	0.131074208	1.23411E-05
	MHD	50.0	0.5	0.014212257	0.003480786	0.013764828	0	0.02217489	0.02830413	0.026168668	0.4620218	0.609637264	0.698056641	0.336783	0.20188506	0.576247	0.00075106	0.005883871	4.36763E-05		0.022735	0.006	0.001271	0.007465	5.64711E-05		0.007957	0.0015	0.001216	0.0071384	5.192E-05	80.66867	619.79918	4.417987	0.006471	0.004953388	0.004622749	0.012414	0.079942554	0.003048262
		1		0.01435606	0.003523557	0.179967236	0	0.03194156	0.02868941	0.026168932	2.5435111	1.574877589	2.044308654	2.942777	0.59929248	0.576524	0.00448148	0.013325596	4.38093E-05	0.299	0.063457	0.023561	0.002413	0.020382	5.69705E-05	0.04499	0.02221	0.00589	0.002305	0.0194942	5.238E-05	505.92387	1441.3231	4.4314394	0.124412	0.067776978	0.004622797	0.080863	0.211016762	0.003060603
Worker	LDA	50.0	0.5	0.143306127	0.042683769	0	0	0.0045285	0.10768412	0.159592017	0	0.021192179	0.122461753	0	0.35029931	1.546631	0	0.001252255	0.000323762		0.0036	0.004	0	0.000614	0.000990927		0.00126	0.001	0	0.0005655	0.0009111	0	126.68013	32.749475	0	0.001154545	0.034539145	0	0.002249406	0.015441065
	LDT1	25.0	0.25	0.156677436	0.04332923	0	0	0.0077825	0.12516577	0.145126689	0	0.035722679	0.100614187	0	0.38639431	1.408382	0	0.000820722	0.000217772		0.002307	0.002	0	0.000514	0.000767762		0.000807	0.0005	0	0.0004735	0.000706	0	83.019433	22.02833	0	0.00173807	0.028010471	0	0.002554131	0.009913954
	LDT2	25.0	0.25	0.074138692	0.021036563	0	0	0.00307324	0.05534742	0.101569939	0	0.019062039	0.088569484	0	0.22117686	0.96209	0	0.000860099	0.000220741		0.002219	0.002	0	0.000345	0.000540097		0.000777	0.0005	0	0.0003173	0.0004966	0	87.013301	22.328622	0	0.000769908	0.021709383	0	0.001617133	0.009562758
		1		0.374122256	0.107049562	0	0	0.015382	0.28819731	0.406288645	0	0.075976897	0.311645425	0	0.95807047	3.917103	0	0.002933076	0.000762276	0.299	0.008126	0.008	0	0.001473	0.002298785	0.04499	0.002844	0.002	0	0.0013563	0.0021137	0	296.71286	77.106427	0	0.003662524	0.084258998	0	0.00642067	0.034917777

		Mix %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNLS	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust PM10	PM10_PM BW	PM10_PM TW	PM10_IDLEX	PM10_RUNEX	PM10_STREX	Road Dust PM25	PM25_PM BW	PM25_PM TW	PM25_IDLEX	PM25_RUNEX	PM25_STREX	CO2_NBIO_IDLEX	CO2_NBIO_RUNEX	CO2_NBIO_STREX	CH4_IDLEX	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX
Category																														19	22	23	8	9	10						
Hauling	HHDT	100.0	1	0.000195977	5.82846E-05	0.329789936	0	0.01860554	0.00052501	4.36152E-07	4.1112137	1.850604526	2.731408381	5.19556	0.77488683	0.000626	0.00728035	0.014635772	1.93499E-07		0.081298	0.035125	0.002182	0.025474	6.09682E-07		0.028454	0.008781	0.002082	0.0243688	5.606E-07	832.31669	1617.1297	0.019573	0.232934	0.121678903	8.02769E-08	0.134072	0.258076714	1.94763E-05
	MHD	0.0	0	0.025794994	0.006259754	0.026359118	0	0.03811329	0.05096401	0.04894298	0.8943127	1.112921974	1.40789614	0.671381	0.34617278	1.07433	0.00148998	0.011664295	8.43209E-05	0.299	0.045399	0.012	0.002128	0.012985	0.000106814	0.04499	0.01589	0.003	0.002035	0.0124151	9.821E-05	160.25985	1229.1806	8.5293121	0.013383	0.009658327	0.008772715	0.024689	0.158249654	0.006031915
Vendor	HHDT	50.0	0.5	9.79886E-05	2.91423E-05	0.164894968	0	0.00930277	0.0002625	2.18076E-07	2.0556069	0.925302263	1.36570419	2.59778	0.38744341	0.000313	0.00364017	0.007317886	9.67497E-08		0.040649	0.017563	0.001091	0.012737	3.04841E-07		0.014227	0.004391	0.001041	0.0121844	2.803E-07	416.15835	808.56485	0.0097865	0.116467	0.060839451	4.01385E-08	0.067036	0.129038357	9.73817E-06
	MHD	50.0	0.5	0.012897497	0.003129877	0.013179559	0	0.01905664	0.02548201	0.02447149	0.4471563	0.5564460987	0.70394807	0.335691	0.17308639	0.537165	0.00074499	0.005832147	4.21605E-05		0.0227	0.006	0.001064	0.006492	5.3407E-05		0.007945	0.0015	0.001018	0.0062075	4.911E-05	80.129824	614.5903	4.2646561	0.006691	0.004829164	0.004386358	0.012344	0.079124827	0.003015958
			1	0.012995486	0.003159019	0.178074527	0	0.02835941	0.02574451	0.024471708	2.5027632	1.48176325	2.06965226	2.933471	0.56052298	0.537478	0.00438516	0.013150033	4.22572E-05	0.299	0.063348	0.023563	0.002155	0.01923	5.37119E-05	0.04499	0.022172	0.005891	0.002059	0.0183919	4.939E-05	496.28827	1423.1552	4.2744426	0.123158	0.065668615	0.004386398	0.07938	0.208163184	0.003025696
Worker	LDA	50.0	0.5	0.136796864	0.040510207	0	0	0.00394285	0.10236849	0.147535756	0	0.018684555	0.115476587	0	0.32485557	1.445873	0	0.001219878	0.000315615		0.003584	0.004	0	0.000585	0.000954881		0.001254	0.001	0	0.000539	0.000878	0	123.40405	31.925346	0	0.001026569	0.03235985	0	0.002081025	0.014940319
	LDT1	25.0	0.25	0.148814258	0.041105424	0	0	0.00690435	0.11745495	0.134116008	0	0.0319581	0.094816504	0	0.35468144	1.306204	0	0.00080836	0.000213259		0.002306	0.002	0	0.000482	0.00072446		0.000807	0.0005	0	0.0004435	0.0006661	0	81.76883	21.571794	0	0.001555571	0.026204278	0	0.00234364	0.009623613
	LDT2	25.0	0.25	0.072043204	0.020150051	0	0	0.00277508	0.05358915	0.094795741	0	0.017007912	0.082407943	0	0.2073317	0.905899	0	0.00084201	0.000215566		0.002217	0.002	0	0.000333	0.000526973		0.000776	0.0005	0	0.0003065	0.0004845	0	85.183477	21.80511	0	0.000704556	0.020482149	0	0.001504676	0.009197602
			1	0.357654326	0.101765681	0	0	0.01362228	0.2734126	0.376447505	0	0.067650567	0.292701033	0	0.88686871	3.657977	0	0.002870248	0.000744439	0.299	0.008107	0.008	0	0.001401	0.002206314	0.04499	0.002837	0.002	0	0.001289	0.0020286	0	290.35636	75.302249	0	0.003286696	0.079046277	0	0.005929341	0.033761535

CalEEMod EMFAC2021 Emission Factors Input — Year 2022

Season	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	CH4_IDLEX	0	0	0	0	0.005715	0.003459	0.013325	0.206586857	0.007557	0	0	0.073426	0
A	CH4_RUNEX	0.00262	0.007767	0.003383	0.004896	0.010237	0.008314	0.010833	0.125617727	0.00979	0.350130168	0.173457	0.093942	0.017185
A	CH4_STREX	0.073882	0.119672	0.092036	0.116615	0.025471	0.014269	0.009682	9.9441E-08	0.019008	0.004663452	0.19335	0.004688	0.028369
A	CO_IDLEX	0	0	0	0	0.198658	0.145501	0.651982	4.97661886	0.488392	0	0	1.621037	0
A	CO_RUNEX	0.760946	1.692164	0.95137	1.147775	1.056725	0.677353	0.501333	0.800252118	0.642924	4.124448351	13.58248	0.9513	2.058413
A	CO_STREX	3.322299	6.090252	4.093035	4.559313	2.13502	1.264781	1.235154	0.000436679	2.130857	0.48496823	8.107621	0.67174	2.789542
A	CO2_NBIO_IDLEX	0	0	0	0	8.910742	13.95614	165.3045	879.5752488	85.25208	0	0	195.3581	0
A	CO2_NBIO_RUNEX	259.9438	336.8063	355.6403	430.3206	817.3397	858.1198	1248.398	1666.151858	1420.912	1102.901969	188.9834	1071.282	1702.83
A	CO2_NBIO_STREX	67.20602	89.96676	91.48948	109.8836	18.21997	10.55785	9.138443	0.030444739	16.62396	3.31327329	50.90901	3.708073	23.6993
A	NOX_IDLEX	0	0	0	0	0.052368	0.100699	1.038732	4.483888986	0.385202	0	0	1.506794	0
A	NOX_RUNEX	0.048635	0.159739	0.086392	0.134091	0.853668	1.119952	1.574899	2.394965381	1.208206	0.329132707	0.60517	2.986224	1.654513
A	NOX_STREX	0.261102	0.427174	0.383682	0.505292	0.479423	0.269607	1.281987	2.425661108	0.91248	0.048622235	0.149724	0.46558	0.298066
A	PM10_IDLEX	0	0	0	0	0.000668	0.001334	0.003039	0.002476095	0.000459	0	0	0.001574	0
A	PM10_PMBW	0.007233	0.009226	0.008886	0.009068	0.078	0.091	0.045475	0.082552815	0.049849	0.110359457	0.012	0.046029	0.044952
A	PM10_PMTW	0.008	0.008	0.008	0.008	0.00938	0.01061	0.012	0.035118082	0.012	0.032484506	0.004	0.010935	0.013135
A	PM10_RUNEX	0.001291	0.002197	0.00143	0.001533	0.016407	0.025675	0.018341	0.027281345	0.016941	0.006218357	0.001891	0.015648	0.032536
A	PM10_STREX	0.002063	0.003256	0.002221	0.002404	0.000272	0.000128	0.000122	1.13121E-06	0.000148	8.37433E-06	0.003773	3.75E-05	0.00037
A	PM25_IDLEX	0	0	0	0	0.000639	0.001276	0.002908	0.002364184	0.000439	0	0	0.001505	0
A	PM25_PMBW	0.002532	0.003229	0.00311	0.003174	0.0273	0.03185	0.015916	0.028893485	0.017447	0.03862581	0.0042	0.01611	0.015733
A	PM25_PMTW	0.002	0.002	0.002	0.002	0.002345	0.002652	0.003	0.008779521	0.003	0.008121126	0.001	0.002734	0.003284
A	PM25_RUNEX	0.001189	0.002023	0.001316	0.001413	0.015653	0.024543	0.017539	0.026097586	0.016199	0.005946371	0.001772	0.014956	0.031073
A	PM25_STREX	0.001897	0.002994	0.002042	0.00221	0.00025	0.000117	0.000112	1.04011E-06	0.000136	7.69989E-06	0.003556	3.45E-05	0.00034
A	ROG_DIURN	0.298356	0.654689	0.305234	0.371774	0.142048	0.075802	0.031516	0.000336069	0.066167	0.017061368	3.980024	0.023681	36.75334
A	ROG_HTSK	0.089123	0.181374	0.087307	0.103701	0.037388	0.020186	0.007787	9.99559E-05	0.017416	0.005624927	3.560376	0.0068	10.2939
A	ROG_IDLEX	0	0	0	0	0.023467	0.017109	0.029206	0.334782686	0.040359	0	0	0.178459	0
A	ROG_RESTL	0	0	0	0	0	0	0	0	0	0	0	0	0
A	ROG_RUNEX	0.010496	0.035089	0.013698	0.021403	0.104886	0.130534	0.060436	0.033100547	0.060818	0.063146087	1.156556	0.062084	0.108196
A	ROG_RUNLS	0.225275	0.530134	0.228911	0.286632	0.202385	0.107137	0.063713	0.000900445	0.073897	0.010905595	3.734124	0.015438	0.237872
A	ROG_STREX	0.34655	0.627914	0.435929	0.600223	0.128012	0.07114	0.05565	5.40242E-07	0.100833	0.017141714	1.442993	0.026744	0.124324
A	SO2_IDLEX	0	0	0	0	8.68E-05	0.000134	0.00154	0.007812146	0.000808	0	0	0.001782	0
A	SO2_RUNEX	0.00257	0.00333	0.003515	0.004251	0.00799	0.008276	0.011852	0.015152394	0.013604	0.009476431	0.001868	0.00996	0.016708
A	SO2_STREX	0.000664	0.000889	0.000904	0.001086	0.00018	0.000104	9.03E-05	3.00977E-07	0.000164	3.27551E-05	0.000503	3.67E-05	0.000234
A	TOG_DIURN	0.298356	0.654689	0.305234	0.371774	0.142048	0.075802	0.031516	0.000336069	0.066167	0.017061368	0.088089	0.023681	36.75334
A	TOG_HTSK	0.089123	0.181374	0.087307	0.103701	0.037388	0.020186	0.007787	9.99559E-05	0.017416	0.005624927	3.560376	0.0068	10.2939
A	TOG_IDLEX	0	0	0	0	0.033415	0.023307	0.0464	0.573123753	0.053678	0	0	0.2911	0
A	TOG_RESTL	0	0	0	0	0	0	0	0	0	0	0	0	0
A	TOG_RUNEX	0.015286	0.051142	0.019968	0.031121	0.130739	0.152989	0.079545	0.162488475	0.079853	0.420818384	1.378949	0.165501	0.146385
A	TOG_RUNLS	0.225275	0.530134	0.228911	0.286632	0.202385	0.107137	0.063713	0.000900445	0.073897	0.010905595	3.734124	0.015438	0.237872
A	TOG_STREX	0.379427	0.687484	0.477287	0.657163	0.140157	0.077889	0.060929	5.91497E-07	0.1104	0.018768019	1.568432	0.029282	0.136119
A	N2O_IDLEX	0	0	0	0	0.000643	0.001679	0.025434	0.141105148	0.01202	0	0	0.026084	0
A	N2O_RUNEX	0.00491	0.011145	0.00702	0.010295	0.043036	0.0838	0.161707	0.265545018	0.157529	0.166506076	0.041009	0.135782	0.070507
A	N2O_STREX	0.031951	0.040826	0.039881	0.044373	0.037118	0.02093	0.006082	2.37172E-05	0.015897	0.007148428	0.008761	0.003988	0.030278

CalEEMod EMFAC2021 Emission Factors Input — Year 2025

Season	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	CH4_IDLEX	0	0	0	0	0.005194	0.003023	0.013842	0.229861003	0.007514	0	0	0.076044	0
A	CH4_RUNEX	0.001841	0.005577	0.002592	0.003307	0.007222	0.006455	0.009536	0.117132109	0.009593	0.497756349	0.158292	0.090769	0.011159
A	CH4_STREX	0.060617	0.097956	0.077312	0.090898	0.021636	0.011648	0.008314	7.74759E-08	0.016852	0.003733046	0.177199	0.004898	0.025922
A	CO_IDLEX	0	0	0	0	0.195049	0.141036	0.668176	5.176290252	0.524506	0	0	1.692209	0
A	CO_RUNEX	0.60658	1.307104	0.781411	0.865787	0.821777	0.532869	0.296939	0.756535609	0.44406	5.878094388	12.31202	0.85843	1.105311
A	CO_STREX	2.711494	4.855262	3.417927	3.621729	2.164208	1.195973	1.000247	0.000684691	1.872658	0.515229574	7.965438	0.66885	2.373596
A	CO2_NBIO_IDLEX	0	0	0	0	8.602925	13.6884	158.593	813.9732577	87.04447	0	0	189.0522	0
A	CO2_NBIO_RUNEX	240.2859	321.7972	333.6012	401.5645	764.972	810.9955	1213.655	1586.833625	1366.1	1082.148951	187.2679	1017.838	1680.132
A	CO2_NBIO_STREX	62.25317	84.48449	85.20268	101.7438	17.59535	9.640849	8.205073	0.017114195	14.85767	3.177121883	47.30784	3.779827	22.06858
A	NOX_IDLEX	0	0	0	0	0.046413	0.089605	0.864894	4.061456113	0.364367	0	0	1.350384	0
A	NOX_RUNEX	0.033383	0.114688	0.061427	0.085138	0.585978	0.806102	1.006394	1.774057666	0.968278	0.301158242	0.557882	2.407715	1.487818
A	NOX_STREX	0.218516	0.357478	0.309231	0.377914	0.420652	0.228874	1.403485	2.751173324	0.987981	0.039008099	0.129146	0.492123	0.298831
A	PM10_IDLEX	0	0	0	0	0.000685	0.001389	0.001762	0.002096665	0.000404	0	0	0.001209	0
A	PM10_PMBW	0.007137	0.009219	0.00886	0.008972	0.077556	0.090487	0.04526	0.081222471	0.04982	0.123663808	0.012	0.044786	0.044946
A	PM10_PMTW	0.008	0.008	0.008	0.008	0.00942	0.010665	0.012	0.035128275	0.012	0.042521858	0.004	0.010572	0.013235
A	PM10_RUNEX	0.00112	0.001813	0.001292	0.00131	0.01302	0.021567	0.011186	0.025031341	0.015263	0.005684616	0.001925	0.012423	0.028992
A	PM10_STREX	0.001849	0.00275	0.002061	0.002069	0.000206	9.12E-05	0.000101	5.20395E-07	0.000131	1.2108E-05	0.003464	4.08E-05	0.000296
A	PM25_IDLEX	0	0	0	0	0.000656	0.001329	0.001685	0.001999711	0.000387	0	0	0.001155	0
A	PM25_PMBW	0.002498	0.003227	0.003101	0.00314	0.027145	0.03167	0.015841	0.028427865	0.017437	0.043282333	0.0042	0.015675	0.015731
A	PM25_PMTW	0.002	0.002	0.002	0.002	0.002355	0.002666	0.003	0.008782069	0.003	0.010630465	0.001	0.002643	0.003309
A	PM25_RUNEX	0.001031	0.001669	0.001189	0.001207	0.012419	0.020616	0.010694	0.023944936	0.014593	0.005434911	0.001799	0.01187	0.027693
A	PM25_STREX	0.0017	0.002528	0.001895	0.001902	0.000189	8.39E-05	9.28E-05	4.78484E-07	0.000121	1.11329E-05	0.003253	3.76E-05	0.000272
A	ROG_DIURN	0.264632	0.562584	0.283569	0.336782	0.120201	0.063181	0.023118	0.000161301	0.068202	0.010220489	3.860886	0.029457	30.55965
A	ROG_HTSK	0.077597	0.155938	0.078131	0.089235	0.030304	0.015991	0.005603	4.7964E-05	0.016021	0.003785535	3.558651	0.007775	7.988502
A	ROG_IDLEX	0	0	0	0	0.021187	0.015503	0.025251	0.32711902	0.04025	0	0	0.185349	0
A	ROG_RESTL	0	0	0	0	0	0	0	0	0	0	0	0	0
A	ROG_RUNEX	0.006942	0.024558	0.010089	0.013778	0.079612	0.109106	0.032483	0.017799596	0.044456	0.059943987	1.024683	0.053481	0.077128
A	ROG_RUNLS	0.197921	0.439329	0.211003	0.255197	0.16959	0.087065	0.045291	0.000432041	0.075038	0.007986552	3.760078	0.019152	0.188623
A	ROG_STREX	0.273326	0.495732	0.354505	0.447416	0.106693	0.056928	0.045776	4.20633E-07	0.089311	0.013239776	1.305157	0.027862	0.108247
A	SO2_IDLEX	0	0	0	0	8.37E-05	0.000131	0.001472	0.007098942	0.000823	0	0	0.001718	0
A	SO2_RUNEX	0.002375	0.003181	0.003298	0.003967	0.007471	0.007812	0.011512	0.014348163	0.013043	0.00885381	0.001851	0.009458	0.016473
A	SO2_STREX	0.000615	0.000835	0.000842	0.001006	0.000174	9.53E-05	8.11E-05	1.69191E-07	0.000147	3.14091E-05	0.000468	3.74E-05	0.000218
A	TOG_DIURN	0.264632	0.562584	0.283569	0.336782	0.120201	0.063181	0.023118	0.000161301	0.068202	0.010220489	0.08531	0.029457	30.55965
A	TOG_HTSK	0.077597	0.155938	0.078131	0.089235	0.030304	0.015991	0.005603	4.7964E-05	0.016021	0.003785535	3.558651	0.007775	7.988502
A	TOG_IDLEX	0	0	0	0	0.03005	0.020889	0.042478	0.588143126	0.05333	0	0	0.302207	0
A	TOG_RESTL	0	0	0	0	0	0	0	0	0	0	0	0	0
A	TOG_RUNEX	0.010114	0.035818	0.014707	0.020053	0.097862	0.126808	0.046457	0.137213337	0.060464	0.565677917	1.236542	0.152507	0.100988
A	TOG_RUNLS	0.197921	0.439329	0.211003	0.255197	0.16959	0.087065	0.045291	0.000432041	0.075038	0.007986552	3.760078	0.019152	0.188623
A	TOG_STREX	0.299257	0.542764	0.388138	0.489864	0.116815	0.062329	0.050119	4.6054E-07	0.097784	0.014495888	1.419098	0.030505	0.118517
A	N2O_IDLEX	0	0	0	0	0.000637	0.00168	0.024457	0.131219379	0.012456	0	0	0.024955	0
A	N2O_RUNEX	0.003885	0.008627	0.005651	0.007595	0.040583	0.081593	0.156018	0.253304032	0.157183	0.165902975	0.038984	0.126174	0.069141
A	N2O_STREX	0.028873	0.037292	0.035503	0.037751	0.034174	0.018376	0.005858	1.42154E-05	0.01459	0.006142466	0.007691	0.004354	0.031786

CalEEMod EMFAC2021 Emission Factors Input — Year 2030

Season	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	CH4_IDLEX	0	0	0	0	0.004335	0.002508	0.015544	0.200689575	0.007521	0	0	0.081907	0
A	CH4_RUNEX	0.001251	0.003273	0.001878	0.002097	0.004028	0.004457	0.009465	0.087739612	0.010745	0.633168094	0.142987	0.08726	0.006074
A	CH4_STREX	0.045719	0.070684	0.060357	0.065129	0.016442	0.00872	0.006578	4.40093E-08	0.013432	0.002502449	0.157242	0.005216	0.022777
A	CO_IDLEX	0	0	0	0	0.182077	0.135546	0.628457	4.997868655	0.549826	0	0	1.823721	0
A	CO_RUNEX	0.484447	0.895501	0.639473	0.660784	0.544761	0.383737	0.155266	0.628349624	0.288528	7.378159276	11.04655	0.716417	0.371762
A	CO_STREX	2.08878	3.413929	2.729559	2.781248	2.051418	1.109837	0.71851	0.00087263	1.464305	0.531636543	7.830862	0.671301	1.918466
A	CO2_NBIO_IDLEX	0	0	0	0	7.808851	13.36322	143.3801	719.710734	89.80588	0	0	181.8136	0
A	CO2_NBIO_RUNEX	218.6415	296.0222	304.9904	364.0422	665.9344	713.025	1074.538	1395.928332	1245.372	969.9926525	185.5769	941.807	1656.25
A	CO2_NBIO_STREX	55.99265	76.24029	77.1602	91.4769	15.88489	8.544837	6.787068	0.009437452	12.01881	3.025945099	42.83228	3.929487	20.12804
A	NOX_IDLEX	0	0	0	0	0.036306	0.076255	0.72827	3.806064714	0.333548	0	0	1.088868	0
A	NOX_RUNEX	0.023158	0.066035	0.041164	0.048222	0.312391	0.495733	0.584719	1.446947564	0.825827	0.255958394	0.509869	1.567888	1.278466
A	NOX_STREX	0.178975	0.272625	0.247045	0.271696	0.32724	0.178285	1.220957	2.603954429	0.931305	0.025581732	0.103081	0.520702	0.298107
A	PM10_IDLEX	0	0	0	0	0.000666	0.001456	0.000655	0.001737607	0.000311	0	0	0.000746	0
A	PM10_PMBW	0.007078	0.009138	0.008838	0.008892	0.0744	0.086908	0.04333	0.082108579	0.049981	0.147119217	0.012	0.043749	0.04494
A	PM10_PMTW	0.008	0.008	0.008	0.008	0.009343	0.010534	0.012	0.035145225	0.012	0.05700071	0.004	0.010442	0.013343
A	PM10_RUNEX	0.000838	0.00126	0.000989	0.000971	0.009189	0.01687	0.00542	0.023402177	0.012621	0.004822062	0.001997	0.008575	0.022807
A	PM10_STREX	0.001482	0.002074	0.001658	0.001608	0.000134	5.67E-05	8.23E-05	1.43954E-07	0.000118	1.26121E-05	0.003416	4.58E-05	0.000233
A	PM25_IDLEX	0	0	0	0	0.000637	0.001393	0.000626	0.001655588	0.000297	0	0	0.000713	0
A	PM25_PMBW	0.002477	0.003198	0.003093	0.003112	0.02604	0.030418	0.015165	0.028738003	0.017493	0.051491726	0.0042	0.015312	0.015729
A	PM25_PMTW	0.002	0.002	0.002	0.002	0.002336	0.002634	0.003	0.008786306	0.003	0.014250178	0.001	0.00261	0.003336
A	PM25_RUNEX	0.000771	0.001159	0.00091	0.000894	0.008761	0.016127	0.005178	0.022386582	0.012067	0.00460949	0.001864	0.008187	0.021783
A	PM25_STREX	0.001362	0.001907	0.001524	0.001478	0.000123	5.22E-05	7.56E-05	1.3236E-07	0.000109	1.15963E-05	0.003197	4.21E-05	0.000214
A	ROG_DIURN	0.227323	0.469769	0.248439	0.276762	0.087274	0.048494	0.014918	4.02275E-05	0.069383	0.007038146	3.680755	0.041692	20.29626
A	ROG_HTSK	0.060745	0.120653	0.063468	0.068938	0.020831	0.011136	0.00342	1.26947E-05	0.014014	0.002098044	3.555147	0.009335	4.900484
A	ROG_IDLEX	0	0	0	0	0.01758	0.01365	0.020875	0.311156106	0.039789	0	0	0.197824	0
A	ROG_RESTL	0	0	0	0	0	0	0	0	0	0	0	0	0
A	ROG_RUNEX	0.00434	0.013675	0.006865	0.008091	0.050519	0.082873	0.014952	0.014289903	0.031966	0.05310504	0.890508	0.040189	0.050568
A	ROG_RUNLS	0.170881	0.355945	0.18526	0.207423	0.123377	0.065349	0.028627	0.000113992	0.077263	0.007877766	3.783469	0.027699	0.119258
A	ROG_STREX	0.197184	0.337555	0.26551	0.301161	0.07823	0.041209	0.034167	2.38553E-07	0.071386	0.008378471	1.134366	0.029472	0.088942
A	SO2_IDLEX	0	0	0	0	7.6E-05	0.000128	0.00132	0.006214699	0.000846	0	0	0.001639	0
A	SO2_RUNEX	0.002161	0.002926	0.003015	0.003597	0.006498	0.00686	0.010167	0.012580529	0.011835	0.007389377	0.001835	0.008739	0.016224
A	SO2_STREX	0.000554	0.000754	0.000763	0.000904	0.000157	8.45E-05	6.71E-05	9.32988E-08	0.000119	2.99145E-05	0.000423	3.88E-05	0.000199
A	TOG_DIURN	0.227323	0.469769	0.248439	0.276762	0.087274	0.048494	0.014918	4.02275E-05	0.069383	0.007038146	0.080793	0.041692	20.29626
A	TOG_HTSK	0.060745	0.120653	0.063468	0.068938	0.020831	0.011136	0.00342	1.26947E-05	0.014014	0.002098044	3.555147	0.009335	4.900484
A	TOG_IDLEX	0	0	0	0	0.0248	0.018097	0.03926	0.541395418	0.052568	0	0	0.32342	0
A	TOG_RESTL	0	0	0	0	0	0	0	0	0	0	0	0	0
A	TOG_RUNEX	0.006329	0.019954	0.010004	0.011775	0.060583	0.095343	0.026358	0.103810529	0.046832	0.694289379	1.091848	0.133799	0.062589
A	TOG_RUNLS	0.170881	0.355945	0.18526	0.207423	0.123377	0.065349	0.028627	0.000113992	0.077263	0.007877766	3.783469	0.027699	0.119258
A	TOG_STREX	0.215892	0.36958	0.2907	0.329734	0.085652	0.045119	0.037409	2.61185E-07	0.078158	0.009173371	1.234067	0.032269	0.097381
A	N2O_IDLEX	0	0	0	0	0.000589	0.00168	0.022195	0.116327365	0.013129	0	0	0.023481	0
A	N2O_RUNEX	0.003165	0.00587	0.004501	0.005405	0.035467	0.074134	0.137514	0.223022009	0.151496	0.151061958	0.036967	0.112558	0.068485
A	N2O_STREX	0.025397	0.032408	0.031653	0.032172	0.028461	0.015119	0.00476	3.77164E-06	0.011347	0.00458201	0.006341	0.004848	0.033159

CalEEMod EMFAC2021 Fleet Mix Input — Year 2022

FleetMixLandUseSubType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.537284	0.044282	0.22264	0.123915	0.022851	0.005418	0.009384	0.007051	0.001066	0.000424	0.022133	0.000678	0.002874
Parking Lot	0.537284	0.044282	0.22264	0.123915	0.022851	0.005418	0.009384	0.007051	0.001066	0.000424	0.022133	0.000678	0.002874

CalEEMod EMFAC2021 Fleet Mix Input — Year 2025

FleetMixLandUseSubType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.528224	0.040364	0.230108	0.128589	0.023276	0.00574	0.009425	0.00744	0.001057	0.000413	0.022096	0.000684	0.002585
Enclosed Parking with Ele\	0.528224	0.040364	0.230108	0.128589	0.023276	0.00574	0.009425	0.00744	0.001057	0.000413	0.022096	0.000684	0.002585

CalEEMod EMFAC2021 Fleet Mix Input — Year 2030

FleetMixLandUseSubType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.514977	0.035448	0.239576	0.135703	0.02426	0.00617	0.009659	0.007844	0.001064	0.000396	0.02195	0.000681	0.002272
Enclosed Parking with Ele\	0.514977	0.035448	0.239576	0.135703	0.02426	0.00617	0.009659	0.007844	0.001064	0.000396	0.02195	0.000681	0.002272

Adjustment Factors

Vehicle Category	Fuel	Population	Pop Fract	VMT (miles/day)	VMT Fract	Trips/day	Trip Fract
HHDT	GAS	3.82736662	3.06472E-05	105.1913484	0.0001019	76.57795135	0.000613
HHDT	DSL	8126.63008	0.065073107	984491.3077	0.9537077	118998.6435	0.952869
HHDT	NG	660.775639	0.005291089	47681.35825	0.0461904	5809.396593	0.046518
		8791.23308		1032277.857		124884.618	
LDA	GAS	604047.779	0.193629661	22374249.93	0.890678	2805661.292	0.899365
LDA	DSL	1988.84691	0.000637532	60930.0916	0.0024255	8564.495491	0.002745
LDA	ELEC	49768.5612	0.015953489	2058455.934	0.0819434	247155.5919	0.079227
LDA	PIH	14080.3346	0.004513501	626833.5276	0.0249531	58222.18377	0.018663
		669885.522		25120469.48		3119603.563	
LDT1	GAS	54974.0845	0.223264467	1779154.38	0.99554	245182.1054	0.99575
LDT1	DSL	28.8860153	0.000117314	444.5777523	0.0002488	84.95747345	0.000345
LDT1	ELEC	182.992792	0.000743183	6367.047111	0.0035627	860.9347277	0.003496
LDT1	PIH	24.3157739	9.87529E-05	1158.952646	0.0006485	100.5457251	0.000408
		55210.2791		1787124.958		246228.5433	
LDT2	GAS	274728.482	0.211367862	9911729.948	0.9883247	1286654.306	0.989913
LDT2	DSL	933.788033	0.000718429	35569.22943	0.0035467	4479.453168	0.003446
LDT2	ELEC	669.358508	0.000514984	23693.948	0.0023626	3436.204483	0.002644
LDT2	PIH	1256.28016	0.000966544	57825.98507	0.005766	5194.718469	0.003997
		277587.908		10028819.11		1299764.682	
LHDT1	GAS	19023.5394	0.047262976	692949.1823	0.6550292	283422.3924	0.704148
LHDT1	DSL	9466.89746	0.023520005	364941.2883	0.3449708	119081.6607	0.295852
		28490.4369	0.070782981	1057890.471		402504.0531	
LHDT2	GAS	2479.11932	0.027325923	89333.80071	0.3475945	36935.18397	0.407116
LHDT2	DSL	4276.17469	0.047133844	167672.0053	0.6524055	53788.89816	0.592884
		6755.29401	0.074459767	257005.806		90724.08214	
MCY	GAS	27595.0892	0.022132728	162923.9676	1	55190.17831	1
MDV	GAS	150747.251	0.210750361	5216511.844	0.9733898	697659.3115	0.975354
MDV	DSL	2337.32844	0.003267674	86668.8473	0.0161722	11158.45778	0.0156
MDV	ELEC	623.697512	0.000871953	22215.79757	0.0041454	3205.616376	0.004482
MDV	PIH	789.561205	0.001103836	33722.80892	0.0062926	3264.835584	0.004564
		154497.838		5359119.297		715288.2212	
MH	GAS	2642.08408	7.37200628	23105.28291	0.7162099	264.3140911	0.737496
MH	DSL	940.800797	2.625044918	9155.209641	0.2837901	94.08007967	0.262504
		3582.88487		32260.49255		358.3941708	
MHDT	GAS	1426.53505	0.009471981	69284.18236	0.1382254	28542.11337	0.189515
MHDT	DSL	10189.5513	0.067657111	428042.2812	0.8539656	121266.7671	0.805193
MHDT	NG	84.4805227	0.000560938	3914.204711	0.007809	796.8889021	0.005291
		11700.5669		501240.6682		150605.7694	
OBUS	GAS	470.923365	0.025852134	21653.29515	0.2596868	9422.234682	0.517249
OBUS	DSL	852.167884	0.046781196	61336.68113	0.7356076	8739.294756	0.479758
OBUS	NG	6.12418985	0.000336198	392.3599028	0.0047056	54.50528967	0.002992
		1329.21544		83382.33618		18216.03473	
SBUS	GAS	160.413892	0.015673239	7959.430234	0.3405375	641.6555689	0.062693
SBUS	DSL	662.516235	0.064731149	15413.71135	0.6594625	9593.235079	0.937307
SBUS	NG	22.5967669	0.002207817	578.3531561	0.0247443	327.2011847	0.031969
		845.526894		23373.14159		10234.89065	
UBUS	GAS	45.8110441	0.021676301	4784.036586	0.0818022	183.2441763	0.086705
UBUS	DSL	435.647489	0.206134265	48716.13451	0.8329971	1742.589957	0.824537
UBUS	ELEC	5.04675694	0.03014879	199.0027319	0.0415995	20.18702775	0.120595
UBUS	NG	41.8487514	0.019801472	4783.780965	0.0817979	167.3950058	0.079206
		528.354042		58482.9548		2113.416166	

Adjustment Factors

Vehicle Category	Fuel	Population	Pop Fract	VMT (miles/day)	VMT Fract	Trips/day	Trip Fract
HHDT	GAS	2.33035896	1.70966E-05	124.9448223	0.0001166	46.62582199	0.000342
HHDT	DSL	8692.57496	0.06377287	1008963.948	0.9416827	127877.0897	0.938167
HHDT	ELEC	63.3712014	0.000464921	6579.674935	0.0061409	825.9971986	0.00606
HHDT	NG	832.40502	0.00610692	55779.3819	0.0520598	7555.504424	0.055431
		9590.68154		1071447.949		136305.2172	
LDA	GAS	598860.284	0.189163833	22133914.69	0.8620184	2780384.029	0.878248
LDA	DSL	1620.03991	0.000511727	46912.85411	0.001827	6871.193241	0.00217
LDA	ELEC	61443.1924	0.019408249	2670451.983	0.1040023	299852.6978	0.094715
LDA	PIH	19037.6636	0.006013485	825567.7143	0.0321522	78720.73884	0.024866
		680961.18		25676847.24		3165828.659	
LDT1	GAS	51680.8552	0.222992328	1664705.874	0.9915742	230185.983	0.993205
LDT1	DSL	21.282725	9.18306E-05	302.825779	0.0001804	59.13231308	0.000255
LDT1	ELEC	234.457824	0.001011638	9323.703781	0.0055536	1109.79593	0.004789
LDT1	PIH	98.1319848	0.000423419	4519.182281	0.0026918	405.7757571	0.001751
		52034.7277		1678851.586		231760.687	
LDT2	GAS	290874.748	0.209748755	10447705.78	0.9789509	1360240.873	0.980865
LDT2	DSL	1049.95238	0.000757117	38652.33695	0.0036217	4980.340082	0.003591
LDT2	ELEC	2157.05904	0.001555448	73663.77305	0.0069023	10962.38395	0.007905
LDT2	PIH	2561.88514	0.001847366	112327.2154	0.0105251	10593.39505	0.007639
		296643.645		10672349.11		1386776.992	
LHDT1	GAS	19422.4639	0.045941069	728336.977	0.6336476	289365.7727	0.684453
LHDT1	DSL	10387.1028	0.024569211	408019.3319	0.3549737	130656.6864	0.30905
LHDT1	ELEC	196.401964	0.000464561	13079.06139	0.0113787	2746.629156	0.006497
		30005.9687	0.070974841	1149435.37		422769.0882	
LHDT2	GAS	2512.65228	0.025565973	91345.05406	0.3225651	37434.7751	0.380895
LHDT2	DSL	4837.2356	0.049218364	188645.0475	0.6661587	60846.33861	0.619105
LHDT2	ELEC	50.4620201	0.000513446	3193.250687	0.0112763	669.1749743	0.006809
		7400.3499	0.075297782	283183.3523		98281.11371	
MCY	GAS	28484.893	0.022095845	166414.5147	1	56969.78604	1
MDV	GAS	159532.218	0.207432201	5551044.411	0.9605893	739781.3765	0.961903
MDV	DSL	2421.36412	0.003148385	85326.79887	0.0147655	11351.14178	0.014759
MDV	ELEC	2274.54722	0.002957486	77934.95958	0.0134864	11571.05737	0.015045
MDV	PIH	1542.36579	0.002005465	64484.39206	0.0111588	6377.682532	0.008293
		165770.495		5778790.561		769081.2582	
MH	GAS	2337.87649	7.013583236	21506.19156	0.6912933	233.8811638	0.701639
MH	DSL	994.543666	2.983611331	9603.892712	0.3087067	99.45436656	0.298361
		3332.42015		31110.08427		333.3355304	
MHDT	GAS	1412.26257	0.009037553	72039.87357	0.1394582	28256.54946	0.180823
MHDT	DSL	10548.0591	0.067500648	435100.6189	0.8422883	125915.2277	0.805775
MHDT	ELEC	90.8085123	0.000581115	4838.905804	0.0093674	1182.343378	0.007566
MHDT	NG	98.9062774	0.000632935	4590.306874	0.0088861	911.9208312	0.005836
		12150.0365		516569.7051		156266.0414	
OBUS	GAS	430.702276	0.023671729	18962.49127	0.2311741	8617.491144	0.473624
OBUS	DSL	921.411582	0.050641491	62304.88754	0.7595666	9451.527202	0.519463
OBUS	ELEC	2.67203053	0.000146857	221.7710452	0.0027036	53.46198693	0.002938
OBUS	NG	8.1253065	0.000446573	537.746753	0.0065557	72.31522781	0.003975
		1362.9112		82026.89662		18194.79556	
SBUS	GAS	178.243554	0.016385172	8812.851183	0.3543672	712.9742161	0.065541
SBUS	DSL	673.204793	0.061884852	15283.75186	0.6145639	9748.005403	0.896093
SBUS	ELEC	4.48116849	0.000411935	145.0761128	0.0058336	51.24766317	0.004711
SBUS	NG	25.2843935	0.002324287	627.585971	0.0252354	366.1180183	0.033656
		881.213909		24869.26513		10878.3453	
UBUS	GAS	46.2191762	0.021676301	4826.657731	0.0818022	184.8767049	0.086705
UBUS	DSL	405.367492	0.190113029	44987.36567	0.7624463	1621.46997	0.760452
UBUS	ELEC	23.3120232	0.100202165	2427.539875	0.3589751	93.248093	0.400809
UBUS	NG	58.1624738	0.02727758	6762.418158	0.1146095	232.6498951	0.10911
		533.061166		59003.98143		2132.244663	

Adjustment Factors

Vehicle Category	Fuel	Population	Pop Fract	VMT (miles/day)	VMT Fract	Trips/day	Trip Fract
HHDT	GAS	1.48761568	9.81801E-06	172.849851	0.000152	29.76421444	0.000196
HHDT	DSL	9231.23405	0.060924558	1024356.864	0.9007481	136537.8407	0.901126
HHDT	ELEC	530.250085	0.003499559	54761.34921	0.0481533	6663.696554	0.043979
HHDT	NG	938.272575	0.006192438	57937.9272	0.0509466	8287.794951	0.054698
		10701.2443		1137228.99		151519.0964	
LDA	GAS	602124.626	0.184735004	21985012.74	0.8461961	2796633.75	0.858022
LDA	DSL	966.571543	0.000296549	27899.12475	0.0010738	4169.431018	0.001279
LDA	ELEC	74807.2796	0.022951267	2981995.184	0.114776	356617.9586	0.109412
LDA	PIH	24661.5156	0.007566283	986083.3495	0.037954	101975.3669	0.031287
		702559.993		25980990.4		3259396.506	
LDT1	GAS	47587.4471	0.220781409	1511766.355	0.9787303	212019.26	0.983661
LDT1	DSL	0.76846667	3.56529E-06	17.05570223	1.104E-05	2.625517308	1.22E-05
LDT1	ELEC	459.59884	0.002132303	19527.56637	0.0126423	2229.167753	0.010342
LDT1	PIH	311.959599	0.001447333	13308.95728	0.0086163	1289.952942	0.005985
		48359.774		1544619.935		215541.0062	
LDT2	GAS	315384.001	0.207524795	11011602.46	0.9644118	1467132.745	0.965383
LDT2	DSL	1158.98987	0.000762623	40906.34603	0.0035826	5439.347127	0.003579
LDT2	ELEC	5453.19362	0.003588238	171698.9957	0.0150376	27128.05332	0.01785
LDT2	PIH	4846.71192	0.003189169	193738.4599	0.0169679	20041.15378	0.013187
		326842.897		11417946.26		1519741.3	
LHDT1	GAS	19753.0188	0.042469943	727605.5091	0.5718283	294290.548	0.632739
LHDT1	DSL	11269.2779	0.024229491	427352.764	0.3358584	141753.3387	0.304777
LHDT1	ELEC	2074.53776	0.004460356	117461.3639	0.0923134	29061.9606	0.062485
		33096.8344	0.07115979	1272419.637		465105.8473	
LHDT2	GAS	2461.018	0.023436275	87198.39839	0.2764804	36665.50124	0.349166
LHDT2	DSL	5433.24767	0.051740819	199824.8391	0.6335857	68343.42067	0.650834
LHDT2	ELEC	523.424852	0.004984575	28364.00967	0.0899339	6941.368001	0.066103
		8417.69052	0.08016167	315387.2472		105008.9219	
MCY	GAS	29945.6713	0.021950206	170059.0451	1	59891.3425	1
MDV	GAS	174344.044	0.2032491	5962226.801	0.9422971	807535.9337	0.94142
MDV	DSL	2406.78655	0.002805815	79682.09193	0.0125933	11072.81735	0.012909
MDV	ELEC	5418.75334	0.006317146	169876.9029	0.0268481	26922.57502	0.031386
MDV	PIH	2963.42173	0.003454737	115546.1715	0.0182614	12253.74886	0.014285
		185133.006		6327331.967		857785.0749	
MH	GAS	2034.68785	6.562577556	19970.25646	0.6642899	203.5501727	0.65652
MH	DSL	1064.93836	3.434797413	10092.30624	0.3357101	106.4938359	0.34348
		3099.62621		30062.5627		310.0440086	
MHDT	GAS	1369.78361	0.008097456	69786.55357	0.1286334	27406.63039	0.162014
MHDT	DSL	10679.1279	0.063129513	415833.3823	0.766481	127641.7789	0.754553
MHDT	ELEC	991.138618	0.005859102	51102.91436	0.094195	12793.3276	0.075628
MHDT	NG	136.843702	0.00080895	5799.937145	0.0106907	1320.473703	0.007806
		13176.8939		542522.7874		169162.2106	
OBUS	GAS	373.850854	0.019905227	15017.95753	0.1835305	7480.007877	0.398264
OBUS	DSL	1041.41451	0.05544883	64198.49481	0.784553	10721.4028	0.570848
OBUS	ELEC	23.470396	0.001249652	1822.61906	0.0222738	469.5956826	0.025003
OBUS	NG	12.4197043	0.000661272	789.0471667	0.0096427	110.535368	0.005885
		1451.15547		81828.11857		18781.54172	
SBUS	GAS	198.199726	0.017610498	9649.073176	0.3683175	792.7989059	0.070442
SBUS	DSL	659.302865	0.058580564	14502.39326	0.5535749	9546.70548	0.848247
SBUS	ELEC	42.2755564	0.00375628	1362.719324	0.0520167	492.3385095	0.043745
SBUS	NG	29.1983511	0.00259434	683.5221158	0.0260909	422.7921234	0.037566
		928.976499		26197.70788		11254.63502	
UBUS	GAS	46.8993965	0.021676301	4897.692973	0.0818022	187.5975859	0.086705
UBUS	DSL	338.509163	0.156454601	37119.08129	0.6199702	1354.036652	0.625818
UBUS	ELEC	78.6722459	0.256009323	8935.028159	1.0016223	314.6889835	1.024037
UBUS	NG	76.8255673	0.035507794	8920.556737	0.1489929	307.3022692	0.142031
		540.906373		59872.35916		2163.625491	

Source: EMFAC2021 (v1.0.1) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	NOx_RUNEX	NOx_STREX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PM	PM2.5_PM	PM10_RUI	PM10_IDL	PM10_STR	PM10_PM	PM10_PM	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLEX	N2O_STRE	ROG_RUNE	ROG_IDLE	ROG_STRE	ROG_HOTS	ROG_RUNL	ROG_DIUR	TOG_RUNE	TOG_IDLEX	TOG_STRE	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNE	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2022	HHDT	Aggregate	Aggregate	Gasoline	3.827367	105.1913	105.1913	0	76.57795	9.246272	0	1.235102	0.00578	0	0.001696	0.005	0.036521	0.006286	0	0.001845	0.02	0.104346	2407.176	0	49.64979	0.419155	0	0.000162	0.231899	0	0.038678	2.628217	0	0.000881	0.16301	1.46846	10.96573	3.835087	0	0.000965	0.16301	1.46846	10.96573	0.039703	94.77398	0	0.712144	0.023797	0	0.000491
Santa Clara	2022	HHDT	Aggregate	Aggregate	Diesel	8126.63	984491.3	984491.3	0	118998.6	2.444518	67.79787	2.544846	0.027272	0.034513	0	0.008769	0.027987	0.028505	0.036074	0	0.035077	0.079962	1677.544	1267.87	0	0.001458	0.236832	0	0.264298	1.997403	0	0.031398	5.098937	0	0	0	0	0.035744	5.804752	0	0	0	0	0.202666	0.125232	70.47019	0	0.015885	0.120052	0
Santa Clara	2022	HHDT	Aggregate	Aggregate	Natural Ga	660.7756	47681.36	47681.36	0	5809.397	1.356717	13.62116	0	0.001899	0.022358	0	0	0.009	0.047596	0.002065	0.024316	0	0.036	0.135989	1429.3	10316.77	0	2.688526	36.13158	0	0.291372	2.10314	0	0.062535	0.56302	0	0	0	0	2.77132	36.92822	0	0	0	0	0.851705	14.53027	73.87982	0	0	0	0
Santa Clara	2022	LDA	Aggregate	Aggregate	Gasoline	604047.8	22374250	22374250	0	2805661	0.053791	0	0.287921	0.00126	0	0.002062	0.002	0.002656	0.00137	0	0.002242	0.008	0.007588	287.1374	0	73.33113	0.002925	0	0.081262	0.005394	0	0.035089	0.011654	0	0.381731	0.098272	0.249754	1.530333	0.017001	0	0.417946	0.098272	0.249754	1.530333	0.032827	0.847106	0	3.666246	0.002839	0	0.000725
Santa Clara	2022	LDA	Aggregate	Aggregate	Diesel	1988.847	60930.09	60930.09	0	8564.495	0.263546	0	0	0.019976	0	0	0.002	0.00269	0.020879	0	0	0.008	0.007686	236.272	0	0	0.00151	0	0	0.037225	0	0	0.032513	0	0	0	0	0	0.037014	0	0	0	0	0	0.0031	0.352928	0	0	0.002239	0	0
Santa Clara	2022	LDA	Aggregate	Aggregate	Electricity	49768.56	2058456	0	2058456	247155.6	0	0	0	0	0	0	0.002	0.001531	0	0	0	0.008	0.004374	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2022	LDA	Aggregate	Aggregate	Plug-in Hyb	14080.33	626833.5	326494.8	300338.7	58222.18	0.003418	0	0.11551	0.000718	0	0.002292	0.002	0.001368	0.000781	0	0.002492	0.008	0.003908	145.2228	0	67.22203	0.000469	0	0.042745	0.000623	0	0.021047	0.001478	0	0.173285	0.039673	0.035067	0.451466	0.002157	0	0.189725	0.039673	0.035067	0.451466	0.019838	0.224082	0	1.339893	0.001436	0	0.000665
Santa Clara	2022	LDT1	Aggregate	Aggregate	Gasoline	54974.08	1779154	1779154	0	245182.1	0.160037	0	0.42895	0.001971	0	0.003006	0.002	0.003236	0.002144	0	0.003269	0.008	0.009246	338.1243	0	90.32061	0.007798	0	0.120165	0.011179	0	0.040992	0.03517	0	0.630523	0.182138	0.532387	2.932213	0.051284	0	0.69034	0.182138	0.532387	2.932213	0.035502	1.699209	0	6.115696	0.003343	0	0.000893
Santa Clara	2022	LDT1	Aggregate	Aggregate	Diesel	28.88602	444.5778	444.5778	0	84.95747	1.664076	0	0	0.241157	0	0	0.002	0.003731	0.252061	0	0	0.008	0.01066	415.6618	0	0	0.013984	0	0	0.065488	0	0	0.301058	0	0	0	0	0	0.342735	0	0	0	0	0	0.0031	1.609282	0	0	0.003939	0	0
Santa Clara	2022	LDT1	Aggregate	Aggregate	Electricity	182.9928	6367.047	0	6367.047	860.9347	0	0	0	0	0	0	0.002	0.001541	0	0	0	0.008	0.004403	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2022	LDT1	Aggregate	Aggregate	Plug-in Hyb	24.31577	1158.953	555.2268	603.7259	100.5457	0.003144	0	0.11551	0.00042	0	0.001472	0.002	0.001376	0.000457	0	0.001601	0.008	0.003931	133.572	0	73.48077	0.00043	0	0.042675	0.000571	0	0.020981	0.001359	0	0.173285	0.025111	0.023155	0.300675	0.001984	0	0.189725	0.025111	0.023155	0.300675	0.020121	0.206104	0	1.339893	0.00132	0	0.000726
Santa Clara	2022	LDT2	Aggregate	Aggregate	Gasoline	274728.5	9911730	9911730	0	1286654	0.087216	0	0.387125	0.001308	0	0.002055	0.002	0.003124	0.001422	0	0.002235	0.008	0.008926	357.8859	0	92.09899	0.003418	0	0.092802	0.006919	0	0.040202	0.013801	0	0.439671	0.088088	0.231141	1.442564	0.020134	0	0.481384	0.088088	0.231141	1.442564	0.034673	0.960886	0	4.129331	0.003538	0	0.00091
Santa Clara	2022	LDT2	Aggregate	Aggregate	Diesel	933.788	35569.23	35569.23	0	4479.453	0.049482	0	0	0.005617	0	0	0.002	0.003089	0.005871	0	0	0.008	0.008825	319.8313	0	0	0.000662	0	0	0.05039	0	0	0.01425	0	0	0	0	0	0.016223	0	0	0	0	0	0.0031	0.132603	0	0	0.003031	0	0
Santa Clara	2022	LDT2	Aggregate	Aggregate	Electricity	669.3585	23693.95	0	23693.95	3436.204	0	0	0	0	0	0	0.002	0.001524	0	0	0	0.008	0.004354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2022	LDT2	Aggregate	Aggregate	Plug-in Hyb	1256.28	57825.99	28723.51	29102.47	5194.718	0.003259	0	0.11551	0.000565	0	0.001911	0.002	0.001372	0.000614	0	0.002078	0.008	0.00392	138.4921	0	79.93529	0.000446	0	0.042681	0.000592	0	0.020988	0.00141	0	0.173285	0.026873	0.02547	0.333582	0.002057	0	0.189725	0.026873	0.02547	0.333582	0.020799	0.213696	0	1.339893	0.001369	0	0.00079
Santa Clara	2022	LHDT1	Aggregate	Aggregate	Gasoline	19023.54	692949.2	692949.2	0	283422.4	0.22563	0.03858	0.680855	0.001666	0	0.000355	0.002	0.0273	0.001812	0	0.000386	0.008	0.078	910.666	121.4496	25.8752	0.010696	0.11838	0.036173	0.012587	0.003045	0.052713	0.053941	0.441903	0.181796	0.053097	0.287419	3.005479	0.078711	0.644824	0.199044	0.053097	0.287419	3.005479	0.044851	1.310703	3.750518	3.032062	0.009003	0.001201	0.000256
Santa Clara	2022	LHDT1	Aggregate	Aggregate	Diesel	9466.897	364941.3	364941.3	0	119081.7	2.046185	2.148991	0	0.042212	0.027161	0	0.003	0.0273	0.044121	0.028389	0	0.012	0.078	640.1321	134.8074	0	0.009365	0.005098	0	0.100853	0.021239	0	0.201618	0.10976	0	0	0	0	0.229529	0.124954	0	0	0	0	0.156672	0.574472	0.909745	0	0.006066	0.001277	0
Santa Clara	2022	LHDT2	Aggregate	Aggregate	Gasoline	2479.119	89333.8	89333.8	0	36935.18	0.214022	0.038116	0.662237	0.001522	0	0.000288	0.002	0.03185	0.001655	0	0.000313	0.008	0.091	1017.016	140.0339	25.93331	0.008303	0.117781	0.035049	0.012366	0.003023	0.05141	0.03933	0.436803	0.174741	0.049582	0.263161	2.773988	0.057391	0.637382	0.19132	0.049582	0.263161	2.773988	0.044954	1.055116	3.755463	3.106689	0.010054	0.001384	0.000256
Santa Clara	2022	LHDT2	Aggregate	Aggregate	Diesel	4276.175	167672	167672	0	53788.9	1.602621	2.114348	0	0.036809	0.027077	0	0.003	0.03185	0.038473	0.028302	0	0.012	0.091	773.4619	214.911	0	0.00832	0.005098	0	0.121859	0.033839	0	0.179126	0.10976	0	0	0	0	0.203923	0.124954	0	0	0	0	0.1727	0.476085	0.909745	0	0.007329	0.002036	0
Santa Clara	2022	MCY	Aggregate	Aggregate	Gasoline	27595.09	162924	162924	0	55190.18	0.60517	0	0.149724	0.001772	0	0.003556	0.001	0.0042	0.001891	0	0.003773	0.004	0.012	188.9834	0	50.90901	0.173457	0	0.19335	0.041009	0	0.008761	1.156556	0	1.442993	3.560376	3.734124	3.980024	1.378949	0	1.568432	3.560376	3.734124	3.980024	0.008705	13.58248	0	8.107621	0.001868	0	0.000503
Santa Clara	2022	MDV	Aggregate	Aggregate	Gasoline	150747.3	5216512	5216512	0	697659.3	0.136769	0	0.517519	0.001357	0	0.002255	0.002	0.003193	0.001475	0	0.002452	0.008	0.009123	434.2294	0	112.1929	0.005018	0	0.119363	0.009481	0	0.045397	0.021781	0	0.614579	0.106179	0.293735	1.762049	0.031733	0	0.672881	0.106179	0.293735	1.762049	0.034617	1.174347	0	4.66825	0.004293	0	0.001109
Santa Clara	2022	MDV	Aggregate	Aggregate	Diesel	2337.328	86668.85	86668.85	0	11158.46	0.05815	0	0	0.005454	0	0	0.002	0.003153	0.0057	0	0	0.008	0.009009	417.1884	0	0	0.000553	0	0	0.065728	0	0	0.011906	0	0	0	0	0	0.013554	0	0	0	0	0	0.0031	0.20344	0	0	0.003953	0	0
Santa Clara	2022	MDV	Aggregate	Aggregate	Electricity	623.8975	22215.8	0	22215.8	3205.616	0	0	0	0	0	0	0.002	0.001523	0	0	0	0.008	0.004351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2022	MDV	Aggregate	Aggregate	Plug-in Hyb	789.5612	33722.81	17285.18	16437.63	3264.836	0.003363	0	0.11551	0.000723	0	0.002366	0.002	0.001369	0.000786	0	0.002574	0.008	0.003913	142.9094	0	99.86367	0.000458	0	0.042456	0.000605	0	0.020778	0.001454	0	0.173285	0.030414	0.029758	0.381921	0.002122	0	0.189725	0.030414	0.029758	0.381921	0.021528	0.220512	0	1.339893	0.001413	0	0.000987
Santa Clara	2022	MH	Aggregate	Aggregate	Gasoline	2642.084	23105.28	23105.28	0	264.3141	0.551445	0	0.40416	0.001917	0	0.000461	0.003	0.015756	0.002085	0	0.000502	0.012	0.045017	1949.266	0	32.13484	0.02167	0	0.038467	0.030967	0	0.041056	0.101032	0	0.168576	13.95792	0.32254	4.985527	0.147425	0	0.184569	13.95792	0.32254	4.985527	0.044583	2.705832	0	3.782453	0.01927	0	0.000318
Santa Clara	2022	MH	Aggregate	Aggregate	Diesel	940.8008	9155.21	9155.21	0	94.08008	4.438358	0	0	0.104654	0	0	0.004	0.015675	0.109386	0	0	0.016	0.044785	1080.89	0	0	0.005865	0	0	0.170295	0	0	0.126278	0	0	0	0	0	0.143759	0	0	0	0	0	0.143863	0.424501	0	0	0.010242	0	0
Santa Clara	2022	MHDT	Aggregate	Aggregate	Gasoline	1426.535	69284.18	69284.18	0	28542.11	0.686176	0.088062	0.462297	0.001432	0	0.000593	0.003	0.015756	0.001558	0	0.000645	0.012	0.045017	1819.358	542.4673	48.22005	0.022377	0.249961	0.051086	0.030967	0.006806	0.032093	0.113907	1.006391	0.293642	0.041091	0.336192	3.327263	0.166213	1.468523	0.321501	0.041091	0.336192	3.327263	0.044929	2.41434	15.04306	6.517433	0.017986	0.005363	0.000477
Santa Clara	2022	MHDT	Aggregate	Aggregate	Diesel	10189.55	428042.3	428042.3	0	121266.8	1.73167	15.28688	1.483339	0.020297	0.042841	0	0.003	0.015941	0.021215	0.044778	0	0.012	0.045546	1158.231	2324.123	0	0.002426	0.013407	0	0.18248	0.366167	0	0.052238	0.288656	0	0	0	0	0.05947	0.328613	0	0	0	0	0.196531	0.168917	7.277505	0	0.010968	0.022008	0
Santa Clara	2022	MHDT	Aggregate	Aggregate	Natural Ga	84.48052	3914.205	3914.205	0	796.8889	0.162027	6.474875	0	0.001029	0.016219	0	0	0.003	0.016011	0.001119	0.01764	0	0.012	0.045746	1002.329	5210.514	0	0.725882	17.91735	0	0.204331	1.062197	0	0.010371	0.256004	0	0	0	0	0.740815	18.28597	0	0	0	0	1.06	2.991509	30.51881	0	0	0	0
Santa Clara	2022	OBUS	Aggregate	Aggregate	Gasoline	470.9234	21653.3	21653.3	0	9422.235	0.596343	0.064966	0.407047	0.000863	0	0.000262	0.003	0.01568	0.000939	0	0.000285	0.012	0.044799	1804.41	384.2235	32.13915	0.017165	0.194553	0.036748	0.027969	0.005221	0.030733	0.084851	0.744858	0.194941	0.033671	0.142865	2.559429	0.123815	1.086895	0.213436	0.033671	0.142865	2.559429	0.044907	1.918016	5.766114	4.119591	0.017838	0.003798	0.000318
Santa Clara	2022	OBUS	Aggregate	Aggregate	Diesel	852.1679	61336.68	61336.68	0	8739.295	1.430263	8.186956	1.463102	0.021712	0.009363	0	0.003	0.01808	0.022694	0.009786	0	0.012	0.051656	1287.997	1601.524	0	0.002446	0.020931	0	0.202924	0.252321	0	0.052654	0.450629	0	0	0	0	0.059942	0.513007	0	0	0	0	0.209454	0.176751	7.212161	0	0.012197	0.015165	0
Santa Clara	2022	OBUS	Aggregate	Aggregate	Natural Ga	6.12419	392.3999	392.3999	0	54.50529	0.261572	1.567279	0	0.000722	0.003187	0	0	0.003	0.016148	0.000785	0.003466	0	0.012	0.046137	1035.05	1183.472	0	0.750937	4.605624	0	0.211002	0.241259	0	0.010729	0.065805	0	0	0	0	0.766387	4.700378	0	0	0	0	1.06	3.149633	5.746939	0	0	0	0
Santa Clara	2022	SBUS	Aggregate	Aggregate	Gasoline	160.4139	7959.43	7959.43	0	641.6556	0.522721	0.925562	0.689048	0.000853	0	0.00055	0.002	0.015721	0.000928	0	0.000599	0.008	0.044917	820.0467	2616.389	59.14656	0.01243	2.458676	0.074784	0.027982	0.086242	0.063619	0.606464	10.62737	0.42659	0.108472	0.246255	1.510943	0.088229	15.50744	0.467063	0.108472	0.246255	1.510943	0.045	1.548936	82.15497	10.71476	0.008107	0.025866	0.000585
Santa Clara	2022	SBUS	Aggregate	Aggregate	Diesel	662.5162	15413.71	15413.71	0	9593.235	4.235498	22.873	0.450634	0.022112	0.02288	0	0.003	0.015721	0.023112	0.023915	0	0.012	0.044917	1152.917	2246.353	0	0.002834	0.008182	0	0.181642	0.353914	0	0.061017	0.17615	0	0	0	0	0.069464	0.200533	0	0	0	0	0.140239	0.185604	4.488491	0	0.010917	0.021272	0
Santa Clara	2022	SBUS	Aggregate	Aggregate	Natural Ga	22.59677	578.3532	578.3532	0	327.2012	0.608852	5.295722	0	0.003378	0.010765	0	0	0.003	0.015721	0.003674	0.011708	0	0.012	0.044917	1281.922	4050.07	0	3.549889	15.56318	0	0.261328	0.825633	0	0.050721	0.222367	0	0	0	0	3.622922	15.88337	0	0	0	0	1.06	12.18179	19.41173	0	0	0	0
Santa Clara	2022	UBUS	Aggregate	Aggregate	Gasoline	45.81104	4784.037	4784.037	0	183.2442	0.03147	0	0.560776	0.000899	0	8.88E-05	0.002	0.03185	0.000978	0	9.66E-05	0.008	0.091	974.6428	0	38.21309	0.002303	0	0.053785	0.004696	0	0.082445	0.006534	0	0.197701	0.064874	0.125778	0.787098	0.009534	0	0.216458	0.064874	0.125778	0.787098	0.045	0.577943	0	5.5933	0.009635	0	0.000378
Santa Clara	2022	UBUS	Aggregate	Aggregate	Diesel	435.6475	48716.13	48716.13	0	1742.59	0.386257	0	0	0.007023	0	0	0.0083	0.0385	0.00734	0	0	0.0332	0.11	1100.743	0	0	0.003215	0	0	0.173422	0	0	0.069208	0	0	0	0	0	0.078788	0	0	0	0	0	0.187775	0.079368	0	0	0.01043	0	0
Santa Clara	2022	UBUS	Aggregate	Aggregate	Electricity	5.046757	199.0027	0	199.0027	20.18703	0	0	0	0	0	0	0.009	0.01925	0	0	0	0.036	0.055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2022	UBUS	Aggregate	Aggregate	Natural Ga	41.84875	4783.781	4783.781	0	167.395	0.058772	0	0	0.000282	0	0	0.008181	0.0385	0.000295	0	0	0.032723	0.11	1299.039	0	0	4.245393	0	0	0.264818	0	0	0.060658	0	0	0	0	0	4.332735	0	0	0	0	0	0.97	49.03622	0	0	0	0	0

Source: EMFAC2021 (v1.0.1) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_DIU	PM2.5_TIR	PM10_RUN	PM10_IDL	PM10_STR	PM10_DIU	PM10_TIR	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIUR	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNEX	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2023	HHDT	Aggregate	Aggregate	Gasoline	3.454009	114.3093	114.3093	0	69.10781	8.107874	0	1.602501	0.00493	0	0.0017	0.005	0.035266	0.005362	0	0.001849	0.02	0.100759	2306.817	0	49.81185	0.340225	0	0.00018	0.208909	0	0.045697	2.104867	0	0.000979	0.158374	1.426645	10.65375	3.071416	0	0.001072	0.158374	1.426645	10.65375	0.040468	83.0074	0	1.02738	0.022805	0	0.000492
Santa Clara	2023	HHDT	Aggregate	Aggregate	Diesel	8235.059	991289	991289	0	120860.8	1.969368	63.40488	2.849455	0.025957	0.031631	0	0.008769	0.027531	0.027131	0.033061	0	0.035077	0.078661	1656.801	12241.32	0	0.000809	0.237446	0	0.26103	1.928625	0	0.017417	5.112156	0	0	0	0	0.019828	5.819801	0	0	0	0	0.214624	0.087393	74.20136	0	0.015689	0.115918	0
Santa Clara	2023	HHDT	Aggregate	Aggregate	Electricity	6.70171	411.5054	0	411.5054	103.2044	0	0	0	0	0	0	0	0.00874	0.013383	0	0	0	0.03496	0.038238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2023	HHDT	Aggregate	Aggregate	Natural Ga	753.7366	53295.97	53295.97	0	6914.034	1.208844	13.92832	0	0.001774	0.024237	0	0.009	0.046729	0.001929	0.02636	0	0.036	0.133512	1398.51	10630.2	0	2.44811	37.44665	0	0.285095	2.167036	0	0.054572	0.572265	0	0	0	0	2.520799	38.25947	0	0	0	0	0.860105	13.78246	74.03965	0	0	0	0
Santa Clara	2023	LDA	Aggregate	Aggregate	Gasoline	601938.3	22370251	22370251	0	2795479	0.047412	0	0.27189	0.001217	0	0.001992	0.002	0.002656	0.001323	0	0.002167	0.008	0.007588	282.586	0	71.87767	0.002603	0	0.076449	0.004995	0	0.034134	0.01016	0	0.353794	0.094758	0.240611	1.480552	0.014823	0	0.387359	0.094758	0.240611	1.480552	0.033781	0.787617	0	3.436611	0.002794	0	0.000711
Santa Clara	2023	LDA	Aggregate	Aggregate	Diesel	1871.125	56220.8	56220.8	0	8000.531	0.238318	0	0	0.018559	0	0	0.002	0.002698	0.019399	0	0	0.008	0.007709	234.6327	0	0	0.001413	0	0	0.036966	0	0	0.030417	0	0	0	0	0	0.034627	0	0	0	0	0	0.0031	0.342459	0	0	0.002223	0	0
Santa Clara	2023	LDA	Aggregate	Aggregate	Electricity	53751.15	2268185	0	2268185	265250.1	0	0	0	0	0	0	0.002	0.001532	0	0	0	0.008	0.004377	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2023	LDA	Aggregate	Aggregate	Plug-in Hyb	15805.32	700610.9	356649.7	343961.3	65355	0.00334	0	0.11551	0.000664	0	0.002171	0.002	0.001373	0.000722	0	0.002361	0.008	0.003922	141.9339	0	66.50966	0.000457	0	0.042604	0.000605	0	0.020916	0.001444	0	0.173285	0.040642	0.036088	0.447056	0.002108	0	0.189725	0.040642	0.036088	0.447056	0.019705	0.219019	0	1.339893	0.001403	0	0.000658
Santa Clara	2023	LDT1	Aggregate	Aggregate	Gasoline	53782.25	1744480	1744480	0	239737.9	0.143293	0	0.404336	0.00185	0	0.002837	0.002	0.003239	0.002012	0	0.003085	0.008	0.009253	333.6435	0	88.48953	0.006987	0	0.112557	0.010257	0	0.039834	0.031222	0	0.583212	0.174145	0.503091	2.807011	0.045546	0	0.638542	0.174145	0.503091	2.807011	0.035775	1.553409	0	5.660037	0.003298	0	0.000875
Santa Clara	2023	LDT1	Aggregate	Aggregate	Diesel	26.04714	391.8698	391.8698	0	75.17737	1.659056	0	0	0.24041	0	0	0.002	0.003728	0.25128	0	0	0.008	0.010651	415.6155	0	0	0.013928	0	0	0.06548	0	0	0.299852	0	0	0	0	0	0.341362	0	0	0	0	0	0.0031	1.601395	0	0	0.003938	0	0
Santa Clara	2023	LDT1	Aggregate	Aggregate	Electricity	194.8941	7068.184	0	7068.184	916.4832	0	0	0	0	0	0	0.002	0.00154	0	0	0	0.008	0.0044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2023	LDT1	Aggregate	Aggregate	Plug-in Hyb	43.27677	2048.369	944.1579	1104.211	178.9495	0.003025	0	0.11551	0.000387	0	0.00141	0.002	0.001383	0.000421	0	0.001534	0.008	0.003951	128.5161	0	72.38136	0.000412	0	0.042439	0.000544	0	0.020762	0.001308	0	0.173285	0.024584	0.021781	0.285922	0.001909	0	0.189725	0.024584	0.021781	0.285922	0.019359	0.198314	0	1.339893	0.001271	0	0.000716
Santa Clara	2023	LDT2	Aggregate	Aggregate	Gasoline	280180.4	10140967	10140967	0	1311796	0.077207	0	0.358346	0.001265	0	0.002003	0.002	0.003125	0.001375	0	0.002179	0.008	0.008929	351.1382	0	90.07377	0.003121	0	0.087759	0.006381	0	0.038646	0.012417	0	0.410727	0.085119	0.224187	1.404898	0.018118	0	0.449694	0.085119	0.224187	1.404898	0.035545	0.896823	0	3.892097	0.003471	0	0.00089
Santa Clara	2023	LDT2	Aggregate	Aggregate	Diesel	978.4967	36936.87	36936.87	0	4673.401	0.046157	0	0	0.005431	0	0	0.002	0.003102	0.005677	0	0	0.008	0.008863	315.6668	0	0	0.00065	0	0	0.049733	0	0	0.013984	0	0	0	0	0	0.015919	0	0	0	0	0	0.0031	0.132099	0	0	0.002991	0	0
Santa Clara	2023	LDT2	Aggregate	Aggregate	Electricity	1105.879	38931.7	0	38931.7	5663.051	0	0	0	0	0	0	0.002	0.001525	0	0	0	0.008	0.004357	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2023	LDT2	Aggregate	Aggregate	Plug-in Hyb	1696.55	77270.66	37142.68	40127.98	7015.234	0.003154	0	0.11551	0.000504	0	0.001759	0.002	0.001378	0.000548	0	0.001913	0.008	0.003938	134.0231	0	78.93358	0.000429	0	0.042457	0.000568	0	0.020778	0.001364	0	0.173285	0.02624	0.024448	0.318232	0.00199	0	0.189725	0.02624	0.024448	0.318232	0.020144	0.206812	0	1.339893	0.001325	0	0.00078
Santa Clara	2023	LHDT1	Aggregate	Aggregate	Gasoline	19180.96	711085.5	711085.5	0	285767.8	0.197814	0.037373	0.6588	0.001595	0	0.000328	0.002	0.0273	0.001734	0	0.000356	0.008	0.078	889.7424	120.2664	25.83956	0.009485	0.115635	0.034516	0.011082	0.003012	0.051891	0.047656	0.428153	0.172233	0.050564	0.277601	2.913784	0.069539	0.62476	0.188574	0.050564	0.277601	2.913784	0.044872	1.225109	3.753425	3.080251	0.008796	0.001189	0.000255
Santa Clara	2023	LHDT1	Aggregate	Aggregate	Diesel	9807.465	384084.8	384084.8	0	123365.6	1.780633	2.029274	0	0.038253	0.026974	0	0.003	0.0273	0.039983	0.028193	0	0.012	0.078	635.427	132.908	0	0.008623	0.005098	0	0.100112	0.02094	0	0.185652	0.10976	0	0	0	0	0.211352	0.124954	0	0	0	0	0.16551	0.518876	0.909745	0	0.006021	0.001259	0
Santa Clara	2023	LHDT2	Aggregate	Aggregate	Gasoline	2494.382	90793.04	90793.04	0	37162.58	0.187016	0.036817	0.642061	0.001446	0	0.00026	0.002	0.03185	0.001572	0	0.000283	0.008	0.091	997.3845	138.7974	25.72325	0.007074	0.114568	0.033461	0.01097	0.002967	0.050452	0.033047	0.42203	0.165607	0.046993	0.25097	2.676301	0.048222	0.613826	0.181319	0.046993	0.25097	2.676301	0.044967	0.961891	3.759407	3.119312	0.00986	0.001372	0.000254
Santa Clara	2023	LHDT2	Aggregate	Aggregate	Diesel	4479.532	176769.2	176769.2	0	56346.87	1.416942	1.998258	0	0.034177	0.027026	0	0.003	0.03185	0.035723	0.028248	0	0.012	0.091	764.5039	212.1206	0	0.007824	0.005098	0	0.120448	0.03342	0	0.168448	0.10976	0	0	0	0	0.191767	0.124954	0	0	0	0	0.178982	0.44054	0.909745	0	0.007244	0.00201	0
Santa Clara	2023	MCY	Aggregate	Aggregate	Gasoline	27894.5	164894.5	164894.5	0	55788.99	0.586927	0	0.142374	0.001778	0	0.003413	0.001	0.0042	0.001899	0	0.003626	0.004	0.012	188.3093	0	49.59811	0.167622	0	0.187482	0.040223	0	0.008379	1.105923	0	1.392636	3.5601	3.745685	3.947874	1.324135	0	1.513873	3.5601	3.745685	3.947874	0.00876	13.08956	0	8.051197	0.001862	0	0.00049
Santa Clara	2023	MDV	Aggregate	Aggregate	Gasoline	153799.1	5358084	5358084	0	712433.9	0.11759	0	0.470106	0.001289	0	0.002144	0.002	0.003187	0.001402	0	0.002331	0.008	0.009106	426.0995	0	109.7064	0.004406	0	0.110292	0.008479	0	0.043081	0.018826	0	0.559259	0.101975	0.285798	1.72733	0.02744	0	0.612315	0.101975	0.285798	1.72733	0.035428	1.067328	0	4.333252	0.004212	0	0.001085
Santa Clara	2023	MDV	Aggregate	Aggregate	Diesel	2374.918	86834.44	86834.44	0	11267.05	0.053096	0	0	0.00515	0	0	0.002	0.003181	0.005383	0	0	0.008	0.00909	413.3141	0	0	0.000529	0	0	0.065118	0	0	0.011397	0	0	0	0	0	0.012975	0	0	0	0	0	0.0031	0.202592	0	0	0.003916	0	0
Santa Clara	2023	MDV	Aggregate	Aggregate	Electricity	1130.115	40073.7	0	40073.7	5799.833	0	0	0	0	0	0	0.002	0.001524	0	0	0	0.008	0.004354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2023	MDV	Aggregate	Aggregate	Plug-in Hyb	986.0895	41899.14	20787.35	21111.79	4077.48	0.003256	0	0.11551	0.000638	0	0.002151	0.002	0.001376	0.000693	0	0.002339	0.008	0.00393	138.3296	0	98.37574	0.000441	0	0.042261	0.000581	0	0.020595	0.001408	0	0.173285	0.02985	0.028058	0.359617	0.002054	0	0.189725	0.02985	0.028058	0.359617	0.020837	0.213457	0	1.339893	0.001368	0	0.000973
Santa Clara	2023	MH	Aggregate	Aggregate	Gasoline	2522.745	22546.87	22546.87	0	252.3754	0.479133	0	0.412521	0.001781	0	0.000428	0.003	0.015756	0.001937	0	0.000466	0.012	0.045017	1948.243	0	31.87585	0.018146	0	0.038028	0.02809	0	0.042647	0.082252	0	0.163779	13.03985	0.30297	4.773625	0.120022	0	0.179318	13.03985	0.30297	4.773625	0.044742	2.111943	0	3.629376	0.01926	0	0.000315
Santa Clara	2023	MH	Aggregate	Aggregate	Diesel	959.1578	9344.849	9344.849	0	95.91578	4.269554	0	0	0.097907	0	0	0.004	0.015675	0.102334	0	0	0.016	0.044785	1081.435	0	0	0.005704	0	0	0.17038	0	0	0.122812	0	0	0	0	0	0.139813	0	0	0	0	0	0.150005	0.410284	0	0	0.010247	0	0
Santa Clara	2023	MHDT	Aggregate	Aggregate	Gasoline	1418.703	70785.86	70785.86	0	28385.41	0.562864	0.088304	0.453053	0.001386	0	0.000555	0.003	0.015756	0.001507	0	0.000603	0.012	0.045017	1792.411	536.9661	47.19918	0.018074	0.254589	0.049387	0.026381	0.007064	0.032566	0.09086	1.010025	0.279571	0.037187	0.302385	3.037923	0.132583	1.473826	0.306095	0.037187	0.302385	3.037923	0.04497	1.909686	15.08517	6.156285	0.01772	0.005308	0.000467
Santa Clara	2023	MHDT	Aggregate	Aggregate	Diesel	10273.55	431550.4	431550.4	0	122418.2	1.337342	13.57242	1.624162	0.016518	0.035742	0	0.003	0.015941	0.017265	0.037358	0	0.012	0.045646	1151.562	2263.789	0	0.001721	0.012298	0	0.181429	0.356661	0	0.037048	0.26478	0	0	0	0	0.042176	0.301431	0	0	0	0	0.209014	0.132571	7.583386	0	0.010905	0.021437	0
Santa Clara	2023	MHDT	Aggregate	Aggregate	Electricity	4.749835	101.8022	0	101.8022	59.6458	0	0	0	0	0	0	0.003	0.00799	0	0	0	0.012	0.022828	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2023	MHDT	Aggregate	Aggregate	Natural Ga	83.841	4047.874	4047.874	0	762.81	0.141319	6.52743	0	0.001137	0.017647	0	0.003	0.016002	0.001236	0.019193	0	0.012	0.045721	989.385	5296.533	0	0.740055	17.59163	0	0.201693	1.079733	0	0.010574	0.25135	0	0	0	0	0.755281	17.95355	0	0	0	0	1.06	2.992708	33.64344	0	0	0	0
Santa Clara	2023	OBUS	Aggregate	Aggregate	Gasoline	458.8974	20830.08	20830.08	0	9181.619	0.553081	0.064991	0.405616	0.000893	0	0.000264	0.003	0.01568	0.000972	0	0.000287	0.012	0.044799	1784.092	381.8461	31.89445	0.015808	0.194938	0.036281	0.026177	0.005253	0.030766	0.078109	0.745234	0.192301	0.034706	0.154035	2.766253	0.113977	1.087444	0.210546	0.034706	0.154035	2.766253	0.044918	1.743956	5.768375	4.071703	0.017638	0.003775	0.000315
Santa Clara	2023	OBUS	Aggregate	Aggregate	Diesel	870.4209	61645.66	61645.66	0	8910.755	1.203188	7.410097	1.541404	0.020323	0.008632	0	0.003	0.018018	0.021242	0.009022	0	0.012	0.05148	1282.538	1552.949	0	0.001991	0.020568	0	0.202064	0.244668	0	0.04286	0.442828	0	0	0	0	0.048793	0.504126	0	0	0	0	0.215865	0.153454	7.510858	0	0.012145	0.014706	0
Santa Clara	2023	OBUS	Aggregate	Aggregate	Natural Ga	6.1456	409.5466	409.5466	0	54.69584	0.219315	1.549107	0	0.000923	0.00362	0	0.003	0.016148	0.001004	0.003937	0	0.012	0.046137	1017.405	1188.285	0	0.774069	4.381267	0	0.207405	0.24224	0	0.01106	0.0626	0	0	0	0	0.789994	4.471404	0	0	0	0	1.06	3.211954	6.724204	0	0	0	0
Santa Clara	2023	SBUS	Aggregate	Aggregate	Gasoline	166.9867	8309.308	8309.308	0	667.9468	0.519317	0.925703	0.7051	0.000862	0	0.00056	0.002	0.015721	0.000937	0	0.000609	0.008	0.044917	815.0909	2602.033	58.66947	0.011871	2.46208	0.074918	0.027733	0.086224	0.064904	0.057744	10.62943	0.427061	0.112221	0.259299	1.591441	0.084259	15.51043	0.467578	0.112221	0.259299	1.591441	0.045	1.469507	82.16746	10.56434	0.008058	0.025724	0.00058
Santa Clara	2023	SBUS	Aggregate	Aggregate	Diesel	667.1185	15392.68	15392.68	0	9659.876	4.028015	22.39863	0.467155	0.020908	0.02125	0	0.003	0.015721	0.021853	0.022211	0	0.012	0.044917	1148.524	2237.814	0	0.002748	0.008083	0	0.18095	0.352568	0	0.059161	0.174017	0	0	0	0	0.06735	0.198106	0	0	0	0	0.144154	0.181489	4.581854	0	0.010876	0.021191	0
Santa Clara	2023	SBUS	Aggregate	Aggregate	Electricity	0.302373	3.510494	0	3.510494	4.378365	0	0	0	0	0	0	0.003	0.00786	0	0	0	0.012	0.022459	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2023	SBUS	Aggregate	Aggregate	Natural Ga	23.50762	595.8705	595.8705	0	340.3903	0.587321	5.282702	0	0.003378	0.011076	0	0.003	0.015721	0.003674	0.012046	0	0.012	0.044917	1271.127	4058.811	0	3.490611	15.40242	0	0.259128	0.827415	0	0.049874	0.22007	0	0	0	0	3.562424	15.7193	0	0	0	0	1.06	11.90284	20.11199	0	0	0	0
Santa Clara	2023	UBUS	Aggregate	Aggregate	Gasoline	45.94709	4798.244	4798.244	0	183.7884	0.026807	0	0.443444	0.001143	0	0.000128	0.002	0.03185	0.001243	0	0.00014	0.008	0.091	926.2924	0	36.84613	0.002031	0	0.041715	0.004215	0	0.070149	0.005614	0	0.147842	0.038144	0.09212	0.456803	0.008192	0	0.161868	0.038144	0.09212	0.456803	0.045	0.571128	0	6.073786	0.009157	0	0.000364
Santa Clara	2023	UBUS	Aggregate	Aggregate	Diesel	436.6681	48829.71	48829.71	0	1746.672	0.386256	0	0	0.007022	0	0	0.0083	0.0385	0.00734	0	0	0.0332	0.11	1100.965	0	0	0.003215	0	0	0.173457	0	0	0.065028	0	0	0	0	0	0.078788	0	0	0	0	0	0.18785	0.079368	0	0	0.010432	0	0
Santa Clara	2023	UBUS	Aggregate	Aggregate	Electricity	5.046757	199.0027	0	199.0027	20.18703	0	0	0	0	0	0	0.009	0.01925	0	0	0	0.036	0.055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2023	UBUS	Aggregate	Aggregate	Natural Ga	42.26114	4829.673	4829.673	0	169.0446	0.05878	0	0	0.000282	0	0	0.008182	0.0385	0.000295	0	0	0.032727	0.11	1299.127	0	0	4.245742	0	0	0.264835	0	0	0.060663	0	0	0	0	0	4.333091	0	0	0	0	0	0.97	49.04231	0	0	0	0	0

Source: EMFAC2021 (v1.0.1) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_DM	PM2.5_PM	PM10_RUI	PM10_IDLE	PM10_STR	PM10_DM	PM10_PM	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIUR	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNEX	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2024	HHDT	Aggregate	Aggregate	Gasoline	2.588708	115.1526	115.1526	0	51.79487	7.013725	0	1.695629	0.003612	0	0.001433	0.005	0.03384	0.003929	0	0.001559	0.02	0.096686	2166.164	0	50.04419	0.246012	0	0.000205	0.192927	0	0.049797	1.47824	0	0.001115	0.149022	1.34233	10.02547	2.157045	0	0.001221	0.149022	1.34233	10.02547	0.04274	52.51903	0	1.60109	0.021415	0	0.000495
Santa Clara	2024	HHDT	Aggregate	Aggregate	Diesel	8486.693	1001095	1001095	0	124748.4	1.894567	62.88367	2.898867	0.025674	0.03017	0	0.008877	0.027454	0.026835	0.031534	0	0.035082	0.07844	1634.1	11997.01	0	0.000777	0.23663	0	0.257453	1.890134	0	0.016732	5.094584	0	0	0	0	0.019048	5.799796	0	0	0	0	0	0.215084	0.082524	74.10576	0	0.015474	0.113605	0
Santa Clara	2024	HHDT	Aggregate	Aggregate	Electricity	28.33039	2794.261	0	2794.261	378.7946	0	0	0	0	0	0	0.008585	0.014055	0	0	0	0.034341	0.040158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	HHDT	Aggregate	Aggregate	Natural Ga	794.401	54591.27	54591.27	0	7249.717	1.128254	13.55515	0	0.001724	0.024776	0	0.009	0.047521	0.001875	0.026946	0	0.036	0.135775	1387.534	10583.64	0	2.344742	36.30276	0	0.282858	2.157544	0	0.050833	0.550696	0	0	0	0	0.412728	37.08609	0	0	0	0	0	0.85184	13.40196	74.43135	0	0	0	0
Santa Clara	2024	LDA	Aggregate	Aggregate	Gasoline	600108.2	22290344	22290344	0	2786617	0.042281	0	0.257993	0.001177	0	0.001931	0.002	0.002656	0.00128	0	0.0021	0.008	0.007587	277.9403	0	70.44944	0.002338	0	0.072036	0.004672	0	0.033228	0.008937	0	0.328953	0.090491	0.230394	1.422636	0.013041	0	0.360162	0.090491	0.230394	1.422636	0.034712	0.737516	0	3.233068	0.002748	0	0.000696
Santa Clara	2024	LDA	Aggregate	Aggregate	Diesel	1750.024	51573.48	51573.48	0	7442.61	0.213181	0	0	0.016747	0	0	0.002	0.002706	0.017504	0	0	0.008	0.00773	232.7849	0	0	0.001289	0	0	0.036675	0	0	0.027749	0	0	0	0	0	0.03159	0	0	0	0	0	0.0031	0.331109	0	0	0.002206	0	0
Santa Clara	2024	LDA	Aggregate	Aggregate	Electricity	57627.4	2472767	0	2472767	282733	0	0	0	0	0	0	0.002	0.001533	0	0	0	0.008	0.00438	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	LDA	Aggregate	Aggregate	Plug-in Hyb	17457.1	767059.2	381568.7	385490.5	72185.1	0.003264	0	0.11551	0.000618	0	0.00207	0.002	0.001377	0.000672	0	0.002252	0.008	0.003935	138.6993	0	65.78653	0.000444	0	0.04244	0.000587	0	0.020762	0.001412	0	0.173285	0.041111	0.037292	0.447104	0.00206	0	0.189725	0.041111	0.037292	0.447104	0.019502	0.214038	0	1.339893	0.001371	0	0.00065
Santa Clara	2024	LDT1	Aggregate	Aggregate	Gasoline	52693.37	1706864	1706864	0	234793.4	0.128357	0	0.381294	0.001737	0	0.002678	0.002	0.00324	0.001889	0	0.002913	0.008	0.009258	328.9675	0	86.69483	0.006261	0	0.105365	0.009424	0	0.03869	0.027741	0	0.539321	0.165332	0.472477	2.667158	0.040475	0	0.590488	0.165332	0.472477	2.667158	0.036079	1.427621	0	5.253053	0.003252	0	0.000857
Santa Clara	2024	LDT1	Aggregate	Aggregate	Diesel	23.46233	343.9308	343.9308	0	66.44459	1.651932	0	0	0.239373	0	0	0.002	0.003724	0.250196	0	0	0.008	0.01064	415.4307	0	0	0.013862	0	0	0.065451	0	0	0.298448	0	0	0	0	0	0.339763	0	0	0	0	0	0.0031	1.593665	0	0	0.003936	0	0
Santa Clara	2024	LDT1	Aggregate	Aggregate	Electricity	211.0028	8008.646	0	8008.646	994.4346	0	0	0	0	0	0	0.002	0.001539	0	0	0	0.008	0.004397	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	LDT1	Aggregate	Aggregate	Plug-in Hyb	67.64578	3164.46	1414.302	1750.158	279.7153	0.002933	0	0.11551	0.000367	0	0.001381	0.002	0.001389	0.0004	0	0.001502	0.008	0.003967	124.6157	0	71.36186	0.000397	0	0.042219	0.000522	0	0.020556	0.001268	0	0.173285	0.024153	0.020965	0.279628	0.001851	0	0.189725	0.024153	0.020965	0.279628	0.018771	0.192305	0	1.339893	0.001232	0	0.000705
Santa Clara	2024	LDT2	Aggregate	Aggregate	Gasoline	285585.4	10322758	10322758	0	1336438	0.069091	0	0.334237	0.001227	0	0.001959	0.002	0.003127	0.001334	0	0.00213	0.008	0.008936	344.6046	0	88.12796	0.002864	0	0.082985	0.005943	0	0.037254	0.011242	0	0.384216	0.081741	0.217688	1.368189	0.016404	0	0.420668	0.081741	0.217688	1.368189	0.036359	0.842122	0	3.673764	0.003407	0	0.000871
Santa Clara	2024	LDT2	Aggregate	Aggregate	Diesel	1015.453	37944.26	37944.26	0	4835.434	0.041515	0	0	0.004813	0	0	0.002	0.003113	0.005031	0	0	0.008	0.008895	311.1925	0	0	0.000609	0	0	0.049029	0	0	0.013105	0	0	0	0	0	0.014919	0	0	0	0	0	0.0031	0.129976	0	0	0.002949	0	0
Santa Clara	2024	LDT2	Aggregate	Aggregate	Electricity	1597.567	55532.59	0	55532.59	8150.927	0	0	0	0	0	0	0.002	0.001526	0	0	0	0.008	0.004359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	LDT2	Aggregate	Aggregate	Plug-in Hyb	2116.58	94757.71	44376.61	50381.09	8752.056	0.003073	0	0.11551	0.000467	0	0.001672	0.002	0.001383	0.000508	0	0.001819	0.008	0.003953	130.578	0	78.06	0.000416	0	0.042233	0.000547	0	0.020569	0.001329	0	0.173285	0.025949	0.023686	0.309385	0.001939	0	0.189725	0.025949	0.023686	0.309385	0.019635	0.201506	0	1.339893	0.001291	0	0.000772
Santa Clara	2024	LHDT1	Aggregate	Aggregate	Gasoline	19314.14	722529.3	722529.3	0	287751.9	0.17374	0.036221	0.636996	0.001534	0	0.000302	0.002	0.0273	0.001668	0	0.000328	0.008	0.078	871.4559	119.0993	25.78022	0.008358	0.112945	0.032997	0.009778	0.002977	0.050968	0.041718	0.415023	0.163611	0.047402	0.263136	2.768514	0.060875	0.605601	0.179134	0.047402	0.263136	2.768514	0.044898	1.142278	3.756209	3.123927	0.008615	0.001177	0.000255
Santa Clara	2024	LHDT1	Aggregate	Aggregate	Diesel	10107.74	398004.1	398004.1	0	127142.6	1.563015	1.92168	0	0.035058	0.026804	0	0.003	0.0273	0.036643	0.028016	0	0.012	0.078	631.4008	131.1503	0	0.008006	0.005098	0	0.099477	0.020663	0	0.172364	0.10976	0	0	0	0	0.196225	0.124954	0	0	0	0	0	0.172781	0.473594	0.909745	0	0.005983	0.001243	0
Santa Clara	2024	LHDT1	Aggregate	Aggregate	Electricity	70.82836	5110.544	0	5110.544	989.4273	0	0	0	0	0	0	0.002	0.01365	0	0	0	0.008	0.039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	LHDT2	Aggregate	Aggregate	Gasoline	2506.906	91452.57	91452.57	0	37349.16	0.16518	0.035604	0.621534	0.00139	0	0.000239	0.002	0.03185	0.001512	0	0.000259	0.008	0.091	980.0361	137.5922	25.51292	0.006183	0.111453	0.031983	0.009819	0.00291	0.049384	0.028613	0.40822	0.157242	0.04419	0.238167	2.558385	0.041752	0.595674	0.17216	0.04419	0.238167	2.558385	0.044971	0.899209	3.762546	3.129931	0.009689	0.00136	0.000252
Santa Clara	2024	LHDT2	Aggregate	Aggregate	Diesel	4663.455	183558.4	183558.4	0	58660.4	1.266102	1.895403	0	0.032055	0.027	0	0.003	0.03185	0.033504	0.028221	0	0.012	0.091	756.8682	209.5618	0	0.007406	0.005098	0	0.119245	0.033017	0	0.159439	0.10976	0	0	0	0	0.18151	0.124954	0	0	0	0	0	0.184132	0.411861	0.909745	0	0.007172	0.001986	0
Santa Clara	2024	LHDT2	Aggregate	Aggregate	Electricity	18.33259	1253.286	0	1253.286	242.668	0	0	0	0	0	0	0.002	0.015925	0	0	0	0.008	0.0455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	MCY	Aggregate	Aggregate	Gasoline	28171.51	1660222.3	1660222.3	0	56343.02	0.571344	0	0.135477	0.001779	0	0.003248	0.001	0.0042	0.001902	0	0.003456	0.004	0.012	187.743	0	48.37697	0.162609	0	0.181972	0.039558	0	0.00802	1.062175	0	1.345317	3.559276	3.75283	3.900294	1.276951	0	1.462608	3.559276	3.75283	3.900294	0.008808	12.6697	0	8.002987	0.001856	0	0.000478
Santa Clara	2024	MDV	Aggregate	Aggregate	Gasoline	156642.4	5468054	5468054	0	726101.1	0.101279	0	0.42828	0.001229	0	0.002042	0.002	0.003184	0.001336	0	0.002221	0.008	0.009096	418.13	0	107.2801	0.003873	0	0.10186	0.007628	0	0.040967	0.01626	0	0.508806	0.097051	0.275722	1.677059	0.023715	0	0.557077	0.097051	0.275722	1.677059	0.036179	0.972241	0	4.022964	0.004134	0	0.001061
Santa Clara	2024	MDV	Aggregate	Aggregate	Diesel	2400.615	86292.69	86292.69	0	11318.82	0.048844	0	0	0.004909	0	0	0.002	0.003206	0.005131	0	0	0.008	0.009159	409.13	0	0	0.00051	0	0	0.064459	0	0	0.010978	0	0	0	0	0	0.012498	0	0	0	0	0	0.0031	0.201538	0	0	0.003877	0	0
Santa Clara	2024	MDV	Aggregate	Aggregate	Electricity	1678.684	58660.63	0	58660.63	8578.496	0	0	0	0	0	0	0.002	0.001525	0	0	0	0.008	0.004358	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	MDV	Aggregate	Aggregate	Plug-in Hyb	1250.857	52904.03	25301.52	27602.51	5172.294	0.003138	0	0.11551	0.000561	0	0.001962	0.002	0.001382	0.00061	0	0.002134	0.008	0.003948	133.3485	0	96.65661	0.000423	0	0.042047	0.000554	0	0.020395	0.001357	0	0.173285	0.030318	0.026684	0.341695	0.00198	0	0.189725	0.030318	0.026684	0.341695	0.020087	0.205781	0	1.339893	0.001318	0	0.000956
Santa Clara	2024	MH	Aggregate	Aggregate	Gasoline	2420.57	22012.3	22012.3	0	242.1538	0.420938	0	0.419963	0.001679	0	0.000404	0.003	0.015756	0.001826	0	0.000439	0.012	0.045017	1947.501	0	31.65056	0.015478	0	0.037539	0.025731	0	0.04407	0.06827	0	0.159123	12.21143	0.286769	4.596479	0.09962	0	0.174219	12.21143	0.286769	4.596479	0.044846	1.682224	0	3.497247	0.019253	0	0.000313
Santa Clara	2024	MH	Aggregate	Aggregate	Diesel	977.3606	9498.302	9498.302	0	97.73606	4.117169	0	0	0.091772	0	0	0.004	0.015675	0.095921	0	0	0.016	0.044785	1081.931	0	0	0.005558	0	0	0.170459	0	0	0.11965	0	0	0	0	0	0.136214	0	0	0	0	0	0.155539	0.397281	0	0	0.010252	0	0
Santa Clara	2024	MHDT	Aggregate	Aggregate	Gasoline	1414.552	71600.35	71600.35	0	28302.35	0.470752	0.088485	0.440963	0.001362	0	0.000533	0.003	0.015756	0.001482	0	0.000579	0.012	0.045017	1768.687	531.8002	46.25227	0.015051	0.25808	0.047572	0.022913	0.00727	0.03271	0.074951	1.01271	0.265405	0.033945	0.276365	2.798712	0.109368	1.477744	0.290585	0.033945	0.276365	2.798712	0.04498	1.56073	15.11634	5.825814	0.017485	0.005257	0.000457
Santa Clara	2024	MHDT	Aggregate	Aggregate	Diesel	1039.53	4340443.6	434043.6	0	123939	1.232824	13.14099	1.642732	0.014397	0.029902	0	0.003	0.015941	0.015048	0.031254	0	0.012	0.045546	1147.309	2248.547	0	0.001507	0.01158	0	0.180759	0.35426	0	0.032455	0.249319	0	0	0	0	0.036947	0.283831	0	0	0	0	0	0.210532	0.120871	7.556027	0	0.010864	0.021292	0
Santa Clara	2024	MHDT	Aggregate	Aggregate	Electricity	30.91601	1660.353	0	1660.353	407.4536	0	0	0	0	0	0	0.003	0.007956	0	0	0	0.012	0.022732	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	MHDT	Aggregate	Aggregate	Natural Ga	90.59449	4303.581	4303.581	0	827.6228	0.133415	6.499719	0	0.001179	0.018131	0	0.003	0.016007	0.001282	0.019719	0	0.012	0.045734	984.6917	5301.101	0	0.74573	17.31409	0	0.200736	1.080664	0	0.010655	0.247384	0	0	0	0	0.761072	17.6703	0	0	0	0	0	1.06	2.995842	34.7393	0	0	0	0
Santa Clara	2024	OBUS	Aggregate	Aggregate	Gasoline	443.1467	19894.31	19894.31	0	8866.48	0.49672	0.06506	0.408547	0.000907	0	0.000252	0.003	0.01568	0.000987	0	0.000274	0.012	0.044799	1764.001	379.4143	31.61308	0.013757	0.195733	0.03606	0.024018	0.005304	0.031028	0.067076	0.746281	0.190964	0.033873	0.154922	2.818385	0.097877	1.088971	0.209081	0.033873	0.154922	2.818385	0.044969	1.491576	5.774637	4.000641	0.017439	0.003751	0.000313
Santa Clara	2024	OBUS	Aggregate	Aggregate	Diesel	893.1376	61949.05	61949.05	0	9141.625	1.178643	7.363387	1.543157	0.019849	0.008167	0	0.003	0.018015	0.020746	0.008536	0	0.012	0.051472	1273.38	1538.564	0	0.001935	0.020479	0	0.200622	0.242401	0	0.04166	0.440905	0	0	0	0	0.047427	0.501937	0	0	0	0	0	0.216021	0.150181	7.500483	0	0.012058	0.014569	0
Santa Clara	2024	OBUS	Aggregate	Aggregate	Electricity	1.087483	92.50105	0	92.50105	21.75833	0	0	0	0	0	0	0.003	0.00784	0	0	0	0.012	0.022399	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	OBUS	Aggregate	Aggregate	Natural Ga	7.05737	469.3876	469.3876	0	62.81059	0.190585	1.537414	0	0.00106	0.003899	0	0.003	0.016148	0.001153	0.004241	0	0.012	0.046137	1004.237	1191.581	0	0.789796	4.236895	0	0.20472	0.242912	0	0.011285	0.060537	0	0	0	0	0.806045	4.324062	0	0	0	0	0	1.06	3.254325	7.353064	0	0	0	0
Santa Clara	2024	SBUS	Aggregate	Aggregate	Gasoline	172.6948	8584.866	8584.866	0	690.7791	0.50288	0.925939	0.716801	0.000864	0	0.000567	0.002	0.015721	0.000939	0	0.000616	0.008	0.044917	810.6064	2589.131	58.1367	0.011135	2.464862	0.074893	0.027101	0.086311	0.065929	0.054059	10.63288	0.426367	0.113914	0.274691	1.686167	0.078883	15.51547	0.466819	0.113914	0.274691	1.686167	0.045	1.38705	82.18841	10.36621	0.008014	0.025596	0.000575
Santa Clara	2024	SBUS	Aggregate	Aggregate	Diesel	670.5958	15345.26	15345.26	0	9710.228	3.821388	21.90481	0.482851	0.019766	0.019703	0	0.003	0.015721	0.02066	0.020594	0	0.012	0.044917	1144.18	2229	0	0.002665	0.008001	0	0.180266	0.35118	0	0.057376	0.172257	0	0	0	0	0.065318	0.196101	0	0	0	0	0	0.148025	0.1775	4.677792	0	0.010835	0.021107	0
Santa Clara	2024	SBUS	Aggregate	Aggregate	Electricity	2.064666	64.35501	0	64.35501	23.64639	0	0	0	0	0	0	0.002539	0.00786	0	0	0	0.010157	0.022459	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	SBUS	Aggregate	Aggregate	Natural Ga	24.3995	612.0941	612.0941	0	353.3048	0.567729	5.270895	0	0.003378	0.011357	0	0.003	0.015721	0.003674	0.012352	0	0.012	0.044917	1261.305	4066.736	0	3.436672	15.25665	0	0.257125	0.829031	0	0.049103	0.217987	0	0	0	0	3.507376	15.57053	0	0	0	0	0	1.06	11.64901	20.74693	0	0	0	0
Santa Clara	2024	UBUS	Aggregate	Aggregate	Gasoline	46.08313	4812.451	4812.451	0	184.3325	0.027483	0	0.457232	0.001143	0	0.000128	0.002	0.03185	0.001243	0	0.00014	0.008	0.091	926.0836	0	36.94783	0.002034	0	0.043067	0.004288	0	0.071717	0.005634	0	0.152979	0.038099	0.092116	0.456438	0.008221	0	0.167492	0.038099	0.092116	0.456438	0.045	0.581148	0	6.130495	0.009155	0	0.000365
Santa Clara	2024	UBUS	Aggregate	Aggregate	Diesel	437.4745	48917.61	48917.61	0	1749.898	0.386257	0	0	0.007023	0	0	0.0083	0.0385	0.00734	0	0	0.0332	0.11	1101.14	0	0	0.003215	0	0	0.173485	0	0	0.069208	0	0	0	0	0	0.078788	0	0	0	0	0	0.187908	0.079368	0	0	0.010434	0	0
Santa Clara	2024	UBUS	Aggregate	Aggregate	Electricity	5.347565	235.0626	0	235.0626	21.39026	0	0	0	0	0	0	0.008888	0.01925	0	0	0	0.03552	0.055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2024	UBUS	Aggregate	Aggregate	Natural Ga	42.58696	4865.187	4865.187	0	170.3478	0.058788	0	0	0.000282	0	0	0.008183	0.0385	0.000295	0	0	0.032731	0.11	1299.206	0	0	4.246059	0	0	0.264852	0	0	0.060668	0	0	0	0	0	4.333415	0	0	0	0	0	0.97	49.04786	0	0	0	0	0

Source: EMFAC2021 (v1.0.1) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PM	PM2.5_PM	PM10_RUI	PM10_IDLE	PM10_STR	PM10_PM	PM10_PM	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIUR	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNEX	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2025	HHDT	Aggregate	Aggregate	Gasoline	2.330359	124.9448	124.9448	0	46.62582	5.556909	0	1.379041	0.003103	0	0.001399	0.005	0.033068	0.003375	0	0.001521	0.02	0.09448	2106.229	0	50.03138	0.207413	0	0.000226	0.167059	0	0.041557	1.222197	0	0.00123	0.140217	1.263022	9.434649	1.783427	0	0.001346	0.140217	1.263022	9.434649	0.043157	47.7242	0	2.001616	0.020822	0	0.000495
Santa Clara	2025	HHDT	Aggregate	Aggregate	Diesel	8692.575	1008964	1008964	0	127877.1	1.825194	62.42367	2.931995	0.025335	0.028938	0	0.008772	0.027421	0.02648	0.030247	0	0.035088	0.078345	1608.776	11755.34	0	0.00075	0.235891	0	0.253463	1.852058	0	0.016139	5.078674	0	0	0	0	0	0.018373	5.781684	0	0	0	0	0.215507	0.078083	74.00904	0	0.015234	0.111316	0
Santa Clara	2025	HHDT	Aggregate	Aggregate	Electricity	63.3712	6579.675	0	6579.675	825.9972	0	0	0	0	0	0	0.008551	0.014281	0	0	0	0.034206	0.040802	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	HHDT	Aggregate	Aggregate	Natural Ga	832.405	55779.38	55779.38	0	7555.504	1.049864	13.18492	0	0.00168	0.025258	0	0.009	0.048303	0.001827	0.02747	0	0.036	0.138007	1375.94	10529.31	0	2.235928	35.17609	0	0.280494	2.146469	0	0.047235	0.530122	0	0	0	0	0	0.299347	35.93114	0	0	0	0	0.843784	13.01274	74.75478	0	0	0	0
Santa Clara	2025	LDA	Aggregate	Aggregate	Gasoline	598860.3	22133915	22133915	0	2780384	0.038209	0	0.245539	0.001142	0	0.00188	0.002	0.002655	0.001242	0	0.002044	0.008	0.007587	273.2075	0	69.04168	0.002117	0	0.067825	0.004408	0	0.032293	0.007947	0	0.306311	0.087189	0.224301	1.384954	0.011596	0	0.335372	0.087189	0.224301	1.384954	0.035611	0.6952	0	3.049452	0.002701	0	0.000683
Santa Clara	2025	LDA	Aggregate	Aggregate	Diesel	1620.04	46912.85	46912.85	0	6871.193	0.18842	0	0	0.015236	0	0	0.002	0.002712	0.015925	0	0	0.008	0.007748	230.5963	0	0	0.001193	0	0	0.036331	0	0	0.025693	0	0	0	0	0	0	0.02925	0	0	0	0	0	0.0031	0.319914	0	0	0.002185	0	0
Santa Clara	2025	LDA	Aggregate	Aggregate	Electricity	61443.19	2670452	0	2670452	299852.7	0	0	0	0	0	0	0.002	0.001534	0	0	0	0.008	0.004382	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	LDA	Aggregate	Aggregate	Plug-in Hyb	19037.66	825567.7	401013	424554.8	78720.74	0.003187	0	0.11551	0.000578	0	0.001985	0.002	0.001382	0.000629	0	0.002159	0.008	0.003948	135.4391	0	65.04608	0.000432	0	0.042249	0.000569	0	0.020584	0.001378	0	0.173285	0.041164	0.03735	0.440525	0.002011	0	0.189725	0.041164	0.03735	0.440525	0.019241	0.209016	0	1.339893	0.001339	0	0.000643
Santa Clara	2025	LDT1	Aggregate	Aggregate	Gasoline	51680.86	1664706	1664706	0	230186	0.115355	0	0.35972	0.001639	0	0.002543	0.002	0.003241	0.001782	0	0.002766	0.008	0.00926	324.1276	0	84.93844	0.005621	0	0.098552	0.008687	0	0.037511	0.02471	0	0.498818	0.156963	0.442299	2.52236	0.038056	0	0.546143	0.156963	0.442299	2.52236	0.036453	1.317416	0	4.886115	0.003204	0	0.00084
Santa Clara	2025	LDT1	Aggregate	Aggregate	Diesel	21.28272	302.8258	302.8258	0	59.13231	1.64381	0	0	0.238169	0	0	0.002	0.00372	0.248938	0	0	0.008	0.010628	415.1682	0	0	0.013797	0	0	0.06541	0	0	0.297038	0	0	0.338158	0	0	0	0	0	0	0	0	0	0.0031	1.585068	0	0	0.003934	0	0
Santa Clara	2025	LDT1	Aggregate	Aggregate	Electricity	234.4578	9323.704	0	9323.704	1109.796	0	0	0	0	0	0	0.002	0.001537	0	0	0	0.008	0.004392	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	LDT1	Aggregate	Aggregate	Plug-in Hyb	98.13198	4519.182	1961.286	2557.896	405.7758	0.002848	0	0.11551	0.000353	0	0.001365	0.002	0.001394	0.000383	0	0.001485	0.008	0.003982	121.0095	0	70.34635	0.000383	0	0.041987	0.000501	0	0.020339	0.001231	0	0.173285	0.023895	0.020384	0.276746	0.001797	0	0.189725	0.023895	0.020384	0.276746	0.018228	0.186748	0	1.339893	0.001196	0	0.000695
Santa Clara	2025	LDT2	Aggregate	Aggregate	Gasoline	290874.7	10447706	10447706	0	1360241	0.06257	0	0.314364	0.001192	0	0.001919	0.002	0.00313	0.001296	0	0.002087	0.008	0.008944	338.2713	0	86.2638	0.002642	0	0.078494	0.005588	0	0.036037	0.010244	0	0.360071	0.079452	0.214938	1.349256	0.014949	0	0.394233	0.079452	0.214938	1.349256	0.03712	0.795621	0	3.47417	0.003344	0	0.000853
Santa Clara	2025	LDT2	Aggregate	Aggregate	Diesel	1049.952	38652.34	38652.34	0	4980.34	0.039332	0	0	0.004727	0	0	0.002	0.003123	0.004941	0	0	0.008	0.008921	306.7182	0	0	0.000603	0	0	0.048324	0	0	0.01298	0	0	0	0	0	0	0.014777	0	0	0	0	0	0.0031	0.129797	0	0	0.002906	0	0
Santa Clara	2025	LDT2	Aggregate	Aggregate	Electricity	2157.059	73663.77	0	73663.77	10962.38	0	0	0	0	0	0	0.002	0.001527	0	0	0	0.008	0.004362	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	LDT2	Aggregate	Aggregate	Plug-in Hyb	2561.885	112327.2	51267.44	61059.78	10593.4	0.002995	0	0.11551	0.000438	0	0.00161	0.002	0.001388	0.000477	0	0.001751	0.008	0.003967	127.2609	0	77.17666	0.000403	0	0.041992	0.000528	0	0.020344	0.001295	0	0.173285	0.026071	0.023359	0.305362	0.001893	0	0.189725	0.026071	0.023359	0.305362	0.019143	0.196395	0	1.339893	0.001258	0	0.000763
Santa Clara	2025	LHDT1	Aggregate	Aggregate	Gasoline	19422.46	728337	728337	0	289365.8	0.152112	0.035118	0.61458	0.001478	0	0.000276	0.002	0.0273	0.001607	0	0.0003	0.008	0.078	855.4024	117.9783	25.70715	0.007214	0.110329	0.031611	0.008613	0.002941	0.049929	0.03557	0.40247	0.15588	0.044275	0.247775	2.616411	0.051904	0.587284	0.170669	0.044275	0.247775	2.616411	0.044934	1.05316	3.759094	3.16195	0.008457	0.001166	0.000254
Santa Clara	2025	LHDT1	Aggregate	Aggregate	Diesel	10387.1	408019.3	408019.3	0	130656.7	1.379237	1.823414	0	0.032347	0.026692	0	0.003	0.0273	0.03381	0.027899	0	0.012	0.078	628.07	129.5472	0	0.007468	0.005098	0	0.098953	0.02041	0	0.160779	0.10976	0	0	0	0	0.183036	0.124954	0	0	0	0	0.17898	0.435087	0.909745	0	0.005951	0.001228	0
Santa Clara	2025	LHDT1	Aggregate	Aggregate	Electricity	196.402	13079.06	0	13079.06	2746.629	0	0	0	0	0	0	0.002	0.01365	0	0	0	0.008	0.039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	LHDT2	Aggregate	Aggregate	Gasoline	2512.652	91345.05	91345.05	0	37434.78	0.146187	0.034452	0.600885	0.001346	0	0.00022	0.002	0.03185	0.001464	0	0.000239	0.008	0.091	964.5764	136.4471	25.31105	0.005467	0.108422	0.030581	0.008804	0.002854	0.048245	0.025115	0.395081	0.149459	0.041982	0.228581	2.471298	0.036648	0.576501	0.163639	0.041982	0.228581	2.471298	0.044974	0.850878	3.765161	3.139903	0.009536	0.001349	0.00025
Santa Clara	2025	LHDT2	Aggregate	Aggregate	Diesel	4837.236	188645	188645	0	60846.34	1.139289	1.802658	0	0.030296	0.027005	0	0.003	0.03185	0.031666	0.028226	0	0.012	0.091	750.3571	207.2396	0	0.007043	0.005098	0	0.118219	0.032651	0	0.151622	0.10976	0	0	0	0	0.172612	0.124954	0	0	0	0	0.188496	0.387904	0.909745	0	0.00711	0.001964	0
Santa Clara	2025	LHDT2	Aggregate	Aggregate	Electricity	50.46202	3193.251	0	3193.251	669.175	0	0	0	0	0	0	0.002	0.015925	0	0	0	0.008	0.0455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	MCY	Aggregate	Aggregate	Gasoline	28484.89	166414.5	166414.5	0	56969.79	0.557882	0	0.129146	0.001799	0	0.003253	0.001	0.0042	0.001925	0	0.003464	0.004	0.012	187.2679	0	47.30784	0.158292	0	0.177199	0.038984	0	0.007691	1.024683	0	1.305157	3.558651	3.760078	3.860886	1.236542	0	1.419098	3.558651	3.760078	3.860886	0.008851	12.31202	0	7.965438	0.003851	0	0.000468
Santa Clara	2025	MDV	Aggregate	Aggregate	Gasoline	159532.2	5551044	5551044	0	739781.4	0.087905	0	0.391886	0.001179	0	0.001962	0.002	0.003182	0.001282	0	0.002134	0.008	0.009091	410.3223	0	104.9535	0.003431	0	0.094137	0.006921	0	0.039073	0.014165	0	0.463643	0.092515	0.265086	1.620407	0.020668	0	0.50763	0.092515	0.265086	1.620407	0.036883	0.895922	0	3.753621	0.004056	0	0.001038
Santa Clara	2025	MDV	Aggregate	Aggregate	Diesel	2421.364	85326.8	85326.8	0	11351.14	0.044948	0	0	0.004686	0	0	0.002	0.003225	0.004898	0	0	0.008	0.009216	404.5816	0	0	0.000492	0	0	0.063742	0	0	0.010592	0	0	0	0	0	0	0.012058	0	0	0	0	0	0.0031	0.199936	0	0	0.003834	0	0
Santa Clara	2025	MDV	Aggregate	Aggregate	Electricity	2274.547	77934.96	0	77934.96	11571.06	0	0	0	0	0	0	0.002	0.001526	0	0	0	0.008	0.004361	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	MDV	Aggregate	Aggregate	Plug-in Hyb	1542.366	64484.39	29833.21	34651.18	6377.683	0.003036	0	0.11551	0.000507	0	0.00183	0.002	0.001388	0.000551	0	0.00199	0.008	0.003965	128.9983	0	95.11137	0.000407	0	0.041816	0.00053	0	0.02018	0.001313	0	0.173285	0.02949	0.025333	0.327899	0.001916	0	0.189725	0.02949	0.025333	0.327899	0.019431	0.199076	0	1.339893	0.001275	0	0.00094
Santa Clara	2025	MH	Aggregate	Aggregate	Gasoline	2337.876	21506.19	21506.19	0	233.8812	0.37652	0	0.425905	0.001612	0	0.000388	0.003	0.015756	0.001753	0	0.000422	0.012	0.045017	1947.057	0	31.4529	0.013722	0	0.036945	0.023864	0	0.045303	0.059455	0	0.154277	11.38549	0.268831	4.357209	0.086757	0	0.168914	11.38549	0.268831	4.357209	0.044879	1.426924	0	3.382931	0.019249	0	0.000311
Santa Clara	2025	MH	Aggregate	Aggregate	Diesel	994.5437	9603.893	9603.893	0	99.45437	3.976372	0	0	0.086098	0	0	0.004	0.015675	0.08999	0	0	0.016	0.044785	1082.401	0	0	0.005421	0	0	0.170533	0	0	0.116701	0	0	0	0	0	0	0.132856	0	0	0	0	0	0.166635	0.385118	0	0	0.010256	0	0
Santa Clara	2025	MHDT	Aggregate	Aggregate	Gasoline	1412.263	72039.87	72039.87	0	28256.55	0.394798	0.086175	0.424333	0.001347	0	0.000513	0.003	0.015756	0.001465	0	0.000558	0.012	0.045017	1746.959	526.7233	45.37618	0.012585	0.261076	0.04598	0.019987	0.007219	0.032398	0.061949	1.015127	0.253154	0.030988	0.250472	2.558011	0.090397	1.481271	0.277172	0.030988	0.250472	2.558011	0.044991	1.276089	15.1444	5.531626	0.01727	0.005207	0.000449
Santa Clara	2025	MHDT	Aggregate	Aggregate	Diesel	10548.06	435100.6	435100.6	0	125915.2	1.128155	12.74108	1.646559	0.012461	0.024792	0	0.003	0.015941	0.013024	0.025912	0	0.012	0.045545	1141.328	2229.374	0	0.00131	0.010957	0	0.179817	0.351239	0	0.028195	0.235896	0	0	0	0	0.032098	0.268549	0	0	0	0	0.211891	0.109646	7.535393	0	0.010808	0.021111	0
Santa Clara	2025	MHDT	Aggregate	Aggregate	Electricity	90.80851	4838.906	0	4838.906	1182.343	0	0	0	0	0	0	0.003	0.007951	0	0	0	0.012	0.022718	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	MHDT	Aggregate	Aggregate	Natural Ga	98.90628	4590.307	4590.307	0	911.9208	0.12435	6.45266	0	0.002126	0.018594	0	0.003	0.016009	0.001333	0.020223	0	0.012	0.045741	979.0142	1290.545	0	0.751438	16.97256	0	0.199578	1.078512	0	0.010737	0.242504	0	0	0	0	0	0.766898	17.32175	0	0	0	0	1.06	2.996166	35.80775	0	0	0	0
Santa Clara	2025	OBUS	Aggregate	Aggregate	Gasoline	430.7023	18962.49	18962.49	0	8617.491	0.460353	0.06398	0.405045	0.000939	0	0.000255	0.003	0.01568	0.001022	0	0.000278	0.012	0.044799	1744.286	377.0226	31.37018	0.012641	0.195762	0.035581	0.02242	0.005219	0.030806	0.061504	0.74652	0.188569	0.033827	0.158433	2.881145	0.089747	1.089321	0.206459	0.033827	0.158433	2.881145	0.04498	1.352776	5.776073	3.953891	0.017244	0.003727	0.00031
Santa Clara	2025	OBUS	Aggregate	Aggregate	Diesel	921.4116	62304.89	62304.89	0	9451.527	1.133246	7.151668	1.532624	0.018916	0.007596	0	0.003	0.018017	0.019772	0.007939	0	0.012	0.051478	1259.126	1532.11	0	0.001844	0.020685	0	0.198376	0.241385	0	0.039711	0.445333	0	0	0	0	0.045208	0.506978	0	0	0	0	0.216212	0.14449	7.587325	0	0.011923	0.014508	0
Santa Clara	2025	OBUS	Aggregate	Aggregate	Electricity	2.672031	221.771	0	221.771	53.46199	0	0	0	0	0	0	0.003	0.00784	0	0	0	0.012	0.022399	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	OBUS	Aggregate	Aggregate	Natural Ga	8.125306	537.7468	537.7468	0	72.31523	0.164816	1.526623	0	0.001183	0.004157	0	0.003	0.016148	0.001287	0.004521	0	0.012	0.046137	987.912	1189.826	0	0.803903	4.103659	0	0.201392	0.242554	0	0.011486	0.058633	0	0	0	0	0	0.820442	4.188085	0	0	0	0	1.06	3.29233	7.933419	0	0	0	0
Santa Clara	2025	SBUS	Aggregate	Aggregate	Gasoline	178.2436	8812.851	8812.851	0	712.9742	0.487257	0.905562	0.722985	0.000866	0	0.000573	0.002	0.015721	0.000942	0	0.000623	0.008	0.044917	806.3455	2576.863	57.67146	0.010523	2.465929	0.074733	0.026439	0.084425	0.066434	0.051046	10.63602	0.42511	0.118631	0.292211	1.797789	0.074486	15.52005	0.465442	0.118631	0.292211	1.797789	0.045	1.308927	82.20747	10.20511	0.007972	0.025475	0.00057
Santa Clara	2025	SBUS	Aggregate	Aggregate	Diesel	673.2048	15283.75	15283.75	0	9748.005	3.614242	21.38359	0.496308	0.018677	0.018235	0	0.003	0.015721	0.019521	0.019059	0	0.012	0.044917	1139.829	2219.616	0	0.002583	0.007936	0	0.179581	0.349701	0	0.055601	0.170862	0	0	0	0	0.063298	0.194514	0	0	0	0	0.151888	0.17348	4.777291	0	0.010794	0.021018	0
Santa Clara	2025	SBUS	Aggregate	Aggregate	Electricity	4.481168	145.0761	0	145.0761	51.24766	0	0	0	0	0	0	0.002	0.002556	0.00786	0	0	0	0.010226	0.022459	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	SBUS	Aggregate	Aggregate	Natural Ga	25.28439	627.586	627.586	0	366.118	0.5494	5.260001	0	0.003378	0.011617	0	0.003	0.015721	0.003674	0.012635	0	0.012	0.044917	1252.115	4074.049	0	3.386209	15.12215	0	0.255252	0.830522	0	0.048382	0.216066	0	0	0	0	0.345875	15.43326	0	0	0	0	1.06	11.41153	21.33281	0	0	0	0
Santa Clara	2025	UBUS	Aggregate	Aggregate	Gasoline	46.21918	4826.658	4826.658	0	184.8767	0.027276	0	0.449893	0.001143	0	0.000128	0.002	0.03185	0.001243	0	0.00014	0.008	0.091	925.8676	0	36.64281	0.001993	0	0.043054	0.004259	0	0.070843	0.005515	0	0.152699	0.04366	0.092112	0.471505	0.008047	0	0.167186	0.04366	0.092112	0.471505	0.045	0.586139	0	5.942314	0.009153	0	0.000362
Santa Clara	2025	UBUS	Aggregate	Aggregate	Diesel	405.3675	44987.37	44987.37	0	1621.47	0.382968	0	0	0.006962	0	0	0.008	0.03238	0.0385	0.007277	0	0	0.032951	0.11	1121.875	0	0	0.003193	0	0	0.176752	0	0	0.06875	0	0	0	0	0.078266	0	0	0	0	0	0.22	0.0787	0	0	0.01063	0	0
Santa Clara	2025	UBUS	Aggregate	Aggregate	Electricity	23.31202	2427.54	0	2427.54	93.24809	0	0	0	0	0	0	0.008	0.008977	0.01925	0	0	0	0.035907	0.055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	UBUS	Aggregate	Aggregate	Natural Ga	58.16247	6762.418	6762.418	0	232.6499	0.060506	0	0	0.000287	0	0	0.008408	0.0385	0.0003	0	0	0	0.033634	0.11	1317.877	0	0	4.320397	0	0	0.268658	0	0	0.06173	0	0	0	0	4.409282	0	0	0	0	0	0.97	50.3461	0	0	0	0	0

Source: EMFAC2021 (v1.0.1) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PMP	PM2.5_PMT	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PMP	PM10_PMT	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_DIUR	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNEX	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2030	HHDT	Aggregate	Aggregate	Gasoline	1.487616	172.8499	172.8499	0	29.76421	2.911619	0	0.534862	0.001674	0	0.000674	0.005	0.032468	0.00182	0	0.000733	0.02	0.092765	1924.768	0	48.04273	0.102337	0	0.000224	0.119593	0	0.0192	0.501241	0	0.001214	0.064624	0.580293	4.097317	0.731409	0	0.00133	0.064624	0.580293	4.097317	0.0445	26.13927	0	4.442251	0.019028	0	0.000475
Santa Clara	2030	HHDT	Aggregate	Aggregate	Diesel	9231.234	1024357	1024357	0	136537.8	1.56454	61.29817	2.88955	0.024765	0.0244	0	0.008788	0.028144	0.025885	0.025504	0	0.035154	0.080413	1474.596	10772.22	0	0.000646	0.235119	0	0.232323	1.697167	0	0.013904	5.062058	0	0	0	0	0.015828	5.762768	0	0	0	0	0.217216	0.061916	74.26736	0	0.013964	0.102006	0
Santa Clara	2030	HHDT	Aggregate	Aggregate	Electricity	530.2501	54761.35	0	54761.35	6663.697	0	0	0	0	0	0	0.008533	0.015514	0	0	0	0.03413	0.044327	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	HHDT	Aggregate	Aggregate	Natural Ga	938.2726	57937.93	57937.93	0	8287.795	0.731127	11.54643	0	0.001557	0.027291	0	0.009	0.05172	0.001694	0.029682	0	0.036	0.147772	1322.875	10241.21	0	1.710465	30.09558	0	0.269677	2.087739	0	0.033169	0.444488	0	0	0	0	0.755601	30.73125	0	0	0	0	0.811239	11.16082	76.40969	0	0	0	0
Santa Clara	2030	LDA	Aggregate	Aggregate	Gasoline	602124.6	21985013	21985013	0	2796634	0.027128	0	0.204379	0.000885	0	0.001532	0.002	0.002653	0.000962	0	0.001666	0.008	0.00758	252.5101	0	62.99349	0.00146	0	0.051774	0.003674	0	0.028877	0.005055	0	0.223494	0.069299	0.197319	1.209286	0.007376	0	0.244698	0.069299	0.197319	1.209286	0.039301	0.56355	0	2.385556	0.002496	0	0.000623
Santa Clara	2030	LDA	Aggregate	Aggregate	Diesel	966.5715	27899.12	27899.12	0	4169.431	0.084622	0	0	0.00656	0	0	0.002	0.002722	0.006857	0	0	0.008	0.007776	216.2434	0	0	0.000652	0	0	0.034069	0	0	0.014035	0	0	0	0	0	0.015978	0	0	0	0	0	0.0031	0.244061	0	0	0.002049	0	0
Santa Clara	2030	LDA	Aggregate	Aggregate	Electricity	74807.28	2981995	0	2981995	356618	0	0	0	0	0	0	0.002	0.001537	0	0	0	0.008	0.004391	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	LDA	Aggregate	Aggregate	Plug-in Hyb	2466.152	986083.3	441285.3	544798	101975.4	0.002937	0	0.11551	0.000402	0	0.001538	0.002	0.001398	0.000437	0	0.001673	0.008	0.003994	124.7883	0	62.09864	0.00039	0	0.041401	0.000504	0	0.019792	0.00127	0	0.173285	0.041078	0.050398	0.518869	0.001853	0	0.189725	0.041078	0.050398	0.518869	0.018326	0.192609	0	1.339893	0.001234	0	0.000614
Santa Clara	2030	LDT1	Aggregate	Aggregate	Gasoline	47587.45	1511766	1511766	0	212019.3	0.06744	0	0.276451	0.001181	0	0.001933	0.002	0.003236	0.001284	0	0.002102	0.008	0.009245	301.4361	0	77.09479	0.003341	0	0.071607	0.005993	0	0.032827	0.01396	0	0.342108	0.122517	0.361736	2.125938	0.020371	0	0.374565	0.122517	0.361736	2.125938	0.038435	0.913385	0	3.462484	0.00208	0	0.000762
Santa Clara	2030	LDT1	Aggregate	Aggregate	Diesel	0.768467	17.0557	17.0557	0	2.625517	0.541325	0	0	0.080932	0	0	0.002	0.003285	0.084591	0	0	0.008	0.009386	366.951	0	0	0.006227	0	0	0.057813	0	0	0.134063	0	0	0	0	0	0.152622	0	0	0	0	0	0.0031	0.953187	0	0	0.003477	0	0
Santa Clara	2030	LDT1	Aggregate	Aggregate	Electricity	459.5988	19527.57	0	19527.57	2229.168	0	0	0	0	0	0	0.002	0.001532	0	0	0	0.008	0.004379	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	LDT1	Aggregate	Aggregate	Plug-in Hyb	311.9596	13308.96	5503.171	7805.787	1289.953	0.002713	0	0.11551	0.000237	0	0.000982	0.002	0.001404	0.000258	0	0.001068	0.008	0.004012	115.302	0	67.68965	0.00036	0	0.041331	0.000464	0	0.019726	0.001173	0	0.173285	0.023088	0.020052	0.277122	0.001712	0	0.189725	0.023088	0.020052	0.277122	0.017367	0.177967	0	1.339893	0.00114	0	0.000669
Santa Clara	2030	LDT2	Aggregate	Aggregate	Gasoline	315384	11011602	11011602	0	1467133	0.042522	0	0.254325	0.000923	0	0.001563	0.002	0.003147	0.001004	0	0.001699	0.008	0.008992	313.0844	0	78.91261	0.001939	0	0.061959	0.004491	0	0.03252	0.007052	0	0.272663	0.065379	0.191547	1.192189	0.010291	0	0.298532	0.065379	0.191547	1.192189	0.039832	0.659365	0	2.809133	0.003095	0	0.00078
Santa Clara	2030	LDT2	Aggregate	Aggregate	Diesel	1158.99	40906.35	40906.35	0	5439.347	0.030058	0	0	0.003988	0	0	0.002	0.003143	0.004169	0	0	0.008	0.008981	285.9943	0	0	0.000559	0	0	0.045059	0	0	0.012039	0	0	0	0	0	0.013706	0	0	0	0	0	0.0031	0.125642	0	0	0.00271	0	0
Santa Clara	2030	LDT2	Aggregate	Aggregate	Electricity	5453.194	171699	0	171699	27128.05	0	0	0	0	0	0	0.002	0.001531	0	0	0	0.008	0.004374	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	LDT2	Aggregate	Aggregate	Plug-in Hyb	4846.712	193738.5	82854.31	110884.1	20041.15	0.002806	0	0.11551	0.000301	0	0.001204	0.002	0.001402	0.000327	0	0.00131	0.008	0.004007	119.2524	0	74.25998	0.000371	0	0.041171	0.000476	0	0.019577	0.001214	0	0.173285	0.026751	0.026025	0.323076	0.001771	0	0.189725	0.026751	0.026025	0.323076	0.017953	0.184065	0	1.339893	0.001179	0	0.000734
Santa Clara	2030	LHDT1	Aggregate	Aggregate	Gasoline	19753.02	727605.5	727605.5	0	294290.5	0.082552	0.030634	0.51718	0.001329	0	0.000195	0.002	0.0273	0.001446	0	0.000212	0.008	0.078	802.0575	113.4696	25.10498	0.003719	0.099174	0.025985	0.00491	0.002766	0.044981	0.016744	0.351327	0.123637	0.032922	0.194989	2.054962	0.024432	0.512656	0.135367	0.032922	0.194989	2.054962	0.045	0.768194	3.76818	3.242124	0.007929	0.001122	0.000248
Santa Clara	2030	LHDT1	Aggregate	Aggregate	Diesel	11269.28	427352.8	427352.8	0	141753.3	0.789576	1.444738	0	0.023821	0.026284	0	0.003	0.0273	0.024898	0.027472	0	0.012	0.078	617.2105	123.3953	0	0.005662	0.005098	0	0.097242	0.019441	0	0.121909	0.10976	0	0	0	0	0.138785	0.124954	0	0	0	0	0.199336	0.314077	0.909745	0	0.005848	0.001169	0
Santa Clara	2030	LHDT1	Aggregate	Aggregate	Electricity	2074.538	117461.4	0	117461.4	29061.96	0	0	0	0	0	0	0.002	0.01365	0	0	0	0.008	0.039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	LHDT2	Aggregate	Aggregate	Gasoline	2461.018	87198.4	87198.4	0	36665.5	0.076883	0.029634	0.510604	0.001202	0	0.000149	0.002	0.03185	0.001308	0	0.000162	0.008	0.091	909.7177	131.684	24.47216	0.00272	0.095769	0.024975	0.005151	0.002617	0.043301	0.011255	0.340122	0.118021	0.031894	0.187158	2.069204	0.016423	0.496305	0.129219	0.031894	0.187158	2.069204	0.045	0.659048	3.775132	3.178541	0.008993	0.001302	0.000242
Santa Clara	2030	LHDT2	Aggregate	Aggregate	Diesel	5433.248	199824.8	199824.8	0	68343.42	0.748874	1.460368	0	0.024929	0.026926	0	0.003	0.03185	0.026056	0.028143	0	0.012	0.091	728.4033	198.6254	0	0.005847	0.005098	0	0.11476	0.031294	0	0.125888	0.10976	0	0	0	0	0.143315	0.124954	0	0	0	0	0.202684	0.318068	0.909745	0	0.006902	0.001882	0
Santa Clara	2030	LHDT2	Aggregate	Aggregate	Electricity	523.4249	28364.01	0	28364.01	6941.368	0	0	0	0	0	0	0.002	0.015925	0	0	0	0.008	0.0455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	MCY	Aggregate	Aggregate	Gasoline	29945.67	170059	170059	0	59891.34	0.509869	0	0.103081	0.001864	0	0.003197	0.001	0.0042	0.001997	0	0.003416	0.004	0.012	185.5769	0	42.83228	0.142987	0	0.157242	0.036967	0	0.006341	0.890508	0	1.134366	3.555147	3.783469	3.680755	1.091848	0	1.234067	3.555147	3.783469	3.680755	0.009004	11.04655	0	7.830862	0.001835	0	0.000423
Santa Clara	2030	MDV	Aggregate	Aggregate	Gasoline	174344	5962227	5962227	0	807535.9	0.050767	0	0.286849	0.000902	0	0.001551	0.002	0.003188	0.000981	0	0.001687	0.008	0.00911	378.9313	0	95.79397	0.002213	0	0.068559	0.004925	0	0.033878	0.008456	0	0.317272	0.072796	0.219895	1.355815	0.012339	0	0.347373	0.072796	0.219895	1.355815	0.03954	0.69525	0	2.93398	0.003746	0	0.000947
Santa Clara	2030	MDV	Aggregate	Aggregate	Diesel	2406.787	79682.09	79682.09	0	11072.82	0.026422	0	0	0.003049	0	0	0.002	0.00327	0.003187	0	0	0.008	0.009343	380.8057	0	0	0.000373	0	0	0.059996	0	0	0.008029	0	0	0	0	0	0.00914	0	0	0	0	0	0.0031	0.181562	0	0	0.003608	0	0
Santa Clara	2030	MDV	Aggregate	Aggregate	Electricity	5418.753	169876.9	0	169876.9	26922.58	0	0	0	0	0	0	0.002	0.001532	0	0	0	0.008	0.004377	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	MDV	Aggregate	Aggregate	Plug-in Hyb	2963.422	115546.2	49482.19	66063.98	12253.75	0.00281	0	0.11551	0.000321	0	0.001277	0.002	0.001403	0.000349	0	0.001389	0.008	0.004008	119.4157	0	90.62083	0.00037	0	0.041054	0.000474	0	0.019467	0.001215	0	0.173285	0.028447	0.028695	0.345627	0.001773	0	0.189725	0.028447	0.028695	0.345627	0.017986	0.184317	0	1.339893	0.001181	0	0.000896
Santa Clara	2030	MH	Aggregate	Aggregate	Gasoline	2034.688	19970.26	19970.26	0	203.5502	0.205296	0	0.454071	0.001366	0	0.000326	0.003	0.015756	0.001486	0	0.000355	0.012	0.045017	1945.26	0	30.65867	0.006703	0	0.034694	0.016757	0	0.050507	0.023566	0	0.135475	7.46433	0.181652	3.092727	0.034387	0	0.148329	7.46433	0.181652	3.092727	0.045	0.391655	0	2.922173	0.019231	0	0.000303
Santa Clara	2030	MH	Aggregate	Aggregate	Diesel	1064.938	10092.31	10092.31	0	106.4938	3.402012	0	0	0.062183	0	0	0.004	0.015675	0.064995	0	0	0.016	0.044785	1084.369	0	0	0.00483	0	0	0.170843	0	0	0.103997	0	0	0	0	0	0.118394	0	0	0	0	0	0.181066	0.332398	0	0	0.010275	0	0
Santa Clara	2030	MHDT	Aggregate	Aggregate	Gasoline	1369.784	69786.55	69786.55	0	27406.63	0.182504	0.074436	0.34723	0.001338	0	0.000467	0.003	0.015756	0.001455	0	0.000508	0.012	0.045017	1664.876	504.5675	41.89188	0.006139	0.269683	0.040602	0.011558	0.006658	0.029379	0.027836	1.022884	0.21089	0.021107	0.176695	1.842352	0.040618	1.49259	0.230898	0.021107	0.176695	1.842352	0.045	0.52486	15.23455	4.434866	0.016459	0.004988	0.000414
Santa Clara	2030	MHDT	Aggregate	Aggregate	Diesel	10679.13	4158333.4	415833.4	0	127641.8	0.730884	11.4465	1.543564	0.006512	0.00966	0	0.003	0.015941	0.006806	0.010097	0	0.012	0.045547	1109.144	2139.822	0	0.000682	0.00913	0	0.174746	0.33713	0	0.014684	0.196569	0	0	0	0	0.016716	0.223779	0	0	0	0	0.21635	0.072794	7.506963	0	0.010503	0.020263	0
Santa Clara	2030	MHDT	Aggregate	Aggregate	Electricity	991.1386	51102.91	0	51102.91	12793.33	0	0	0	0	0	0	0.003	0.007951	0	0	0	0.012	0.022716	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	MHDT	Aggregate	Aggregate	Natural Ga	136.8437	5799.937	5799.937	0	1320.474	0.096762	6.249105	0	0.001362	0.019752	0	0.003	0.016004	0.001481	0.021482	0	0.012	0.045726	958.0225	5202.364	0	0.762569	15.80303	0	0.195299	1.060536	0	0.010896	0.225794	0	0	0	0	0.778258	16.12815	0	0	0	0	1.06	2.989146	38.55016	0	0	0	0
Santa Clara	2030	OBUS	Aggregate	Aggregate	Gasoline	373.8509	15017.96	15017.96	0	7480.008	0.303475	0.05759	0.379431	0.001075	0	0.000273	0.003	0.01568	0.001169	0	0.000296	0.012	0.044799	1659.483	366.2829	30.178	0.008294	0.194656	0.033726	0.01556	0.004647	0.028492	0.039512	0.74712	0.179242	0.035188	0.193999	3.485652	0.057656	1.090195	0.196247	0.035188	0.193999	3.485652	0.045	0.869951	5.779659	3.676722	0.016406	0.003621	0.000298
Santa Clara	2030	OBUS	Aggregate	Aggregate	Diesel	1041.415	64198.49	64198.49	0	10721.4	0.980356	5.976871	1.366725	0.015111	0.005302	0	0.003	0.018208	0.015794	0.005542	0	0.012	0.052023	1187.709	1474.191	0	0.001456	0.020843	0	0.187124	0.232259	0	0.031354	0.448735	0	0	0	0	0.035694	0.51085	0	0	0	0	0.217102	0.12266	7.728975	0	0.011247	0.01396	0
Santa Clara	2030	OBUS	Aggregate	Aggregate	Electricity	23.4704	1822.619	0	1822.619	468.5957	0	0	0	0	0	0	0.003	0.00784	0	0	0	0.012	0.022399	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	OBUS	Aggregate	Aggregate	Natural Ga	12.4197	789.0472	789.0472	0	110.5354	0.10256	1.499304	0	0.00148	0.004808	0	0.003	0.016148	0.001609	0.005229	0	0.012	0.046137	931.8762	1168.573	0	0.837982	3.766358	0	0.189969	0.238221	0	0.011973	0.053814	0	0	0	0	0.855222	3.843845	0	0	0	0	1.06	3.384146	9.402647	0	0	0	0
Santa Clara	2030	SBUS	Aggregate	Aggregate	Gasoline	198.1997	9649.073	9649.073	0	792.7989	0.406238	0.82859	0.759705	0.000888	0	0.000598	0.002	0.015721	0.000966	0	0.00065	0.008	0.044917	789.8243	2529.341	55.78331	0.007921	2.470848	0.074041	0.023184	0.077325	0.068817	0.038133	10.64152	0.418393	0.132523	0.393216	2.367471	0.055643	15.52808	0.458087	0.132523	0.393216	2.367471	0.045	0.979717	82.24088	9.529837	0.007808	0.025005	0.000551
Santa Clara	2030	SBUS	Aggregate	Aggregate	Diesel	659.3029	14502.39	14502.39	0	9546.705	2.539504	18.10728	0.550768	0.01404	0.011608	0	0.003	0.015721	0.014674	0.012133	0	0.012	0.044917	1118.5	2161.652	0	0.002094	0.007833	0	0.17622	0.340569	0	0.04508	0.168645	0	0	0	0	0.051321	0.19199	0	0	0	0	0.171795	0.148382	5.367405	0	0.010592	0.02047	0
Santa Clara	2030	SBUS	Aggregate	Aggregate	Electricity	42.27556	1362.719	0	1362.719	492.3385	0	0	0	0	0	0	0.002	0.002592	0.00786	0	0	0	0.010366	0.022459	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	SBUS	Aggregate	Aggregate	Natural Ga	29.19835	683.5221	683.5221	0	422.7921	0.477489	5.21952	0	0.003378	0.012583	0	0.003	0.015721	0.003674	0.013685	0	0.012	0.044917	1216.036	4101.156	0	3.18823	14.62233	0	0.247897	0.836047	0	0.045554	0.208924	0	0	0	0	3.253822	14.92316	0	0	0	0	1.06	10.47986	23.50992	0	0	0	0
Santa Clara	2030	UBUS	Aggregate	Aggregate	Gasoline	46.8994	4897.693	4897.693	0	187.5976	0.01748	0	0.295043	0.001197	0	0.000134	0.002	0.03185	0.001302	0	0.000145	0.008	0.091	850.5412	0	34.89923	0.001406	0	0.028862	0.003131	0	0.052846	0.003661	0	0.096632	0.024197	0.090857	0.324693	0.005342	0	0.1058	0.024197	0.090857	0.324693	0.045	0.587543	0	6.131541	0.008408	0	0.000345
Santa Clara	2030	UBUS	Aggregate	Aggregate	Diesel	338.5092	37119.08	37119.08	0	1354.037	0.396482	0	0	0.007209	0	0	0.002	0.008494	0.0385	0.007535	0	0	0.033977	0.11	1140.779	0	0	0.003281	0	0	0.17973	0	0	0.070632	0	0	0	0	0.080409	0	0	0	0	0	0.22	0.081446	0	0	0.010809	0	0
Santa Clara	2030	UBUS	Aggregate	Aggregate	Electricity	78.67225	8935.028	0	8935.028	314.689	0	0	0	0	0	0	0.002	0.007594	0.01925	0	0	0	0.030375	0.055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2030	UBUS	Aggregate	Aggregate	Natural Ga	76.82557	8920.557	8920.557	0	307.3023	0.058538	0	0	0.000282	0	0	0.00815	0.0385	0.000294	0	0	0	0.032599	0.11	1296.487	0	0	4.23523	0	0	0.264297	0	0	0.060513	0	0	0	0	4.322362	0	0	0	0	0	0.97	48.85872	0	0	0	0	0

Attachment 4: Project Construction Emissions and Health Risk Calculations

Construction Health Risk Assessment and Calculations

330 Distel Circle, Los Altos, CA

Year	Unmitigated DPM	DPM EMFAC2021	Unmitigated Emissions	Unmitigated Fug PM2.5	Fug PM2.5 EMFAC2021	Unmitigated Emissions
2023	0.1271	0.0002	0.1273	0.3612	0.0003	0.3615
2024	0.1039	0.0001	0.1040	0.0000	0.0002	0.0002

Year	Mitigated DPM	DPM EMFAC2021	Mitigated Emissions	Mitigated Fug PM2.5	Fug PM2.5 EMFAC2021	Mitigated Emissions
2023	0.0092	0.0002	0.0094	0.0704	0.0003	0.0707
2024	0.0123	0.0001	0.0124	0.0000	0.0002	0.0002

330 Distel Circle, Los Altos, CA
- Construction Health Impact Modeling

Source Parameters for Point Sources Used in Construction Modeling

Source	Stack Height (ft)	Stack Diam (in)	Exhaust Temp (F)	Volume Flow (acfm)	Velocity (ft/min)	Velocity (ft/sec)
Construction Equipment	9.0	2.5	918	632	18540	309.0

Source	Stack Height (m)	Stack Diam (m)	Exhaust Temp (K)			Velocity (ft/sec)
Construction Equipment	2.74	0.064	765.37			94.2

330 Distel Circle, Los Altos, CA

DPM Construction Emissions and Modeling Emission Rates

Construction Year	Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2023	Construction	0.1273	Point	107	254.6	0.07752	9.77E-03	9.13E-05
2024	Construction	0.1040	Point	107	208.1	0.06334	7.98E-03	7.46E-05
Total		***0.2314***			***462.7***	***0.1409***	***0.0177***	

Emissions assumed to be evenly distributed over each construction areas

hr/day = 9 (7am - 4pm)
days/yr = 365
hours/year = 3285

DPM Construction Emissions and Modeling Emission Rates - With Mitigation

Construction Year	Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2023	Construction	0.0094	Point	107	18.8	0.00571	7.20E-04	6.73E-06
2024	Construction	0.0124	Point	107	24.9	0.00757	9.54E-04	8.91E-06
Total		***0.0218***			***43.6***	***0.0133***	***0.0017***	

Emissions assumed to be evenly distributed over each construction areas

hr/day = 9 (7am - 4pm)
days/yr = 365
hours/year = 3285

330 Distel Circle, Los Altos, CA

PM2.5 Fugitive Dust Construction Emissions for Modeling

Construction Year	Activity	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	DPM Emission Rate $g/s/m^2$
2023	Construction	CON_FUG	0.3615	723.0	0.22009	2.77E-02	3547.9	7.82E-06
2024	Construction	CON_FUG	0.0002	0.4	0.00011	1.38E-05	3547.9	3.88E-09
Total			***0.3617***	***723.4***	***0.2202***	***0.0277***		

Emissions assumed to be evenly distributed over each construction areas

hr/day = 9 (7am - 4pm)
days/yr = 365
hours/year = 3285

PM2.5 Fugitive Dust Construction Emissions for Modeling - With Mitigation

Construction Year	Activity	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	DPM Emission Rate $g/s/m^2$
2023	Construction	CON_FUG	0.0707	141.4	0.04304	5.42E-03	3547.9	1.53E-06
2024	Construction	CON_FUG	0.0002	0.4	0.00011	1.38E-05	3547.9	3.88E-09
Total			***0.0709***	***141.8***	***0.0432***	***0.0054***		

Emissions assumed to be evenly distributed over each construction areas

hr/day = 9 (7am - 4pm)
days/yr = 365
hours/year = 3285

330 Distel Circle, Los Altos, CA - Construction Health Impact Summary

Maximum Impacts at MEI Residential Location - Without Mitigation

Emissions Year	Maximum Concentrations: Exhaust PM10/DPM (µg/m³)	Maximum Concentrations: Fugitive PM2.5 (µg/m³)	Cancer Risk (per million): Infant/Child	Cancer Risk (per million): Adult	Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m³)
2023	0.2311	1.2961	41.11	0.66	0.05	1.53
2024	0.1889	0.0006	31.02	0.54	0.04	0.19
Total	-	-	**72.13**	**1.21**	-	-
Maximum	0.2311	1.2961	**-**	**-**	**0.05**	**1.53**

Maximum Impacts at MEI Residential Location - With Mitigation

Emissions Year	Maximum Concentrations: Exhaust PM10/DPM (µg/m³)	Maximum Concentrations: Fugitive PM2.5 (µg/m³)	Cancer Risk (per million): Infant/Child	Cancer Risk (per million): Adult	Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m³)
2023	0.0170	0.2536	3.03	0.05	0.003	0.27
2024	0.0226	0.0006	3.71	0.06	0.005	0.02
Total	-	-	**6.74**	**0.11**	-	-
Maximum	0.0226	0.2536	**-**	**-**	**0.005**	**0.27**

- Tier 4 Interim Engine, Electric Cranes, and Enhanced BMPs Mitigation

Maximum Impacts at Mountain View-Los Altos Montessori Children's Center - Without Mitigation

Construction Year	Unmitigated Emissions: Maximum Concentrations: Exhaust PM10/DPM (µg/m³)	Unmitigated Emissions: Maximum Concentrations: Fugitive PM2.5 (µg/m³)	Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m³)
2023	0.0119	0.0512	0.84	0.002	0.06
2024	0.0098	0.0000	0.69	0.002	0.01
Total	-	-	**1.53**	-	-
Maximum	0.0119	0.0512	**-**	**0.002**	**0.06**

330 Distel Circle, Los Altos, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 1.5 meter receptor height (1st Floor Level)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information				Maximum		
			DPM Conc (ug/m3)		Age	Infant/Child	Modeled DPM Conc (ug/m3)		Age	Adult			
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Cancer Risk (per million)	Year	Annual	Sensitivity Factor	Cancer Risk (per million)	Hazard Index	Fugitive PM2.5	Total PM2.5
0	0.25	-0.25 - 0*	2023	0.2311	10	3.14	2023	0.2311	-	-			
1	1	0 - 1	2023	0.2311	10	37.96	2023	0.2311	1	0.66	0.05	1.30	1.53
2	1	1 - 2	2024	0.1889	10	31.02	2024	0.1889	1	0.54	0.04	0.001	0.19
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00			
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**72.13**				**1.21**			

* Third trimester of pregnancy

330 Distel Circle, Los Altos, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 4.5 meter receptor height (2nd Floor Level)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child	Adult - Exposure Information			Adult	Maximum		
			DPM Conc (ug/m3)		Age	Cancer	Modeled DPM Conc (ug/m3)		Age	Cancer			
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Risk (per million)	Year	Annual	Sensitivity Factor	Risk (per million)	Hazard Index	Fugitive PM2.5	Total PM2.5
0	0.25	-0.25 - 0*	2023	0.2235	10	3.04	2023	0.2235	-	-			
1	1	0 - 1	2023	0.2235	10	36.71	2023	0.2235	1	0.64	0.04	1.19	1.41
2	1	1 - 2	2024	0.1826	10	30.00	2024	0.1826	1	0.52	0.04	0.001	0.18
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00			
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**69.75**				**1.17**			

* Third trimester of pregnancy

330 Distel Circle, Los Altos, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 1.5 meter receptor height (1st Floor Level)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child	Adult - Exposure Information			Adult	Maximum		
			DPM Conc (ug/m3)		Age	Cancer	Modeled DPM Conc (ug/m3)		Age	Cancer			
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Risk (per million)	Year	Annual	Sensitivity Factor	Risk (per million)	Hazard Index	Fugitive PM2.5	Total PM2.5
0	0.25	-0.25 - 0*	2023	0.0170	10	0.23	2023	0.0170	-	-			
1	1	0 - 1	2023	0.0170	10	2.80	2023	0.0170	1	0.05	0.003	0.25	0.27
2	1	1 - 2	2024	0.0226	10	3.71	2024	0.0226	1	0.06	0.005	0.001	0.02
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00			
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**6.74**				**0.11**			

* Third trimester of pregnancy

330 Distel Circle, Los Altos, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Mountain View-Los Altos Montessori Children's Center (2-6 years) - 1 meter - Child Exposure

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C_{air} x SAF x 8-Hr BR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
SCAF = School Child Adjustment Factor (unitless) for source operation and exposures different than 8 hours/day
= (24/SHR) x (7days/SDay) x (SCHR/8 hrs)
SHR = Hours/day of emission source operation
SDay = Number of days per week of source operation
SCHR = School operation hours while emission source in operation
8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant	School Child
Age -->	**0 - <2**	**2 - <16**
Parameter		
ASF =	10	3
DPM CPF =	1.10E+00	1.10E+00
8-Hr BR* =	1200	520
SCHR =	9	9
SHR =	9	9
SDay =	5	5
A =	1	1
EF =	250	250
AT =	70	70
SAF =	4.20	4.20

* 95th percentile 8-hr breathing rates for moderate intensity activities

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information: DPM Conc (ug/m3) Year	DPM Conc (ug/m3) Annual	Age* Sensitivity Factor	Child Cancer Risk (per million)
1	1	2 - 3	2023	0.0119	3	0.84
2	1	3 - 4	2024	0.0098	3	0.69
3	1	4 - 5		0.0000	3	0.00
4	1	5 - 6		0.0000	3	0.00
Total Increased Cancer Risk						**1.53**

Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0.002	0.05	0.06
0.002	0.000	0.01

* Children assumed to be 2-6 years of age with 2 years of Construction Exposure

Attachment 5: Community Risk Modeling Information and Calculations

CT-EMFAC2017 Emissions Factors for Santa Clara County 2023

File Name: 330 Distel - Santa Clara (SF) - 2023 - Annual.EF
CT-EMFAC2017 Version: 1.0.2.27401
Run Date: 4/14/2022 15:13
Area: Santa Clara (SF)
Analysis Year: 2023
Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.015	0.487	0.513
Truck 2	0.02	0.938	0.047
Non-Truck	0.965	0.014	0.958

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph
PM2.5	0.009229	0.005981	0.004054	0.002896	0.002194	0.001765	0.001511	0.001375
TOG	0.195764	0.127928	0.086105	0.061055	0.046181	0.036838	0.030861	0.027137
Diesel PM	0.000904	0.000732	0.000563	0.000446	0.000382	0.000353	0.00035	0.00037

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.35761

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002108

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.016808

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.014855

==========END==========

El Camino Real Traffic Emissions and Health Risk Calculations - 2023

Analysis Year = ***2023***

Vehicle Type	2021 Caltrans Vehicles (veh/day)	2023 Vehicles (veh/day)
Total	**30,365**	**30,972**

Increase From 2021	1.02
Vehicles/Direction	**15,486**
Avg Vehicles/Hour/Direction	645

Traffic Data Year = ***2021***

Project Traffic Data - Background Plus Project ADT	AADT Total	Total Truck
El Camino Real and Distel Circle	30,365	1,066
	Percent of Total Vehicles	3.51%

Traffic Increase per Year (%) = *1.00%*

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2023

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	55.7	3.4	Varied	15,486
DPM_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	55.7	3.4	Varied	15,486
									Total	30,972

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.00035	0.00038		

Emisson Factors from CT-EMFAC2017

2023 Hourly Traffic Volumes and DPM Emissions - DPM_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.91%	606	2.34E-05	9	6.50%	1006	4.25E-05	17	5.58%	864	3.65E-05
2	2.59%	401	1.55E-05	10	7.36%	1140	4.41E-05	18	3.28%	508	2.14E-05
3	2.88%	445	1.72E-05	11	6.33%	980	3.79E-05	19	2.36%	365	1.41E-05
4	3.34%	517	2.00E-05	12	6.84%	1060	4.10E-05	20	0.92%	142	5.51E-06
5	2.19%	338	1.31E-05	13	6.15%	953	3.69E-05	21	2.99%	463	1.79E-05
6	3.39%	525	2.03E-05	14	6.15%	953	3.69E-05	22	4.14%	641	2.48E-05
7	5.98%	926	3.58E-05	15	5.23%	810	3.14E-05	23	2.47%	383	1.48E-05
8	4.66%	721	3.05E-05	16	3.91%	606	2.34E-05	24	0.86%	134	5.17E-06
								Total		15,486	

2023 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.91%	606	2.31E-05	9	6.50%	1006	4.20E-05	17	5.58%	864	3.60E-05
2	2.59%	401	1.53E-05	10	7.36%	1140	4.35E-05	18	3.28%	508	2.12E-05
3	2.88%	445	1.70E-05	11	6.33%	980	3.74E-05	19	2.36%	365	1.39E-05
4	3.34%	517	1.97E-05	12	6.84%	1060	4.05E-05	20	0.92%	142	5.44E-06
5	2.19%	338	1.29E-05	13	6.15%	953	3.64E-05	21	2.99%	463	1.77E-05
6	3.39%	525	2.01E-05	14	6.15%	953	3.64E-05	22	4.14%	641	2.45E-05
7	5.98%	926	3.54E-05	15	5.23%	810	3.10E-05	23	2.47%	383	1.46E-05
8	4.66%	721	3.01E-05	16	3.91%	606	2.31E-05	24	0.86%	134	5.10E-06
								Total		15,486	

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2023

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	56	1.3	Varied	15,486
PM25_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	56	1.3	Varied	15,486
									Total	30,972

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.001511	0.002194		

Emisson Factors from CT-EMFAC2017

2023 Hourly Traffic Volumes and PM2.5 Emissions - PM25_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	178	2.98E-05	9	7.11%	1101	2.67E-04	17	7.38%	1144	2.77E-04
2	0.42%	65	1.08E-05	10	4.39%	680	1.14E-04	18	8.17%	1266	3.07E-04
3	0.41%	63	1.05E-05	11	4.66%	722	1.21E-04	19	5.70%	882	1.47E-04
4	0.26%	41	6.81E-06	12	5.89%	912	1.52E-04	20	4.27%	662	1.11E-04
5	0.50%	78	1.30E-05	13	6.15%	953	1.59E-04	21	3.26%	505	8.43E-05
6	0.90%	140	2.34E-05	14	6.04%	935	1.56E-04	22	3.30%	511	8.54E-05
7	3.79%	587	9.82E-05	15	7.01%	1086	1.81E-04	23	2.46%	381	6.36E-05
8	7.76%	1202	2.92E-04	16	7.14%	1105	1.85E-04	24	1.86%	289	4.82E-05
								Total		15,486	

2023 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	178	2.94E-05	9	7.11%	1101	2.64E-04	17	7.38%	1144	2.74E-04
2	0.42%	65	1.07E-05	10	4.39%	680	1.12E-04	18	8.17%	1266	3.03E-04
3	0.41%	63	1.04E-05	11	4.66%	722	1.19E-04	19	5.70%	882	1.45E-04
4	0.26%	41	6.72E-06	12	5.89%	912	1.50E-04	20	4.27%	662	1.09E-04
5	0.50%	78	1.28E-05	13	6.15%	953	1.57E-04	21	3.26%	505	8.32E-05
6	0.90%	140	2.31E-05	14	6.04%	935	1.54E-04	22	3.30%	511	8.42E-05
7	3.79%	587	9.69E-05	15	7.01%	1086	1.79E-04	23	2.46%	381	6.28E-05
8	7.76%	1202	2.88E-04	16	7.14%	1105	1.82E-04	24	1.86%	289	4.76E-05
								Total		15,486	

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2023

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	56	1.3	Varied	15,486
TEXH_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	56	1.3	Varied	15,486
									Total	30,972

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.03086	0.04618		

Emisson Factors from CT-EMFAC2017

2023 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	178	6.09E-04	9	7.11%	1101	5.62E-03	17	7.38%	1144	5.84E-03
2	0.42%	65	2.21E-04	10	4.39%	680	2.32E-03	18	8.17%	1266	6.46E-03
3	0.41%	63	2.15E-04	11	4.66%	722	2.46E-03	19	5.70%	882	3.01E-03
4	0.26%	41	1.39E-04	12	5.89%	912	3.11E-03	20	4.27%	662	2.26E-03
5	0.50%	78	2.65E-04	13	6.15%	953	3.25E-03	21	3.26%	505	1.72E-03
6	0.90%	140	4.78E-04	14	6.04%	935	3.19E-03	22	3.30%	511	1.74E-03
7	3.79%	587	2.00E-03	15	7.01%	1086	3.71E-03	23	2.46%	381	1.30E-03
8	7.76%	1202	6.14E-03	16	7.14%	1105	3.77E-03	24	1.86%	289	9.85E-04
								Total		15,486	

2023 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	178	6.01E-04	9	7.11%	1101	5.55E-03	17	7.38%	1144	5.76E-03
2	0.42%	65	2.18E-04	10	4.39%	680	2.29E-03	18	8.17%	1266	6.38E-03
3	0.41%	63	2.13E-04	11	4.66%	722	2.43E-03	19	5.70%	882	2.97E-03
4	0.26%	41	1.37E-04	12	5.89%	912	3.07E-03	20	4.27%	662	2.23E-03
5	0.50%	78	2.61E-04	13	6.15%	953	3.21E-03	21	3.26%	505	1.70E-03
6	0.90%	140	4.72E-04	14	6.04%	935	3.15E-03	22	3.30%	511	1.72E-03
7	3.79%	587	1.98E-03	15	7.01%	1086	3.66E-03	23	2.46%	381	1.28E-03
8	7.76%	1202	6.06E-03	16	7.14%	1105	3.72E-03	24	1.86%	289	9.72E-04
								Total		15,486	

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2023

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	56	1.3	Varied	15,486
TEVAP_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	56	1.3	Varied	15,486
									Total	30,972

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle per Hour (g/hour)	1.35761	1.35761		
Emissions per Vehicle per Mile (g/VMT)	0.03879	0.05430		

Emisson Factors from CT-EMFAC2017

2023 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	178	7.65E-04	9	7.11%	1101	6.61E-03	17	7.38%	1144	6.87E-03
2	0.42%	65	2.77E-04	10	4.39%	680	2.92E-03	18	8.17%	1266	7.60E-03
3	0.41%	63	2.71E-04	11	4.66%	722	3.10E-03	19	5.70%	882	3.78E-03
4	0.26%	41	1.75E-04	12	5.89%	912	3.91E-03	20	4.27%	662	2.84E-03
5	0.50%	78	3.33E-04	13	6.15%	953	4.09E-03	21	3.26%	505	2.16E-03
6	0.90%	140	6.01E-04	14	6.04%	935	4.01E-03	22	3.30%	511	2.19E-03
7	3.79%	587	2.52E-03	15	7.01%	1086	4.66E-03	23	2.46%	381	1.63E-03
8	7.76%	1202	7.22E-03	16	7.14%	1105	4.74E-03	24	1.86%	289	1.24E-03
								Total		15,486	

2023 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	178	7.55E-04	9	7.11%	1101	6.53E-03	17	7.38%	1144	6.78E-03
2	0.42%	65	2.74E-04	10	4.39%	680	2.88E-03	18	8.17%	1266	7.50E-03
3	0.41%	63	2.67E-04	11	4.66%	722	3.06E-03	19	5.70%	882	3.73E-03
4	0.26%	41	1.73E-04	12	5.89%	912	3.86E-03	20	4.27%	662	2.80E-03
5	0.50%	78	3.28E-04	13	6.15%	953	4.03E-03	21	3.26%	505	2.14E-03
6	0.90%	140	5.93E-04	14	6.04%	935	3.96E-03	22	3.30%	511	2.16E-03
7	3.79%	587	2.49E-03	15	7.01%	1086	4.60E-03	23	2.46%	381	1.61E-03
8	7.76%	1202	7.12E-03	16	7.14%	1105	4.68E-03	24	1.86%	289	1.22E-03
								Total		15,486	

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2023

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	56	1.3	Varied	15,486
FUG_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	56	1.3	Varied	15,486
									Total	30,972

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681	0.01681		
Road Dust - Emissions per Vehicle (g/VMT)	0.01486	0.01486		
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03377	0.03377		

Emisson Factors from CT-EMFAC2017

2023 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	178	6.66E-04	9	7.11%	1101	4.11E-03	17	7.38%	1144	4.27E-03
2	0.42%	65	2.41E-04	10	4.39%	680	2.54E-03	18	8.17%	1266	4.73E-03
3	0.41%	63	2.36E-04	11	4.66%	722	2.70E-03	19	5.70%	882	3.29E-03
4	0.26%	41	1.52E-04	12	5.89%	912	3.41E-03	20	4.27%	662	2.47E-03
5	0.50%	78	2.90E-04	13	6.15%	953	3.56E-03	21	3.26%	505	1.88E-03
6	0.90%	140	5.23E-04	14	6.04%	935	3.49E-03	22	3.30%	511	1.91E-03
7	3.79%	587	2.19E-03	15	7.01%	1086	4.06E-03	23	2.46%	381	1.42E-03
8	7.76%	1202	4.49E-03	16	7.14%	1105	4.13E-03	24	1.86%	289	1.08E-03
								Total		15,486	

2023 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	178	6.57E-04	9	7.11%	1101	4.06E-03	17	7.38%	1144	4.21E-03
2	0.42%	65	2.38E-04	10	4.39%	680	2.51E-03	18	8.17%	1266	4.66E-03
3	0.41%	63	2.33E-04	11	4.66%	722	2.66E-03	19	5.70%	882	3.25E-03
4	0.26%	41	1.50E-04	12	5.89%	912	3.36E-03	20	4.27%	662	2.44E-03
5	0.50%	78	2.86E-04	13	6.15%	953	3.51E-03	21	3.26%	505	1.86E-03
6	0.90%	140	5.16E-04	14	6.04%	935	3.45E-03	22	3.30%	511	1.88E-03
7	3.79%	587	2.16E-03	15	7.01%	1086	4.00E-03	23	2.46%	381	1.40E-03
8	7.76%	1202	4.43E-03	16	7.14%	1105	4.07E-03	24	1.86%	289	1.06E-03
								Total		15,486	

330 Distel Circle, Los Altos, CA - El Camino Real Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
at Construction MEI Receptor, 1.5m receptor height (1st floor)

Emission Year	2023
Receptor Information	Construction MEI receptor
Number of Receptors	1
Receptor Height	1st Floor, 1.5 meters
Receptor Distances	At Construction MEI location
Meteorological Conditions	
BAQMD San Jose Airport Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

Construction MEI Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0007	0.0770	0.0946

Construction MEI PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.0776	0.0739	0.0037

330 Distel Circle, Los Altos, CA - El Camino Real Cancer Risk & PM2.5 Impacts at Construction MEI - 1.5 meter receptor height (1st floor)
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2023	10	0.0007	0.0770	0.0946	0.010	0.006	0.0004	0.02
1	1	0 - 1	2023	10	0.0007	0.0770	0.0946	0.118	0.072	0.0052	0.20
2	1	1 - 2	2024	10	0.0007	0.0770	0.0946	0.118	0.072	0.0052	0.20
3	1	2 - 3	2025	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
4	1	3 - 4	2026	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
5	1	4 - 5	2027	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
6	1	5 - 6	2028	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
7	1	6 - 7	2029	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
8	1	7 - 8	2030	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
9	1	8 - 9	2031	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
10	1	9 - 10	2032	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
11	1	10 - 11	2033	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
12	1	11 - 12	2034	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
13	1	12 - 13	2035	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
14	1	13 - 14	2036	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
15	1	14 - 15	2037	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
16	1	15 - 16	2038	3	0.0007	0.0770	0.0946	0.019	0.011	0.0008	0.03
17	1	16-17	2039	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
18	1	17-18	2040	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
19	1	18-19	2041	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
20	1	19-20	2042	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
21	1	20-21	2043	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
22	1	21-22	2044	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
23	1	22-23	2045	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
24	1	23-24	2046	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
25	1	24-25	2047	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
26	1	25-26	2048	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
27	1	26-27	2049	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
28	1	27-28	2050	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
29	1	28-29	2051	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
30	1	29-30	2052	1	0.0007	0.0770	0.0946	0.002	0.001	0.0001	0.00
Total Increased Cancer Risk								0.54	0.327	0.024	**0.89**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0001	0.07	0.08

* Third trimester of pregnancy

CT-EMFAC2017 Emissions Factors for Santa Clara County 2025

File Name: 330 Distel - Santa Clara (SF) - 2023 - Annual.EF
CT-EMFAC2017 Version: 1.0.2.27401
Run Date: 4/14/2022 15:14
Area: Santa Clara (SF)
Analysis Year: 2025
Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.015	0.502	0.498
Truck 2	0.02	0.936	0.048
Non-Truck	0.965	0.015	0.951

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph
PM2.5	0.008489	0.005501	0.00373	0.002665	0.00202	0.001628	0.001397	0.001277
TOG	0.172619	0.113109	0.076066	0.0539	0.040836	0.03264	0.027389	0.02411
Diesel PM	0.000788	0.00065	0.000505	0.000405	0.00035	0.000326	0.000328	0.000351

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.255395

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002108

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.016801

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.014826

END

El Camino Real Traffic Emissions and Health Risk Calculations - 2025

Analysis Year = ***2025***

Vehicle Type	2021 Caltrans Vehicles (veh/day)	2025 Vehicles (veh/day)
Total	**30,365**	**31,580**

Increase From 2021	1.04
Vehicles/Direction	**15,790**
Avg Vehicles/Hour/Direction	658

Traffic Data Year = ***2021***

Project Traffic Data - Background Plus Project ADT	AADT Total	Total Truck
El Camino Real and Distel Circle	30,365	1,066
	Percent of Total Vehicles	3.51%

Traffic Increase per Year (%) = *1.00%*

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2025

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	55.7	3.4	Varied	15,790
DPM_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	55.7	3.4	Varied	15,790
									Total	31,580

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.00033	0.00035		

Emisson Factors from CT-EMFAC2017

2025 Hourly Traffic Volumes and DPM Emissions - DPM_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.93%	621	2.25E-05	9	6.41%	1011	3.91E-05	17	5.55%	876	3.39E-05
2	2.62%	414	1.50E-05	10	7.36%	1163	4.22E-05	18	3.16%	498	1.93E-05
3	2.85%	450	1.63E-05	11	6.34%	1001	3.63E-05	19	2.36%	372	1.35E-05
4	3.31%	522	1.89E-05	12	6.92%	1092	3.96E-05	20	0.87%	137	4.96E-06
5	2.17%	342	1.24E-05	13	6.29%	993	3.60E-05	21	3.09%	488	1.77E-05
6	3.36%	531	1.93E-05	14	6.23%	984	3.57E-05	22	4.12%	650	2.36E-05
7	6.00%	947	3.43E-05	15	5.15%	813	2.95E-05	23	2.58%	407	1.48E-05
8	4.58%	723	2.80E-05	16	3.84%	606	2.20E-05	24	0.92%	146	5.28E-06
								Total		15,790	

2025 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.93%	621	2.22E-05	9	6.41%	1011	3.86E-05	17	5.55%	876	3.35E-05
2	2.62%	414	1.48E-05	10	7.36%	1163	4.16E-05	18	3.16%	498	1.90E-05
3	2.85%	450	1.61E-05	11	6.34%	1001	3.58E-05	19	2.36%	372	1.33E-05
4	3.31%	522	1.87E-05	12	6.92%	1092	3.91E-05	20	0.87%	137	4.89E-06
5	2.17%	342	1.22E-05	13	6.29%	993	3.56E-05	21	3.09%	488	1.75E-05
6	3.36%	531	1.90E-05	14	6.23%	984	3.52E-05	22	4.12%	650	2.33E-05
7	6.00%	947	3.39E-05	15	5.15%	813	2.91E-05	23	2.58%	407	1.46E-05
8	4.58%	723	2.76E-05	16	3.84%	606	2.17E-05	24	0.92%	146	5.21E-06
								Total		15,790	

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2025

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	56	1.3	Varied	15,790
PM25_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	56	1.3	Varied	15,790
									Total	31,580

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.001397	0.002020		

Emisson Factors from CT-EMFAC2017

2025 Hourly Traffic Volumes and PM2.5 Emissions - PM25_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	182	2.80E-05	9	7.11%	1123	2.51E-04	17	7.39%	1167	2.61E-04
2	0.42%	67	1.03E-05	10	4.39%	693	1.07E-04	18	8.18%	1291	2.88E-04
3	0.41%	64	9.96E-06	11	4.66%	736	1.14E-04	19	5.69%	899	1.39E-04
4	0.26%	41	6.34E-06	12	5.89%	930	1.44E-04	20	4.28%	675	1.04E-04
5	0.50%	78	1.21E-05	13	6.15%	971	1.50E-04	21	3.25%	514	7.94E-05
6	0.91%	143	2.21E-05	14	6.04%	954	1.47E-04	22	3.30%	521	8.04E-05
7	3.79%	598	9.24E-05	15	7.01%	1107	1.71E-04	23	2.46%	389	6.00E-05
8	7.77%	1226	2.74E-04	16	7.14%	1127	1.74E-04	24	1.86%	294	4.55E-05
								Total		15,790	

2025 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	182	2.77E-05	9	7.11%	1123	2.48E-04	17	7.39%	1167	2.57E-04
2	0.42%	67	1.02E-05	10	4.39%	693	1.06E-04	18	8.18%	1291	2.85E-04
3	0.41%	64	9.83E-06	11	4.66%	736	1.12E-04	19	5.69%	899	1.37E-04
4	0.26%	41	6.26E-06	12	5.89%	930	1.42E-04	20	4.28%	675	1.03E-04
5	0.50%	78	1.20E-05	13	6.15%	971	1.48E-04	21	3.25%	514	7.83E-05
6	0.91%	143	2.18E-05	14	6.04%	954	1.45E-04	22	3.30%	521	7.94E-05
7	3.79%	598	9.12E-05	15	7.01%	1107	1.69E-04	23	2.46%	389	5.92E-05
8	7.77%	1226	2.70E-04	16	7.14%	1127	1.72E-04	24	1.86%	294	4.49E-05
								Total		15,790	

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2025

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	56	1.3	Varied	15,790
TEXH_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	56	1.3	Varied	15,790
									Total	31,580

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.02739	0.04084		

Emisson Factors from CT-EMFAC2017

2025 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	182	5.50E-04	9	7.11%	1123	5.07E-03	17	7.39%	1167	5.27E-03
2	0.42%	67	2.02E-04	10	4.39%	693	2.10E-03	18	8.18%	1291	5.83E-03
3	0.41%	64	1.95E-04	11	4.66%	736	2.23E-03	19	5.69%	899	2.72E-03
4	0.26%	41	1.24E-04	12	5.89%	930	2.82E-03	20	4.28%	675	2.04E-03
5	0.50%	78	2.38E-04	13	6.15%	971	2.94E-03	21	3.25%	514	1.56E-03
6	0.91%	143	4.34E-04	14	6.04%	954	2.89E-03	22	3.30%	521	1.58E-03
7	3.79%	598	1.81E-03	15	7.01%	1107	3.35E-03	23	2.46%	389	1.18E-03
8	7.77%	1226	5.54E-03	16	7.14%	1127	3.41E-03	24	1.86%	294	8.92E-04
								Total		15,790	

2025 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	182	5.43E-04	9	7.11%	1123	5.01E-03	17	7.39%	1167	5.20E-03
2	0.42%	67	1.99E-04	10	4.39%	693	2.07E-03	18	8.18%	1291	5.75E-03
3	0.41%	64	1.93E-04	11	4.66%	736	2.20E-03	19	5.69%	899	2.69E-03
4	0.26%	41	1.23E-04	12	5.89%	930	2.78E-03	20	4.28%	675	2.02E-03
5	0.50%	78	2.34E-04	13	6.15%	971	2.90E-03	21	3.25%	514	1.54E-03
6	0.91%	143	4.28E-04	14	6.04%	954	2.85E-03	22	3.30%	521	1.56E-03
7	3.79%	598	1.79E-03	15	7.01%	1107	3.31E-03	23	2.46%	389	1.16E-03
8	7.77%	1226	5.47E-03	16	7.14%	1127	3.37E-03	24	1.86%	294	8.80E-04
								Total		15,790	

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2025

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	56	1.3	Varied	15,790
TEVAP_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	56	1.3	Varied	15,790
									Total	31,580

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle per Hour (g/hour)	1.25540	1.25540		
Emissions per Vehicle per Mile (g/VMT)	0.03587	0.05022		

Emisson Factors from CT-EMFAC2017

2025 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	182	7.20E-04	9	7.11%	1123	6.24E-03	17	7.39%	1167	6.48E-03
2	0.42%	67	2.64E-04	10	4.39%	693	2.75E-03	18	8.18%	1291	7.17E-03
3	0.41%	64	2.56E-04	11	4.66%	736	2.92E-03	19	5.69%	899	3.57E-03
4	0.26%	41	1.63E-04	12	5.89%	930	3.69E-03	20	4.28%	675	2.68E-03
5	0.50%	78	3.11E-04	13	6.15%	971	3.85E-03	21	3.25%	514	2.04E-03
6	0.91%	143	5.68E-04	14	6.04%	954	3.78E-03	22	3.30%	521	2.06E-03
7	3.79%	598	2.37E-03	15	7.01%	1107	4.39E-03	23	2.46%	389	1.54E-03
8	7.77%	1226	6.81E-03	16	7.14%	1127	4.47E-03	24	1.86%	294	1.17E-03
								Total		15,790	

2025 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	182	7.11E-04	9	7.11%	1123	6.16E-03	17	7.39%	1167	6.39E-03
2	0.42%	67	2.61E-04	10	4.39%	693	2.71E-03	18	8.18%	1291	7.08E-03
3	0.41%	64	2.52E-04	11	4.66%	736	2.88E-03	19	5.69%	899	3.52E-03
4	0.26%	41	1.61E-04	12	5.89%	930	3.64E-03	20	4.28%	675	2.64E-03
5	0.50%	78	3.07E-04	13	6.15%	971	3.80E-03	21	3.25%	514	2.01E-03
6	0.91%	143	5.61E-04	14	6.04%	954	3.73E-03	22	3.30%	521	2.04E-03
7	3.79%	598	2.34E-03	15	7.01%	1107	4.33E-03	23	2.46%	389	1.52E-03
8	7.77%	1226	6.72E-03	16	7.14%	1127	4.41E-03	24	1.86%	294	1.15E-03
								Total		15,790	

330 Distel Circle, Los Altos, CA - Offsite Residential Roadway Modeling
Cumulative Operation - El Camino Real
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2025

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_EB_ECR	El Camino Real Eastbound	EB	3	640.7	0.40	17.0	56	1.3	Varied	15,790
FUG_WB_ECR	El Camino Real Westbound	WB	3	632.3	0.39	17.0	56	1.3	Varied	15,790
									Total	31,580

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01680	0.01680		
Road Dust - Emissions per Vehicle (g/VMT)	0.01483	0.01483		
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03374	0.03374		

Emisson Factors from CT-EMFAC2017

2025 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	182	6.77E-04	9	7.11%	1123	4.19E-03	17	7.39%	1167	4.35E-03
2	0.42%	67	2.48E-04	10	4.39%	693	2.58E-03	18	8.18%	1291	4.82E-03
3	0.41%	64	2.40E-04	11	4.66%	736	2.75E-03	19	5.69%	899	3.35E-03
4	0.26%	41	1.53E-04	12	5.89%	930	3.47E-03	20	4.28%	675	2.52E-03
5	0.50%	78	2.93E-04	13	6.15%	971	3.62E-03	21	3.25%	514	1.92E-03
6	0.91%	143	5.34E-04	14	6.04%	954	3.56E-03	22	3.30%	521	1.94E-03
7	3.79%	598	2.23E-03	15	7.01%	1107	4.13E-03	23	2.46%	389	1.45E-03
8	7.77%	1226	4.57E-03	16	7.14%	1127	4.21E-03	24	1.86%	294	1.10E-03
								Total		15,790	

2025 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	182	6.68E-04	9	7.11%	1123	4.14E-03	17	7.39%	1167	4.30E-03
2	0.42%	67	2.45E-04	10	4.39%	693	2.55E-03	18	8.18%	1291	4.75E-03
3	0.41%	64	2.37E-04	11	4.66%	736	2.71E-03	19	5.69%	899	3.31E-03
4	0.26%	41	1.51E-04	12	5.89%	930	3.42E-03	20	4.28%	675	2.49E-03
5	0.50%	78	2.89E-04	13	6.15%	971	3.58E-03	21	3.25%	514	1.89E-03
6	0.91%	143	5.27E-04	14	6.04%	954	3.51E-03	22	3.30%	521	1.92E-03
7	3.79%	598	2.20E-03	15	7.01%	1107	4.08E-03	23	2.46%	389	1.43E-03
8	7.77%	1226	4.51E-03	16	7.14%	1127	4.15E-03	24	1.86%	294	1.08E-03
								Total		15,790	

330 Distel Circle, Los Altos, CA - El Camino Real Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
On-Site 1st & 2nd Levels of Residential Receptors
- At 6.6m (2nd Fl) and 9.9m (3rd Fl) receptor heights

Emission Year	2025
Receptor Information	Maximum On-Site Receptor
Number of Receptors	107
Receptor Height	1st & 2nd Level of Residential Receptors
Receptor Distances	6 meter grid spacing in residential areas

Meteorological Conditions	
BAQMD San Jose Airport Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

On-Site Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)			
	DPM	Exhaust TOG	Evaporative TOG	
2013-2017	0.0015	0.1573	0.2012	1st Level of Res Receps
2013-2017	0.0011	0.1034	0.1322	2nd Level of Res Receps

On-Site PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)			
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5	
2013-2017	0.1701	0.1622	0.0079	1st Level of Res Receps
2013-2017	0.1119	0.1067	0.0052	2nd Level of Res Receps

330 Distel Circle, Los Altos, CA - El Camino Real Cancer Risk & PM2.5
Impacts at On-Site 1st Level of Residential Receptors - 6.6 m (2nd Fl) receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2026	10	0.0015	0.1573	0.2012	0.020	0.012	0.0009	0.03
1	1	0 - 1	2026	10	0.0015	0.1573	0.2012	0.243	0.147	0.0111	0.40
2	1	1 - 2	2027	10	0.0015	0.1573	0.2012	0.243	0.147	0.0111	0.40
3	1	2 - 3	2028	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
4	1	3 - 4	2029	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
5	1	4 - 5	2030	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
6	1	5 - 6	2031	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
7	1	6 - 7	2032	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
8	1	7 - 8	2033	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
9	1	8 - 9	2034	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
10	1	9 - 10	2035	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
11	1	10 - 11	2036	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
12	1	11 - 12	2037	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
13	1	12 - 13	2038	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
14	1	13 - 14	2039	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
15	1	14 - 15	2040	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
16	1	15 - 16	2041	3	0.0015	0.1573	0.2012	0.038	0.023	0.0017	0.06
17	1	16-17	2042	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
18	1	17-18	2043	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
19	1	18-19	2044	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
20	1	19-20	2045	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
21	1	20-21	2046	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
22	1	21-22	2047	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
23	1	22-23	2048	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
24	1	23-24	2049	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
25	1	24-25	2050	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
26	1	25-26	2051	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
27	1	26-27	2052	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
28	1	27-28	2053	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
29	1	28-29	2054	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
30	1	29-30	2055	1	0.0015	0.1573	0.2012	0.004	0.003	0.0002	0.01
Total Increased Cancer Risk								1.10	0.668	0.050	**1.82**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0003	0.16	0.17

* Third trimester of pregnancy

330 Distel Circle, Los Altos, CA - El Camino Real Cancer Risk & PM2.5
Impacts at On-Site 2nd Level of Residential Receptors - 9.9 m (3rd Fl) receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

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Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
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FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
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Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
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Values

	Infant/Child			Adult
Age --> / Parameter	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
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AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2026	10	0.0011	0.1034	0.1322	0.014	0.008	0.0006	0.02
1	1	0 - 1	2026	10	0.0011	0.1034	0.1322	0.172	0.097	0.0073	0.28
2	1	1 - 2	2027	10	0.0011	0.1034	0.1322	0.172	0.097	0.0073	0.28
3	1	2 - 3	2028	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
4	1	3 - 4	2029	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
5	1	4 - 5	2030	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
6	1	5 - 6	2031	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
7	1	6 - 7	2032	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
8	1	7 - 8	2033	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
9	1	8 - 9	2034	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
10	1	9 - 10	2035	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
11	1	10 - 11	2036	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
12	1	11 - 12	2037	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
13	1	12 - 13	2038	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
14	1	13 - 14	2039	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
15	1	14 - 15	2040	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
16	1	15 - 16	2041	3	0.0011	0.1034	0.1322	0.027	0.015	0.0011	0.04
17	1	16-17	2042	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
18	1	17-18	2043	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
19	1	18-19	2044	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
20	1	19-20	2045	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
21	1	20-21	2046	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
22	1	21-22	2047	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
23	1	22-23	2048	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
24	1	23-24	2049	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
25	1	24-25	2050	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
26	1	25-26	2051	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
27	1	26-27	2052	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
28	1	27-28	2053	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
29	1	28-29	2054	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
30	1	29-30	2055	1	0.0011	0.1034	0.1322	0.003	0.002	0.0001	0.00
Total Increased Cancer Risk								0.78	0.439	0.033	**1.25**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0002	0.11	0.11

* Third trimester of pregnancy

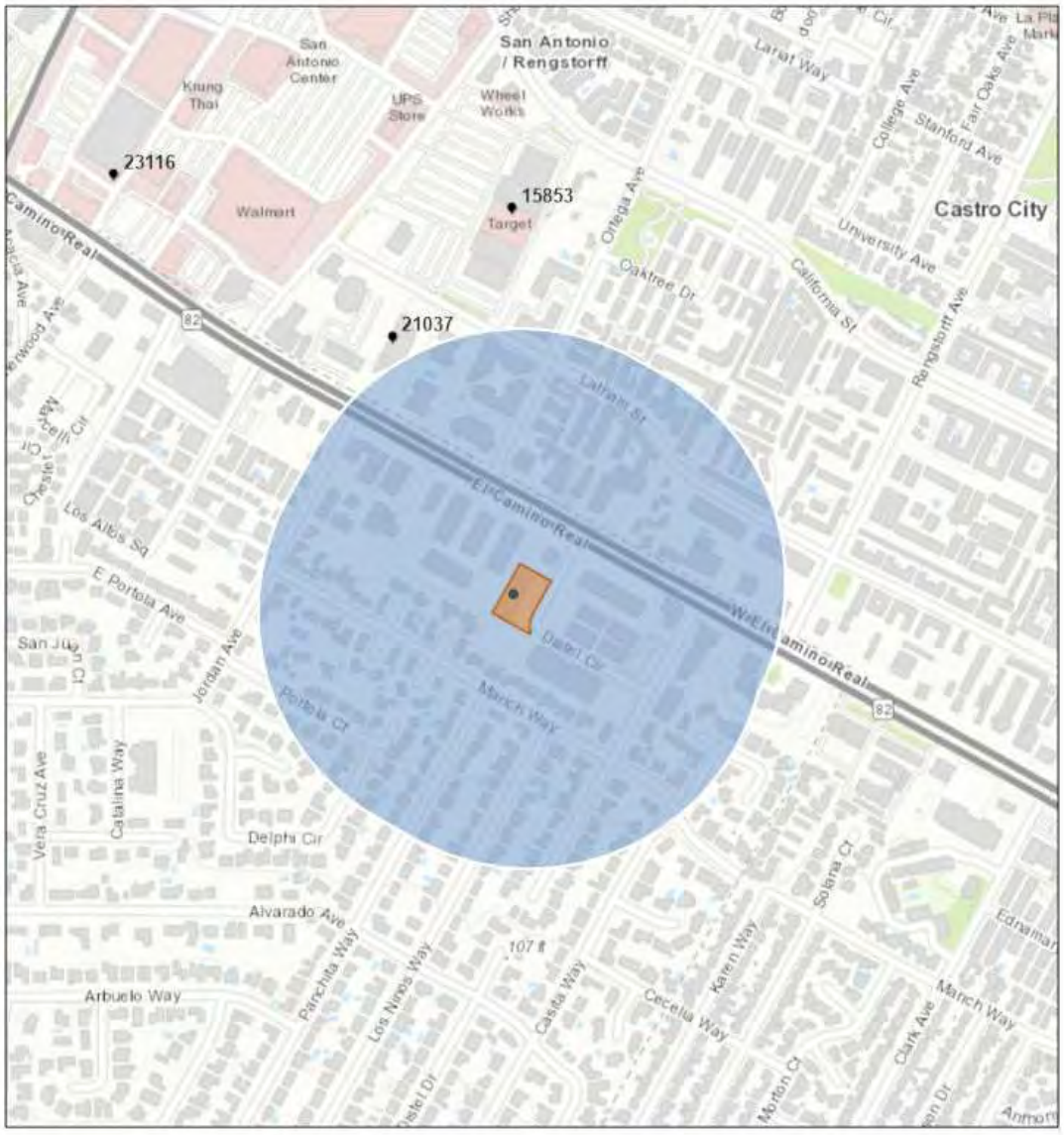
Agenda Item # 10.

Stationary Source Risk & Hazards Screening Report

Area of Interest (AOI) Information

Area : 3,996,155.94 ft²

Mar 16 2022 11:08:58 Pacific Daylight Time



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Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Facilities 2018	0	N/A	N/A

Note: The estimated risk and hazard impacts from these sources would be expected to be substantially lower when site specific Health Risk Screening Assessments are conducted.

The screening level map is not recommended for evaluating sensitive land uses such as schools, senior centers, day cares, and health facilities.

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Attachment 6: Project CAP New Development Checklist

City of Los Altos
Planning Division
(650) 947-2750
Planning@losaltosca.gov

NEW DEVELOPMENT
CLIMATE ACTION PLAN CHECKLIST

As required in the Los Altos Climate Action Plan, which was adopted in December of 2013, new development shall demonstrate compliance with all applicable best management practices outlined in the checklist below. This list should be included in the project plans and, for all applicable best management practices, provide a description for how the project will complying.

	Best Management Practice	Applicable to	Project Compliance		
1.1	***Improve Non-Motorized Transportation***				
☐	Provide end-of-trip facilities to encourage alternative transportation, including showers, lockers, and bicycle racks.	Nonresidential projects over 10,000 square feet	Yes	No	N/A
☐	Connect to and include non-motorized (bicycle and pedestrian) infrastructure on-site.	Nonresidential projects over 10,000 square feet	Yes	No	N/A
☐	Where appropriate, require new projects to provide pedestrian access that internally links all surrounding uses. Applicable to all new commercial and multiple-family development.	Nonresidential projects over 10,000 square feet	Yes	No	N/A
1.2	***Expand Transit and Commute Options***				
☐	Develop a program to reduce employee vehicle miles traveled (VMT).	Nonresidential projects over 10,000 square feet *(or over 50 employees)*	Yes	No	N/A
1.3	***Provide Alternative-Fuel Vehicle Infrastructure***				
☐	Provide electric vehicle (EV) pre-wiring and/or charging stations.	All projects	Yes	No	N/A
2.2	***Increase Energy Efficiency***				
☐	Install higher-efficiency appliances.	All new construction	Yes	No	N/A
☐	Install high-efficiency outdoor lights.	All new construction	Yes	No	N/A
☐	Obtain third-party heating, ventilating and air conditioning (HVAC) commissioning.	All new nonresidential construction	Yes	No	N/A

	Best Management Practice	Applicable to	Project Compliance
3.1	***Reduce and Divert Waste***		
☐	Develop and implement a Construction and Demolition (C&D) waste plan.	All new projects	Yes No N/A
3.2	***Conserve Water***		
☐	Reduce turf area and increase native plant landscaping.	All new projects	Yes No N/A
3.3	***Use Carbon-Efficient Construction Equipment***		
☐	Implement applicable Bay Area Air Quality Management District construction site and equipment best practices. *Tables 8-1 and 8-2 in the District's Air Quality Guidelines (see separate handout).*	All new projects	Yes No N/A
4.1	***Sustain a Green Infrastructure System and Sequester Carbon***		
☐	Create or restore vegetated common space.	Projects over 10,000 sq ft	Yes No N/A
☐	Establish a carbon sequestration project or similar off-site mitigation strategy.	Projects over 10,000 sq ft	Yes No N/A
☐	Plant at least one well-placed shade tree per dwelling unit.	New residential projects	Yes No N/A

Preliminary Arborist Report

330 Distel Circle
Los Altos, CA

PREPARED FOR
EAH Housing
22 Pelican Way
San Rafael, CA 94901

PREPARED BY
HortScience | Bartlett Consulting
325 Ray Street
Pleasanton, CA 94566

September 2021
Revised February 3, 2022

Preliminary Arborist Report
330 Distel Circle, Los Altos

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Description of Trees	2
Suitability for Preservation	4
Preliminary Evaluation of Impacts and Recommendations	6
Tree Preservation Guidelines	12

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Table 3. Recommendations for preservation and removal	6

Exhibits

Tree Assessment Form

Tree Assessment Plan

Preliminary Arborist Report
330 Distel Circle, Los Altos CA

Introduction and Overview
EAH Housing is proposing to redevelop the property located at 330 Distel Circle, in Los Altos. The plan proposes to construct affordable housing using modern, flexible and sustainable building approaches. HortScience | Bartlett Consulting (HBC), Divisions of The F. A. Bartlett Tree Expert Co. was asked to prepare a **Preliminary Arborist Report** to meet the City of Los Altos' requirements.

This report provides the following information:

1. An assessment of trees within and immediately adjacent to the project site.
2. An assessment of the impacts of constructing the proposed project on the trees.
3. Preliminary recommendations for tree preservation and removal.
4. Preliminary guidelines for tree preservation during the design, construction and maintenance phases.

Assessment Methods
Trees were assessed on July 29, 2021. All trees measuring 6" or greater in diameter, within the project area or with portions of their crowns extending into the project area, were included (per City of Los Altos Chapter 11.08, Tree Protection Regulations). The assessment procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 48" above grade;
4. Evaluating the health and structural condition using a scale of 1–5:
   - ***5*** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
   - ***4*** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
   - ***3*** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
   - ***2*** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   - ***1*** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
5. Rating the suitability for preservation as "high", "moderate" or "low". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

   High: Trees with good health and structural stability that have the potential for longevity at the site.

   Moderate: Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'good' category.

   Low: Tree in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

Twenty-seven (27) trees were assessed, representing 11 species (Table 1, following page). Eight (8) off-site trees with portions of their crowns extending onto the development site were included in the assessment (#449, 450 and 452-457). Descriptions of each tree are found in the ***Tree Assessment Form*** and locations are plotted on the ***Tree Assessment Plan*** (see Exhibits).

The site was a single-story office building, with perimeter landscaping. Vegetation at the site was primarily exotic species, with a handful of native coast live oaks and coast redwoods.

Nine (9) holly oaks made up the backbone of the landscaping, with #431-435 on the north side of the building and #440, 441, 445 and 450 (off-site) on the south side of the building. The majority of these were young to semi-mature, with trunk diameters from 7" to 15". Holly oak #433 was mature at 20" in trunk diameter and the only holly oak in good condition (**Photo 1**). Most had not been provided sufficient space for full development and were crowded by adjacent trees, producing one-sided crowns and leaning trunks. Seven holly oaks were in fair condition, #435 was in poor and #433 was in good condition.

Photo 1: Looking north at holly oak #433. This was the only holly oak on the site that was mature (20" in diameter) and in good condition.

Four evergreen pears were growing adjacent to the building, with #437 and 438 on the west side and #443 and 444 on the east side. They were semi-mature (11" to 15" in trunk diameter) and primarily in fair condition, with #443 in good condition. Most leaned as a result of competition for light and #443 and 444 had been planted in close proximity to the existing building and parking lot, displacing the adjacent asphalt by an estimated 5".

Three coast live oaks were assessed, with #436 located in the northwest corner of the site and #449 (off-site) and 451 located to the south of the building. Coast live oak #436 was young (9" in diameter) and in fair condition. Coast live oaks #449 and 451 were both mature and in good condition.

Sweetgums #447 and 448 were growing in the planter behind the sidewalk along Distal Circle. Sweetgum #447 was young (10" in diameter) and #448 was semi-mature at 14" in diameter. Both were in fair condition, but #447 was in decline, with a very sparse crown.

Table 1. Tree condition and frequency of occurrence.
330 Distel Circle, Los Altos

Common Name	Scientific Name	Condition Rating			No. of trees
		Poor (1)	Fair (3)	Good (4-5)	
African fern pine	*Afrocarpus falcatus*	-	-	1	1
Hollywood juniper	*Juniperus chinensis 'Kaizuka'*	-	2	-	2
Sweetgum	*Liquidambar styraciflua*	-	2	-	2
Olive	*Olea europaea*	-	-	1	1
Calif. sycamore	*Platanus racemosa*	-	-	1	1
Callery pear	*Pyrus kawakamii*	-	3	1	4
Coast live oak	*Quercus agrifolia*	-	1	2	3
Holly oak	*Quercus ilex*	1	7	1	9
Coast redwood	*Sequoia sempervirens*	-	2	-	2
Mexican fan palm	*Washingtonia robusta*	-	-	1	1
Xylosma	*Xylosma congestum*	-	1	-	1
Total		**1**	**18**	**8**	**27**
		4%	66%	30%	100%

A row of off-site tree were assessed along the northern fence line and included the following. All of the trees had been planted too close to the wall, with the bases of trees #452 and 454 growing against the wall (**Photo 2**).

- Hollywood junipers #452 and 453. Both were in fair condition but leaned.
- Coast redwoods #454 and 456 were mature and in fair condition. Both had sparse canopies.
- Xylosma #455 was in fair condition, with a low canopy that extended W. over the fence.

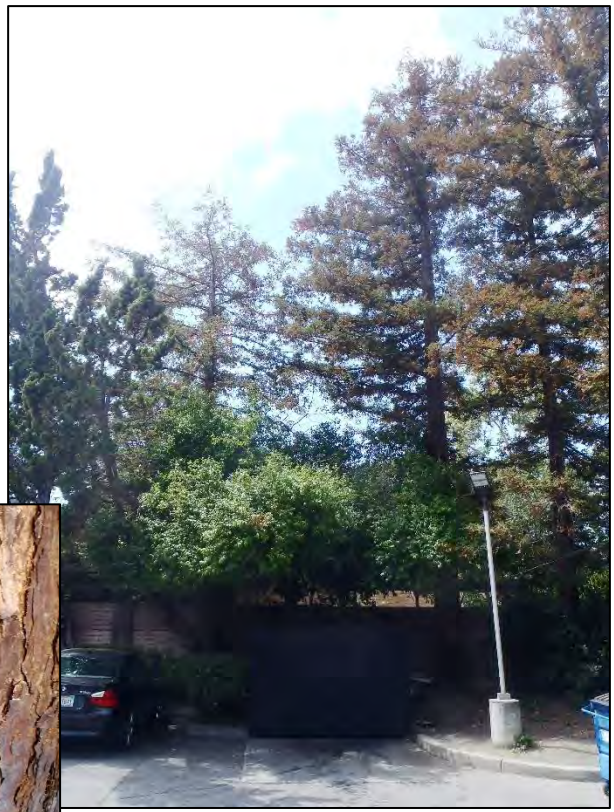

Photo 2: Looking southwest at trees #452-456 (L to R). The row of off-site trees were in fair condition but had been planted close to the wall separating the two properties. Inset below shows the base of coast redwood #454, which was growing against the wall.

The remaining species were represented by the following individuals:

- Mexican fan palm #439 was growing on the west side of the building. It was mature and in excellent condition.
- African fern pine #442 was growing in the planter in front of the building, adjacent to evergreen pears #443 and 444. It was mature (22" in diameter) and in good condition. However, it too had been planted too close to the building and parking lot and was displacing the adjacent asphalt by an estimated 5".
- Olive #446 was multi-stemmed and growing in the landscape along the Distal Circ. Frontage. It was in good condition, with good form and structure and a slightly sparse canopy.
- Calif. sycamore #457 was located just off-site on the west side of the property. It was mature (24" in diameter) and leaned northwest. It had been planted in a very small space and the base was growing against both the wall and curb.

Average tree condition for the site was fair, with 18 trees or 66% of the population. Eight (8) trees were in good condition (30%) and holly oak #435 was the only tree in poor condition (4%). Table 1 (previous page) provides a summary of condition by species.

The City of Los Altos protects all trees with diameters of 15" or greater located on private property. Removal of any tree with a diameter of 15" or greater requires a permit issued by the City, per Chapter 11.08 (Tree Protection Regulations). Based on this definition, 13 of the trees assessed at the 330 Distal Circ. Site qualified as *Protected*. All *Protected* trees are identified in the ***Tree Assessment Form*** (see Exhibits).

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. Holly oak #435 is an examples of such a tree.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, holly oak, coast live oak and coast redwood are tolerant of site disturbance, while sweetgum is more sensitive to site disturbance.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Invasiveness**
  Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (http://www.cal-ipc.org/paf/) lists species identified as being invasive. Los Altos is part of the Central West Floristic Province. Olive was the only species assessed at the 330 Distal Circ. site considered to have 'Limited' invasiveness.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment. Table 2 provides a summary of suitability ratings. Suitability ratings for individual trees are provided in the ***Tree Assessment Forms*** (see Exhibits).

We consider trees with high suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Table 2: Tree Suitability for Preservation
330 Distel Circle, Los Altos

High	These are trees with good health and structural stability that have the potential for longevity at the site. Three (3) of the trees were highly suitable for preservation, including Mexican fan palm #439, olive #446 and coast live oak #451.
Moderate	Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the "high" category. Sixteen (16) of the trees were of moderate suitability for preservation, including 4 holly oaks, 3 evergreen pears, 2 coast live oaks, 2 Hollywood junipers, 2 coast redwoods and one each of: African fern pine, xylosma and Calif. sycamore.
Low	Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. Eight (8) trees were of low suitability for preservation, including 5 holly oaks, sweetgums #447 and 448 and evergreen pear #437.

Preliminary Evaluation of Impacts and Recommendations

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The ***Tree Assessment*** was the reference point for tree condition and quality. Impacts from construction were evaluated using the Preliminary Grading & Utility Plan C3.0, prepared by BKF Engineers dated October 18, 2021.

The plans were preliminary however, included utilities and accurate trunk locations. However, a final assessment is based on final plans.

The plan proposes to redevelop the site into 90 residential units in 5-stories, with ground floor amenities and vertical/mechanical lift parking. Site amenities would include a courtyard, community room, laundry facility and lounge. The main entry would be located along the northeast property boundary, providing access to parking in the north corner of the building. A utility box will be located at the south corner of the site.

Impacts from construction were estimated for each tree. Based on my review of the plans, all of the on-site trees will be removed to accommodate development plan, including eight *Protected* trees (#432, 433, 438-440, 442, 443, and 451). Table 3 (following page) provides the recommendations for each tree along with a description of the impacts and their *Protected* status.

Eight trees have been identified for preservation, all of which are off-site. Five of the trees identified for preservation qualified as *Protected*. Preservation of trees is predicated on following the ***Tree Preservation Guidelines*** provided on the following page.

Some amount of root and canopy pruning of off-site trees may be required for construction clearance. Recommendations for Tree Protection Zones are provided in the ***Tree Preservation Guidelines*** (following page).

Table 3. Recommendations for preservation and removal.
330 Distel Circle, Los Altos

Tag #	Species	Diameter	Protected	Impacts
431	Holly oak	10	No	Remove, within drive isle
432	Holly oak	15	Yes	Remove, within drive isle
433	Holly oak	20	Yes	Remove, within drive isle
434	Holly oak	7	No	Remove, within drive isle
435	Holly oak	9	No	Remove, within drive isle
436	Coast live oak	9	No	Remove, within building footprint
437	Evergreen pear	11	No	Remove, within building footprint
438	Evergreen pear	15	Yes	Remove, within building footprint
439	Mexican fan palm	16	Yes	Remove, within building footprint
440	Holly oak	15	Yes	Remove, within building footprint
441	Holly oak	13	No	Remove, within building footprint
442	African fern pine	22	Yes	Remove, within building footprint
443	Evergreen pear	15	Yes	Remove, within building footprint
444	Evergreen pear	14	No	Remove, within building footprint
445	Holly oak	8	No	Remove, within building footprint
446	Olive	9,9,8,7,7	No	Remove, in area of impact
447	Sweetgum	10	No	Remove, low suitability
448	Sweetgum	14	No	Remove, low suitability
449	Coast live oak	15,15,13	Yes	**Preserve**, off-site
450	Holly oak	14	No	**Preserve**, off-site
451	Coast live oak	20	Yes	Remove, In utility box area

Tag #	Species	Diameter	Protected	Impacts
452	Hollywood juniper	8,7	No	**Preserve**, off-site
453	Hollywood juniper	16	Yes	**Preserve**, off-site
454	Coast redwood	18	Yes	**Preserve**, off-site
455	Xylosma	9	No	**Preserve**, off-site
456	Coast redwood	22	Yes	**Preserve**, off-site
457	Calif. sycamore	24	Yes	**Preserve**, off-site

Preliminary Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods.

The following recommendations will help reduce impacts to trees from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

Design recommendations

1. Any plan affecting trees should be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans and demolition plans.

2. A **TREE PROTECTION ZONE** must be established for trees to be preserved, in which no disturbance is permitted. No trenching, excavation, construction or storage of materials shall occur within that zone. No underground services including utilities, sub-drains, water or sewer shall be placed in the **Tree Protection Zone**. Spoil from trench, footing, utility or other excavation shall not be placed within the **Tree Protection Zone**, either temporarily or permanently. For design purposes, **TREE PROTECTION ZONES** for trees identified for preservation should be established at the dripline in all directions. As plans are refined, more specific **TREE PROTECTION ZONES** will be developed.

3. ***Tree Preservation Guidelines*** prepared by the Consulting Arborist should be included on all plans.

4. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**. To minimize impacts to trees, locate underground services to provide as much room as possible from trees identified for preservation.

5. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.

6. Irrigation systems must be designed to avoid trenching within the **TREE PROTECTION ZONE**.

7. Do not apply lime to soil for stabilization within 25’ of trees to be preserved. Lime is toxic to tree roots.

Pre-construction treatments and recommendations

1. The demolition contractor and construction superintendent shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.

2. Fence all trees to be retained to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6' chain link anchored firmly in the ground or on stanchions. Fences are to remain until all grading and construction is completed. Place weather proof signs, 2' x 2', on the fencing that read "**Tree Protection Zone** Keep Out" (eg. one sign for each of the four compass points).

3. Where possible, cap and abandon all existing underground utilities within the **TPZ** in place. Removal of utility boxes by hand is acceptable but no trenching should be performed within the **TPZ** in an effort to remove utilities, irrigation lines, etc.

4. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain must be removed by a qualified arborist and not by demolition or construction contractors. The qualified arborist shall remove the tree in a manner that causes no damage to the tree(s) and understory to remain. Stumps shall be ground below grade.

5. Any brush clearing required within the **TREE PROTECTION ZONE** shall be accomplished with hand-operated equipment.

6. Any work within the **TREE PROTECTION ZONE** shall be approved and monitored by the Consulting Arborist.

7. Prune trees to be preserved to provide adequate clearance and correct any existing defects in structure. All pruning shall be completed by a Certified Arborist or Tree Worker and adhere to the latest edition of the ANSI Z133 and A300 standards as well as the *Best Management Practices -- Tree Pruning* published by the International Society of Arboriculture.

8. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

9. Apply and maintain 4-6" of wood chip mulch within the **TREE PROTECTION ZONE.**

Recommendations for tree protection during construction

1. Prior to beginning work, all contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.

2. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.

3. Fences have been erected to protect trees to be preserved. Fences define a specific **TREE PROTECTION ZONE** for each tree or group of trees. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Consulting Arborist.

4. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.

5. Prior to grading, pad preparation, excavation for foundations/footings/walls, trenching, trees may require root pruning outside the **TREE PROTECTION ZONE** by cutting all roots cleanly to the depth of the excavation. Roots shall be cut by manually digging a trench

and cutting exposed roots with a saw, with a vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment. The Consulting Arborist will identify where root pruning is required and monitor all root pruning activities

6. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.

7. All underground utilities, drain lines or irrigation lines shall be routed outside the **TREE PROTECTION ZONE**. If lines must traverse through the protection area, they shall be tunneled or bored under the tree as directed by the Consulting Arborist.

8. No materials, equipment, spoil, waste or wash-out water may be deposited, stored, or parked within the **TREE PROTECTION ZONE** (fenced area).

9. Any additional tree pruning needed for clearance during construction must be performed by a qualified arborist and not by construction personnel.

Maintenance of impacted trees
Trees preserved at the 330 Distel Circ. site may experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of failure of branches or entire trees increases. Therefore, annual inspection for structural condition is recommended.

HortScience | Bartlett Consulting

Certified Arborist WE-6757A
Registered Consulting Arborist #693

Exhibits

Tree Assessment Form

Tree Assessment Plan

Tree Assessment Pl

330 Distel Circle
Los Altos, CA

Prepared for:
EAH Housing
San Rafael, CA

September 2021

No Scale

Notes:
Base map provided by:
BKF
San Jose, CA

Numbered tree locations with no survey point were approximately located in the field.

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Tree Assessment

330 Distal Circle
Los Altos, California
July 2021

HORT SCIENCE
BARTLETT CONSULTING

TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
431	Holly oak	10	No	3	Low	Multiple attachments at 10’; one sided NW.; trunk wound; in very narrow island.
432	Holly oak	15	Yes	3	Low	Multiple attachments at 5’; a little one sided NW.; base growing against wall.
433	Holly oak	20	Yes	4	Moderate	Multiple attachments at 10’; good form; sapsucker damage; base w/ in 1’ of wall.
434	Holly oak	7	No	3	Low	Suppressed; leans & one sided W.; base w/ in 1.5’ of wall.
435	Holly oak	9	No	1	Low	All but dead; only basal sprouts remain; strong lean E.
436	Coast live oak	9	No	3	Moderate	Multiple attachments at 10’; fused stems at attachment; fair form and structure.
437	Evergreen pear	11	No	3	Low	Codominant trunks at 10’; wide attachment; poor form and structure.
438	Evergreen pear	15	Yes	3	Moderate	Multiple attachments at 7’; crown bowed N.; long laterals.
439	Mexican fan palm	16	Yes	5	High	Good form and structure; slight pencilling in upper crown; 45’ of brown trunk.
440	Holly oak	15	Yes	3	Moderate	Codominant trunks at 10’; good form; moderate dieback; trunk w/ in 3’ of bldg.
441	Holly oak	13	No	3	Moderate	Multiple attachments at 6’; crown bowed E.; moderate dieback.
442	African fern pine	22	Yes	4	Moderate	Multiple attachments at 6’; slight lean S.; trunk w/ in 1’ of bldg.; displaced asphalt 5”.
443	Evergreen pear	15	Yes	4	Moderate	Multiple attachments at 7’; leans S.; trunk w/ in 3’ of bldg.; displaced asphalt 5”.

Tree Assessment

330 Distal Circle
Los Altos, California
July 2021

HORT SCIENCE
BARTLETT CONSULTING

TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
444	Evergreen pear	14	No	3	Moderate	Multiple attachments at 10'; leaning & one sided S.; trunk w/ in 3' of bldg.; displaced asphalt 5".
445	Holly oak	8	No	3	Low	Small crown; trunk wound; in very narrow island.
446	Olive	9,9,8,7,7	No	4	High	Multiple attachments at 2'; good form; a little sparse.
447	Sweetgum	10	No	3	Low	Poor form and structure; declining.
448	Sweetgum	14	No	3	Low	Upright form; moderate dieback.
449	Coast live oak	15,15,13	Yes	4	Moderate	Off-site, no tag; multiple attachments at 3'; one sided W.; ~5' W. of PL, crown 10' E.
450	Holly oak	14	No	3	Moderate	Off-site, no tag; multiple attachments at 7'; one sided S.; base ~2' W. of PL, crown 12' E.
451	Coast live oak	20	Yes	5	High	Codominant trunks at 5'; good form and structure.
452	Hollywood juniper	8,7	No	3	Moderate	Off-site, no tag; one sided E.; trunk growing against wall.
453	Hollywood juniper	16	Yes	3	Moderate	Off-site, no tag; slight lean S.; base w/ in 6" of wall.
454	Coast redwood	18	Yes	3	Moderate	Off-site, no tag; lost top; sparse; base growing against wall.
455	Xylosma	9	No	3	Moderate	Off-site, no tag; low canopy; extends 15' W. over fence; trunk w/ in 6" of wall.
456	Coast redwood	22	Yes	3	Moderate	Off-site, no tag; sparse canopy; base w/ in 4' of wall.
457	Calif. sycamore	24	Yes	4	Moderate	Off-site, no tag; corrected lean N.; growing in very small island w/ base against wall & curb.

GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED DISTEL CIRCLE APARTMENTS
330 DISTEL CIRCLE
LOS ALTOS, CALIFORNIA

KA PROJECT NO. 042-21020
OCTOBER 5, 2021

Prepared for:

MR. STEVE PRATT
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GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

October 5, 2021

KA Project No. 042-21020

Mr. Steve Pratt
EAH Housing, Inc.
22 Pelican Way
San Rafael, California 94901

RE: Geotechnical Engineering Investigation
Proposed Distel Circle Apartments
330 Distel Circle
Los Altos, California

Dear Mr. Pratt:

In accordance with your request, we have completed a Geotechnical Engineering Investigation for the above-referenced site. The results of our investigation are presented in the attached report.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (925) 307-1160.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

REGISTERED PROFESSIONAL ENGINEER
DAVID R. JAROSZ II
2698
GEOTECHNICAL
STATE OF CALIFORNIA

David R. Jarosz, II
Managing Engineer
RGE No. 2698/RCE No. 60185

DRJ:ht

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Krazan & ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

October 5, 2021 KA Project No. 042-21020

GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED DISTEL CIRCLE APARTMENTS
330 DISTEL CIRCLE
LOS ALTOS, CALIFORNIA

INTRODUCTION

This report presents the results of our Geotechnical Engineering Investigation for the proposed Distel Circle Apartments to be located at 330 Distel Circle in Los Altos, California. Discussions regarding site conditions are presented herein, together with conclusions and recommendations pertaining to site preparation, Engineered Fill, utility trench backfill, drainage and landscaping, foundations, concrete floor slabs and exterior flatwork, retaining walls, pavement design and soil cement reactivity.

A site plan showing the approximate boring locations is presented following the text of this report. A description of the field investigation, boring logs, and the boring log legend are presented in Appendix A. Appendix A also contains a description of the laboratory testing phase of this study, along with the laboratory test results. Appendices B and C contain guides to earthwork and pavement specifications. When conflicts in the text of the report occur with the general specifications in the appendices, the recommendations in the text of the report have precedence.

PURPOSE AND SCOPE

This investigation was conducted to evaluate the soil and groundwater conditions at the site, to make geotechnical engineering recommendations for use in design of specific construction elements, and to provide criteria for site preparation and Engineered Fill construction.

Our scope of services was outlined in our proposal dated May 19, 2021 (KA Proposal No. P419-21) and included the following:

- A site reconnaissance by a member of our engineering staff to evaluate the surface conditions at the project site.
- A field investigation consisting of drilling 4 borings to depths ranging from approximately 20 to 45 feet for evaluation of the subsurface conditions at the project site.
- Performing laboratory tests on representative soil samples obtained from the borings to evaluate the physical and index properties of the subsurface soils.

- Evaluation of the data obtained from the investigation and an engineering analysis to provide recommendations for use in the project design and preparation of construction specifications.

- Preparation of this report summarizing the results, conclusions, recommendations, and findings of our investigation.

PROPOSED CONSTRUCTION

We understand that design of the proposed development is currently underway; structural load information and other final details pertaining to the structures are unavailable. On a preliminary basis, it is understood the proposed development will include the construction of a new multi-family residential development. It is anticipated the buildings will be four- or five-story structures utilizing concrete slab-on-grade construction. Foundation loads are anticipated to be moderately heavy. On-site paved areas and landscaping are also planned for the development of the project.

In the event, these structural or grading details are inconsistent with the final design criteria, the Soils Engineer should be notified so that we may update this writing as applicable.

SITE LOCATION, SITE HISTORY AND SITE DESCRIPTION

The site is roughly rectangular in shape and encompasses approximately 0.9 acres. The site is located approximately 200 feet southwest of El Camino Real at Distel Circle in Los Altos, California. The site has a street address of 330 Distel Circle. The site is predominately surrounded by commercial developments.

Site history was obtained by reviewing historical aerial photographs taken in 1948, 1991, 2010 and 2020. Review of the 1948 aerial photograph indicates that a rural residential development was located adjacent to the site. Two large linear excavations appeared to be present in the northern portion of the site.

Review of the 1991 aerial photograph indicates that a building and parking lot had been constructed at the site. Several trees were located along the edges of the site.

Review of the 2010 and 2020 aerial photographs indicate that the project site conditions appeared to be relatively similar to that noted in the 1991 aerial photograph.

Presently, the site conditions appear relatively similar to that noted in the previous aerial photographs. The site is occupied by a commercial building with an associated parking lot and landscaped areas consisting of trees and shrubs. Buried utilities are located along the edges of the site and extend into portions of the site. The site is relatively level with no major changes in grade.

GEOLOGIC SETTING

The project area is located just south of San Francisco Bay and east of the Santa Cruz Mountains within the northern portion of the Coast Ranges Geomorphic Province of California. The Coast Ranges generally consist of an alternating series of parallel mountains and valleys located adjacent to the Pacific

Coast. The bedrock units that form the range have been disrupted by intense folding, faulting, and crushing that occurred when the range was formed by the processes of plate tectonics. During the Jurassic and Cretaceous Periods (about 150 to 80 million years ago), the Pacific Oceanic Plate, which was progressively moving towards the east, collided with the North American Continental Plate, which was moving toward the west. This collision caused the less rigid Pacific Oceanic Plate to be subducted beneath the North American Continental Plate. The colliding motion of the two plates caused portions of the Pacific Oceanic Crust and overlying marine sediments to be piled onto the North American Continental Plate along the west coast of California. The resulting chaotic jumble of bedrock units scraped off onto the North American Plate, is known as the "Franciscan Assemblage" and comprises a large portion of the Coast Range Province. Subsequent development of a series of northwest-trending fault zones has further contributed to the deformation of the Coast Range.

The near-surface deposits in the vicinity of the subject site are indicated to be comprised of Holocene alluvial fan deposits consisting of sands, silt, and clays derived from erosion of local mountain ranges. Deposits encountered on the subject site during exploratory drilling are discussed in detail in this report.

Seven major faults are located near the site: The Monte Vista–Shannon fault, the San Andreas fault, the Hayward fault, the Calaveras fault, the San Gregorio fault, the Zayante-Vergeles fault, and the Mount Diablo Thrust fault. The Monte Vista–Shannon fault and the San Andreas fault are located approximately 3.2 and 5.7 miles west of the site, respectively. The San Andreas fault was the source of the 1906 San Francisco Earthquake. The Hayward fault is located approximately 13 miles northeast of the site. The Hayward fault is considered capable of producing an earthquake event of magnitude 7.0. The last recorded movement of the Hayward fault was in 1868. The Calaveras fault is located approximately 16 miles northeast of the site and is considered capable of producing an earthquake of magnitude of 6.9. The Zaynte-Vergeles fault is approximately 22 miles north of the site and is considered capable of producing an earthquake of magnitude 7.0. The San Gregorio fault and Mount Diablo Thrust are located approximately 17 miles west and 28 miles east of the site, respectively, and are also considered capable of producing large earthquakes. Although the site is in close proximity to several faults, the site is not within a State of California Earthquake Fault Zone or Special Study Zone for faulting.

The probability of one or more earthquakes of magnitude 6.7 or higher occurring in the San Francisco Bay Area within a 30-year period of time was evaluated by the U.S. Geological Survey (USGS) Working Group on California Earthquake Probabilities on a periodic basis. The result of the 2008 evaluation indicated a 63 percent likelihood that such an earthquake event will occur in the Bay Area between 2007 and 2036 (USGS 2008). The faults with the greater probability of a magnitude 6.7 or higher earthquake are the Hayward fault at 31 percent and the San Andreas fault at 21 percent.

The Alquist-Priolo Earthquake Fault Zoning Act went into effect in March, 1973. Since that time, the act has been amended 11 times (Hart, 2007). The purpose of the Act, as provided in CGS Special Publication 42 (SP 42), is to prohibit the location of most structures for human occupancy across the traces of active faults and to mitigate thereby the hazard of fault-rupture." The act was renamed the Alquist-Priolo Earthquake Fault Zoning Act in 1994, and at that time, the originally designated "Special Studies Zones" was renamed the "Earthquake Fault Zones."

The area of the subject site is not included on an Earthquake Fault Zones Map. At this time there is no Earthquake Fault Zones Map for the Mountain View Quadrangle. In addition, the site is not within a Fault-Rupture Hazard Zone. The nearest zoned faults are portions of the Monte Vista-Shannon, San Andreas and Hayward faults located more than 3.2 miles southwest, 5.7 miles southwest and 13 miles northeast of the subject site, respectively.

In 1990, the California State Legislature passed the Seismic Hazard Mapping Act to protect public safety from the effects of strong shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes. The Act requires that the State Geologist delineate various seismic hazards zones on Seismic Hazards Zones Maps. Specifically, the maps identify areas where soil liquefaction and earthquake-induced landslides are most likely to occur. A site-specific geotechnical evaluation is required prior to permitting most urban developments within the mapped zones. The Act also requires sellers of real property within the zones to disclose this fact to potential buyers. The area of the subject site is located within the bounds of the hazard zone associated with liquefaction potential and is outside of the zones associated with landslide potential, on the Seismic Hazards Zones Mountain View Quadrangle, dated, October 18, 2006. In addition, the site is included on the U.S. Geological Survey map entitled "Liquefaction Susceptibility, Central San Francisco Bay Region, California" (U.S. Geological Survey Open-File Report 2006-1037), dated 2006. The site is not located within an area identified as a moderate susceptibility to liquefaction. However, groundwater was encountered within the site during our subsurface investigation. Therefore, a liquefaction analysis is included in this report.

FIELD AND LABORATORY INVESTIGATIONS

Subsurface soil conditions were explored by drilling 4 borings to depths ranging from approximately 20 to 45 feet below existing site grade, using a truck-mounted drill rig. In addition, 2 bulk subgrade samples were obtained from the site for laboratory R-value testing. The approximate boring and bulk sample locations are shown on the site plan. During drilling operations, penetration tests were performed at regular intervals to evaluate the soil consistency and to obtain information regarding the engineering properties of the subsoils. Soil samples were retained for laboratory testing. The soils encountered were continuously examined and visually classified in accordance with the Unified Soil Classification System. A more detailed description of the field investigation is presented in Appendix A.

Laboratory tests were performed on selected soil samples to evaluate their physical characteristics and engineering properties. The laboratory testing program was formulated with emphasis on the evaluation of natural moisture, density, gradation, shear strength, consolidation potential, expansion potential, plasticity, R-value and moisture-density relationships of the materials encountered. In addition, chemical tests were performed to evaluate the soil-cement reactivity. Details of the laboratory test program and results of the laboratory tests are summarized in Appendix A. This information, along with the field observations, was used to prepare the final boring logs in Appendix A.

SOIL PROFILE AND SUBSURFACE CONDITIONS

Based on our findings, the subsurface conditions encountered appear typical of those found in the geologic region of the site. Portions of the site were covered by approximately 1½ inches of asphaltic concrete underlain by up to approximately 6½ inches of aggregate base. Within areas not covered by

pavement, the upper soils consisted of approximately 6 to 12 inches of very loose clayey sand and clayey sand with gravel. These soils are disturbed, have low strength characteristics and are highly compressible when saturated.

Beneath the pavement section and loose surface soils, approximately 4 to 5 feet of medium dense to dense clayey sand with gravel was encountered. Field and laboratory tests suggest that these soils are moderately strong, slightly compressible and have a moderate expansion potential. Penetration resistance ranged from 34 to 52 blows per foot. Dry densities ranged from 113 to 125 pcf. A representative soil sample consolidated approximately 2½ percent under a 2 ksf load when saturated. A representative soil sample had an angle of internal friction of 43 degrees.

Below 4 to 5½ feet, layers of predominately medium dense to very dense clayey sand and silty sand or stiff to hard sandy clay were encountered. These soils were intermixed with varying amounts of gravel. Field and laboratory tests suggest that these soils are moderately strong and slightly compressible. Penetration resistance ranged from 10 blows per foot to greater than 50 blows per 6 inches. Dry densities ranged from 95 to 127 pcf. Representative soil samples contained approximately 13 to 63 percent fines. These soils had similar strength characteristics as the upper soils and extended to the termination depth of our borings.

For additional information about the soils encountered, please refer to the logs of borings in Appendix A.

GROUNDWATER

Test boring locations were checked for the presence of groundwater during and immediately following the drilling operations. Free groundwater was encountered at approximately 31 to 36 feet below existing site grade. Historic high groundwater was estimated to be 21 feet based on information obtained from the California Geological Survey.

It should be recognized that water table elevations may fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use and climatic conditions, as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.

SOIL LIQUEFACTION

Soil liquefaction is a state of soil particle suspension, caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs in soils, such as sands, in which the strength is purely frictional. However, liquefaction has occurred in soils other than clean sands. Liquefaction usually occurs under vibratory conditions, such as those induced by seismic events.

To evaluate the liquefaction potential of the site, the following items were evaluated:

1) Soil type

2) Groundwater depth

3) Relative density

4) Initial confining pressure

5) Intensity and duration of groundshaking

The soils encountered within a depth of 45 feet on the project site predominately consist of medium dense to very dense clayey sands and silty sands or stiff to hard sandy clays. Groundwater was encountered below the site at approximate depths of 31 to 36 feet during subsurface exploration.

The potential for soil liquefaction during a seismic event was evaluated using the LIQUEFYPRO computer program (version 5.8h) developed by CivilTech Software. For the analysis, a maximum earthquake magnitude of 7.51 M_w and a peak horizontal ground surface acceleration of 0.917g were considered appropriate for the liquefaction analysis. A groundwater depth of 21 feet was used for the analysis. The computer analysis indicates that soils above a depth of 21 feet are non-liquefiable due to the absence of groundwater. The soils between depths of 28 feet to 36 feet in Boring B1 and in Boring B4 at about 28 to 37 feet are considered to be slightly to moderately liquefiable. The analysis indicates that the total and differential seismic induced settlement is not anticipated to exceed 2½ inches and 1¼ inches, respectively. Accordingly, the liquefaction potential at the site is considered moderate and design of the development the liquefaction potential should consider the anticipated settlements in the project design.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of our field and laboratory investigations, along with previous geotechnical experience in the project area, the following is a summary of our evaluations, conclusions, and recommendations.

Administrative Summary

In brief, the subject site and soil conditions, with the exception of the existing development, moderate expansion potential of the on-site clayey soils and estimated settlement associated with the potential for liquefaction, appear to be conducive to the development of the project. The surface soils have a loose consistency. These soils are disturbed, have low strength characteristics and are highly compressible when saturated. Accordingly, it is recommended that the surface soils be recompacted. This compaction effort should stabilize the surface soils and locate any unsuitable or pliant areas not found during our field investigation.

Fill material was not encountered in our borings. However, fill may be present between and beyond our boring locations. The extent of fill material was determined based on limited test borings and visual observation. Verification of the extent of fill should be determined during site grading. It is recommended that fill soils which have not been properly compacted and certified be excavated and

stockpiled so that the native soils can be prepared properly. It is anticipated the fill material will be suitable for reuse as Engineered Fill, provided it is cleansed of excessive organics and debris. However, supplemental testing would be required for re-use as non-expansive Engineered Fill.

The site is occupied by existing structures with associated concrete and asphaltic concrete pavements. In addition, several structures are located within the project site vicinity. Associated with these developments are buried structures, such as utilities. Any surface or buried structures, including utilities, encountered during construction should be properly removed and the resulting excavations backfilled. It is suspected demolition of the existing structures will disturb the upper soils. Areas disturbed by demolition activities should be excavated to firm native ground. The resulting excavations should be backfilled with Engineered Fill. This compaction effort should stabilize the upper soils and locate any unsuitable or pliant areas not found during our field investigation.

Several trees and shrubs are located within portions of the site. If not utilized for the proposed development, tree and shrub removal operations should include roots greater than 1 inch in diameter. The resulting excavations should be backfilled with Engineered Fill compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

The on-site clayey soils have a moderate swell potential. The clayey soils in their present condition present a minor to moderate hazard to construction in terms of possible post-construction movement of slab-on-grade construction. To reduce potential soil movement related to swell potential of the clayey soils, it is recommended that conventional slabs-on-grade and exterior flatwork areas be supported by at least 12 inches of non-expansive Engineered Fill. The fill material should be a well-graded silty sand or sandy silt soil. A clean sand or very sandy soil is not acceptable for this purpose. A sandy soil will allow the surface water to drain into the expansive soils below, which may result in soil swelling. The replacement soils and/or upper 12 inches of Imported Fill soils should meet the specifications as described under the subheading Engineered Fill. The replacement soils should extend 5 feet beyond the perimeter of slab-on-grade areas. The non-expansive replacement soils should be compacted to at least 90 percent of relative compaction based on ASTM Test Method D1557. The exposed native soils in the excavation should not be allowed to dry out and should be kept continually moist, prior to backfilling. In addition, it is recommended that slab-on-grade, continuous footings and slabs be nominally reinforced to reduce cracking and vertical off-set.

As an alternative to the use of non-expansive soils, the upper 12 inches of soil supporting conventional slab areas can consist of lime-treated clayey soils. The lime-treated soils should be recompacted to a minimum of 90 percent of maximum density. Preliminary application rate of lime should be 5 percent by dry weight. The lime material should be calcium oxide, commonly known as quick-lime. The clayey soils should be at or near optimum moisture during the mixing operations.

Based on the soil liquefaction analysis performed within the site, the estimated total seismic-induced settlement is less than 2½ inches. Differential settlement caused by a seismic event is estimated to be less than 1¼ inches. The anticipated differential settlement is estimated over a horizontal distance of

100 feet. The seismic settlements would develop if liquefaction of the underlying saturated subsoils were to occur during a seismic event. If these potential movements are not tolerable, mitigation measures are recommended to reduce structural damage due to soil liquefaction.

After completion of the recommended site preparation and over-excavation, the site should be suitable for shallow footing support. The proposed structure footings may be designed utilizing an allowable bearing pressure of 2,500 psf for dead-plus-live loads. If the structure is supported on geogrid-reinforced Engineered Fill, this value can be increased to 3,500 psf. Footings should have a minimum embedment of 24 inches. As an alternative, the proposed structure may be designed utilizing a post-tensioned or structural slab system. Utilization of post-tensioned or structural slabs designed utilizing the design parameters provided in this report, will eliminate the requirement for 12 inches of non-expansive or lime-treated Engineered Fill below slab-on-grade. However, the previously recommended densification of the upper native soils and fill material at the site should still be performed.

Groundwater Influence on Structures/Construction

During our recent field investigation groundwater was encountered at approximately 31 to 36 feet below existing site grade. Historic high groundwater level for the site was determined to be 21 feet. Therefore, dewatering and/or waterproofing may be required should structures or excavations extend below this depth. If groundwater is encountered, our firm should be consulted prior to dewatering the site. Installation of a standpipe piezometer is suggested prior to construction should groundwater levels be a concern.

In addition to the groundwater level, if earthwork is performed during or soon after periods of precipitation, the subgrade soils may become saturated, "pump," or not respond to densification techniques. Typical remedial measures include: discing and aerating the soil during dry weather; mixing the soil with dryer materials; removing and replacing the soil with an approved fill material; or mixing the soil with an approved lime or cement product. Our firm should be consulted prior to implementing remedial measures to observe the unstable subgrade conditions and provide appropriate recommendations.

Site Preparation - General

General site clearing should include removal of vegetation; existing utilities; structures including foundations; basement walls and floors; existing stockpiled soil; trees and associated root systems; rubble; rubbish; and any loose and/or saturated materials. Site stripping should extend to a minimum depth of 2 to 4 inches, or until all organics in excess of 3 percent by volume are removed. Deeper stripping may be required in localized areas. These materials will not be suitable for reuse as Engineered Fill. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas.

Fill material was not encountered in our borings. However, fill may be present between and beyond our boring locations. The extent of fill material was determined based on limited test borings and visual observation. Verification of the extent of fill should be determined during site grading. It is recommended that fill soils which have not been properly compacted and certified be excavated and

stockpiled so that the native soils can be prepared properly. It is anticipated the fill material will be suitable for reuse as Engineered Fill, provided it is cleansed of excessive organics and debris. However, supplemental testing would be required for re-use as non-expansive Engineered Fill.

Existing structures are located within the site and vicinity. Associated with these developments are buried structures, such as utility lines. Any surface or buried structures, such as utilities or loosely backfilled excavations, encountered during construction should be properly removed and the resulting excavations backfilled. After demolition activities, it is recommended that these disturbed soils be removed and/or recompacted. Excavations, depressions, or soft and pliant areas extending below planned, finished subgrade levels should be cleaned to firm, undisturbed soil and backfilled with Engineered Fill. In general, any septic tanks, debris pits, cesspools, or similar structures should be entirely removed. Concrete footings should be removed to an equivalent depth of at least 3 feet below proposed footing elevations or as recommended by the Soils Engineer. Any other buried structures should be removed in accordance with the recommendations of the Soils Engineer. The resulting excavations should be backfilled with Engineered Fill.

Several trees and shrubs are located within portions of the site. If not utilized for the proposed development, tree and shrub removal operations should include roots greater than 1 inch in diameter. The resulting excavations should be backfilled with Engineered Fill compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

Following stripping, fill removal, and demolition activities, it is recommended that at a minimum, the upper 24 inches of exposed subgrade soils beneath existing site grade or 12 inches below the bottom of planned footings, whichever is deeper, in the building pad areas be excavated, worked until uniform and free from large clods, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. Limits of recompaction should extend a minimum of 5 feet beyond structural elements. Prior to backfilling, the bottom of the excavation should be proof-rolled and observed by Krazan & Associates, Inc. to verify stability. Soft or pliant areas should be excavated to firm native ground. This compaction effort should stabilize the upper soils and locate any unsuitable or pliant areas not found during our field investigation.

Following stripping, fill removal, and demolition activities, it is recommended that at a minimum, the upper 12 inches of exposed subgrade soils beneath the exterior flatwork and pavement areas be excavated, worked until uniform and free from large clods, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. Limits of recompaction should extend a minimum of 2 feet beyond flatwork and pavements. Prior to backfilling, the bottom of the excavation should be proof-rolled and observed by Krazan & Associates, Inc. to verify stability. Soft or pliant areas should be excavated to firm native ground. This compaction effort should stabilize the upper soils and locate any unsuitable or pliant areas not found during our field investigation.

It is recommended that any uncertified fill material encountered within pavement areas be removed and/or recompacted. The fill material should be moisture-conditioned to near optimum moisture and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. As an alternative, the Owner may elect not to recompact the existing fill within paved areas. However, the Owner should be aware that the paved areas may settle which may require annual maintenance. At a minimum, it is recommended that the upper 12 inches of subgrade soil be moisture-conditioned as necessary and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

It is recommended that the upper 12 inches of soil within proposed conventional slab-on-grade and exterior flatwork areas consist of non-expansive Engineered Fill or lime-treated Engineered Fill. The fill placement serves two functions: 1) it provides a uniform amount of soil which will more evenly distribute the soil pressures and 2) it reduces moisture content fluctuation in the clayey material beneath the building area. The non-expansive fill material should be a well-graded silty sand or sandy silt soil. A clean sand or very sandy soil is not acceptable for this purpose. A sandy soil will allow the surface water to drain into the expansive clayey soil below, which may result in soil swelling. Imported Fill should be approved by the Soils Engineer prior to placement. The fill should be placed as specified as Engineered Fill. In addition, it is recommended footings and concrete slabs-on-grade be nominally reinforced.

The upper soils, during wet winter months, become very moist due to the absorptive characteristics of the soil. Earthwork operations performed during winter months may encounter very moist unstable soils, which may require removal to grade a stable building foundation. Project site winterization consisting of placement of aggregate base and protecting exposed soils during the construction phase should be performed.

A representative of our firm should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service, as acceptance of earthwork construction is dependent upon compaction and stability of the material. The Soils Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section and the Engineered Fill section.

Supplemental Site Preparation - Geogrid

Subsurface soils within the site are prone to liquefaction under high groundshaking acceleration during an earthquake. If the proposed structure will be constructed over a geogrid mat the building area should be excavated to a minimum depth of 5 feet and the resulting excavation should be backfilled with a layered system of Engineered Fill and geogrid reinforcement. The depth of the over-excavation should be measured from existing ground or rough pad grade, whichever is deeper.

The first layer of geogrid reinforcement will be placed directly at the bottom of the excavation. The geogrid material should be overlapped a minimum of 3 feet in all directions. The geogrid strips should be "shingled" such that the exposed geogrid edge is opposite the direction of fill placement (as roof shingles to rain runoff). The interlock between the geogrid and Engineered Fill will provide load transfer. No vehicles may traverse the geogrid prior to placement of the Engineered Fill cover.

The next layer of geogrid should be placed on top of the compacted Engineered Fill. This and subsequent layers need only be overlapped a minimum of 1 foot on all sides. The geogrid strips of this layer, and all subsequent layers within the footprint, should be placed with lengths perpendicular to those in the layer immediately below. The fill soils excavated from the area beneath the structure may be moisture-conditioned and recompacted between geogrid layers as reinforced fill. The reinforced fill should be conditioned from 2 to 5 percent above optimum moisture and recompacted to a minimum of 90 percent of maximum density based on ASTM D1557 Test Method.

A total of 4 geogrid layers, including the layer at the base of the excavation, should be installed at vertical increments of 1 foot. The geogrid layers should extend to a minimum of 5 feet beyond the exterior footing perimeter of the structure. The geogrid reinforcement fabric should consist of Tensar® BX 6200 or Triax TX-7 Geogrid, or equivalent. Any additional unstable soils within building areas should be excavated and backfilled with Engineered Fill as requested by the Soil Engineer.

It is recommended that the building site be excavated at once, and soils be stockpiled. The geogrid and excavated soil may then be placed and recompacted as recommended herein. Alternatively, the Contractor may elect to excavate the site in two stages, where excavated soil can be stockpiled over one-half of the site while the other half is mitigated. However, if the Contractor elects the option of two stages over the preferred option of using one stage, a minimum of 5 feet of geogrid from the first half should overlap the second half. Furthermore, the overlapping geogrid should be protected from damages, which may be caused by operating equipment. It is further recommended that flexible utility connections be used for the project.

Engineered Fill

The organic-free, on-site, upper native soils and fill material are predominately clayey sands and sandy clays. These soils contained varying amounts of gravel. The clayey soils will not be suitable for reuse as non-expansive Engineered Fill. The clayey soils will be suitable for reuse for fill placement within the upper 12 inches of conventional slab-on-grade and exterior flatwork areas, provided they are lime-treated. The preliminary application rate of lime should be 5 percent by dry weight. The lime material should be calcium oxide, commonly known as quick-lime. The clayey soils should be above optimum moisture-condition during mixing operations. Additional testing is recommended to determine the appropriate application rate of lime prior to placement. These clayey soils will be suitable for reuse as General Engineered Fill, within pavement areas, structural areas supported by post-tensioned or structural slabs, and below 12 inches from finished pad grade in building areas, provided they are cleansed of excessive organics, debris, and moisture-conditioned to at least 2 percent above optimum moisture. It is recommended that additional testing be performed on the on-site soils and fill material to evaluate the physical and index properties prior to reuse as Engineered Fill.

The preferred materials specified for Engineered Fill are suitable for most applications with the exception of exposure to erosion. Project site winterization and protection of exposed soils during the construction phase should be the sole responsibility of the Contractor, since he has complete control of the project site at that time.

Imported Fill should consist of a well-graded, slightly cohesive, fine silty sand or sandy silt soil, with relatively impervious characteristics when compacted. This material should be approved by the Soils Engineer prior to use and should typically possess the following characteristics:

Percent Passing No. 200 Sieve	20 to 50
Plasticity Index	10 maximum
UBC Standard 29-2 Expansion Index	15 maximum

Fill soils should be placed in lifts approximately 6 inches thick, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and compacted to achieve at least 90 percent of maximum density based on ASTM D1557. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.

Drainage and Landscaping

The ground surface should slope away from building pad and pavement areas toward appropriate drop inlets or other surface drainage devices. In accordance with Section 1804 of the 2019 California Building Code, it is recommended that the ground surface adjacent to foundations be sloped a minimum of 5 percent for a minimum distance of 10 feet away from structures, or to an approved alternative means of drainage conveyance. Swales used for conveyance of drainage and located within 10 feet of foundations should be sloped a minimum of 2 percent. Impervious surfaces, such as pavement and exterior concrete flatwork, within 10 feet of building foundations should be sloped a minimum of 1 percent away from the structure. Drainage gradients should be maintained to carry all surface water to collection facilities and off-site. These grades should be maintained for the life of the project.

Slots or weep holes should be placed in drop inlets or other surface drainage devices in pavement areas to allow free drainage of adjoining base course materials. Cutoff walls should be installed at pavement edges adjacent to vehicular traffic areas these walls should extend to a minimum depth of 12 inches below pavement subgrades to limit the amount of seepage water that can infiltrate the pavements. Where cutoff walls are undesirable subgrade drains can be constructed to transport excess water away from planters to drainage interceptors. If cutoff walls can be successfully used at the site, construction of subgrade drains is considered unnecessary.

Utility Trench Backfill

Utility trenches should be excavated according to accepted engineering practice following OSHA (Occupational Safety and Health Administration) standards by a Contractor experienced in such work. The responsibility for the safety of open trenches should be borne by the Contractor. Traffic and

vibration adjacent to trench walls should be reduced; cyclic wetting and drying of excavation side slopes should be avoided. Depending upon the location and depth of some utility trenches, groundwater flow into open excavations could be experienced; especially during or following periods of precipitation.

Utility trench backfill placed in or adjacent to buildings and exterior slabs should be compacted to at least 90 percent of maximum density based on ASTM Test Method D1557. The utility trench backfill placed in pavement areas should be compacted to at least 90 percent of maximum density based on ASTM Test Method D1557. Pipe bedding should be in accordance with pipe manufacturer's recommendations.

Sandy and gravelly soil conditions were encountered at the site. These cohesionless soils have a tendency to cave in trench wall excavation. Shoring or sloping back trench sidewalls may be required within these sandy and gravelly soils.

The Contractor is responsible for removing all water-sensitive soils from the trench regardless of the backfill location and compaction requirements. The Contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

Foundations - Conventional

After completion of the recommended site preparation and over-excavation, the site should be suitable for shallow footing support. The proposed structures may be supported on a shallow foundation system bearing on a minimum of 12 inches of Engineered Fill. Spread and continuous footings can be designed for the following maximum allowable soil bearing pressures:

Load	Allowable Loading
Dead Load Only	1,875 psf
Dead-Plus-Live Load	2,500 psf
Total Load, Including Wind or Seismic Loads	3,325 psf

The footings should have a minimum embedment depth of 24 inches below pad subgrade (soil grade) or adjacent exterior grade, whichever is lower. Footings should have a minimum width of 12 inches, regardless of load.

The footing excavations should not be allowed to dry out any time prior to pouring concrete. It is recommended that footings be reinforced by at least one No. 4 reinforcing bar in both top and bottom.

Resistance to lateral footing displacement can be computed using an allowable friction factor of 0.35 acting between the base of foundations and the supporting subgrade. Lateral resistance for footings can alternatively be developed using an allowable equivalent fluid passive pressure of 275 pounds per cubic foot acting against the appropriate vertical footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance. A ⅓ increase in the value above may be used for short duration, wind, or seismic loads.

The total static movement is not expected to exceed 1 inch. Differential static movement should be less than ½ inch. Most of the static settlement is expected to occur during construction, as the loads are applied. However, additional post-construction movement may occur if the foundation soils are flooded or saturated. The total seismic-induced settlement is estimated to be less than 2½ inches. The estimated differential settlement associated with a seismic event for a structure supported on Engineered Fill is less than 1¼ inch. The anticipated differential settlement associated with a seismic event is estimated over a horizontal distance of 100 feet. The seismic settlements would develop if liquefaction of the underlying saturated soils were to occur during a seismic event.

Foundations - Conventional (Supported on Geogrid Reinforced Fill)

After completion of the recommended site preparation and over-excavation, the site should be suitable for shallow footing support. The proposed structures may be supported on a shallow foundation system bearing on geogrid-reinforced Engineered Fill. Spread and continuous footings can be designed for the following maximum allowable soil bearing pressures:

Load	Allowable Loading
Dead Load Only	2,625 psf
Dead-Plus-Live Load	3,500 psf
Total Load, Including Wind or Seismic Loads	4,650 psf

The footings should have a minimum embedment depth of 24 inches below pad subgrade (soil grade) or adjacent exterior grade, whichever is lower. Footings should have a minimum width of 12 inches, regardless of load.

The footing excavations should not be allowed to dry out any time prior to pouring concrete. It is recommended that footings be reinforced by at least one No. 4 reinforcing bar in both top and bottom.

Resistance to lateral footing displacement can be computed using an allowable friction factor of 0.35 acting between the base of foundations and the supporting subgrade. Lateral resistance for footings can alternatively be developed using an allowable equivalent fluid passive pressure of 275 pounds per cubic foot acting against the appropriate vertical footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance. A ⅓ increase in the value above may be used for short duration, wind, or seismic loads.

The total static movement is not expected to exceed ¾ inch. Differential static movement should be less than ½ inch. Most of the static settlement is expected to occur during construction, as the loads are applied. However, additional post-construction movement may occur if the foundation soils are flooded or saturated. The total seismic-induced settlement is estimated to be less than 2½ inches. The estimated differential settlement associated with a seismic event for a structure supported on geogrid reinforced Engineered Fill is less than ¾ inch. The anticipated differential settlement associated with a seismic event is estimated over a horizontal distance of 100 feet. The seismic settlements would develop if liquefaction of the underlying saturated soils were to occur during a seismic event.

Foundations - Post-Tension or Structural Slab

The building may be supported on a post-tension slab or structural slab/foundation system. Utilization of a post-tensioned or structural slab designed utilizing the design parameters provided in this report, will eliminate the requirement for 12 inches of non-expansive or lime-treated Engineered Fill below slab-on-grade. However, the previously recommended densification of the upper native soils and fill material at the site should still be performed. Recommendations for a structural slab system are also provided herein. After completion of the recommended site preparation and over-excavations, the post-tension or structural slab foundation can be designed utilizing allowable bearing pressure of 1,500 pounds per square foot for dead-plus-live loads. This value may be increased ⅓ for short duration loads such as wind or seismic. The slab may be designed using a modulus of subgrade reaction (k) of 75 pounds per square inch per inch (pci). The thickened edges of the slab should have a minimum depth of 18 inches below pad grade (soil grade) or exterior grade, whichever is lower. Ultimate design of the slab and reinforcement should be performed by the project Structural Engineer.

The thickness of the slab-on-grade and locations and sizing of stiffening beams (if used) should be determined by the structural consultant during a subsequent structural analysis, which incorporates our design recommendations, including a deepened perimeter or edge section. Post-tensioned slab-on-grade foundations should be structurally designed to resist or distribute the stresses that are anticipated to develop as the result of supporting soil movement. The following preliminary parameters are recommended for use in the structural design of the post-tensioned slab-on-grade foundations in accordance with *Design of Post-Tensioned Slabs-on-Ground*, 3rd Edition, by the Post-Tensioning Institute. In addition, the computer software program Volflo 1.5, by Geostructural Tool Kit, Inc. was also utilized in the analyses. The recommended edge moisture variation (e_m) and differential swell (y_m) values for use in preliminary design of post-tensioned slabs are as follows:

Edge Moisture Variation Distance:	Estimated Differential Swell:
Center lift, e_m = 9 feet	Center lift, y_m = 1 inch
Edge lift, e_m = 4.8 feet	Edge lift, y_m = 1¼ inch

To aid in reducing the potential for differential soil movement associated with shrinkage and swelling of the fine-grained soils due to changes in moisture contents with changing seasons and landscaping, we recommend that the exterior edge of the slab be deepened to provide a moisture cut-off around the perimeter of the building. The deepened edge should extend at least 18 inches below the top of the pad grade, where the top of pad grade is defined as the grade beneath the bottom of the capillary moisture break gravel course or the adjacent exterior subgrade, whichever is deeper.

Import and placement of the amount of fill required for the building pad should correspond to the import fill specifications.

Resistance to lateral displacement can be computed using an allowable friction factor of 0.35 acting between the base of foundations and the supporting subgrade. Lateral resistance for footings can alternatively be developed using an allowable equivalent fluid passive pressure of 275 pounds per cubic

foot acting against the appropriate vertical footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance. A ⅓ increase in the above value may be used for short duration, wind, or seismic loads.

The structural or post-tensioned slab foundations should be designed to withstand a combined total static and seismic settlement of 3 inches, and a differential settlement of up to 2 inches. Most of the static settlement is expected to occur during construction as the loads are applied. However, additional post-construction movement may occur if the foundation soils are flooded or saturated. The anticipated differential settlement is estimated over the width of the building. The seismic settlements would develop only if liquefaction of the underlying saturated soils were to occur during a seismic event.

Floor Slabs and Exterior Flatwork

To reduce post-construction soil movement beneath floor slabs and exterior flatwork, it is recommended that mitigation measures be performed. For conventional slab-on-grade, it is recommended that the upper 12 inches of soil consist of non-expansive or lime-treated Engineered Fill.

In areas that will utilize moisture-sensitive floor coverings, concrete slab-on-grade floors should be underlain by a water vapor retarder. The water vapor retarder should be installed in accordance with accepted engineering practice. The water vapor retarder should consist of a vapor retarder sheeting underlain by a minimum of 3 inches of compacted, clean, gravel of ¾-inch maximum size. To aid in concrete curing an optional 2 to 4 inches of granular fill may be placed on top of the vapor retarder. The granular fill should consist of damp clean sand with at least 10 to 30 percent of the sand passing the 100 sieve. The sand should be free of clay, silt, or organic material. Rock dust which is manufactured sand from rock crushing operations is typically suitable for the granular fill. This granular fill material should be compacted.

It is recommended that the concrete slabs be reinforced at a minimum with No. 3 reinforcing bars, placed at 18 inches on center in each direction within the slabs middle third, to reduce crack separation and possible vertical offset at the cracks. Thicker floor slabs with increased concrete strength and reinforcement should be designed wherever heavy concentrated loads, heavy equipment, or machinery is anticipated.

The exterior floors should be poured separately in order to act independently of the walls and foundation system. Exterior finish grades should be sloped a minimum of 2 percent away from all interior slab areas to preclude ponding of water adjacent to the structures. All fills required to bring the building pads to grade should be Engineered Fills.

Moisture within the structure may be derived from water vapors, which were transformed from the moisture within the soils. This moisture vapor can travel through the vapor membrane and penetrate the slab-on-grade. This moisture vapor penetration can affect floor coverings and produce mold and mildew in the structure. To reduce moisture vapor intrusion, it is recommended that a vapor retarder be installed. It is recommended that the utility trenches within the structure be compacted, as specified in our report, to reduce the transmission of moisture through the utility trench backfill. Special attention to the immediate drainage and irrigation around the building is recommended. Positive drainage should be

established away from the structure and should be maintained throughout the life of the structure. Ponding of water should not be allowed adjacent to the structure. Over-irrigation within landscaped areas adjacent to the structure should not be performed. In addition, ventilation of the structure (i.e. ventilation fans) is recommended to reduce the accumulation of interior moisture.

Lateral Earth Pressures and Retaining Walls

Walls retaining horizontal backfill and capable of deflecting a minimum of 0.1 percent of its height at the top may be designed using an equivalent fluid active pressure of 50 pounds per square foot per foot of depth. Walls that are incapable of this deflection or walls that are fully constrained against deflection may be designed for an equivalent fluid at-rest pressure of 70 pounds per square foot per foot per depth. Expansive soils should not be used for backfill against walls. The wedge of non-expansive backfill material should extend from the bottom of each retaining wall outward and upward at a slope of 2:1 (horizontal to vertical) or flatter. The stated lateral earth pressures do not include the effects of hydrostatic water pressures generated by infiltrating surface water that may accumulate behind the retaining walls; or loads imposed by construction equipment, foundations, or roadways.

During grading and backfilling operations adjacent to any walls, heavy equipment should not be allowed to operate within a lateral distance of 5 feet from the wall, or within a lateral distance equal to the wall height, whichever is greater, to avoid developing excessive lateral pressures. Within this zone, only hand operated equipment ("whackers," vibratory plates, or pneumatic compactors) should be used to compact the backfill soils.

Retaining and/or below grade walls should be drained with either perforated pipe encased in free-draining gravel or a prefabricated drainage system. The gravel zone should have a minimum width of 12 inches wide and should extend upward to within 12 inches of the top of the wall. The upper 12 inches of backfill should consist of native soils, concrete, asphaltic concrete or other suitable backfill to reduce surface drainage into the wall drain system. The aggregate should conform to Class 2 permeable materials graded in accordance with the CalTrans Standard Specifications (2018). Prefabricated drainage systems, such as Miradrain®, Enkadrain®, or an equivalent substitute, are acceptable alternatives in lieu of gravel provided they are installed in accordance with the manufacturer's recommendations. If a prefabricated drainage system is proposed, our firm should review the system for final acceptance prior to installation.

Drainage pipes should be placed with perforations down and should discharge in a non-erosive manner away from foundations and other improvements. The pipes should be placed no higher than 6 inches above the heel of the wall in the center line of the drainage blanket and should have a minimum diameter of 4 inches. Collector pipes may be either slotted or perforated. Slots should be no wider than ⅛ inch in diameter, while perforations should be no more than ¼ inch in diameter. If retaining walls are less than 6 feet in height, the perforated pipe may be omitted in lieu of weep holes on 4 feet maximum spacing. The weep holes should consist of 4-inch diameter holes (concrete walls) or unmortared head joints (masonry walls) and not be higher than 18 inches above the lowest adjacent grade. Two 8-inch square overlapping patches of geotextile fabric (conforming to the CalTrans Standard Specifications for "edge drains") should be affixed to the rear wall opening of each weep hole to retard soil piping.

R-Value Test Results and Pavement Design

Two subgrade soil samples were obtained from the project site for R-value testing at the locations shown on the attached site plan. The samples were tested in accordance with the State of California Materials Manual Test Designation 301. Results of the tests are as follows:

Sample	Depth	Description	R-Value at Equilibrium
1	12-24"	Clayey Sand (SC)	41
2	12-24"	Clayey Sand (SC)	20

The test results are moderate and indicate fair to moderate subgrade support characteristics under dynamic traffic loads. The following table shows the recommended pavement sections for various traffic indices based on an R-value of 41.

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Compacted Subgrade**
4.0	2.0"	4.0"	12.0"
4.5	2.5"	4.0"	12.0"
5.0	2.5"	4.5"	12.0"
5.5	3.0"	4.5"	12.0"
6.0	3.0"	6.0"	12.0"
6.5	3.5"	6.0"	12.0"
7.0	4.0"	6.5"	12.0"
7.5	4.0"	7.5"	12.0"

** 95% compaction based on ASTM Test Method D1557 or CAL 216*
*** 90% compaction based on ASTM Test Method D1557 or CAL 216*

The following table shows the recommended pavement sections for various traffic indices based on an R-value of 20.

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Compacted Subgrade**
4.0	2.0"	6.5"	12.0"
4.5	2.5"	7.0"	12.0"
5.0	2.5"	8.0"	12.0"
5.5	3.0"	8.5"	12.0"
6.0	3.0"	10.5"	12.0"
6.5	3.5"	11.0"	12.0"
7.0	4.0"	12.0"	12.0"
7.5	4.0"	13.0"	12.0"

** 95% compaction based on ASTM Test Method D1557 or CAL 216*
*** 90% compaction based on ASTM Test Method D1557 or CAL 216*

If traffic indices are not available, an estimated (typical value) index of 4.5 may be used for light automobile traffic and an index of 7.0 may be used for light truck traffic.

The following recommendations are for light-duty and heavy-duty Portland Cement Concrete pavement sections.

PORTLAND CEMENT PAVEMENT
LIGHT DUTY

Traffic Index	Portland Cement Concrete***	Class II Aggregate Base*	Compacted Subgrade**
4.5	5.0"	4.0"	12.0"

HEAVY DUTY

Traffic Index	Portland Cement Concrete***	Class II Aggregate Base*	Compacted Subgrade**
7.0	7.0"	4.0"	12.0"

** 95% compaction based on ASTM Test Method D1557 or CAL 216*
*** 90% compaction based on ASTM Test Method D1557 or CAL 216*
****Minimum compressive strength of 3000 psi*

It is recommended that any uncertified fill material encountered within pavement areas be removed and/or recompacted. The fill materials should be moisture-conditioned to near optimum moisture and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. As an alternative, the Owner may elect not to recompact the existing fill within paved areas. However, the Owner should be aware that the paved areas may settle which may require annual maintenance. At a minimum, it is recommended that the upper 12 inches of subgrade soil be moisture-conditioned to a minimum of 2 percent above optimum moisture content and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

Seismic Parameters – 2019 California Building Code

The Site Class per Section 1613 of the 2019 California Building Code (2019 CBC) and ASCE 7-16, Chapter 20 is based upon the site soil conditions. It is our opinion that a Site Class D is most consistent with the subject site soil conditions. For seismic design of the structures based on the seismic provisions of the 2019 CBC, we recommend the following parameters:

Seismic Item	Value	CBC Reference
Site Class	D	Section 1613.2.2
Site Coefficient F_a	1.200	Table 1613.2.3 (1)
S_s	1.857	Section 1613.2.1
S_{MS}	2.228	Section 1613.2.3
S_{DS}	1.485	Section 1613.2.4
Site Coefficient F_v	1.700	Table 1613.2.3 (2)
S_1	0.659	Section 1613.2.1

S_{M1}	1.120	Section 1613.2.3
S_{D1}	0.747	Section 1613.2.4
T_S	0.503	Section 1613.2

* Based on Equivalent Lateral Force (ELF) Design Procedure being used.

Soil Cement Reactivity

Excessive sulfate in either the soil or native water may result in an adverse reaction between the cement in concrete (or stucco) and the soil. HUD/FHA and CBC have developed criteria for evaluation of sulfate levels and how they relate to cement reactivity with soil and/or water.

Soil samples were obtained from the site and tested in accordance with State of California Materials Manual Test Designation 417. The sulfate concentrations detected in these soil samples were less than 150 ppm and are below the maximum allowable values established by HUD/FHA and CBC. However, it is recommended that a Type II cement be used within the concrete to compensate for sulfate reactivity with the cement.

Compacted Material Acceptance

Compaction specifications are not the only criteria for acceptance of the site grading or other such activities. However, the compaction test is the most universally recognized test method for assessing the performance of the Grading Contractor. The numerical test results from the compaction test cannot be used to predict the engineering performance of the compacted material. Therefore, the acceptance of compacted materials will also be dependent on the stability of that material. The Soils Engineer has the option of rejecting any compacted material regardless of the degree of compaction if that material is considered to be unstable or if future instability is suspected. A specific example of rejection of fill material passing the required percent compaction is a fill which has been compacted with an in-situ moisture content significantly less than optimum moisture. This type of dry fill (brittle fill) is susceptible to future settlement if it becomes saturated or flooded.

Testing and Inspection

A representative of Krazan & Associates, Inc. should be present at the site during the earthwork activities to confirm that actual subsurface conditions are consistent with the exploratory fieldwork. This activity is an integral part of our service, as acceptance of earthwork construction is dependent upon compaction testing and stability of the material. This representative can also verify that the intent of these recommendations is incorporated into the project design and construction. Krazan & Associates, Inc. will not be responsible for grades or staking, since this is the responsibility of the Prime Contractor.

LIMITATIONS

Soils Engineering is one of the newest divisions of Civil Engineering. This branch of Civil Engineering is constantly improving as new technologies and understanding of earth sciences advance. Although your site was analyzed using the most appropriate and most current techniques and methods,

undoubtedly there will be substantial future improvements in this branch of engineering. In addition to advancements in the field of Soils Engineering, physical changes in the site, either due to excavation or fill placement, new agency regulations, or possible changes in the proposed structure after the soils report is completed may require the soils report to be professionally reviewed. In light of this, the Owner should be aware that there is a practical limit to the usefulness of this report without critical review. Although the time limit for this review is strictly arbitrary, it is suggested that 2 years be considered a reasonable time for the usefulness of this report.

Foundation and earthwork construction is characterized by the presence of a calculated risk that soil and groundwater conditions have been fully revealed by the original foundation investigation. This risk is derived from the practical necessity of basing interpretations and design conclusions on limited sampling of the earth. The recommendations made in this report are based on the assumption that soil conditions do not vary significantly from those disclosed during our field investigation. If any variations or undesirable conditions are encountered during construction, the Soils Engineer should be notified so that supplemental recommendations may be made.

The conclusions of this report are based on the information provided regarding the proposed construction. If the proposed construction is relocated or redesigned, the conclusions in this report may not be valid. The Soils Engineer should be notified of any changes so the recommendations may be reviewed and re-evaluated.

This report is a Geotechnical Engineering Investigation with the purpose of evaluating the soil conditions in terms of foundation design. The scope of our services did not include any Environmental Site Assessment for the presence or absence of hazardous and/or toxic materials in the soil, groundwater, or atmosphere; or the presence of wetlands. Any statements, or absence of statements, in this report or on any boring log regarding odors, unusual or suspicious items, or conditions observed, are strictly for descriptive purposes and are not intended to convey engineering judgment regarding potential hazardous and/or toxic assessment.

The geotechnical engineering information presented herein is based upon professional interpretation utilizing standard engineering practices and a degree of conservatism deemed proper for this project. It is not warranted that such information and interpretation cannot be superseded by future geotechnical engineering developments. We emphasize that this report is valid for the project outlined above and should not be used for any other sites.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (925) 307-1160.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

Steve Nelson
Project Engineer

REGISTERED PROFESSIONAL ENGINEER
DAVID R. JAROSZ II
2698
GEOTECHNICAL
STATE OF CALIFORNIA

David R. Jarosz, II
Managing Engineer
RGE No. 2698/RCE No. 60185

SN/DRJ:ht

APPROXIMATE BORING LOCATION

APPROXIMATE R-VALUE LOCATION

SITE MAP	**Scale:** NTS	**Date:** October 2021
Distel Circle Apartments **330 Distel Circle** **Los Altos, California**	**Drawn by:** HT	**Approved by:** DJ
	Project No. 042-21020	**Figure No.** 1

Krazan
GEOTECHNICAL ENGINEERING

APPENDIX A

FIELD AND LABORATORY INVESTIGATIONS

Field Investigation

The field investigation consisted of a surface reconnaissance and a subsurface exploratory program. Four 4½-inch to 6½-inch diameter exploratory borings were advanced. The boring locations are shown on the site plan.

The soils encountered were logged in the field during the exploration and with supplementary laboratory test data are described in accordance with the Unified Soil Classification System.

Modified standard penetration tests and standard penetration tests were performed at selected depths. These tests represent the resistance to driving a 2½-inch and 1½-inch diameter split barrel sampler, respectively. The driving energy was provided by a hammer weighing 140 pounds falling 30 inches. Relatively undisturbed soil samples were obtained while performing this test. Bag samples of the disturbed soil were obtained from the auger cuttings. The modified standard penetration tests are identified in the sample type on the boring logs with a full shaded in block. The standard penetration tests are identified in the sample type on the boring logs with half of the block shaded. All samples were returned to our Clovis laboratory for evaluation.

Laboratory Investigation

The laboratory investigation was programmed to determine the physical and mechanical properties of the foundation soil underlying the site. Test results were used as criteria for determining the engineering suitability of the surface and subsurface materials encountered.

In-situ moisture content, dry density, consolidation, direct shear and sieve analysis tests were completed for the undisturbed samples representative of the subsurface material. Atterberg limits, expansion index and R-value tests were completed for select bag samples obtained from the auger cuttings. These tests, supplemented by visual observation, comprised the basis for our evaluation of the site material.

The logs of the exploratory borings and laboratory determinations are presented in this Appendix.

UNIFIED SOIL CLASSIFICATION SYSTEM

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size.)			
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	Clean Gravels (Less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravels with fines (More than 12% fines)	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	Clean Sands (Less than 5% fines)	SW	Well-graded sands, gravelly sands, little or no fines
		SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with fines (More than 12% fines)	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)			
SILTS AND CLAYS Liquid limit less than 50%		ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils

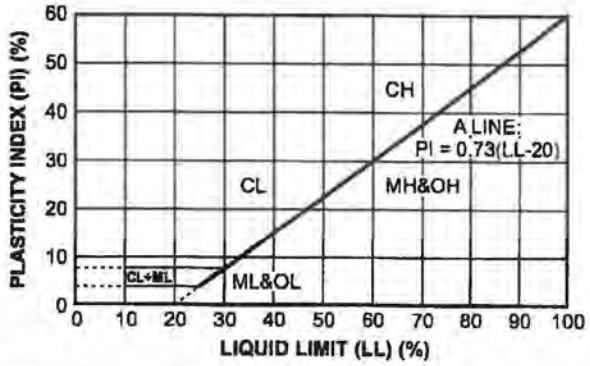
CONSISTENCY CLASSIFICATION

Description	Blows per Foot
Granular Soils	
Very Loose	< 5
Loose	5 – 15
Medium Dense	16 – 40
Dense	41 – 65
Very Dense	> 65
Cohesive Soils	
Very Soft	< 3
Soft	3 – 5
Firm	6 – 10
Stiff	11 – 20
Very Stiff	21 – 40
Hard	> 40

GRAIN SIZE CLASSIFICATION

Grain Type	*Standard Sieve Size*	*Grain Size in Millimeters*
Boulders	Above 12 inches	Above 305
Cobbles	12 to 13 inches	305 to 76.2
Gravel	3 inches to No. 4	76.2 to 4.76
Coarse-grained	3 to ¾ inches	76.2 to 19.1
Fine-grained	¾ inches to No. 4	19.1 to 4.76
Sand	No. 4 to No. 200	4.76 to 0.074
Coarse-grained	No. 4 to No. 10	4.76 to 2.00
Medium-grained	No. 10 to No. 40	2.00 to 0.042
Fine-grained	No. 40 to No. 200	0.042 to 0.074
Silt and Clay	Below No. 200	Below 0.074

PLASTICITY CHART



Log of Boring B1

Project: Distel Circle Apartments

Project No: 042-21020

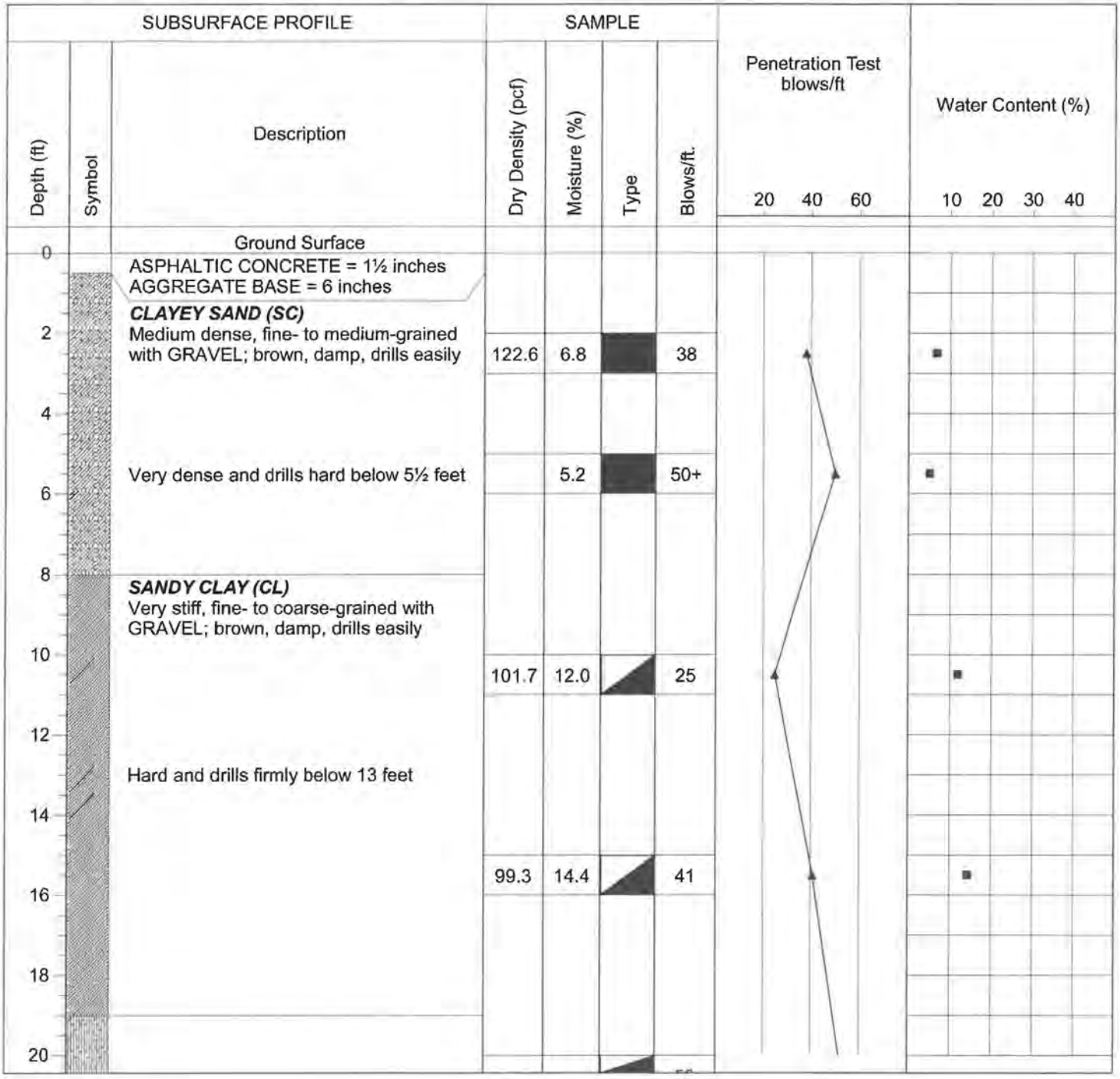
Client: EAH Housing, Inc.

Figure No.: A-1

Location: 330 Distel Circle, Los Altos, California

Logged By: Carlos Jimenez

Depth to Water> **Initial:** 34 Feet **At Completion:** 36 Feet



Drill Method: Hollow Stem

Drill Date: 8-4-21

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 6½ Inches

Driller: Chris Wyneken

Elevation: 45 Feet

Sheet: 1 of 3

Log of Boring B1

Project: Distel Circle Apartments

Project No: 042-21020

Client: EAH Housing, Inc.

Figure No.: A-1

Location: 330 Distel Circle, Los Altos, California

Logged By: Carlos Jimenez

Depth to Water> **Initial:** 34 Feet **At Completion:** 36 Feet

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
22		***SILTY SAND (SM)*** Very dense, fine- to coarse-grained with GRAVEL; brown, damp, drills hard	122.3	4.1		52
24		Dense and drills firmly below 25 feet	113.8	3.4		42
26						
28						
30		Medium dense and drills easily below 30 feet	122.5	4.4		28
32						
34		***SANDY CLAY (CL)*** Stiff, fine- to medium-grained with GRAVEL; dark gray, very moist, drills easily Saturated below 34 feet ▽	97.9	22.9		12
36						
38		***CLAYEY SAND (SC)*** Dense, fine- to coarse-grained with GRAVEL; dark gray, saturated, drills firmly				
40						

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Hollow Stem

Drill Date: 8-4-21

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 6½ Inches

Driller: Chris Wyneken

Elevation: 45 Feet

Sheet: 2 of 3

Log of Boring B1

Project: Distel Circle Apartments

Project No: 042-21020

Client: EAH Housing, Inc.

Figure No.: A-1

Location: 330 Distel Circle, Los Altos, California

Logged By: Carlos Jimenez

Depth to Water> **Initial:** 34 Feet **At Completion:** 36 Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft	Water Content (%)
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.	20 40 60	10 20 30 40
42			107.4	15.9		33		
44								
46		End of Borehole						
48								
50								
52								
54								
56								
58								
60								

Drill Method: Hollow Stem

Drill Rig: CME 45C-1

Driller: Chris Wyneken

Krazan and Associates

Drill Date: 8-4-21

Hole Size: 6½ Inches

Elevation: 45 Feet

Sheet: 3 of 3

Log of Boring B2

Project: Distel Circle Apartments

Project No: 042-21020

Client: EAH Housing, Inc.

Figure No.: A-2

Location: 330 Distel Circle, Los Altos, California

Logged By: Carlos Jimenez

Depth to Water> **Initial:** None **At Completion:** None

Depth (ft)	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0	Ground Surface				
	ASPHALTIC CONCRETE = 1½ inches AGGREGATE BASE = 6½ inches				
2	***CLAYEY SAND (SC)*** Medium dense, fine- to coarse-grained with GRAVEL; brown, damp, drills easily	113.3	5.5		34
4	Very dense and drills hard below 4 feet				
6		122.6	7.2		50+
8	Dense and drills firmly below 8				
10		125.3	9.0		57
12					
14	Very dense below 15 feet				
16		116.5	18.6		50+
18					
20					

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight

Drill Date: 8-4-21

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 20 Feet

Sheet: 1 of 1

Log of Boring B3

Project: Distel Circle Apartments

Project No: 042-21020

Client: EAH Housing, Inc.

Figure No.: A-3

Location: 330 Distel Circle, Los Altos, California

Logged By: Carlos Jimenez

Depth to Water> **Initial:** None **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
		Ground Surface				
0		ASPHALTIC CONCRETE = 1½ inches AGGREGATE BASE = 6 inches				
2		***CLAYEY SAND (SC)*** Dense, fine- to coarse-grained with GRAVEL; brown, damp, drills firmly	125.4	6.8		52
4		Very dense and drills hard below 4½ feet				
6			123.2	4.0		50+
8						
10			121.8	4.8		50+
12						
14						
16			127.2	7.2		50+
18						
20						

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight

Drill Date: 8-4-21

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 4½ Inches

Driller: Chris Wyneken

Elevation: 20 Feet

Sheet: 1 of 1

Log of Boring B4

Project: Distel Circle Apartments

Project No: 042-21020

Client: EAH Housing, Inc.

Figure No.: A-4

Location: 330 Distel Circle, Los Altos, California

Logged By: Carlos Jimenez

Depth to Water> **Initial:** 34 Feet **At Completion:** 31 Feet

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0		Ground Surface				
		ASPHALTIC CONCRETE = 1½ inches AGGREGATE BASE = 6 inches				
2		***CLAYEY SAND (SC)*** Dense, fine- to coarse-grained with GRAVEL; brown, damp, drills firmly	124.2	10.2		49
4		Medium dense and drills easily below 4 feet				
				4.4		27
6						
8						
10			123.2	7.9		40
12		Very dense and drills hard below 13 feet				
14						
			122.4	3.6		45
16						
18		***SILTY SAND (SM)*** Dense, fine- to coarse-grained with GRAVEL; brown, damp, drills firmly				
20						

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Hollow Stem

Drill Rig: CME 45C-1

Driller: Chris Wyneken

Krazan and Associates

Drill Date: 8-4-21

Hole Size: 6½ Inches

Elevation: 45 Feet

Log of Boring B4

Project: Distel Circle Apartments

Project No: 042-21020

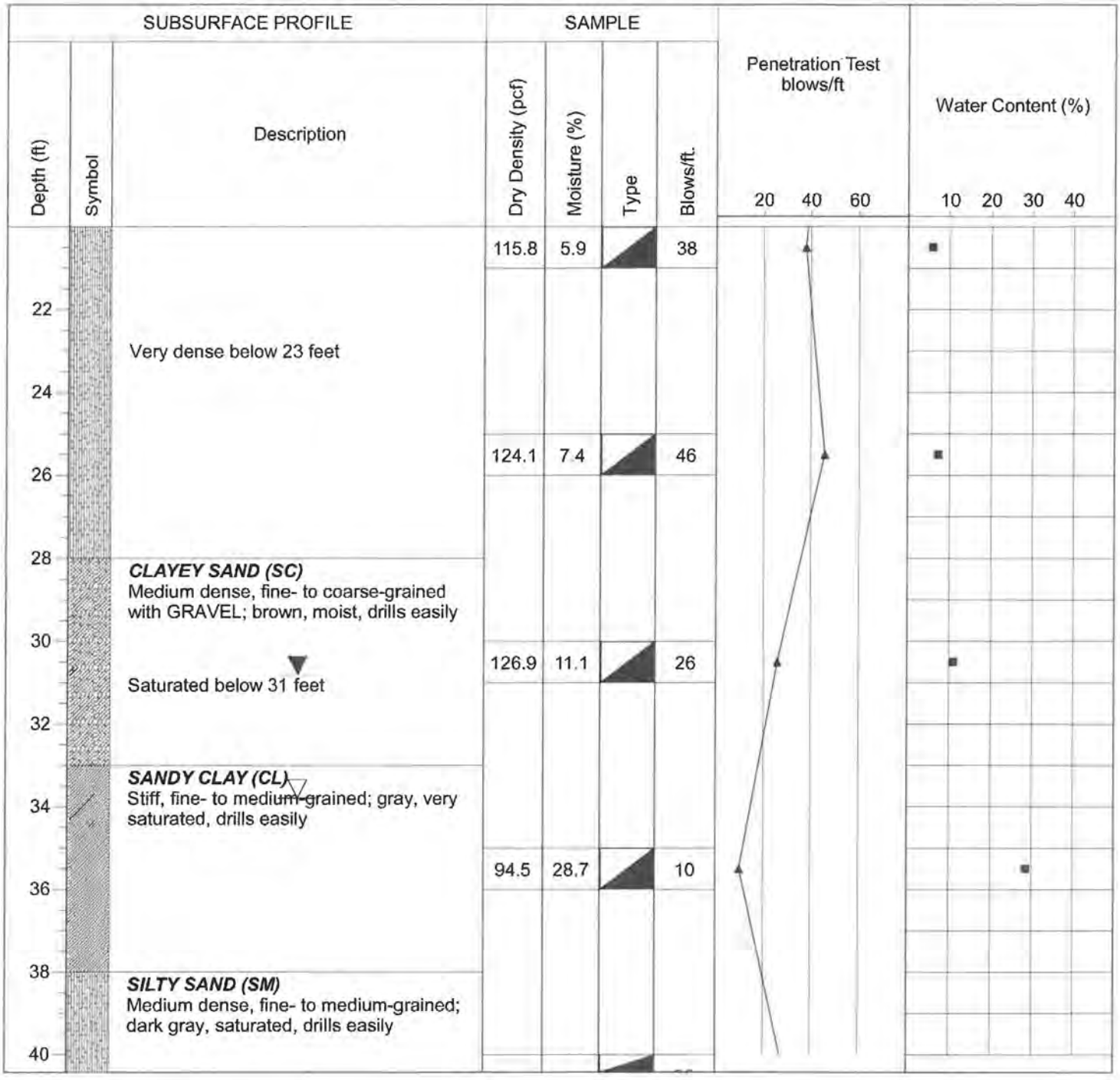
Client: EAH Housing, Inc.

Figure No.: A-4

Location: 330 Distel Circle, Los Altos, California

Logged By: Carlos Jimenez

Depth to Water> **Initial:** 34 Feet **At Completion:** 31 Feet



Drill Method: Hollow Stem

Drill Date: 8-4-21

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 6½ Inches

Driller: Chris Wyneken

Elevation: 45 Feet

Log of Boring B4

Project: Distel Circle Apartments

Project No: 042-21020

Client: EAH Housing, Inc.

Figure No.: A-4

Location: 330 Distel Circle, Los Altos, California

Logged By: Carlos Jimenez

Depth to Water> **Initial:** 34 Feet **At Completion:** 31 Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft	Water Content (%)
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.	20 40 60	10 20 30 40
			111.5	19.0		29		
42								
44								
		End of Borehole						
46								
48								
50								
52								
54								
56								
58								
60								

Drill Method: Hollow Stem

Drill Date: 8-4-21

Drill Rig: CME 45C-1

Krazan and Associates

Hole Size: 6½ Inches

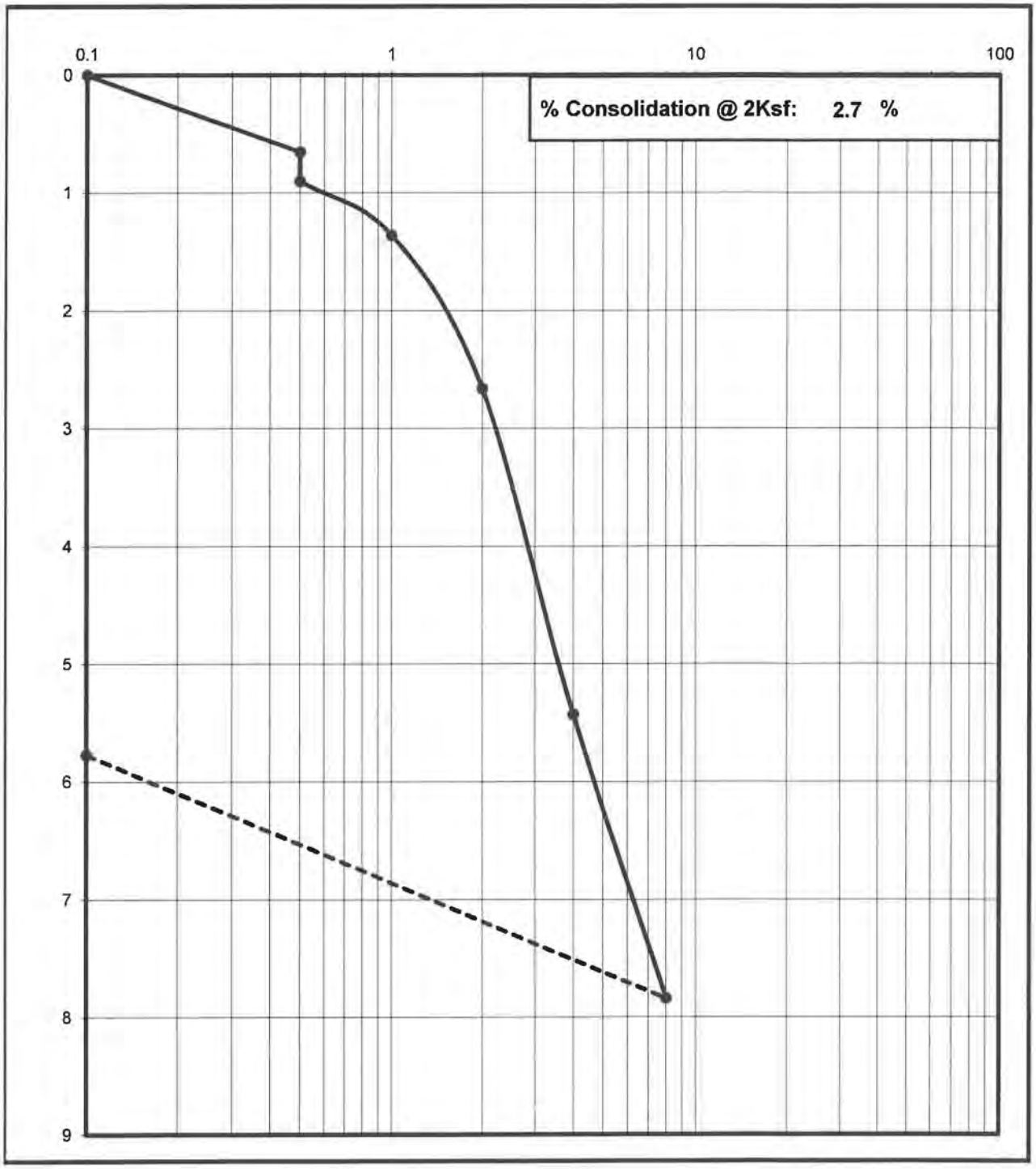
Driller: Chris Wyneken

Elevation: 45 Feet

Sheet: 3 of 3

Consolidation Test

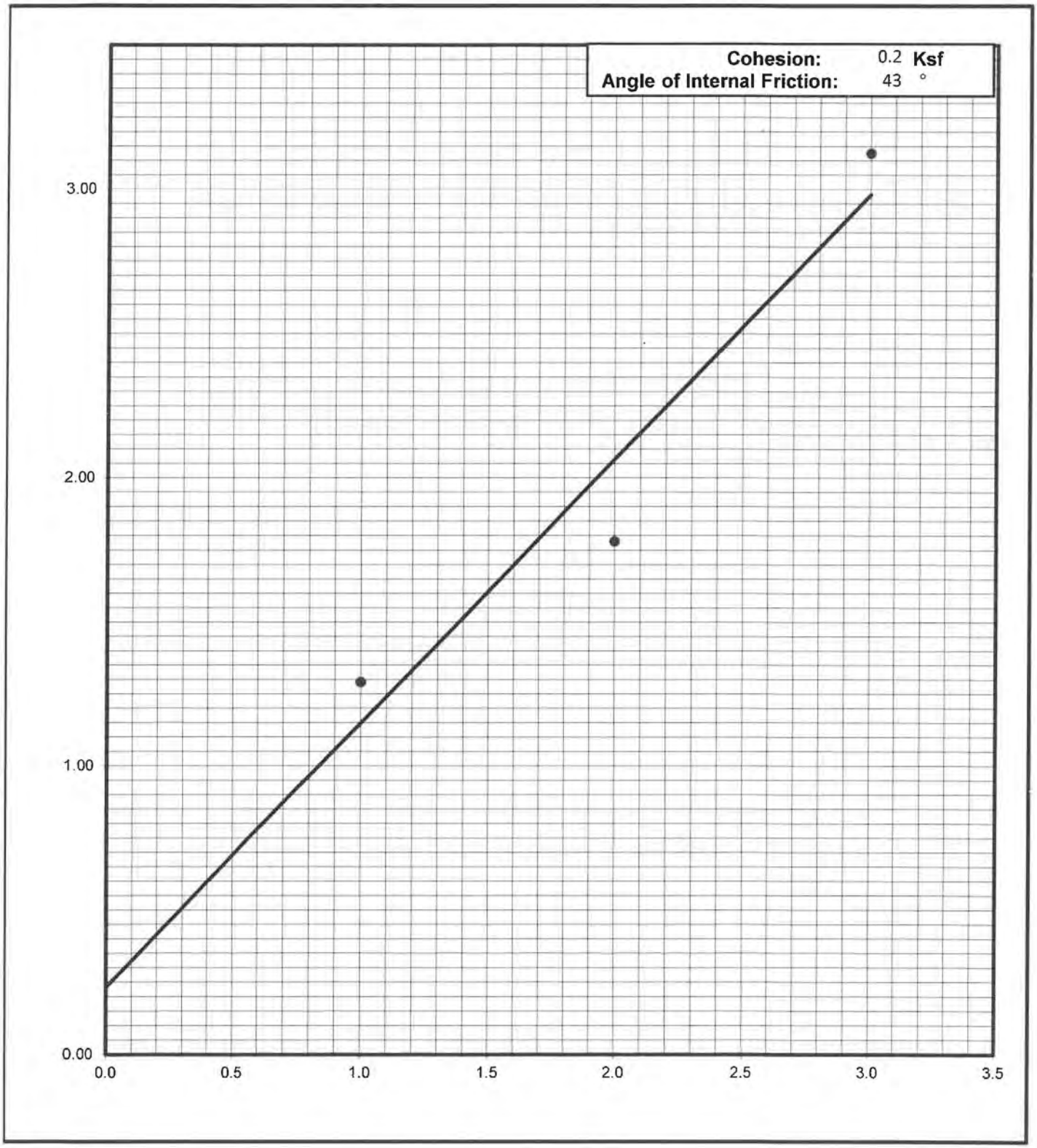
Project No	Boring No. & Depth	Date	Soil Classification
042-21020	B2 @ 2-3'	8/30/2021	SC w/ grvl



Krazan Testing Laboratory

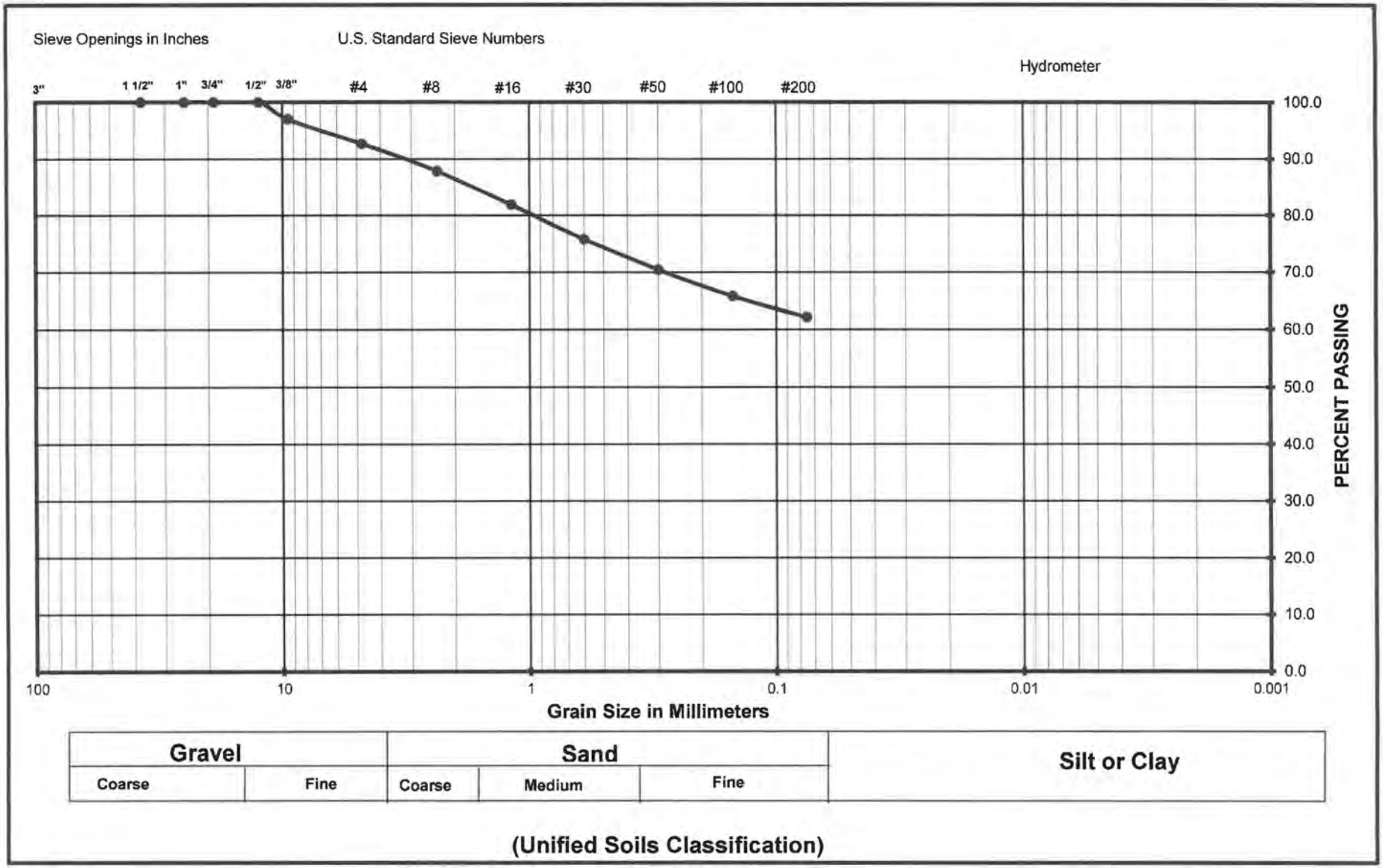
Shear Strength Diagram (Direct Shear)
ASTM D - 3080 / AASHTO T - 236

Project Number	Boring No. & Depth	Soil Type	Date
042-21020	B1 @ 2-3'	SC w/ grvl	8/30/2021



Krazan Testing Laboratory

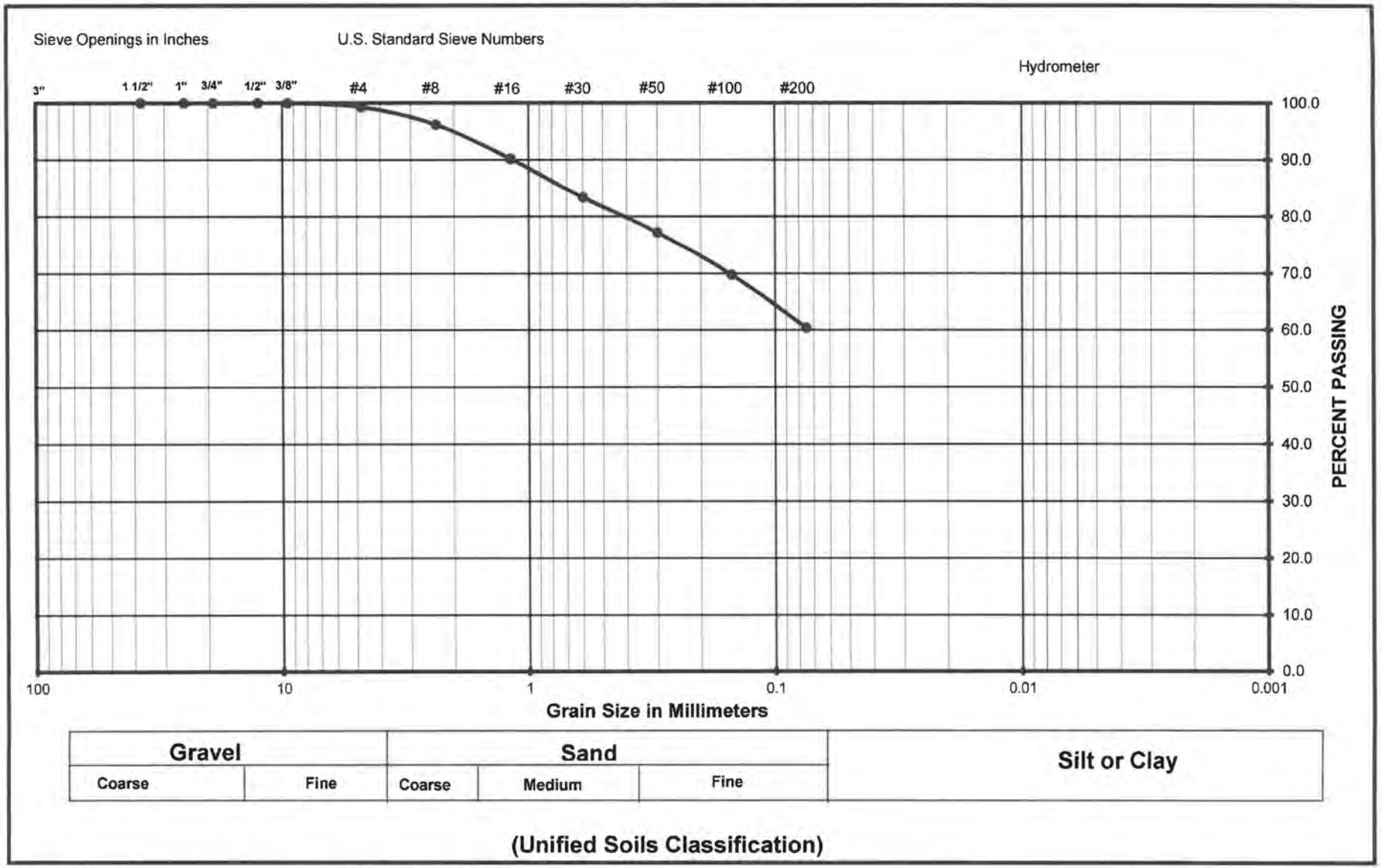
Grain Size Analysis



Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	CL w/ grvl
Sample Number	B1 @ 10-11'

Krazan Testing Laboratory

Grain Size Analysis



Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	CL
Sample Number	B1 @ 15-16'

Krazan Testing Laboratory

Grain Size Analysis

(Unified Soils Classification)

Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SM w/ grvl
Sample Number	B1 @ 20-21'

Krazan Testing Laboratory

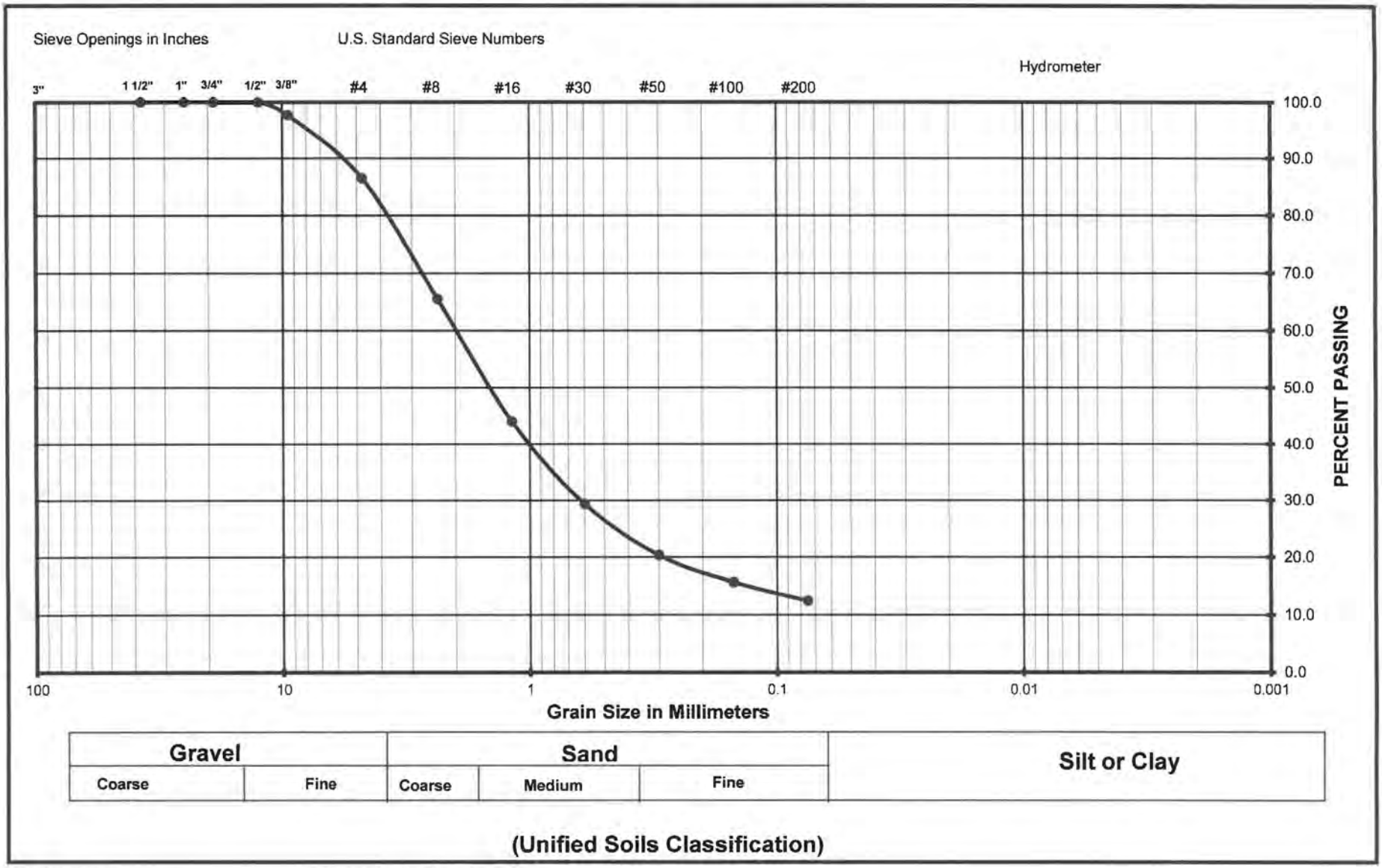
Grain Size Analysis

(Unified Soils Classification)

Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SM w/ grvl
Sample Number	B1 @ 25-26'

Krazan Testing Laboratory

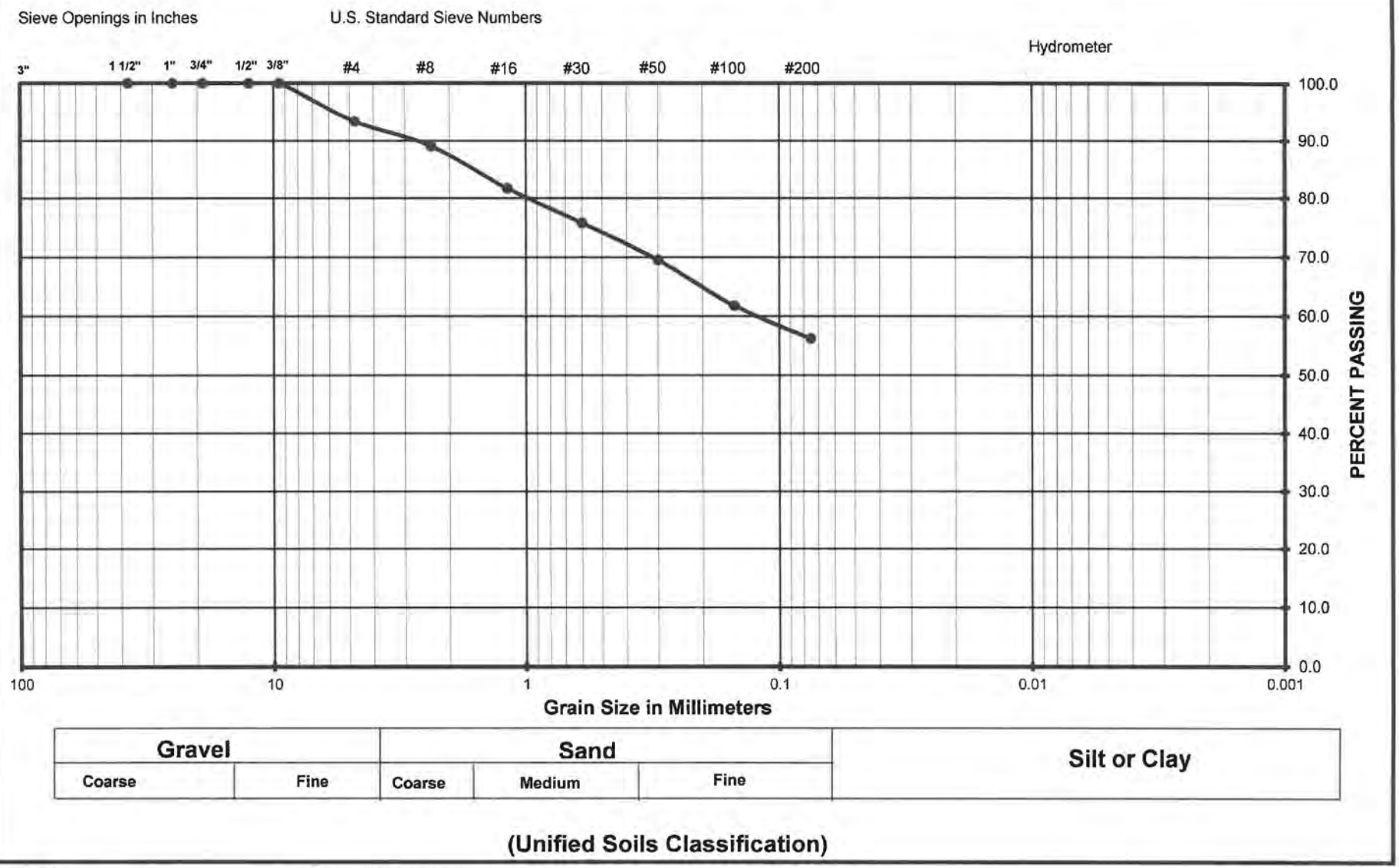
Grain Size Analysis



Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SM w/ grvl
Sample Number	B1 @ 30-31'

Krazan Testing Laboratory

Grain Size Analysis



Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	CL w/ grvl
Sample Number	B1 @ 35-36'

Krazan Testing Laboratory

Grain Size Analysis

Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SC w/ grvl
Sample Number	B1 @ 40-41'

Krazan Testing Laboratory

Grain Size Analysis

(Unified Soils Classification)

Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SC w/ grvl
Sample Number	B2 @ 2-3'

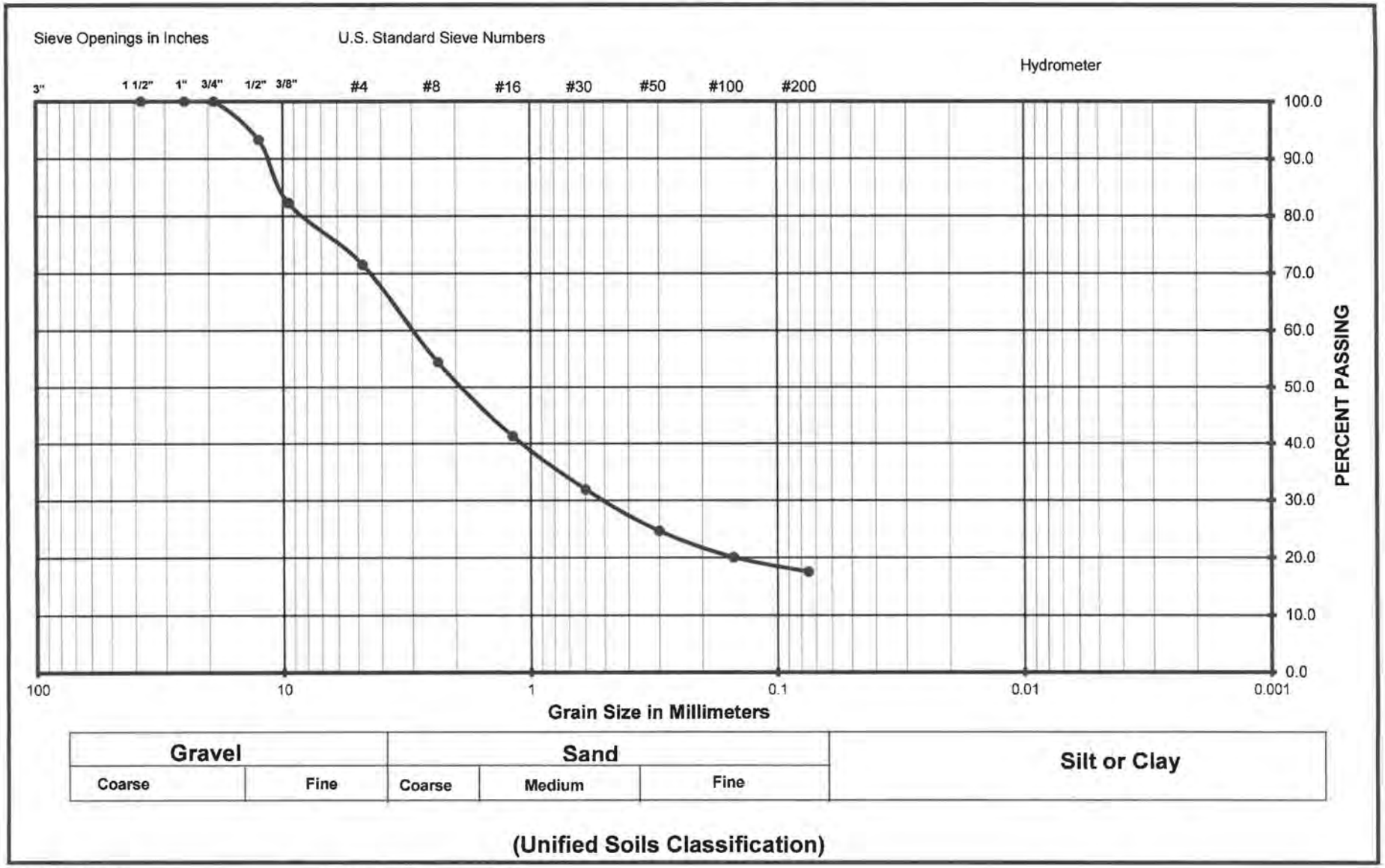
Krazan Testing Laboratory

Grain Size Analysis

Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SC w/ grvl
Sample Number	B4 @ 10-11'

Krazan Testing Laboratory

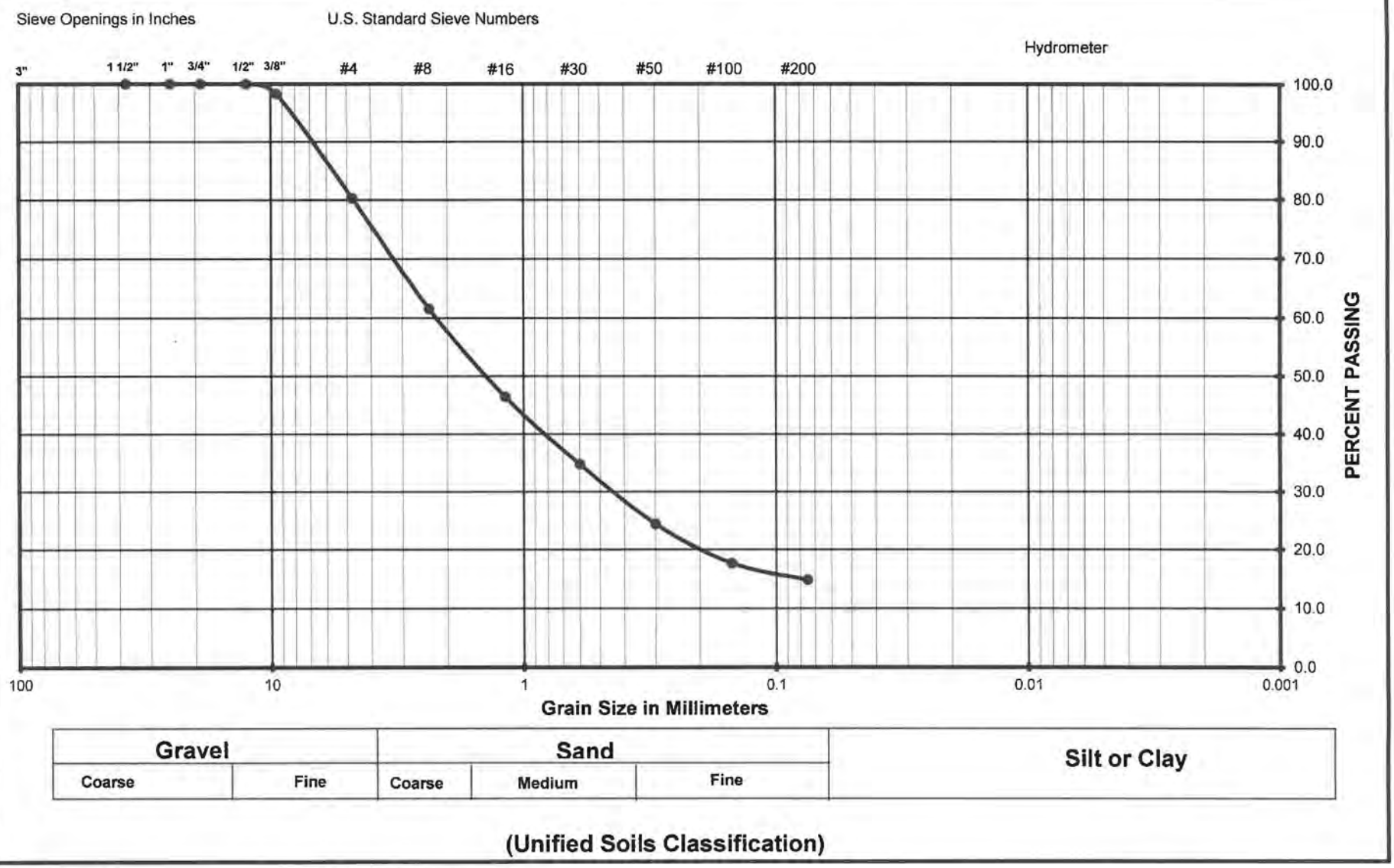
Grain Size Analysis



Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SC w/ grvl
Sample Number	B4 @ 15-16'

Krazan Testing Laboratory

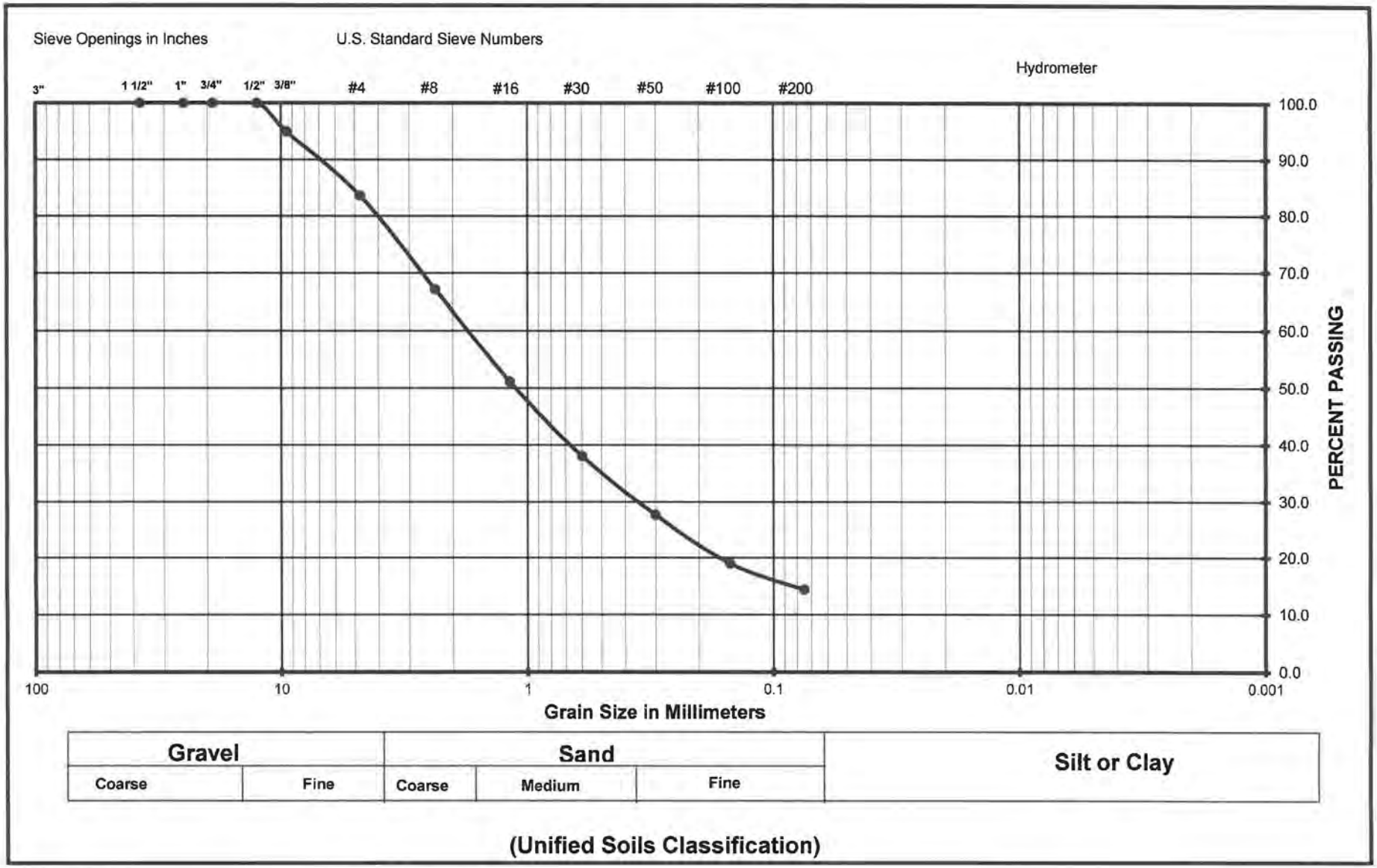
Grain Size Analysis



Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SM w/ grvl
Sample Number	B4 @ 20-21'

Krazan Testing Laboratory

Grain Size Analysis



Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SM w/ grvl
Sample Number	B4 @ 25-26'

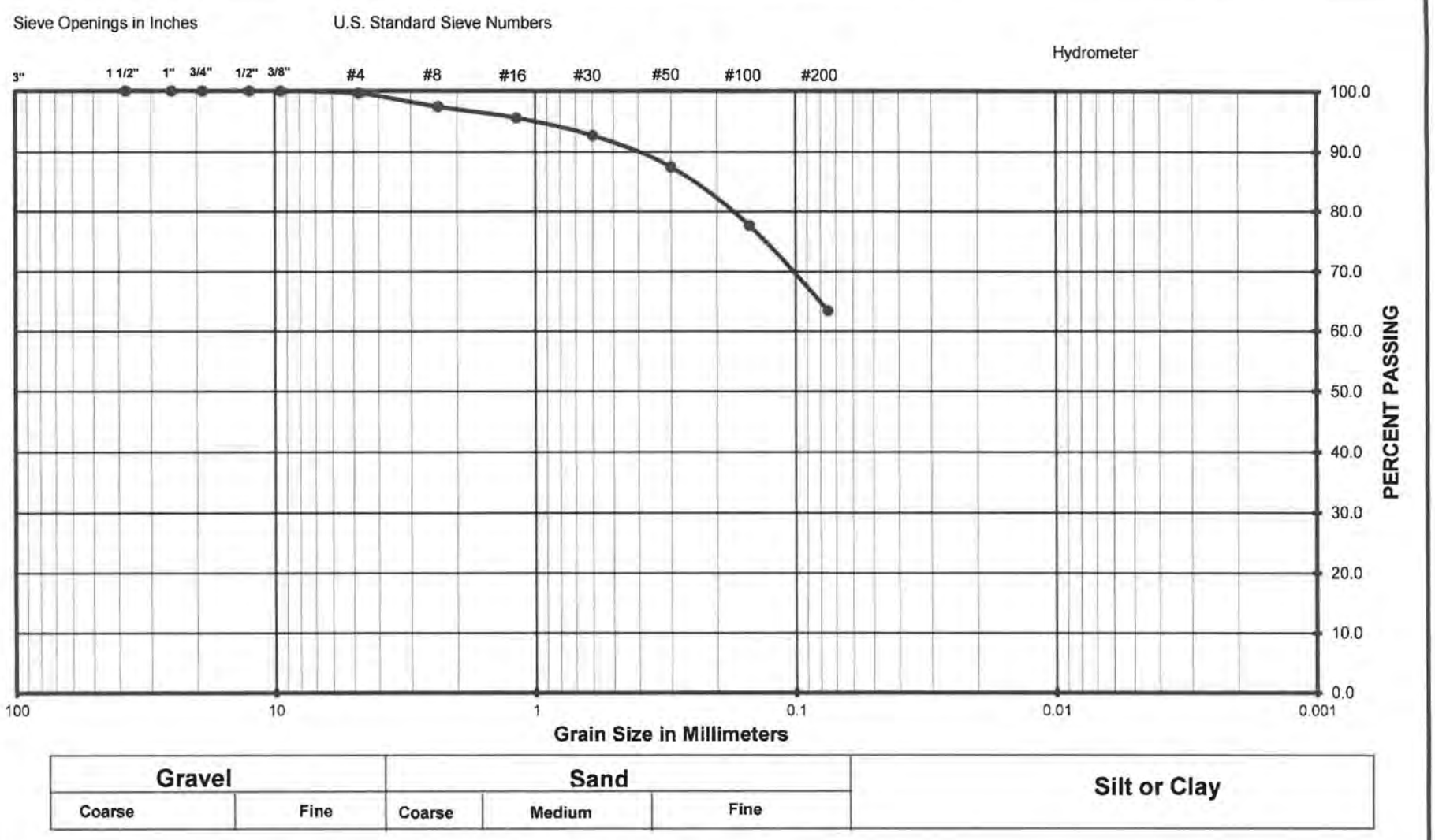
Krazan Testing Laboratory

Grain Size Analysis

Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SC w/ grvl
Sample Number	B4 @ 30-31'

Krazan Testing Laboratory

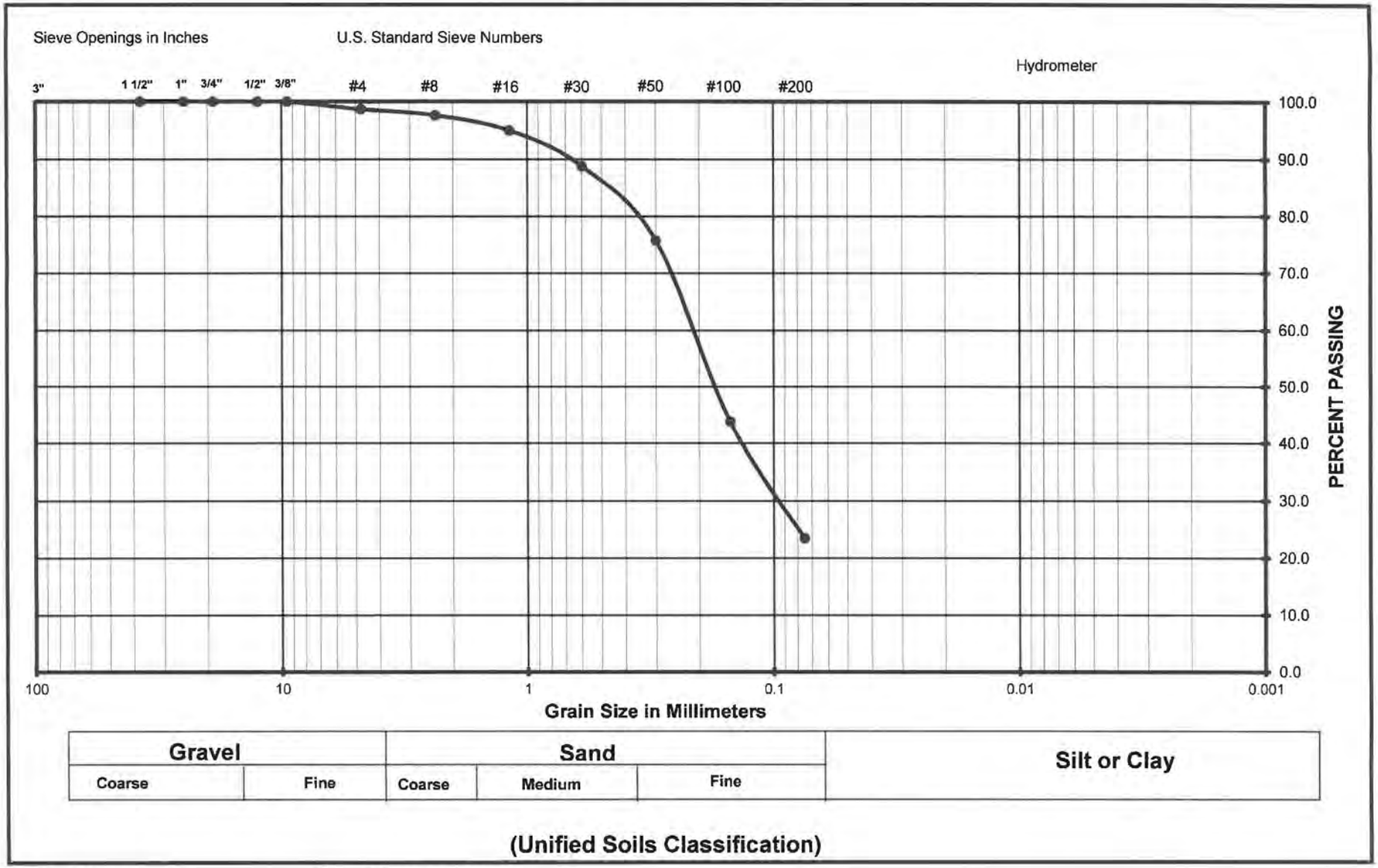
Grain Size Analysis



Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	CL
Sample Number	B4 @ 35-36'

Krazan Testing Laboratory

Grain Size Analysis



(Unified Soils Classification)

Project Name	Distel Circle Apartments
Project Number	042-21020
Soil Classification	SM
Sample Number	B4 @ 40-41'

Krazan Testing Laboratory

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

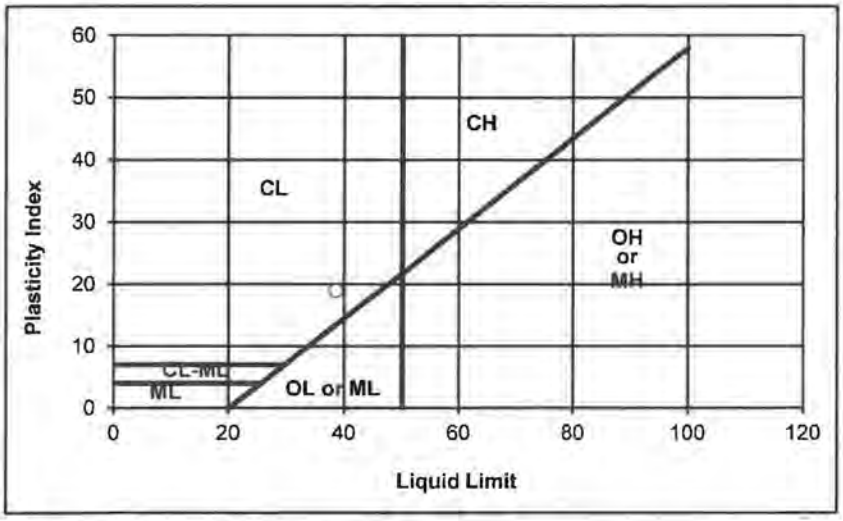
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B1 @ 10-11'
Sample Description: CL w/ grvl

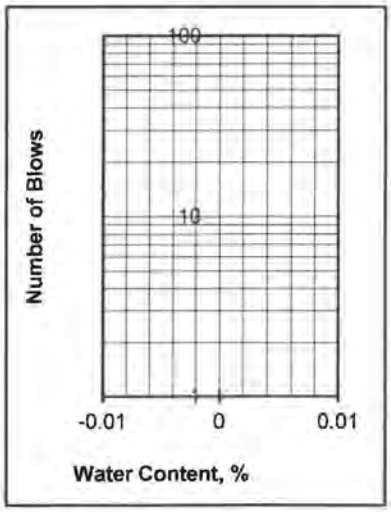
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	20.87	26.08		24.65	28.02	
Weight of Dry Soil & Tare (g)	19.41	24.59		21.23	25.13	
Weight of Tare (g)	12.31	17.06		12.60	17.43	
Weight of water (g)	1.46	1.49		3.42	2.90	
Weight of Dry Soil (g)	7.10	7.53		8.63	7.70	
Water Content (% of dry wt.)	20.6%	19.8%		39.6%	37.6%	
Number of Blows				22	28	

Plastic Limit : 20 **Liquid Limit : 39**

Plasticity Index : 19
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

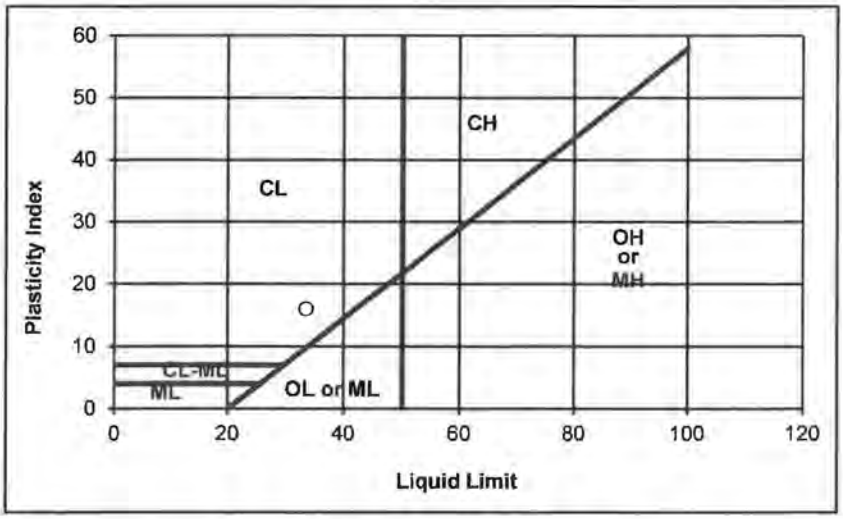
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B1 @ 15-16'
Sample Description: CL

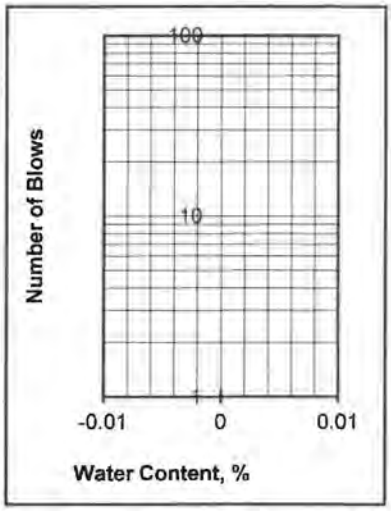
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	26.57	21.25		25.72	24.06	
Weight of Dry Soil & Tare (g)	25.17	19.87		23.49	21.05	
Weight of Tare (g)	17.50	12.36		16.75	12.20	
Weight of water (g)	1.39	1.39		2.23	3.01	
Weight of Dry Soil (g)	7.67	7.51		6.74	8.85	
Water Content (% of dry wt.)	18.1%	18.5%		33.0%	34.0%	
Number of Blows				25	25	

Plastic Limit : 18 **Liquid Limit : 34**

Plasticity Index : 16
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

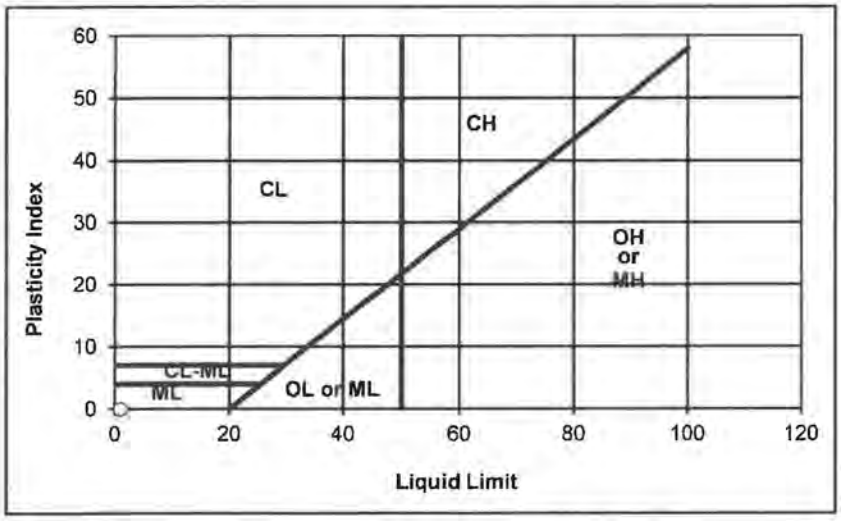
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B1 @ 20-21'
Sample Description: SM w/ grvl

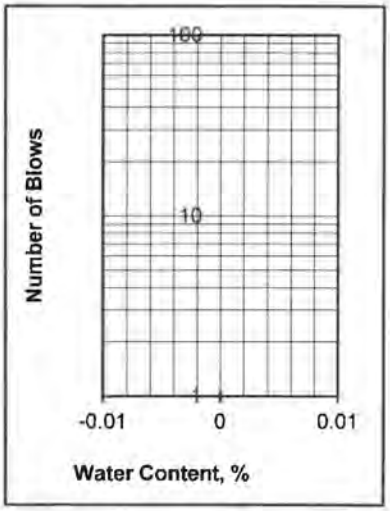
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)						
Weight of Dry Soil & Tare (g)						
Weight of Tare (g)						
Weight of water (g)						
Weight of Dry Soil (g)						
Water Content (% of dry wt.)						
Number of Blows						

Plastic Limit : N/D **Liquid Limit : N/D**

Plasticity Index : NON-PLASTIC
Unified Soil Classification : NON-PLASTIC **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

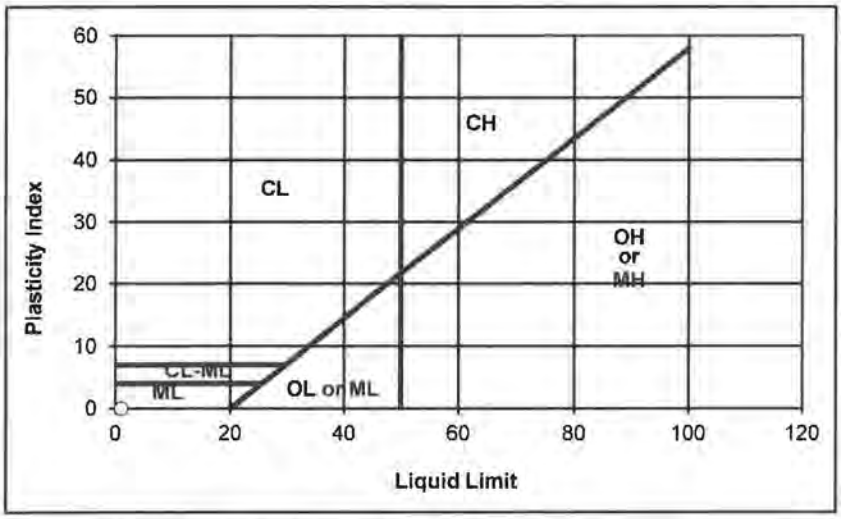
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B1 @ 25-26'
Sample Description: SM w/ grvl

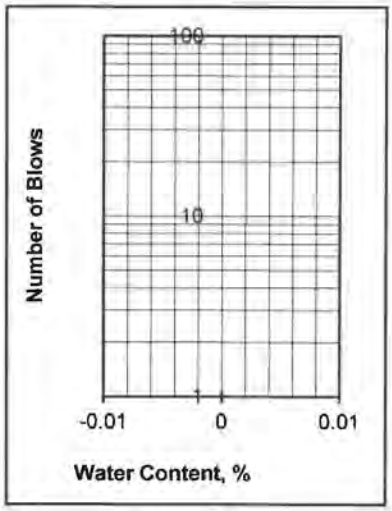
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)						
Weight of Dry Soil & Tare (g)						
Weight of Tare (g)						
Weight of water (g)						
Weight of Dry Soil (g)						
Water Content (% of dry wt.)						
Number of Blows						

Plastic Limit : N/D **Liquid Limit : N/D**

Plasticity Index : NON-PLASTIC
Unified Soil Classification : NON-PLASTIC **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

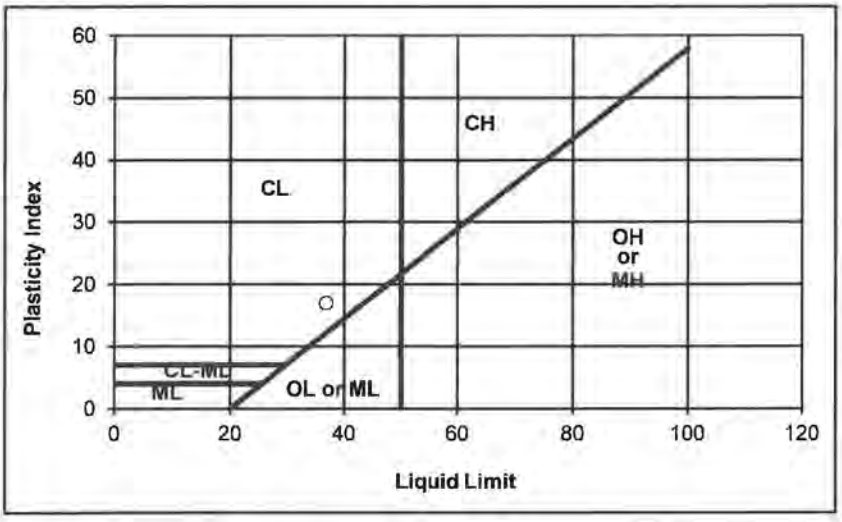
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B1 @ 35-36'
Sample Description: CL w/ grvl

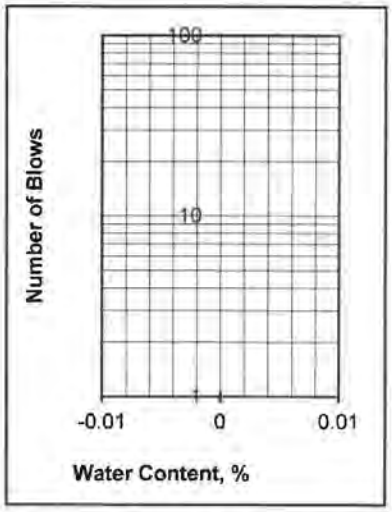
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	24.84	25.64		28.52	21.48	
Weight of Dry Soil & Tare (g)	23.56	24.26		25.42	19.10	
Weight of Tare (g)	17.05	17.39		17.12	12.56	
Weight of water (g)	1.28	1.38		3.10	2.38	
Weight of Dry Soil (g)	6.51	6.87		8.30	6.55	
Water Content (% of dry wt.)	19.7%	20.0%		37.3%	36.3%	
Number of Blows				25	25	

Plastic Limit : 20 **Liquid Limit : 37**

Plasticity Index : 17
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

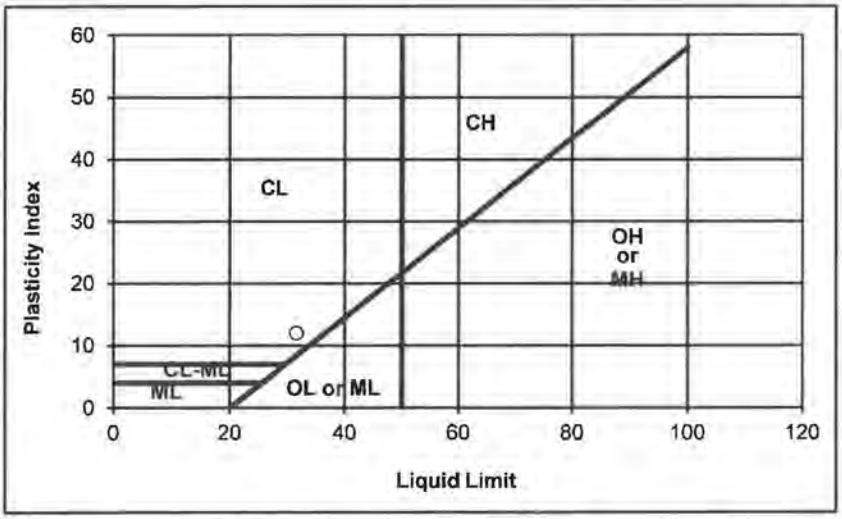
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B1 @ 40-41'
Sample Description: SC w/ grvl

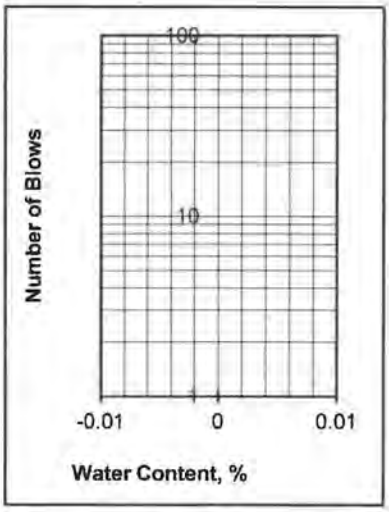
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	32.10	30.41		28.59	27.93	
Weight of Dry Soil & Tare (g)	29.57	28.16		25.91	24.23	
Weight of Tare (g)	17.12	17.03		17.38	12.56	
Weight of water (g)	2.53	2.25		2.69	3.70	
Weight of Dry Soil (g)	12.45	11.13		8.52	11.67	
Water Content (% of dry wt.)	20.3%	20.2%		31.5%	31.7%	
Number of Blows				25	25	

Plastic Limit : 20 **Liquid Limit : 32**

Plasticity Index : 12
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

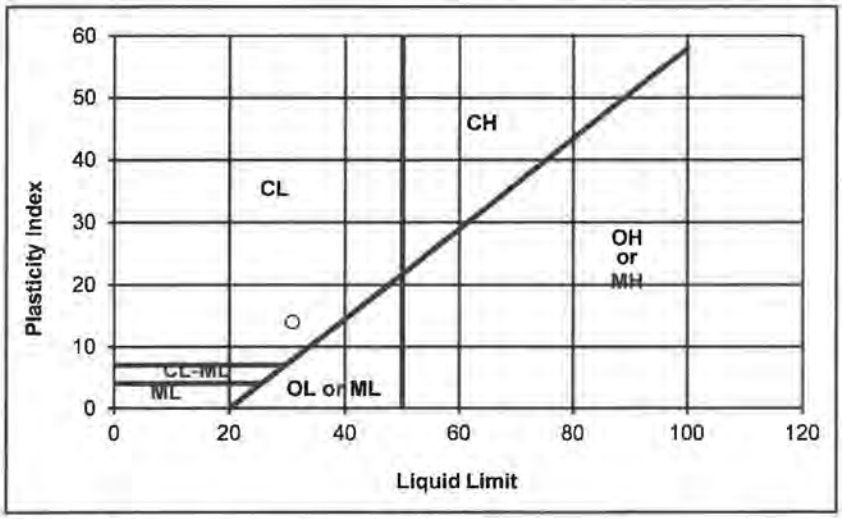
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B4 @ 10-11'
Sample Description: SC w/ grvl

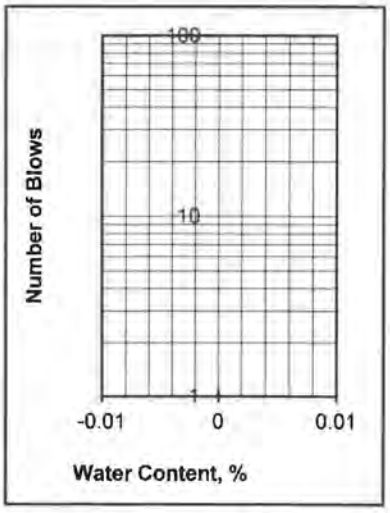
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	27.48	24.16		25.14	29.29	
Weight of Dry Soil & Tare (g)	25.57	22.60		22.37	25.51	
Weight of Tare (g)	14.08	13.35		13.43	13.23	
Weight of water (g)	1.91	1.56		2.77	3.79	
Weight of Dry Soil (g)	11.49	9.25		8.94	12.27	
Water Content (% of dry wt.)	16.6%	16.9%		31.0%	30.8%	
Number of Blows				25	25	

Plastic Limit : 17 **Liquid Limit : 31**

Plasticity Index : 14
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

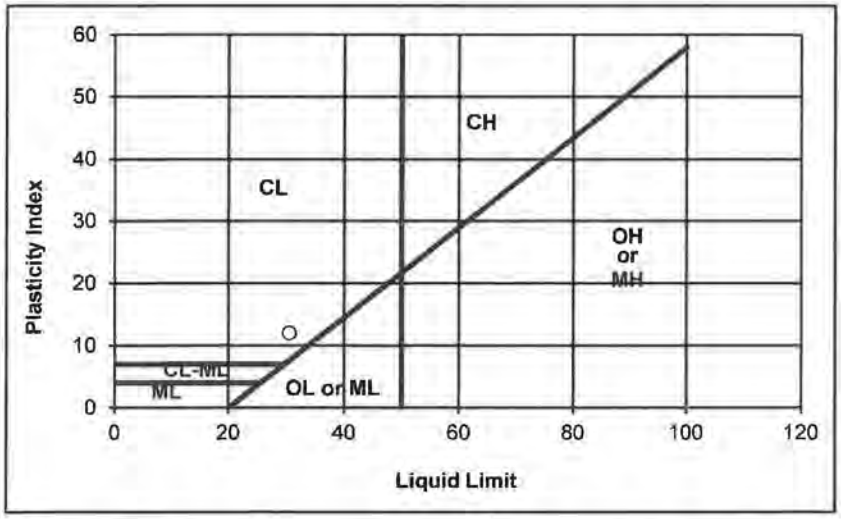
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B4 @ 15-16'
Sample Description: SC w/ grvl

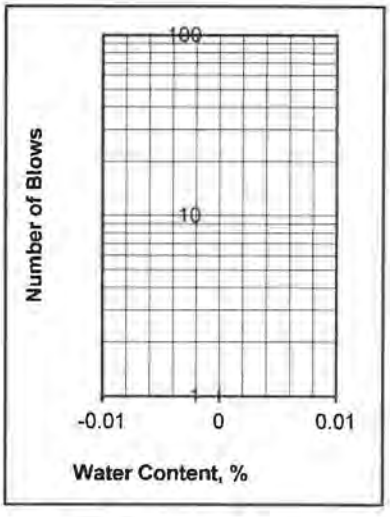
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	24.03	27.70		23.64	29.06	
Weight of Dry Soil & Tare (g)	23.00	26.01		21.26	26.38	
Weight of Tare (g)	17.48	17.06		13.61	17.40	
Weight of water (g)	1.02	1.69		2.39	2.68	
Weight of Dry Soil (g)	5.53	8.95		7.64	8.98	
Water Content (% of dry wt.)	18.5%	18.9%		31.3%	29.8%	
Number of Blows				22	28	

Plastic Limit : 19 **Liquid Limit : 31**

Plasticity Index : 12
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

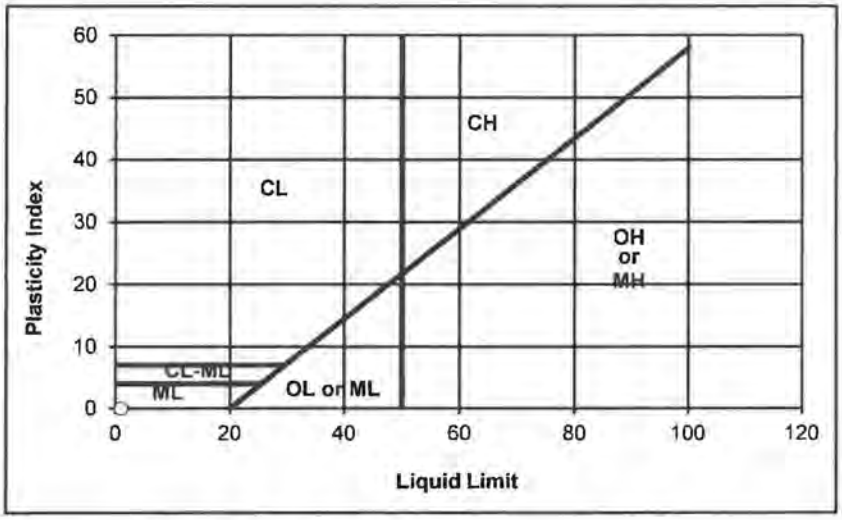
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B4 @ 20-21'
Sample Description: SM w/ grvl

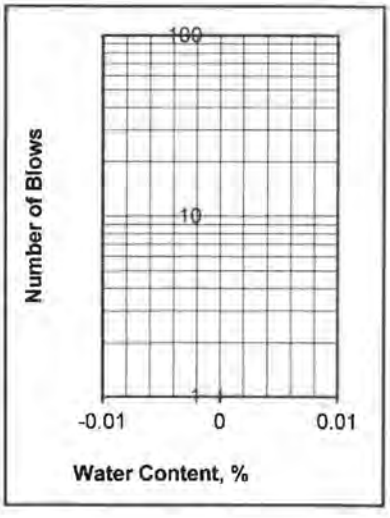
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)						
Weight of Dry Soil & Tare (g)						
Weight of Tare (g)						
Weight of water (g)						
Weight of Dry Soil (g)						
Water Content (% of dry wt.)						
Number of Blows						

Plastic Limit : N/D **Liquid Limit : N/D**

Plasticity Index : NON-PLASTIC
Unified Soil Classification : NON-PLASTIC **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

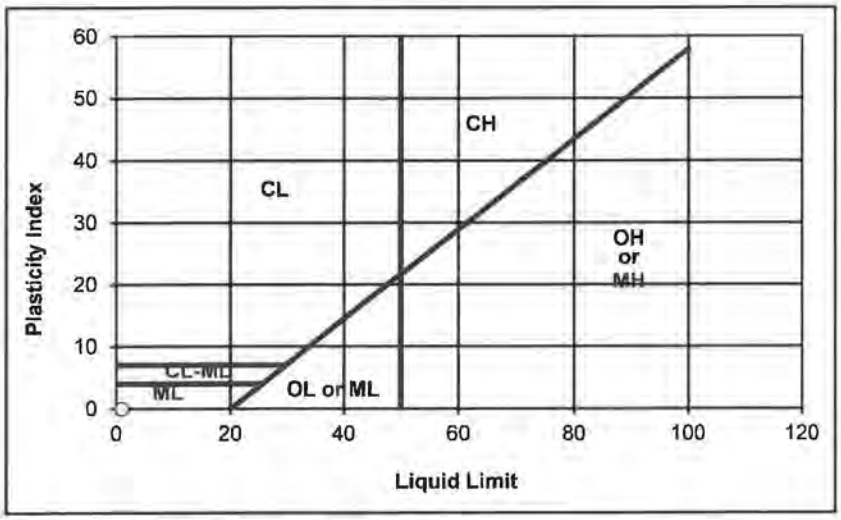
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B4 @ 25-26'
Sample Description: SM w/ grvl

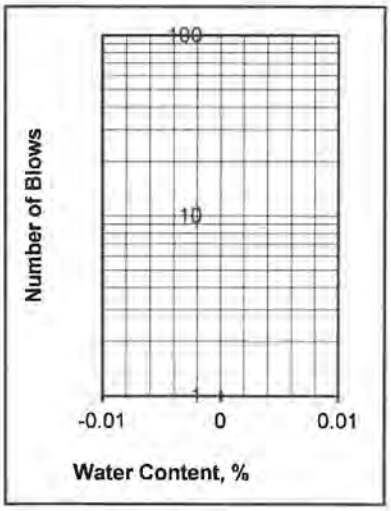
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)						
Weight of Dry Soil & Tare (g)						
Weight of Tare (g)						
Weight of water (g)						
Weight of Dry Soil (g)						
Water Content (% of dry wt.)						
Number of Blows						

Plastic Limit : N/D **Liquid Limit : N/D**

Plasticity Index : NON-PLASTIC
Unified Soil Classification : NON-PLASTIC **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

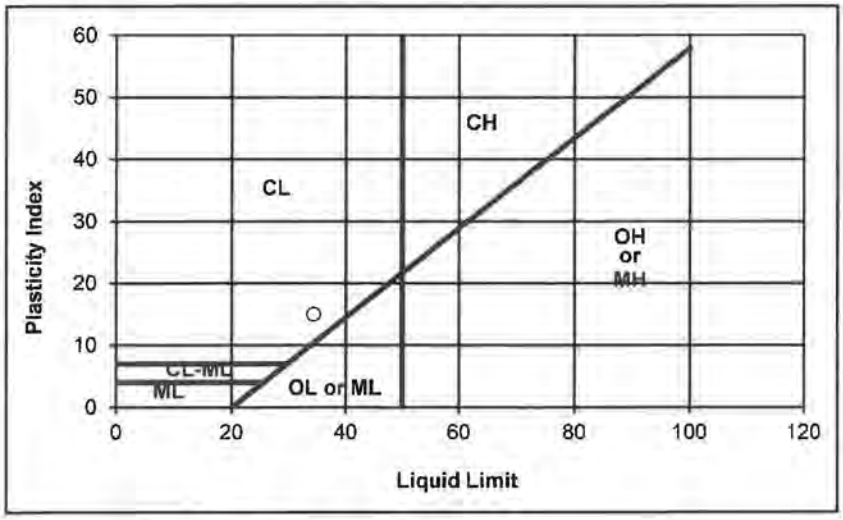
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B4 @ 30-31'
Sample Description: SC w/ grvl

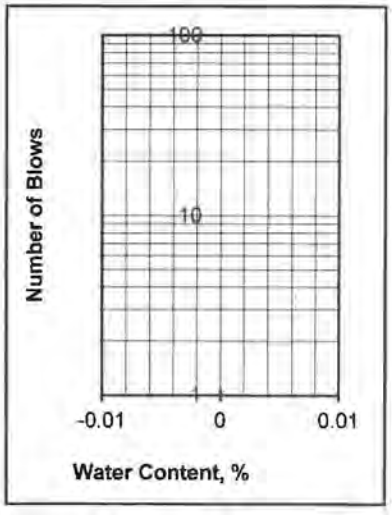
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	29.06	28.65		24.31	28.93	
Weight of Dry Soil & Tare (g)	27.23	26.84		21.57	25.98	
Weight of Tare (g)	17.47	17.06		13.59	17.40	
Weight of water (g)	1.83	1.80		2.74	2.95	
Weight of Dry Soil (g)	9.76	9.79		7.98	8.58	
Water Content (% of dry wt.)	18.7%	18.4%		34.3%	34.4%	
Number of Blows				25	25	

Plastic Limit : 19 **Liquid Limit : 34**

Plasticity Index : 15
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

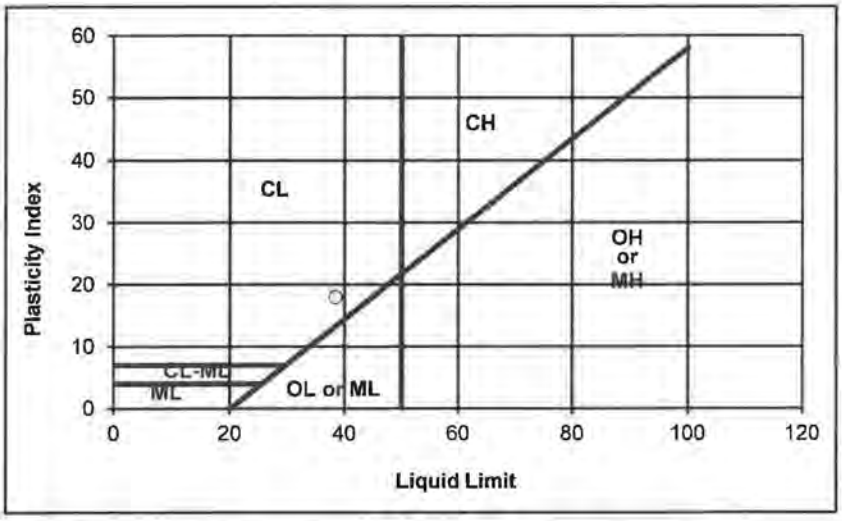
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B4 @ 35-36'
Sample Description: CL

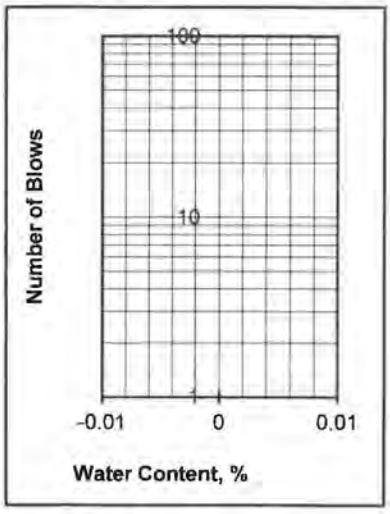
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	21.71	30.09		27.62	28.88	
Weight of Dry Soil & Tare (g)	20.16	27.94		23.43	25.71	
Weight of Tare (g)	12.30	17.07		12.55	17.43	
Weight of water (g)	1.55	2.16		4.19	3.17	
Weight of Dry Soil (g)	7.86	10.86		10.88	8.28	
Water Content (% of dry wt.)	19.8%	19.9%		38.5%	38.3%	
Number of Blows				25	25	

Plastic Limit : 20 **Liquid Limit : 38**

Plasticity Index : 18
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

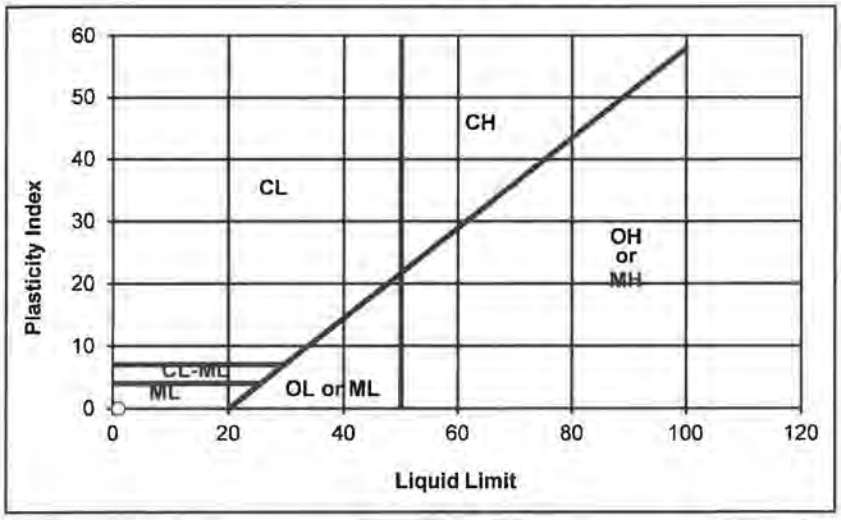
Project: **Distel Circle Apartments**
Project Number: **042-21020**
Date Sampled: 8/4/2021
Sampled By: CJ
Sample Number:
Sample Location: B4 @ 40-41'
Sample Description: SM

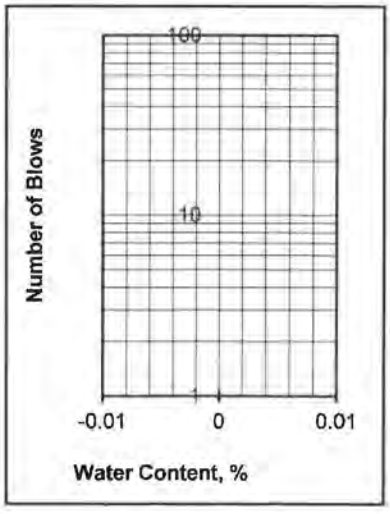
Date Tested: 8/26/2021
Tested By: JM
Verified By: JG

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)						
Weight of Dry Soil & Tare (g)						
Weight of Tare (g)						
Weight of water (g)						
Weight of Dry Soil (g)						
Water Content (% of dry wt.)						
Number of Blows						

Plastic Limit : N/D **Liquid Limit : N/D**

Plasticity Index : NON-PLASTIC
Unified Soil Classification : NON-PLASTIC **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

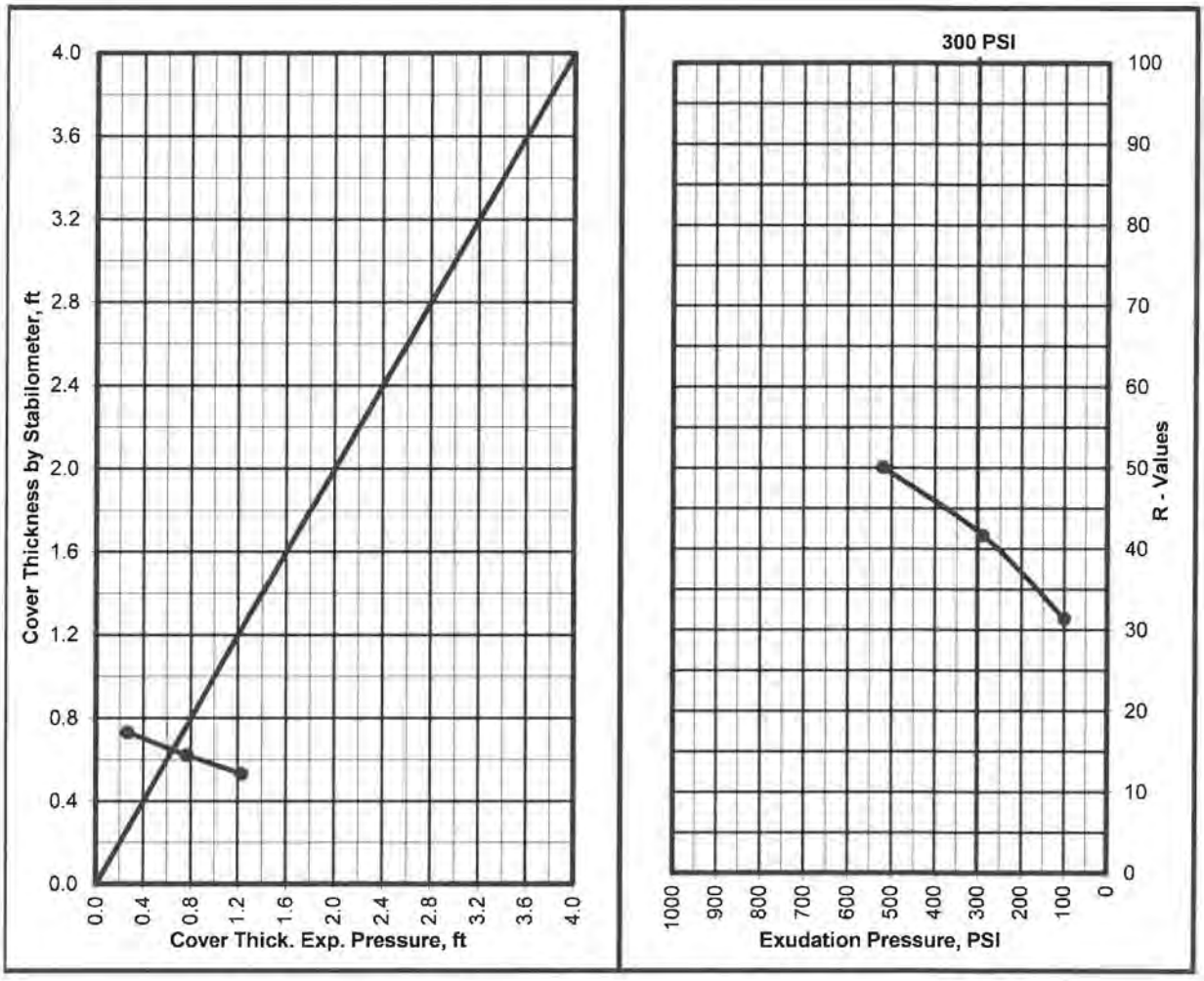
Unusual Conditions, Other Notes:

R - VALUE TEST
ASTM D - 2844 / CAL 301

Project Number	:	042-21020
Project Name	:	Distel Circle Apartments
Date	:	8/27/2021
Sample Location/Curve Number	:	RV#1
Soil Classification	:	SC w/ gravel

TEST	A	B	C
Percent Moisture @ Compaction, %	10.3	9.8	10.7
Dry Density, lbm/cu.ft.	133.9	134.5	132.2
Exudation Pressure, psi	290	520	100
Expansion Pressure, (Dial Reading)	23	37	8
Expansion Pressure, psf	100	160	35
Resistance Value R	42	50	31

R Value by Expansion Pressure (TI =): 5	**41**
R Value at 300 PSI Exudation Pressure	**42**



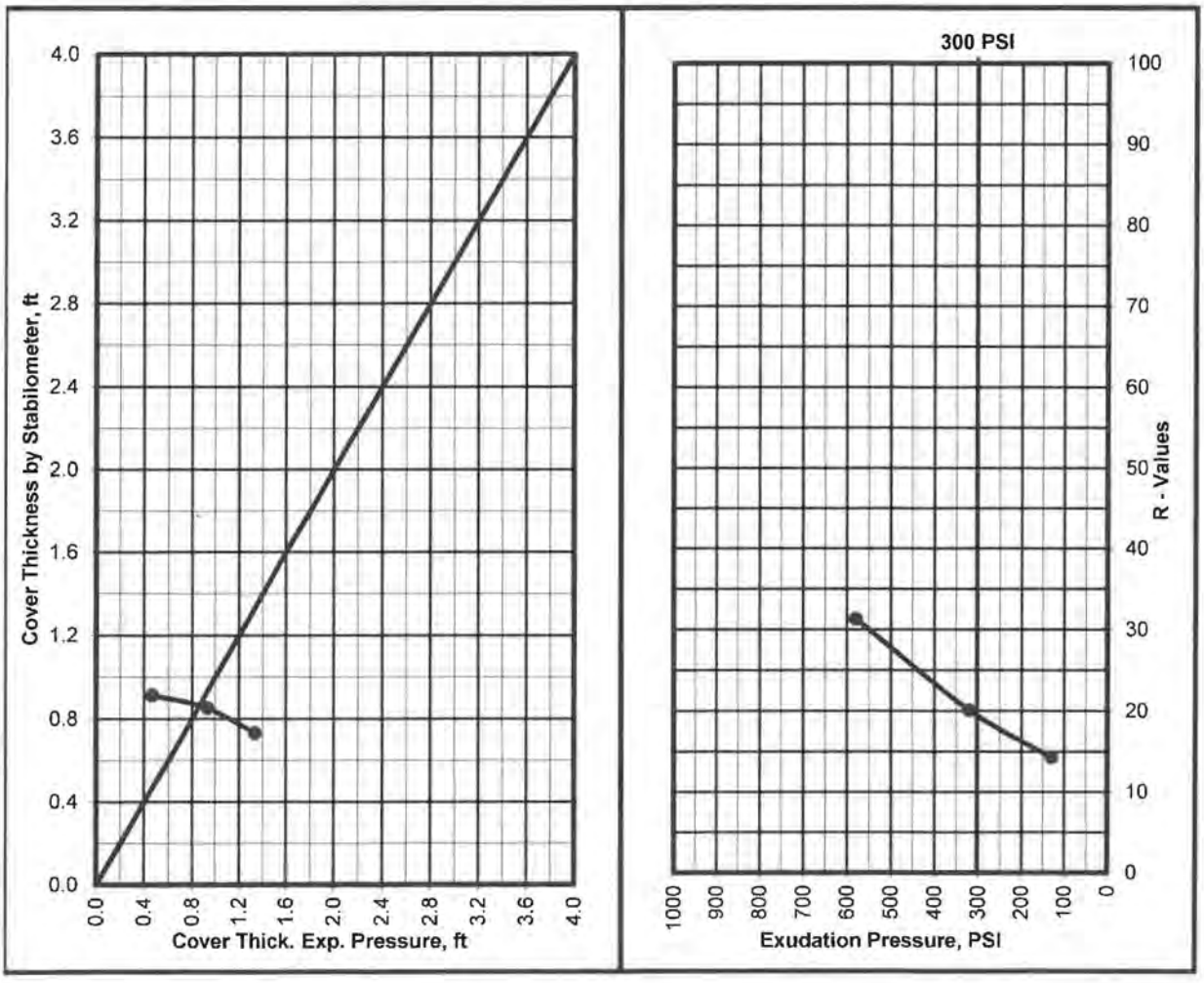
Krazan Testing Laboratory

R - VALUE TEST
ASTM D - 2844 / CAL 301

Project Number	:	042-21020
Project Name	:	Distel Circle Apartments
Date	:	8/27/2021
Sample Location/Curve Number	:	RV#2
Soil Classification	:	SC

TEST	A	B	C
Percent Moisture @ Compaction, %	14.0	14.9	14.4
Dry Density, lbm/cu.ft.	124.7	123.1	124.1
Exudation Pressure, psi	580	130	320
Expansion Pressure, (Dial Reading)	40	14	28
Expansion Pressure, psf	173	61	121
Resistance Value R	31	14	20

R Value at 300 PSI Exudation Pressure	**20**
R Value by Expansion Pressure (TI =): 5	**23**



APPENDIX B

EARTHWORK SPECIFICATIONS

GENERAL

When the text of the report conflicts with the general specifications in this appendix, the recommendations in the report have precedence.

SCOPE OF WORK: These specifications and applicable plans pertain to and include all earthwork associated with the site rough grading, including but not limited to the furnishing of all labor, tools, and equipment necessary for site clearing and grubbing, stripping, preparation of foundation materials for receiving fill, excavation, processing, placement and compaction of fill and backfill materials to the lines and grades shown on the project grading plans, and disposal of excess materials.

PERFORMANCE: The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications. This work shall be inspected and tested by a representative of Krazan and Associates, Inc., hereinafter known as the Soils Engineer and/or Testing Agency. Attainment of design grades when achieved shall be certified by the project Civil Engineer. Both the Soils Engineer and the Civil Engineer are the Owner's representatives. If the Contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, he shall make the necessary readjustments until all work is deemed satisfactory as determined by both the Soils Engineer and the Civil Engineer. No deviation from these specifications shall be made except upon written approval of the Soils Engineer, Civil Engineer or project Architect.

No earthwork shall be performed without the physical presence or approval of the Soils Engineer. The Contractor shall notify the Soils Engineer at least 2 working days prior to the commencement of any aspect of the site earthwork.

The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineers harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of the Owner or the Engineers.

TECHNICAL REQUIREMENTS: All compacted materials shall be densified to a density not less than 90 percent relative compaction based on ASTM Test Method D1557 or CAL-216, as specified in the technical portion of the Soil Engineer's report. The location and frequency of field density tests shall be as determined by the Soils Engineer. The results of these tests and compliance with these specifications shall be the basis upon which satisfactory completion of work will be judged by the Soils Engineer.

SOILS AND FOUNDATION CONDITIONS: The Contractor is presumed to have visited the site and to have familiarized himself with existing site conditions and the contents of the data presented in the soil report.

The Contractor shall make his own interpretation of the data contained in said report, and the Contractor shall not be relieved of liability under the Contract documents for any loss sustained as a result of any variance between conditions indicated by or deduced from said report and the actual conditions encountered during the progress of the work.

DUST CONTROL: The work includes dust control as required for the alleviation or prevention of any dust nuisance on or about the site or the borrow area, or off-site if caused by the Contractor's operation either during the performance of the earthwork or resulting from the conditions in which the Contractor leaves the site. The Contractor shall assume all liability, including court costs of codefendants, for all claims related to dust or windblown materials attributable to his work.

SITE PREPARATION

Site preparation shall consist of site clearing and grubbing and the preparations of foundation materials for receiving fill.

CLEARING AND GRUBBING: The Contractor shall accept the site in this present condition and shall demolish and/or remove from the area of designated project earthwork all structures, both surface and subsurface, trees, brush, roots, debris, organic matter, and all other matter determined by the Soils Engineer to be deleterious or otherwise unsuitable. Such materials shall become the property of the Contractor and shall be removed from the site.

Tree root systems in proposed building areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots larger than 1 inch. Tree roots removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill of tree root excavations should not be permitted until all exposed surfaces have been inspected and the Soils Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

SUBGRADE PREPARATION: Surfaces to receive Engineered Fill, building or slab loads shall be prepared as outlined above, excavated/scarified to a depth of 12 inches, moisture-conditioned as necessary, and compacted to 90 percent relative compaction.

Loose soil areas, areas of uncertified fill, and/or areas of disturbed soils shall be moisture-conditioned as necessary and recompacted to 90 percent relative compaction. All ruts, hummocks, or other uneven surface features shall be removed by surface grading prior to placement of any fill materials. All areas which are to receive fill materials shall be approved by the Soils Engineer prior to the placement of any of the fill material.

EXCAVATION: All excavation shall be accomplished to the tolerance normally defined by the Civil Engineer as shown on the project grading plans. All over-excavation below the grades specified shall be backfilled at the Contractor's expense and shall be compacted in accordance with the applicable technical requirements.

FILL AND BACKFILL MATERIAL: No material shall be moved or compacted without the presence of the Soils Engineer. Material from the required site excavation may be utilized for construction site fills provided prior approval is given by the Soils Engineer. All materials utilized for constructing site fills shall be free from vegetation or other deleterious matter as determined by the Soils Engineer.

PLACEMENT, SPREADING AND COMPACTION: The placement and spreading of approved fill materials and the processing and compaction of approved fill and native materials shall be the responsibility of the Contractor. However, compaction of fill materials by flooding, ponding, or jetting shall not be permitted unless specifically approved by local code, as well as the Soils Engineer.

Both cut and fill areas shall be surface-compacted to the satisfaction of the Soils Engineer prior to final acceptance.

SEASONAL LIMITS: No fill material shall be placed, spread, or rolled while it is frozen or thawing or during unfavorable wet weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until the Soils Engineer indicates that the moisture content and density of previously placed fill are as specified.

APPENDIX C

PAVEMENT SPECIFICATIONS

1. **DEFINITIONS** - The term "pavement" shall include asphaltic concrete surfacing, untreated aggregate base, and aggregate subbase. The term "subgrade" is that portion of the area on which surfacing, base, or subbase is to be placed.

The term "Standard Specifications": hereinafter referred to is the 2018 Standard Specifications of the State of California, Department of Transportation, and the "Materials Manual" is the Materials Manual of Testing and Control Procedures, State of California, Department of Public Works, Division of Highways. The term "relative compaction" refers to the field density expressed as a percentage of the maximum laboratory density as defined in the applicable tests outlined in the Materials Manual.

2. **SCOPE OF WORK** - This portion of the work shall include all labor, materials, tools, and equipment necessary for, and reasonably incidental to the completion of the pavement shown on the plans and as herein specified, except work specifically noted as "Work Not Included."

3. **PREPARATION OF THE SUBGRADE** - The Contractor shall prepare the surface of the various subgrades receiving subsequent pavement courses to the lines, grades, and dimensions given on the plans. The upper 12 inches of the soil subgrade beneath the pavement section shall be compacted to a minimum relative compaction of 90 percent. The finished subgrades shall be tested and approved by the Soils Engineer prior to the placement of additional pavement courses.

4. **UNTREATED AGGREGATE BASE** - The aggregate base material shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate base material shall conform to the requirements of Section 26 of the Standard Specifications for Class 2 material, 1½ inches maximum size. The aggregate base material shall be spread and compacted in accordance with Section 26 of the Standard Specifications. The aggregate base material shall be spread in layers not exceeding 6 inches and each layer of aggregate material course shall be tested and approved by the Soils Engineer prior to the placement of successive layers. The aggregate base material shall be compacted to a minimum relative compaction of 95 percent.

5. **AGGREGATE SUBBASE** - The aggregate subbase shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate subbase material shall conform to the requirements of Section 25 of the Standard Specifications for Class 2 material. The aggregate subbase material shall be compacted to a minimum relative compaction of 95 percent, and it shall be spread and compacted in accordance with Section 25 of the Standard Specifications. Each layer of aggregate subbase shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

6. ASPHALTIC CONCRETE SURFACING - Asphaltic concrete surfacing shall consist of a mixture of mineral aggregate and paving grade asphalt, mixed at a central mixing plant and spread and compacted on a prepared base in conformity with the lines, grades and dimensions shown on the plans. The viscosity grade of the asphalt shall be PG 64-10. The mineral aggregate shall be Type B, ½ inch maximum size, medium grading and shall conform to the requirements set forth in Section 39. The drying, proportioning and mixing of the materials shall conform to Section 39.

The prime coat, spreading and compacting equipment and spreading and compacting mixture shall conform to the applicable chapters of Section 39, with the exception that no surface course shall be placed when the atmospheric temperature is below 50° F. The surfacing shall be rolled with a combination of steel wheel and pneumatic rollers, as described in Section 39-6. The surface course shall be placed with an approved self-propelled mechanical spreading and finishing machine.

7. FOG SEAL COAT - The fog seal (mixing type asphaltic emulsion) shall conform to and be applied in accordance with the requirements of Section 37.

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

FOR:

330 DISTEL CIRCLE

LOS ALTOS, CALIFORNIA

Prepared For:

Mr. Steve Pratt
EAH Inc
22 Pelican Way
San Rafael, CA 94901

Prepared By:

PIERS Environmental Services, Inc.
1038 Redwood Highway, Suite 100A
Mill Valley, CA 94941

AUGUST 2021

PIERS PROJECT NO. 21215

PIERS Environmental Services
TEL:415-388-7900
FAX: 415-388-7909
WWW.PIERSES.COM

August 30, 2021

Mr. Steve Pratt
EAH Inc.
22 Pelican Way
San Rafael, CA 94901

RE: PHASE I ENVIRONMENTAL SITE ASSESSMENT
330 DISTEL CIRCLE, LOS ALTOS, CA

Dear Mr. Pratt:

PIERS Environmental Services, Inc. is pleased to provide you with the attached Phase I Environmental Site Assessment (Phase I ESA) for the above referenced subject site (hereafter referred to as the "Property"). This Phase I ESA conforms to the scope and limitations of the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

The work performed for this project included a professional site reconnaissance; interviews with owners, operators and occupants; and detailed research of regulatory agency files, aerial photographs, historical maps, and a review of the regulatory environmental database listings for the Property and surrounding area.

Should you have any questions or concerns regarding this report please do not hesitate in contacting either of us.

PIERS Environmental Services

Donal Manning
CEO
Environmental Professional

Norma K. Pannell
Senior Project Manager
REPA #100002

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Figure 2 - Property Site Plan

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Appendix A - Property Photographs

Appendix B - Regulatory Records Documentation

Appendix C - PIERS Identified Hazardous Materials Sites Radius Report

Appendix D - Historical Research Documentation

Appendix E - Interview Documentation

Appendix F - Qualifications of Environmental Professional(s)

EXECUTIVE SUMMARY

The Property is located on the northwest side of Distel Circle, southwest of the intersection with El Camino Real, in the City of Los Altos, Santa Clara County, California. The Property consists of a rectangular-shaped parcel of approximately 36,450 square feet in size, which is improved with a one-story commercial office building, approximately 12,120 square feet in size, with associated asphalt paved parking and areas of maintained landscaping. According to the Property profile, the building was constructed in 1975. The Property is legally described as Assessor's Parcel Number 51 of Assessor's Map Book 170, Page 4 (APN 170-04-051).

The subject Property is occupied by Midpensinula Regional Open Space District. The Property is located in an area comprised of commercial usage southwest of El Camino Real, with commercial usage on adjoining streets. The Property and vicinity slope gently towards the northeast. None of the adjacent properties are considered to be of significant environmental concern to the Property.

On August 19, 2021, PIERS conducted a visual reconnaissance of the Property. PIERS inspected all exterior areas of the Property but did not enter any residences due to current environmental concerns (Covid-19) during the site reconnaissance.

The Property building occupies the western side of the parcel with other exterior areas including concrete paved walkways, a patio, asphalt paved parking on the eastern portion and areas of maintained landscaping.

The interior of the Property building includes offices, a lobby, kitchen, meeting rooms, storage rooms and bathrooms.

No hazardous materials or other chemicals were observed at the Property except for cleaning supplies and paints observed a storage room. All of these materials were observed to be stored correctly, and there was no evidence of any improper storage, usage, or disposal of hazardous materials or other chemicals.

No evidence of water supply, irrigation, oil, injection, or dry wells was observed on the Property. No storage tanks were observed at the Property. No stained soil was observed. No significant staining was observed on the exterior paved surfaces.

No drains, sumps or clarifiers were observed.

Building department records included various permits related to the interior remodel work, re-roofing, and a fire hydrant replacement in the sidewalk. No other local agency files were found.

The Property is listed sixteen times on the HAZNET database in the attached IHMRR as Midpeninsula Regional Open Space District for disposal of 0.2 ton of other organic solids in 2006, 0.17 ton of unspecified oil-containing waste in 2009, and 0.005 ton of inorganic solid waste and Polychlorinated biphenyls (PCBs) in 2011; as US Army Corps of Engineers for disposal of 0.02 ton of other organic solids in 2007 and 6.25 tons of unspecified oil-containing waste in 2008; and as Almaden Air Force Station for disposal of 45.08 tons of PCBs in 2008.

The HAZNET status for Midpeninsula is inactive in 2000, 2006, 2011 and 2013; for US ACE, inactive in 2007 and 2008; and for Almaden AFS, inactive in 2009.

The adjacent parcel to the south at 370 Distel Circle, is listed on the HAZNET database as Sutter Bay Medical Foundation (active as of 2020) for the removal and disposal of pharmaceutical waste in 2019, and as Palo Alto Medical Foundation (inactive in 2016) for the disposal of photochemicals/photoprocessing waste, oxygenated solvents and asbestos containing waste from 1994 to 2004; the site does not appear to be of significant environmental concern to the Property.

The adjacent parcel to the north at 5000 W. El Camino Real is listed twice on the ERNS database for 130 gallons of mineral oil released from an electric pad mounted transformer due to external corrosion – no PCBs were released – in 2004; the release was removed by soil excavation and the equipment was repaired.

Based on historical research conducted using aerial photographs, in 1948, the Property was occupied by orchards, as is the surrounding area, except for scattered rural residences. El Camino Real bounds the Property to the northeast.

On the 1956, 1960 and 1968 aerial photographs, the Property has been cleared of orchard trees. On the 1980 and later aerial photographs, the Property appears developed with the current building and associated parking lot. The adjacent and vicinity appear largely developed from 1987 onwards. No features of obvious environmental concern were identified at the Property or vicinity on any of the aerial photographs reviewed.

The prior use of the Property for agriculture implies the use of agricultural chemicals such as fertilizers and pesticides. However, former use of agricultural chemicals is considered *de minimis* under ASTM E1527-13. Fertilizers and pesticides tend to biodegrade over time and the last likely use of agricultural chemicals was prior to the development of the Property in 1956, nearly 65 years ago. Additionally, subsurface migration of agricultural chemicals tends to be low, and surface soils were likely removed during development of the Property. Therefore, the Property's former use as an orchard is not likely to pose significant environmental risk to human health or the environment.

Based on city directory listings and local building department records, the Property was occupied by various commercial tenants from 1980 to 2017. No listings of environmental concern were identified. No other uses are known.

No sites with VOC contamination were identified within the critical distances cited in the VES guidance document. Therefore, it is unlikely that a VEC exists on or near the subject Property.

FINDINGS AND OPINIONS

This assessment has revealed no evidence of Recognized Environmental Conditions (REC), Historical Recognized Environmental Conditions (HRECs) or Controlled Recognized Environmental Conditions (CRECs) associated with the subject Property.

An **environmental issue** is defined as an environmental concern which does not qualify as a REC, but which may warrant further discussion. PIERS did not identify any environmental issues during this Phase I ESA.

CONCLUSIONS AND RECOMMENDATIONS

This Phase I ESA has revealed no evidence of Recognized Environmental Conditions (RECs) or environmental issues in connection with the subject Property or adjacent properties. PIERS recommends no further investigation of the Property at this time.

INTRODUCTION

PROPERTY

PIERS Environmental Services, Inc. (PIERS) has completed this Phase I Environmental Site Assessment (ESA) for the property located at 330 Distel Circle, in the City of Los Altos, Santa Clara County, California (cited hereafter as the Property). PIERS was retained by Mr. Steve Pratt of EAH Housing (cited hereafter as the Client) to conduct this Phase I Environmental Site Assessment for the subject Property for the purpose of compliance with the "All Appropriate Inquiries" Final Rule (40 CFR Part 312) under CERCLA (42 USC 9601). This report follows the guidelines as stated in ASTM Standard Designation E1527-13: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. This Standard complies with "All Appropriate Inquiries" (AAI) 40 CFR Part 312. Any exceptions to, or deletions from, this practice are described in the Deviations Section of this report.

PURPOSE

The purpose is to conduct a Phase I Environmental Site Assessment (Phase I ESA) on this parcel of commercial real estate at 330 Distel Circle, Los Altos, CA with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 USC 9601) and petroleum products. This practice (ASTM E1527-13) is intended to permit a *user,* (i.e. Property owner, buyer, seller, or the Client) to satisfy one of the requirements to qualify for the *innocent landowner, contiguous property owner* or *bona fide prospective purchaser* limitation on CERCLA liability (hereinafter, the *"landowner liability protections,"* or *"LLPs*") as defined under 42 USC 9601(35)(B).

The goal of the Phase I ESA is to identify ***recognized environmental conditions (RECs); historical RECs (HREC); or Controlled RECs (CREC). RECs*** are defined as the presence or likely presence of any hazardous substances or petroleum products, in, on or at a property due to release to the environment; under conditions indicative of a release to the environment or under conditions that pose a material threat of a future release. *De minimis* conditions are not recognized environmental conditions. ***HRECS*** are defined as the historical presence or likely presence at a property of any hazardous substances or petroleum products which were remediated or had undergone risk-based cleanup to meet unrestricted land use criteria. ***CRECs*** are defined as past releases of hazardous substances or petroleum products at a property that were addressed with risk-based closures, but contaminants are allowed to remain in place subject to the implementation of required activity and use limitations (AULs), for example, institutional controls or engineering controls.

De minimis conditions are defined as a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

The identification of potential or existing RECs, HRECs, and/or CRECs affecting the Property is to determine if it:

- Constitutes or results in a potential or material violation of any applicable environmental laws;
- Imposes any material constraints of the operations of the Property or requires a material change in the use thereof (i.e. institutional controls/deed restrictions);
- Requires remedial actions or other responses with respect to hazardous substances or petroleum products affecting the Property under any applicable environmental law;
- May affect the value of the Property; and
- May require specific actions to be performed with regard to such conditions and circumstances.

The Client may use the information contained in this Phase I ESA report for the purposes of:

- Evaluating the Client's legal and financial liabilities for transactions related to purchase, sale, loans, seller financing, or foreclosure of the Property;
- Evaluating the Property's overall development potential, associated market value and the impact of applicable laws that restrict financial or other types of assistance for Property development; and/or
- Determining if specific actions are required prior to the purchase, sale, loan, financing or foreclosure of the Property.

SCOPE OF WORK

The Scope of Services for the performance of this Phase I ESA included the following tasks:

- On-site visual reconnaissance of the Property to evaluate on-site activities in respect to hazardous materials use, storage and disposal activities.
- On-site visual survey of the current uses of the immediately adjacent sites, and surrounding area.
- Review of selected historic documentation for the Property to determine what activities have occurred at the subject site since the Property's first developed use.
- Review of reasonably ascertainable regulatory agency files concerning hazardous material use, storage and disposal at the Property and at adjacent and surrounding sites.
- Acquisition and detailed professional review of a current environmental sites radius report (PIERS Identified Hazardous Materials Sites Radius Report [IHMSRR]).
- Preparation of this report in general accordance with the document entitled *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (The American Society for Testing and Materials [ASTM], Designation E 1527-13) and "All Appropriate Inquiries" Final Rule, 40 Code of Federal Regulations (CFR) Part 312.
- Interviews with available Property contacts, regulatory officials and personnel associated with the subject and adjoining properties.

NON-SCOPE SERVICES

The objective of this Phase I Environmental Site Assessment is to help users (i.e. the Client) qualify for one of the CERCLA Landowner Liability Protections (LLPs) under the "All Appropriate Inquiries" Final Rule (40 CFR Part 312) using the practice of ASTM E1527-13. As such, other environmental concerns of clients may be considered out of scope. Out of scope services may include analysis of Business Environmental Risk (BER); surveys for asbestos-containing building material (ACBM), Naturally Occurring Asbestos (NOA), radon gas, lead-based paint (LBP), and lead in drinking water (LIW); presence of wetlands; federal, state or local regulatory compliance including health and safety; presence of listed species under the Endangered Species Act (ESA); evaluation of indoor air quality; and/or evaluation for the presence of mold. This Section lists any non-scope services requested by the Client or recommended by PIERS.

No Non-Scope Services were requested by the Client.

RECOMMENDATIONS

PIERS has no recommendations for non-scope services.

ADDITIONAL SERVICES

No additional services were requested by the Client or recommended by PIERS.

LIMITING CONDITIONS AND EXCEPTIONS

The findings, conclusions, recommendations and opinions are constrained by the limitations of the methodologies inherent in the ASTM Standard Practice E1527-13.

This Phase I Environmental Site Assessment does not guarantee the condition of the Property. PIERS Environmental Services Inc. (PIERS) cannot and does not warrant or guarantee that information obtained from other sources, e.g. interviews and historical records, concerning the Property is accurate and reliable. PIERS is not responsible for conditions or consequences arising from facts and information that were withheld or concealed, or not fully disclosed at the time this evaluation was performed. Conclusions and recommendations made in the report for the Property are preliminary in nature and are based wholly upon the data obtained and available information reviewed during the assessment. The site assessment is prepared to assist in decisions regarding this Property, and its possible subsurface environmental hazards. PIERS is not responsible for errors or omissions in agency files or databases or non-disclosure by Property owners or representatives.

To achieve the study objectives for this project PIERS was required to base conclusions and recommendations on the best information available during the period the investigation was conducted. PIERS professional services are performed using the degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar fields. The findings are mainly based upon examination of historic records, maps, aerial photographs, and governmental agencies lists. It should be noted that governmental agencies often do not list all sites with environmental contamination; the lists and data used could be inaccurate and/or incomplete. Recommendations are based on the historic land use of the subject Property, as well as features noted during the site inspection. The absence of potential gross contamination sources, historic or present, does not necessarily imply that the subject Property is free of any contamination.

This project did not include sampling of materials (for example: soil, water, air, mold, building materials). This Phase I ESA does not include the mention of, recovery, sampling, or reporting of the nature or extent of Asbestos Containing Materials or any mold issues. PIERS does not warrant or guarantee that no significant events, releases or conditions could have arisen during the periods with data gaps (if they exist).

This Phase I ESA does not include information or advice relating to any environmental issues, laws or environmentally related business decisions that have not been stated in the above outline. No warranties, therefore, are expressed or implied. PIERS has no liability towards consequential damages. In some cases, an environmental compliance audit may be necessary for a Property. The information and opinions rendered in the report are exclusively for use by the Client.

PIERS will not distribute or publish this report without the Client's consent except as required by law or court order. PIERS has no responsibilities or liability whatsoever to persons or entities other than the Client if they so choose to use this report.

This Phase I ESA does not address requirements of any state or local laws or of any federal laws other than the AAI provisions of the LLPs. Not does this report address all of the safety concerns, if any, of the subject Property.

MATTERS KNOWN TO CLIENT

The Client, Property representative or site owner should have provided PIERS with any and all information known to the Client, or suspected by the Client, which pertains to: (a) the existence or possible existence at, on, under or in the vicinity of the Property, of any hazardous materials, pollutants; (b) any conditions at, on, under or in the vicinity of the site, which might represent a potential safety hazard or danger to human health or the environment; (c) any permit, manifest, title record, lien or other record of compliance or non-compliance with any federal, state or local laws, or court or administrative order or decrees which could affect the recommendations or conclusions reached by PIERS in the performance of its Services.

There may be additional reports relating to the Property (whether prepared by PIERS or other parties), and reliance upon any PIERS report without reference to any such other reports is done at Client's sole risk. All information regarding operations, plans, specifications, conditions or test data which is provided to PIERS by the Client, Property owners or third parties (including without limitation, any point of contact at the site), is deemed by PIERS to be correct and complete without any independent verification by PIERS. PIERS assumes no responsibility for the accuracy of such information and shall not be liable if reliance on such information results in incorrect conclusions or results.

LIMITATION OF LIABILITY

PIERS total liability to the Client for any and all injuries, claims, losses, expenses or damages whatsoever directly or indirectly arising out of or in any way related to this report from any cause or causes, including but not limited to PIERS negligence, errors, omissions, strict liability, or breach of contract shall NOT EXCEED THE TOTAL AMOUNT OF THE CONTRACT FOR THIS PROJECT. PIERS SHALL NOT BE LIABLE FOR LATENT OR HIDDEN CONDITIONS, CONDITIONS NOT ACTUALLY OBSERVED BY PIERS, THE POTENTIAL CONSEQUENCES OF OBSERVABLE CONDITIONS, CONDITIONS OF WHICH CLIENT HAD KNOWLEDGE OF AT THE TIME OF THE SERVICES, OR ANY UNAUTHORIZED ASSIGNMENT OF OR RELIANCE UPON THE REPORTS. NONWITHSTANDING THE PRIOR SENTENCE, IN NO EVENT SHALL PIERS BE LIABLE TO CLIENT FOR ANY EXEMPLARY, PUNITIVE, DIRECT OR INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL (INCLUDING LOST PROFITS) DAMAGES ARISING FROM OR IN ANY WAY CONNECTED WITH ITS PERFORMANCE OR FAILURE TO PERFORM UNDER THE AGREEMENT, EVEN IF THE AFFECTED PARTY HAS KNOWLEDGE OF THE POSSIBILITY OF SUCH DAMAGES.

USER RELIANCE AND ASSIGNMENT

This Phase I Environmental Site Assessment has been prepared for the exclusive use of the Client. The Client may rely on the contents of this report. No other person or entity may rely on the report without the advance written consent of PIERS, and no other third party beneficiaries are intended. In the absence of a written agreement with PIERS granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against PIERS, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect indemnify and hold PIERS, the Client and the respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses, and costs attributable to such use. Unauthorized use of the report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

DEVIATIONS

No deviations from the recommended scope of ASTM E1527-13 were observed as part of this Phase I, except for the following:

- The user did not provide PIERS with any land title or environmental lien records.
- PIERS view during the site reconnaissance was partially obstructed by stored materials.
- Interviews with owners were not reasonably ascertainable and constitute a data gap. Based on information obtained from other historical sources, this data gap is not expected to alter the findings of this Phase I ESA.
- PIERS was not able to document the historical use of the Property prior to 1948.

SIGNIFICANT ASSUMPTIONS

PIERS assumes all the information provided to us was true and accurate.

SPECIAL TERMS AND CONDITIONS

The Client for this project requested no special terms, conditions or extraneous services. Therefore, PIERS implemented no special terms, conditions or extraneous services for this project. Business Environmental Risk concerns have not been addressed for this project. Controlled substances information has not been included, as it is outside the scope of ASTM E1527-13 unless specifically requested by the Client.

USER PROVIDED INFORMATION

The "All Appropriate Inquiries" Final Rule (40 CFR Part 312) requires tasks to be performed by or on behalf of a party seeking to qualify for an LLP to CERCLA liability. The environmental professional (EP) shall request that the user ("Client") provide the results of a review of:

- Recorded land title records
- Title and Judicial Records for Environmental Liens and Activity and Use Limitation (AULs)
- Specialized Knowledge or Experience of the User
- Fair Market Value: In a transaction involving the purchase of a parcel, the User should inform the EP if the purchase price is lower than the fair market value due to contamination. The User is not required to disclose the purchase price to the EP.
- Commonly Known or Reasonably Ascertainable Information about the Property to identify conditions indicative of releases or threatened releases of hazardous substances or petroleum products.

  For this Phase I ESA the Client did not provide PIERS with any information regarding liens, activity and use limitations, specialized knowledge, or value reductions for environmental issues on the Property**.**

USER QUESTIONNAIRE

On August 19, 2021, PIERS submitted an ASTM Site Reconnaissance and Interview Form to the owner of the Property. A completed interview form had not been obtained as of the date of this report. A copy of the interview form with observations recorded by PIERS' Project Manager is attached to this report. PIERS recommends that a completed interview form be obtained from the owner.

OWNER, PROPERTY MANAGER AND OCCUPANT INFORMATION

Midpeninsula Regional Open Space District is listed as the owner of record of the Property.

PREVIOUS ENVIRONMENTAL REPORTS

A Ninjo & Moore Phase I Environmental Site Assessment dated November 24, 2020 was provided to PIERS. The assessment revealed no evidence of Recognized Environmental Conditions in connection with the Property at that time.

PROPERTY DESCRIPTION

LOCATION AND LEGAL DESCRIPTION

The Property is located on the northwest side of Distel Circle, southwest of the intersection with El Camino Real, in the City of Los Altos, Santa Clara County, California. A Property Site Plan and a Property Parcel Map are attached to this report as Figures 1 and 2, respectively. Site photographs are presented in Appendix A.

The Property consists of a rectangular-shaped parcel of approximately 36,450 square feet in size, which is improved with a one-story commercial office building, approximately 12,120 square feet in size with associated asphalt paved parking and areas of maintained landscaping. According to the Property profile, the building was constructed in 1975. The Property is legally described as Assessor's Parcel Number 51 of Assessor's Map Book 170, Page 4 (APN 170-04-051), as shown on Figure 2.

The subject Property is occupied by Midpensinula Regional Open Space District.

SITE AND VICINITY GENERAL CHARACTERISTICS

The Property is located in an area comprised of commercial usage on Distel Circle just south from El Camino Real, with commercial and residential usage on adjoining streets. The Property and vicinity slope gently towards the east. None of the adjacent properties are considered to be of significant environmental concern to the Property.

SITE RECONNAISSANCE

On July 21, 2021, PIERS conducted a visual reconnaissance of the Property. PIERS inspected all areas of the Property during the site reconnaissance. Property photographs (Appendix A), site plans, and notes were taken during the reconnaissance.

GENERAL SITE SETTING

The Property building occupies the western portion of the parcel, with associated asphalt parking, concrete paved walkways and areas of maintained landscaping on the eastern side of the parcel. None of the sites in the near vicinity are listed on the regulatory agency databases as having had any spills or releases, except for the adjacent parcel to the north, discussed further in the IHMSRR section of this report. The Property is served by the normal municipal utilities.

EXTERIOR OBSERVATIONS

The exterior portions of the Property include a concrete paved driveway, concrete paved underground parking and storage areas, and areas of contained landscaping. Trash and recycling were observed in the southern portion of the parking lot. Bicycle storage containers are located on the northwest side of the building. A patio area with tables and benches was observed.

INTERIOR OBSERVATIONS

The interior of the Property building includes an entry/lobby area, offices, a kitchen, bathrooms and storage rooms. A boiler room contains a boiler, electrical/power equipment and several small cans of paint.

DESCRIPTION OF STRUCTURES AND PROPERTY IMPROVEMENTS

STRUCTURES

The Property building is of steel and stucco construction over a concrete slab and perimeter foundation. Interior building materials observed including large glass windows, various flooring materials including carpet and tile and acoustical ceiling tiles.

ROADS

No roads are located on the Property. The Property is accessed from Distel Circle.

MECHANICAL SYSTEMS

Mechanical systems observed at the Property consisted of normal utilities, alarms, and fire sprinkler systems.

SOLID WASTE AND SEWAGE DISPOSAL

Trash receptacles are used for solid waste. Sewage is disposed of via city sewer lines. There is a grease interceptor located just southeast of the building.

SURFACE WATER DRAINAGE, PITS, PONDS AND LAGOONS

Surface water drains into on-site storm water drains located along the Property boundary and into the public right of way. Sewage is disposed of via city sewer lines.

No wetlands, surface impoundments, natural catch basins, settling ponds or lagoons are located on the Property.

HEATING AND COOLING SYSTEMS

Heating and cooling systems are located on the roof.

SOURCE OF POTABLE WATER

Water is provided by a municipal water service.

HAZARDOUS MATERIALS STORAGE, USE, DISPOSAL

No hazardous materials or other chemicals were observed at the Property except for cleaning supplies and paints observed a storage room. All of these materials were observed to be stored correctly, and there was no evidence of any improper storage, usage, or disposal of hazardous materials or other chemicals.

WELLS

No evidence of water supply, irrigation, oil, injection, or dry wells was observed on the Property.

FLOOR DRAINS, SUMPS AND CLARIFIERS

No drains, sumps or clarifiers were observed.

STORAGE TANKS

No storage tanks were observed at the Property.

STAINED SOIL OR PAVEMENT

No stained soil was observed. No significant staining was observed on the exterior paved surfaces.

USES AND CONDITIONS OF THE PROPERTY AND ADJOINING PROPERTIES

CURRENT USE OF THE PROPERTY

The Property is occupied by Midpeninsula Regional Open Space District.

CURRENT USES OF ADJOINING PROPERTIES

The area surrounding the Property is comprised of both residential and commercial developments. The parcels immediately surrounding and in the vicinity of the Property are as follows:

- The Property is bound to the northeast by a drive-through fast food restaurant (Carl's JR) at 5000 W. El Camino Real.
- The Property is bound to the west and northwest by commercial office buildings on El Camino Real.
- The Property is bound to the south and south east by Los Altos Center Lab at 370 Distel Circle.
- The Property is bound to the east by Distel Circle, across which is a 2.58-acre parcel improved with commercial offices at 325-333 Distel Circle.

No items of obvious environmental concern were observed on the vicinity reconnaissance.

RECORDS REVIEW

PHYSICAL SETTING SOURCES

TOPOGRAPHIC MAP REVIEW

The Property is located at an elevation of approximately 80 feet above mean sea level (U. S. Geological Survey 7.5 Minute Topographic Quadrangle, "Mountain View"). The Property is located within an area that is relatively flat. Regionally, the area slopes towards the north-northeast.

HYDROGEOLOGICAL REVIEW

The direction of groundwater flow in the vicinity of the Property is inferred to be to the north-northeast, consistent with the topography.

According to Helley et al (1979), the Property and vicinity are underlain by Late Pleistocene alluvium (Qpa). These sediments are described as weakly consolidated, slightly weathered, poorly sorted irregular interbedded clay, silt, sand and gravel that is at least 150 feet thick. This material grades progressively from coarse-grained stream deposits toward higher elevations to fine-grained alluvial fan and fresh-water marsh deposits nearest the present shore of the bay.

Based on information obtained online from the USDA Natural Resources Conservation Service Web Soil Survey database, the Property is mapped as Urban Land – Flaskan Complex. These soils include sandy loams, sandy clayey loams, gravelly sandy clayey loams and very gravelly sandy loams in alluvial fan settings. The soils are well drained with low runoff, non-saline to very slightly saline, and generally have a depth to water table of more than 80 inches.

A Request for Case Closure, dated March 11, 2013, for a nearby Leaking Underground Storage Tank (LUST) case site, at 895 North San Antonio Road, measured depths to groundwater of between 28.48 feet to 42.51 feet below ground surface (bgs), with a groundwater flow direction towards the northwest. The inferred groundwater flow direction in the vicinity is to the northwest.

STANDARD AND ADDITIONAL ENVIRONMENTAL RECORDS SOURCES

Regulatory records documentation is attached to this report as Appendix B.

LOCAL FIRE DEPARTMENT RECORDS REVIEW

Santa Clara County Consolidated Fire Prevention District (SCCFPD)
Inquiry Date – May 25, 2021

On May 25, 2021, PIERS requested to review the file for the Property. The SCCFPD responded that there were no files for the Property.

LOCAL BUILDING DEPARTMENT RECORDS REVIEW

Los Altos Building Department (LABD)
Review Date – July 25, 2021

On July 25, 2021, PIERS obtained the LABD file for the Property. Various permits including an excavation permit in 2018 to repair a fire hydrant, a 1994 alterations permit, 1997 mechanical permit, tenant improvement permits in 2001, 2002 and 2008 including interior demolition, a re-roof permit in 2002 and 2008. There were no items of environmental concern contained in the file.

LOCAL HEALTH DEPARTMENT RECORDS REVIEW

Santa Clara County Environmental Health (SCCEH)
Inquiry Date - May 24, 2021

On May 20, 2021, PIERS submitted an inquiry to SCCEH. There were no files for the Property at the time of this report.

The Property is not listed on any of the regulatory agency databases therefore it is unlikely SCCEH would have files of environmental concern to the Property.

ADDITIONAL FILE REVIEWS

GeoTracker Database – Regional Water Quality Control Board (RWQCB)

The Property is not listed on this database. There are no open cases in close proximity to the Property.

EnviroStor Database – Department of Toxic Substances Control (DTSC)

The DTSC maintains a database of spills or leaks cases on the EnviroStor database. The Property is not listed on this database. There are no open cases in close proximity to the Property.

REGULATORY AGENCIES DATABASES REVIEW

Attached to this report as Appendix C is a PIERS Identified Hazardous Materials Sites Radius Report (IHMSRR) for the subject Property. The report identifies sites of environmental concern within a one-mile radius of the subject Property. The databases searched to compile the enclosed report are gathered from numerous federal, state and local governing environmental entities. All of the databases required to be searched by ASTM E1527-13 – Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process – Section 8.2.1 *Standard Federal, State, and Tribal Environmental Record Sources* have been included in this report, and searched to the required distances from the subject Property. The following is an analysis of the attached report.

SUMMARY OF DATABASES REVIEWED:

SUBJECT PROPERTY

The Property is listed sixteen times on the HAZNET database in the attached IHMRR as Midpeninsula Regional Open Space District for disposal of 0.2 ton of other organic solids in 2006, 0.17 ton of unspecified oil-containing waste in 2009, and 0.005 ton of inorganic solid waste and Polychlorinated biphenyls (PCBs) in 2011; as US Army Corps of Engineers for disposal of 0.02 ton of other organic solids in 2007 and 6.25 tons of unspecified oil-containing waste in 2008; and as Almaden Air Force Station for disposal of 45.08 tons of PCBs in 2008. The HAZNET status for Midpeninsula is inactive in 2000, 2006, 2011 and 2013; for US ACE, inactive in 2007 and 2008; and for Almaden AFS, inactive in 2009.

The Property is not listed on any of the other regulatory agency databases summarized in the attached IHMRR. No spills or releases were noted for the site.

SURROUNDING SITES

NPL - NATIONAL PRIORITIES LIST/TRIBAL NPL

One site within a one-mile radius from the Property were listed on the National Priority List (NPL) database. No sites were listed on the Proposed NPL database, Delisted NPL database or on a Tribal NPL database. The Jasco Chemical Corp is located approximately 4,804 feet east from the Property. As the inferred groundwater flow direction is to the northwest, the site is considered to be in the cross-gradient direction, and as such, does not appear to be of significant environmental concern to the Property.

CORRACT

No sites within a one-mile radius from the Property were listed on the CORRACT database.

TSD

Twenty-three sites within a one-mile radius from the Property were listed on the TSD database. Twenty sites are located between approximately 650 feet south west to 5,150 feet north east from the Property, cross-gradient to down-gradient, and as such, do not appear to be of significant environmental concern to the Property.

Two sites are located approximately 1,586 feet southeast and 3,283 feet southeast from the Property, up-gradient. Based on the distances of these sites from the Property, the risk to the groundwater beneath the Property from these potential sources appears low.

DEFENSE

No sites within a one-mile radius from the Property were listed on the DEFENSE sites database.

BROWN

No sites within a one-mile radius from the Property were listed on the BROWNFIELDS sites database.

CSL

Thirty sites within a one-mile radius from the Property were listed on the CSL database. Some sites have multiple listings. Eighteen sites are closed cases, certified cases or in verification monitoring, and therefore do not appear to be of significant environmental concern to the Property.

Twelve open case sites (some sites are listed twice) are located between approximately 2,716 feet north and 4,795 feet east, cross-gradient or down-gradient from the Property, and as such, do not appear to be of significant environmental concern to the Property.

DEED

Two sites within a one-mile radius from the Property were listed on the DEED database. The sites are located approximately 2,882 feet northeast and 2,891 feet northeast, cross-gradient, and as such, do not appear to be of significant environmental concern to the Property.

SUPERFUND

No sites within a one-half mile radius from the Property was listed on the SUPERFUND database.

U.S. INSTITUTIONAL AND ENGINEERING CONTROL REGISTRIES/TRIBAL

No sites within a one-half mile radius from the Property were listed on the federal institutional control/engineering control registries database. No sites within a one-half mile radius from the Property were listed on a tribal institutional control/engineering control registries database.

LUST/ TRIBAL LUST

Ten sites within a one-half mile radius from the Property were listed on the LUST database. Some sites have multiple listings. Some of the cases are closed.

In fuel leak cases, research conducted in the State of California by Lawrence Livermore National Laboratory (LLNL) indicates that attenuation and degradation of the product in groundwater play major roles in reducing the hydrocarbon contamination to non-detectable levels within several hundred feet of the contaminant source. Moreover, this research indicates that in over 90% of the hydrocarbon contamination cases, with the possible exception of MTBE or other fuel oxygenates, groundwater contaminant plumes do not extend more than 250 feet from the source. Solvent/toxic contamination plumes may extend farther from the source.

Based on the discussion above, fuel leak LUST sites that are within one-eighth mile in the up-gradient direction, and up-gradient solvent or toxic leak sites are considered to have potential risk to the subsurface soils and/or groundwater of the Property.

Two LUST sites (one site, listed twice) within one-eighth mile of the Property were listed. The site was listed as case closed in 1996, and therefore does not appear to be of environmental concern to the Property.

SWLF/ TRIBAL SWLF

No sites within a one-half mile radius from the Property were listed on the SWLF database or a Tribal SWLF database.

WELLS

No sites within a one-quarter mile radius from the Property were listed on the WELLS database.

HAZMAT

Twelve sites within a one-quarter mile radius from the Property were listed on the HAZMAT database. Neither the Property nor any other adjacent parcels were listed on the HAZMAT database.

All of the sites are located over 510 feet from the Property. These sites would only be of potential environmental concern where they are located up-gradient and are listed on other agency databases as having had unauthorized releases or spills, in which case they are discussed under the agency-listed heading.

ERNS

The adjacent parcel to the north at 5000 W. El Camino Real is listed twice on the ERNS database for the release of 130 gallons of mineral oil from an electric pad mounted transformer due to external corrosion – no PCBs were released – in 2004; the release was removed by soil excavation and the equipment was repaired. The site is located 175 feet northwest, down-gradient, and therefore does not appear to be of environmental concern to the Property. Neither the Property nor any other adjacent parcels were listed on the ERNS database.

GENERATORS

The adjacent parcel to the south at 370 Distel Circle was listed on the GENERATORS database (4 listings) for being a small quantity generator of pharmaceutical waste with no violations. The site does not appear to be of significant environmental concern to the Property. Neither the Property nor any other adjacent parcels were listed on the GENERATORS database.

UST/TRIBAL UST

No sites within one-eighth mile of the Property were listed on the UST database. No sites were listed on the Tribal UST database.

AST/TRIBAL AST

No sites within one-eighth mile of the Property were listed on the AST database. No sites were listed on the Tribal AST database.

AIR EMISSIONS

No sites within one-eighth mile of the Property were listed on the Air Emissions database.

HAZNET

Seventy-four sites within one-eighth mile of the Property are listed on the HAZNET database. The Property is listed (16 listings) and discussed above. The adjacent parcel to the south at 370 Distel Circle is listed twice each for Sutter Bay Medical Foundation for the removal and disposal of pharmaceutical waste in 2019 (active as of 2020); and Palo Alto Medical Foundation for the disposal of photochemicals/photoprocessing waste, oxygenated solvents and asbestos containing waste from 1994 to 2004, and is not active at this time. No other adjacent parcels were listed on the HAZNET database.

All of the remaining sites are located over 126 feet from the Property. These sites would only be of potential environmental concern where they are located up-gradient and are listed on other agency databases as having had unauthorized releases or spills, in which case they are discussed under the agency-listed heading.

HISTORICAL USE INFORMATION

As described under ASTM E1527-13 – Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process – Section 8.3 *Historical Use Information,* Historical Use Information is the objective of consulting historical records sources to develop a history of the previous uses of the Property and surrounding area in order to identify the likelihood of past uses having led to recognized environmental conditions in connection with the Property. All obvious uses of the Property shall be identified from the present back to the Property's first developed use or back to 1940 whichever is earlier.

Sources of such information are typically: interviews, aerial photographs, Sanborn Fire Insurance (Sanborn) Maps, city directories, and local fire, building and health department files. Other historical sources include internet sites, community organizations, local libraries and historical societies, and current owner/occupants of neighboring properties. Historical research documentation is attached to this report as Appendix D.

SANBORN FIRE INSURANCE MAPS REVIEW

No historical Sanborn Fire Insurance Map coverage of the Property or vicinity was found.

LOCAL CITY DIRECTORY REVIEW

City Directories have been published for major cities and towns across the United States since the 18th century. Originally, these Directories, published in the 20th century, also included a street index. For each street address, the Directory lists the name of the resident or business operating from this address during a given year. City Directories are a valuable source of historical information with regard to site tenancy and use. Directories for rural areas were not often published.

PIERS reviewed The EDR – City Directory Image Report. Available directories for the period of 1973 through 2017 were reviewed, as follows:

<u>330 Distel Circle</u>
2017 Thornewood
2014 Thornewood
2010 no listing
2005 Kaidara Inc, Kaidara Software Inc., Midpeninsula Open Space

2000 Midpeninsula Open Space District, Alzheimer's Association
1995 no listing
1992 Desktop Presentations, International Technology Group
1986 Jeffrey Buckingham, A C Carmichael Jr., Charles Elvert Jr., Flamer & Company, Lee Garcia, James Lenihan, Jeff Lewis, Personal Computer Insurance, Plan and Review Associates, Roger Ruth, Gary Sheerer
1980 Thomas Archer, Jeffrey Buckingham, A C Carmichael Jr., Charles Elvert Jr., A Flamer, Flamer Company, Home Life Insurance Co, Lenihan Insurance, James Lenihan, Plan and Review Associates, Gary Sheerer

There were no listings of environmental concern in close proximity to the Property.

HISTORICAL AERIAL PHOTOGRAPH REVIEW

PIERS reviewed available aerial photographs from the NETR online database were reviewed for evidence of hazardous materials and features that may have impacted the Property. Aerial photographs from 1948, 1956, 1960, 1968, 1980, 1987, 1991, 1993, 1998, 2002, 2004, 2005, 2012, 2014 and 2016 were reviewed.

On the 1948 aerial photograph, the Property is occupied by orchards, as is the surrounding area, except for scattered rural residences. El Camino Real bounds the Property to the northeast.

On the 1956, 1960 and 1968 aerial photographs, the Property has been cleared of orchard trees. Two parcels to the north appear developed with residential structures. The surrounding area is similar, gradually becoming more developed during this period.

On the 1980 and later aerial photographs, the Property appears developed with the current building and associated parking lot. The adjacent and vicinity appear largely developed from 1987 onwards.

No features of obvious environmental concern were identified at the Property or vicinity on any of the aerial photographs reviewed.

The prior use of the Property for agriculture implies the use of agricultural chemicals such as fertilizers and pesticides. However, former use of agricultural chemicals is considered *de minimis* under ASTM E1527-13. Fertilizers and pesticides tend to biodegrade over time and the last likely use of agricultural chemicals was prior to the development of the Property in 1975, nearly 46 years ago. Additionally, subsurface migration of agricultural chemicals tends to be low, and surface soils were likely removed during development of the Property. Therefore, the Property's former use as an orchard is not likely to pose significant environmental risk to human health or the environment.

INTERVIEWS

ASTM E1527-13 requires the Environmental Professional (EP) or the User to interview current and or previous owners, operators or occupants of the Property likely to have material information about the Property. This task is completed when the aforementioned parties have been identified by the User and the parties comply with the interview request.

PAST AND PRESENT OWNERS AND OCCUPANTS

PIERS Project Manager completed the following interviews of past and present owners, operators and occupants, report user, key site manager and others.

On August 19, 2021, PIERS submitted an ASTM Site Reconnaissance and Interview Form to the owner of the Property. A completed interview form had not been obtained as of the date of this report. A copy of the interview form with observations recorded by PIERS' Project Manager is attached to this report. PIERS recommends that a completed interview form be obtained from the owner.

STATE AND LOCAL GOVERNMENT OFFICIALS

PIERS Project Manager did not complete interviews of state and local government officials. The Property is not listed as a spills or releases site.

VAPOR ENCROACHMENT SCREENING

The Vapor Encroachment Screening (VES) Standard (ASTM E2600-10) may include a two-tiered screening process. Initially, the Tier 1 VES focuses on known or suspected contaminated properties located within the area of concern (AOC). According to ASTM E2600-10:

> "*the AOC is one third of a mile around the TP [Target Property], unless the use of a shorter distance (such as for petroleum hydrocarbon constituents of concern [COCs]) is appropriate. The AOC is measured from the TP to a contaminated property with known or suspect COC contamination of soil or groundwater or both*." *"If there are known or suspect property sources of contamination within the AOC, the environmental professional should evaluate whether COC may be present at the TP.*
>
> *"For a contaminated property identified in Tier 1 located cross-gradient from the TP, the AOC will be the area within the critical distance plus one half of a reasonable estimation of the contaminated plume width (at the point nearest the closest TP boundary) that might be associated with the nearby known or suspect contaminated property (that is, the contaminated property where the groundwater contamination originated)."*

ASTM E2600-10 states that if a VEC cannot be ruled out in the Tier 1 screen, the user can undertake more refined screening, as provided in Tier 2. *"Tier 2 applies numeric screening criteria to existing or newly collected soil, soil gas, and/or groundwater testing results to evaluate whether or not a VEC can be ruled out. Tier 2 has two data collection components: one non-invasive and one invasive.*

The objective of the non-invasive Tier 2 process is to identify through documentation, information regarding plume lengths and contaminants, remediation status, etc. The non-invasive Tier 2 VES uses a plume test and critical distance determination to evaluate whether vapors from the contaminated property might migrate to and encroach upon the Target Property. The critical distance between the Target Property and a contaminated plume is defined by E2600-10 as 30 feet (9 meters) for dissolved petroleum hydrocarbons, and 100 feet (30.5 meters) for separate-phase product petroleum hydrocarbons and non-petroleum chemicals of concern ("COCs") such as volatile organic compounds (VOCs). Contaminated groundwater plumes within these distances may constitute a VEC to the Target Property.

The User should be aware that:

- The presence of a VEC does not necessarily constitute a REC. The EP is to determine if the VEC represents a REC for the Target Property.

- The VES process does not evaluate the potential for vapor intrusion (VI) of subsurface vapors into existing buildings. Evaluation of VI conditions requires field sampling, and is not included in ASTM E1527-13.

EVALUATION

No sites with VOC contamination were identified within the critical distances cited in the VES guidance document. Therefore, it is unlikely that a VEC exists on or near the subject Property.

FINDINGS, OPINIONS AND CONCLUSIONS

PIERS has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 for 330 Distel Circle in Los Altos, CA, i.e., the Property. Any exceptions to, or deletions from, this practice are described in the Deviations Section of this report.

FINDINGS

This assessment has revealed no evidence of **Recognized Environmental Conditions (RECs), Historical Recognized Environmental Conditions (HRECs)** or **Controlled Recognized Environmental Conditions (CRECs)** associated with the subject Property.

An **environmental issue** is defined as an environmental concern which does not qualify as a REC, but which may warrant further discussion. PIERS did not identify any environmental issues during this Phase I ESA.

OPINIONS

No additional opinions concerning the Property are given at this time.

CONCLUSIONS

No further investigation of the Property is recommended at this time.

ADDITIONAL INVESTIGATIONS

Additional investigations were not performed for this Phase I ESA.

DATA GAPS

A data gap is defined as a lack of or inability to obtain information required by this practice (ASTM E1527-13) despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews.

ASTM Standard E 1527-13 requires the ESA report to note any data failure from historical research sources, if any; to give reasons why such sources were excluded; and discuss if data failure significantly affects the ability of the Environmental Professional to identify RECS. For this ESA, historical sources were able to document land use from 1948 to present. No significant data gaps were identified for this Phase I ESA.

DELETIONS

Deviations from the recommended scope of ASTM E1527-13 are summarized earlier in this report, but are not considered significant data gaps.

ENVIRONMENTAL PROFESSIONAL'S STATEMENT

"I, Donal Manning, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312", and "I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed All Appropriate Inquiries (AAI) in conformance with the standards and practices set forth in 40CFR Part 312."

The Environmental Professional(s) Qualifications are set forth in Appendix F of this report.

Should you have any questions or concerns regarding this report please do not hesitate in contacting either of us.

PIERS Environmental Services

Donal Manning
CEO
Environmental Professional

Norma K. Pannell
Senior Project Manager
REPA #100002

REFERENCES

American Society for Testing and Materials (ASTM) E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

ASTM E2091, Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls.

ASTM E2600, Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

"All Appropriate Inquiries" Final Rule, 40 Code of Federal Regulations (CFR) Part 312, Chapter 1 EPA, Subchapter J-Superfund, Emergency Planning, and Community Right-To-Know Programs, 40 C.F.R. Parts 300-399.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "Superfund"), as amended by Superfund Amendments and Reauthorization Act of 1986 ("SARA") and Small Business Liability Relief and Brownfields Revitalization Act of 2002 ("Brownfields Amendments"), 42 U.S.C. §§9601 et seq.

Helley et al, 1979. "Flatland Deposits – Their Geology and Engineering Properties and Their Importance to Comprehensive Planning", Geological Survey Professional Paper 943, dated 1979.

National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300.

Resource Conservation and Recovery Act (also referred to as the Solid Waste Disposal Act), as amended ("RCRA"), 42 U.S.C §6901 et seq.

PIERS Environmental Services, Phase I Environmental Site Assessment, 330 Distel Circle, Los Altos, California, July 15, 2015.

FIGURES

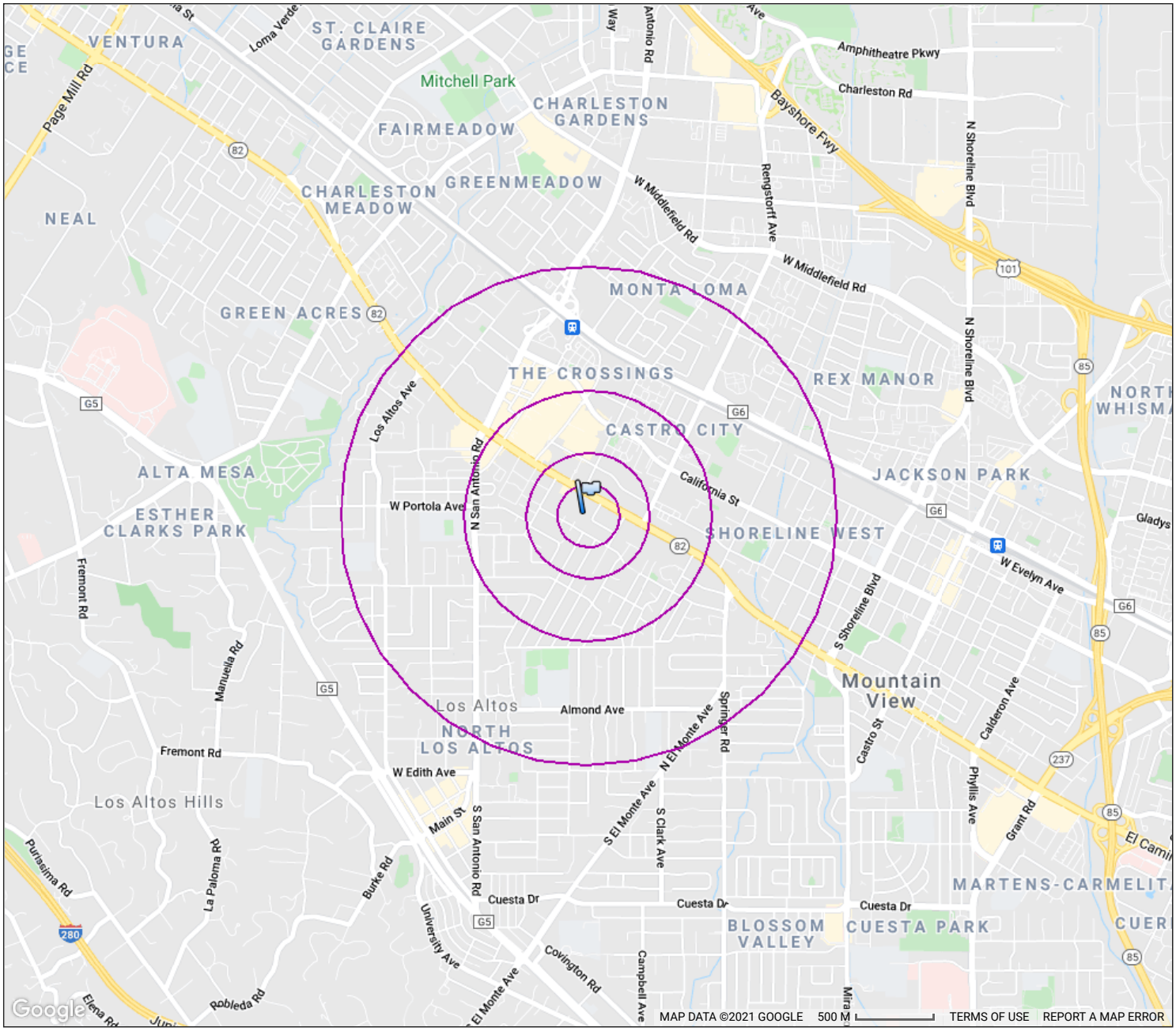


FIGURE 1
PROPERTY VICINITY MAP

330 DISTEL CIRCLE
LOS ALTOS, CA 94022

WEDNESDAY **26TH OF MAY, 2021**

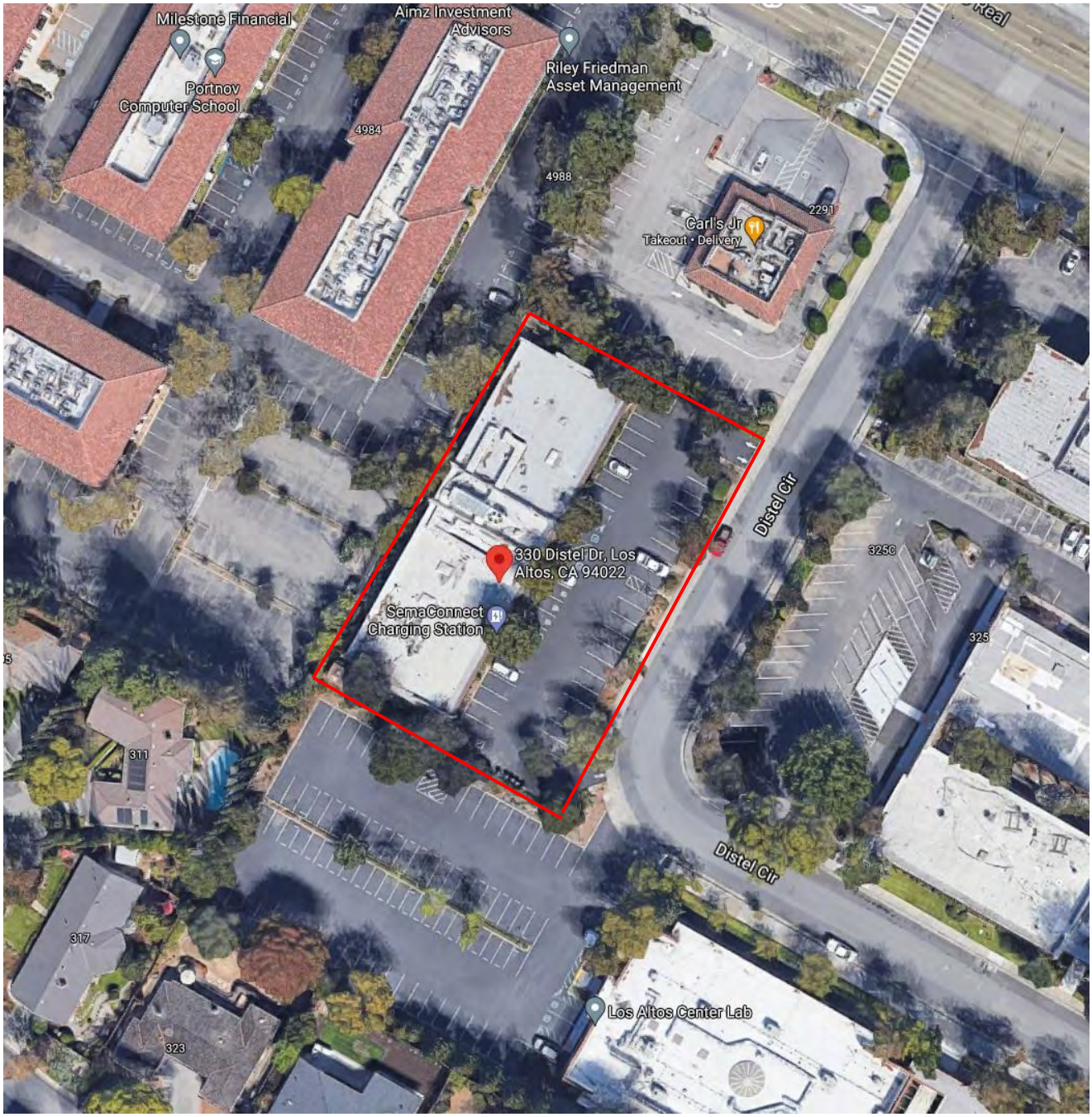


FIGURE 2
PROPERTY SITE PLAN

330 DISTEL CIRCLE
LOS ALTOS, CALIFORNIA

AUGUST 2021
NOT TO SCALE

APPENDIX A
PROPERTY PHOTOGRAPHS

PROPERTY PHOTOGRAPHS
330 DISTEL CIRCLE, LOS ALTOS, CA

PHOTO #1. VIEW SOUTHWEST SHOWING PROPERTY BUILDING FROM ENTRY.

PHOTO #2. VIEW OF ADJACENT PARCEL TO EAST AND PROPERTY BUILDING.

PROPERTY PHOTOGRAPHS
330 DISTEL CIRCLE, LOS ALTOS, CA

PHOTO #3. VIEW OF ADJACENT PROPERTY TO THE NORTHEAST.

PHOTO #4. VIEW OF ADJACENT PROPERTY TO THE SOUTHEAST.

PROPERTY PHOTOGRAPHS
330 DISTEL CIRCLE, LOS ALTOS, CA

PHOTO #5. VIEW OF EXTERIOR EASTERN SIDE OF PARCEL.

PHOTO #6. VIEW OF EXTERIOR AREAS ALONG SOUTHERN SIDE OF BUILDING.

PROPERTY PHOTOGRAPHS
330 DISTEL CIRCLE, LOS ALTOS, CA

PHOTO #7. VIEW OF INTERIOR LOBBY AND OFFICES.

PHOTO #8. VIEW OF INTERIOR OFFICE AREAS.

PROPERTY PHOTOGRAPHS
330 DISTEL CIRCLE, LOS ALTOS, CA

PHOTO #9. VIEW OF BOILER ROOM.

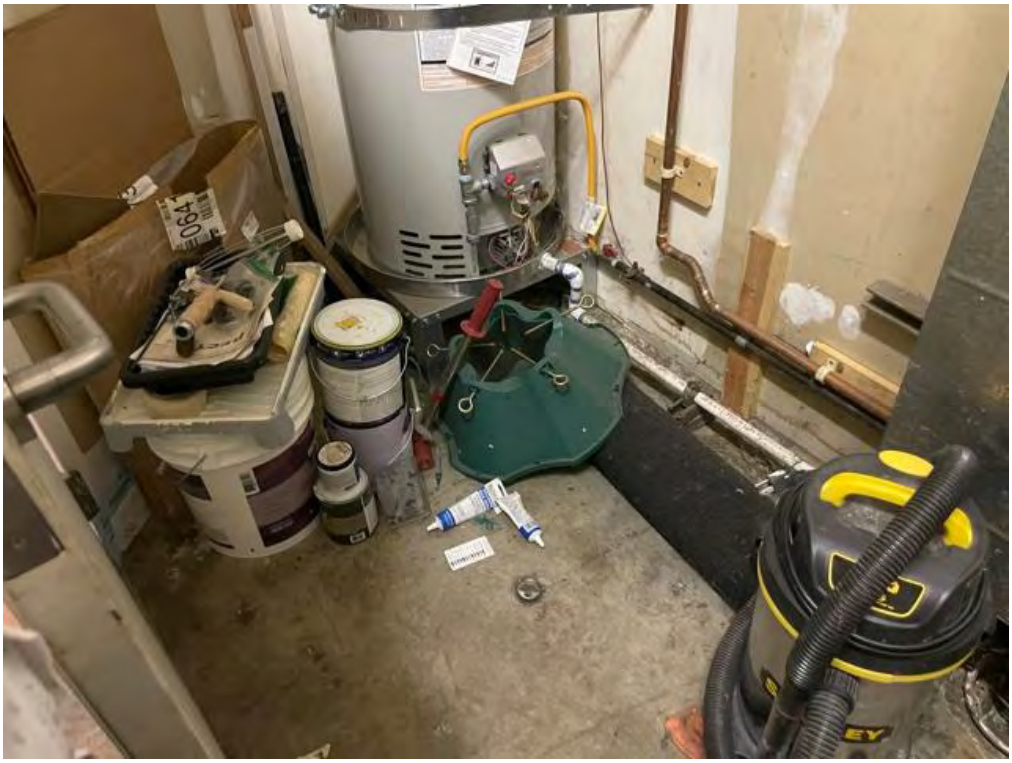


PHOTO #10. VIEW OF PAINT CANS IN BOILER ROOM AREA.

APPENDIX B
REGULATORY RECORDS DOCUMENTATION

Agenda Item # 10.

Request #21-1232

☑ **CLOSED**

As of July 15, 2021, 9:55am

Request Visibility: Unpublished

Details

HI,
would like to obtain any files related to haz materials use or storage, haz waste, USTs, spills, leaks, releases or violations for 330 Diestel Circle Los Altos

Received

June 23, 2021 via web

Departments

Department of Environmental Health (DEH)

Requester

Donal Manning
donal@pierses.com
1038 Redwood Hwy suite 100A
4153887900
PIERS Environmental Services

Documents

Public (pending)

(none)

Requester

(none)

Staff

Point of Contact

645

Anna Cortez

Agenda Item # 10.

Timeline

Request Closed

Public

Hello,

Thank you for your recent record request received on 06/23/2021 for the following address in LOS ALTOS:

330 Diestel Circle

We have no records for this location. However, additional electronic documents may be found on the following websites:

- Local Oversight Program (LOP)
- GEOTracker (GT)
- Spill Reports Website – California Office of Emergency Services (Cal OES):

Please be advised that in some cities, other participating agencies may be responsible for maintaining the type of files you requested. This link may be of assistance in determining who will have the documents you are looking for in the future:

- UNIDOCS – Who regulates what in Santa Clara County

July 3, 2021, 10:01am

Department Assignment

Public

Department of Environmental Health (DEH)

June 23, 2021, 6:34am

Request Opened

Public

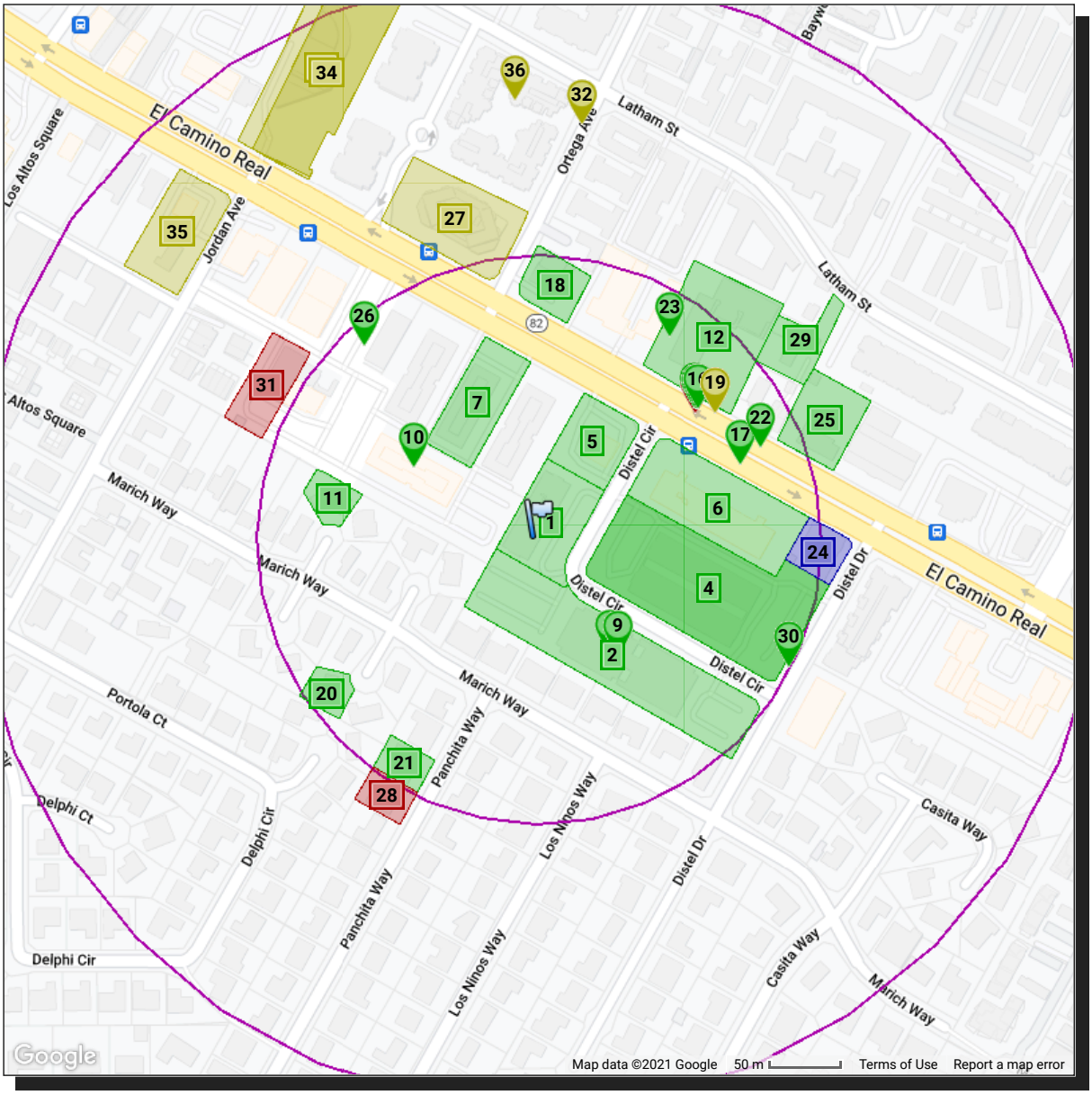
Request received via web

June 23, 2021, 6:34am

APPENDIX C
PIERS IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS REPORT

PIERS Environmental Services

Tel: 415-388-7900 piers@pie
Fax: 415-388-7909 www.piers



Identified Hazardous Materials Sites Radius Report For:

330 Distel Circle
Los Altos, CA 94022

Project #: 21215
Date: 5/26/2021

Powered by the Cypress STARReport™ Technology

Identified Hazardous Materials Sites Radius R

Table of Contents

About This Report ..... Page 1
Site Summary ..... Page 2
Quarter Mile Map ..... Page 3
One Mile Map ..... Page 4
Site Vicinity Map ..... Page 5
Site Details Summary ..... Page 6
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Surrounding Sites Details ..... Page 22
List of Unlocatable Sites ..... Page 197
Searched Databases ..... Page 198

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

ABOUT THIS REPORT

The databases searched to compile the enclosed report are gathered from numerous federal, state and local governing environmental entities. All of the databases required to be searched by ASTM Standard E 1527 - Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process "Standard Environmental Records Sources" have been included in this report, and searched to the required distances from the subject property. Additionally, Cypress Technology Solutions, Inc (CTS) has acquired other valuable databases and integrated them into the Cypress STARReport System in order to provide more valuable information to our clients regarding hazardous materials storage and release sites within a one-mile radius from the subject property.

CTS has created a sophisticated data update system, keeping our report databases as current as possible (surpassing ASTM E1527 requirements). CTS consistently requests and updates data from each of the government agencies used to create this report. Depending on the type of database, records are updated at the agencies at varying intervals (daily, monthly, quarterly, semi-annually, or annually). An overall data update (including all available updates) is loaded into our specialized software on a quarterly basis. It should be clearly understood that this database/map report lists only reported and accurately entered sites. Numerous sites have yet to be discovered and therefore are not yet listed by any governmental agency. The most effective way to determine if a site may be listed by a government agency in the future is by performing a Transaction Screen or Phase I Environmental Site Assessment, which include a professional site inspection and review of historical records. This radius report satisfies only one subsection requirement found within the ASTM Phase I Environmental Site Assessment reporting requirements. This report should not be considered a Phase I Environmental Site Assessment. If no sites are found for a database searched, the database and its description are excluded from the report details so as to report recorded sites only. Sites that include erroneous or incomplete address information may not show up on the report. Every attempt is made to include a listing of these unlocated sites in the report where there is a possibility of their impacting the subject property, but no guaranty can be made.

CTS has used a technology called Geocoding to locate the sites on the map. While this technology is the standard of care in the industry and is generally reliable for well formatted, complete and correct addresses, due to the limitations of this technology no guaranty of the accuracy of site placement can be made.

For specific data inquiries or interpretations, environmental consultation, or to order Transaction Screen Reports, Phase I Environmental Site Assessment Reports, or other environmental reports, please contact us via email at radiusreports@pierses.com, or via telephone at 408-559-1248. A full summary of our firm, including services offered and pricing can be viewed at www.pierses.com.

DISCLAIMER

This report contains data obtained from multiple governmental agencies. Neither CTS nor PIERS can insure the accuracy of the enclosed information. CTS and PIERS are in no way responsible for errors and/or omissions occurring in data, data conversion, or for the client's use of the information (report). CTS, PIERS and its affiliates cannot be held liable for accuracy, storage, loss or expense suffered by customers resulting directly or indirectly from any data provided by CTS. No warranty expressed or implied is made in any way in connection with this report.

CTS has researched and obtained certain local, State and Federal environmental databases (Data) to assist its client's in meeting the requirements of ASTM Standards. CTS has obtained Data that is readily available and of adequate quality to be included in this report. As of the date of this report, there are certain Data that are either not yet available or are not of adequate quality and therefore are not included in this Report.

Identified Hazardous Materials Sites Radius F

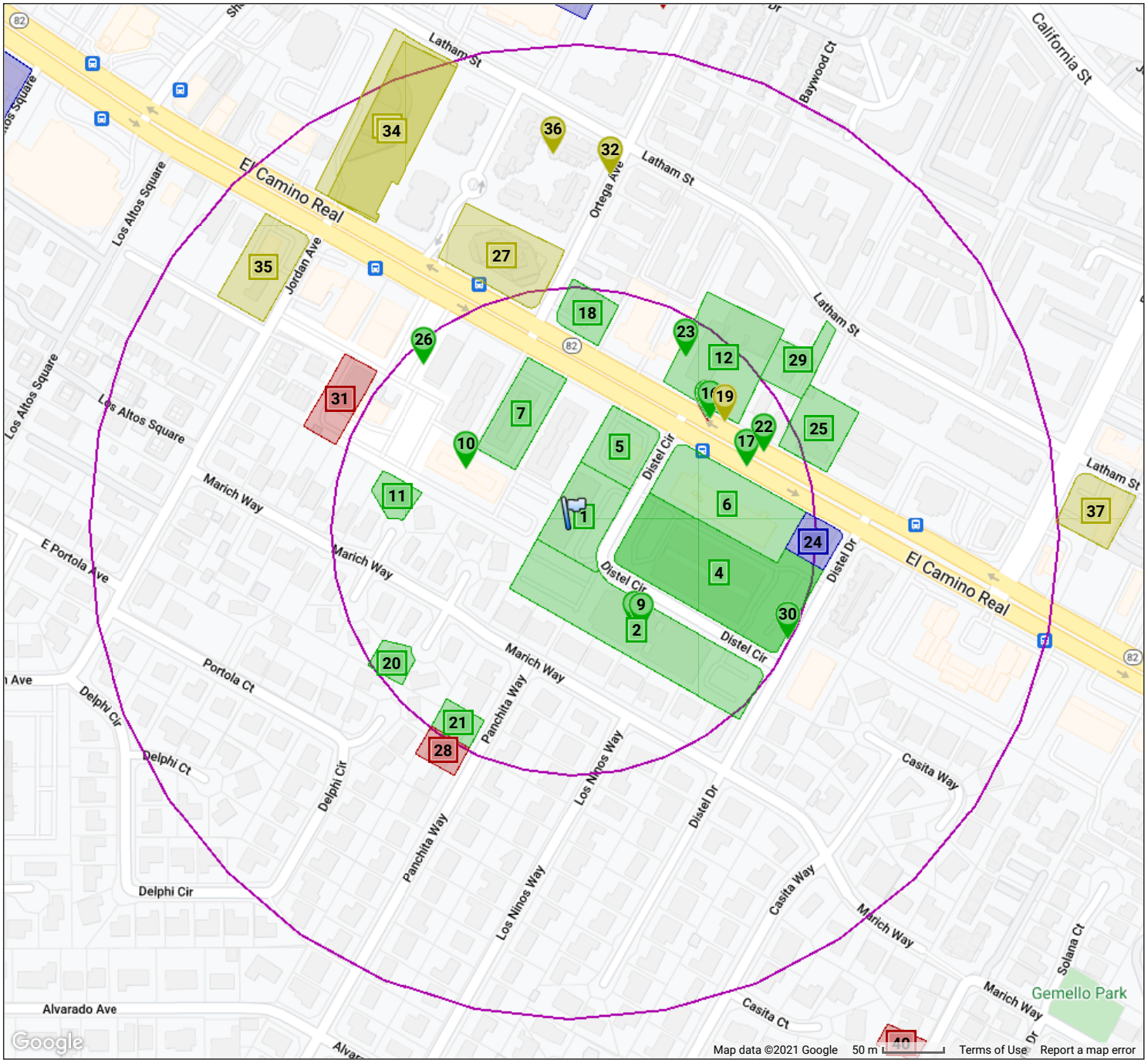
Site Summary

		Subject Property	Up to 1/8 mile	1/8 mile to 1/4 mile	1/4 mile to 1/2 mile	1/2 mile to 1 mile	Total
Databases Searched to One mile(s)							
NPL	National Priority List (Superfund) Sites	0	0	0	0	1	1
CORRACT	Corrective Action Sites	0	0	0	0	0	0
TSD	Treatment, Storage and Disposal Sites	0	1	1	5	16	23
DEFENSE	Unused and Formerly Used Defense Sites	0	0	0	0	0	0
BROWN	Brownfields Cleanup and Reuse Sites	0	0	0	0	0	0
CSL	Contaminated Sites List	0	1	0	3	26	30
DEED	Deed Restrictions/Environmental Covenants	0	0	0	0	2	2
Databases Searched to One-Half mile(s)							
SUPERFUND	Superfund Database	0	0	0	0	-	0
CONTROLS	Institutional and Engineering Controls	0	0	0	0	-	0
LUST	Leaking Underground Storage Tanks	0	2	0	6	2*	10
SWLF	Solid Waste Landfills	0	0	0	0	-	0
Databases Searched to One-Quarter mile(s)							
WELLS	Water Wells	0	0	0	-	-	0
HAZMAT	Hazardous Materials Storage and Incident Records	0	3	9	-	-	12
Databases Searched to One-Eighth mile(s)							
ERNS	Emergency Response Notification System	0	2	-	-	-	2
GENERATOR	Small and Large Quantity Generators	0	11	-	-	-	11
UST	Underground Storage Tank Sites	0	0	-	-	-	0
AST	Aboveground Storage Tanks	0	0	-	-	-	0
EMISSIONS	Air Emissions and Dry Cleaner Sites	0	0	-	-	-	0
HAZNET	Hazardous Waste Information System	16	58	-	-	-	74
	Totals	16	78	10	14	47	165

* In some situations we include lists beyond the standard search distance. For instance if a site is on multiple lists, and one of those lists is within the search radius but others are not, we may include those that are not within the radius.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

QUARTER MILE MAP



Site Searched to One-Eighth Mile

Site Searched to One-Quarter Mile

Site Searched to One-Half Mile

Site Searched to One Mile

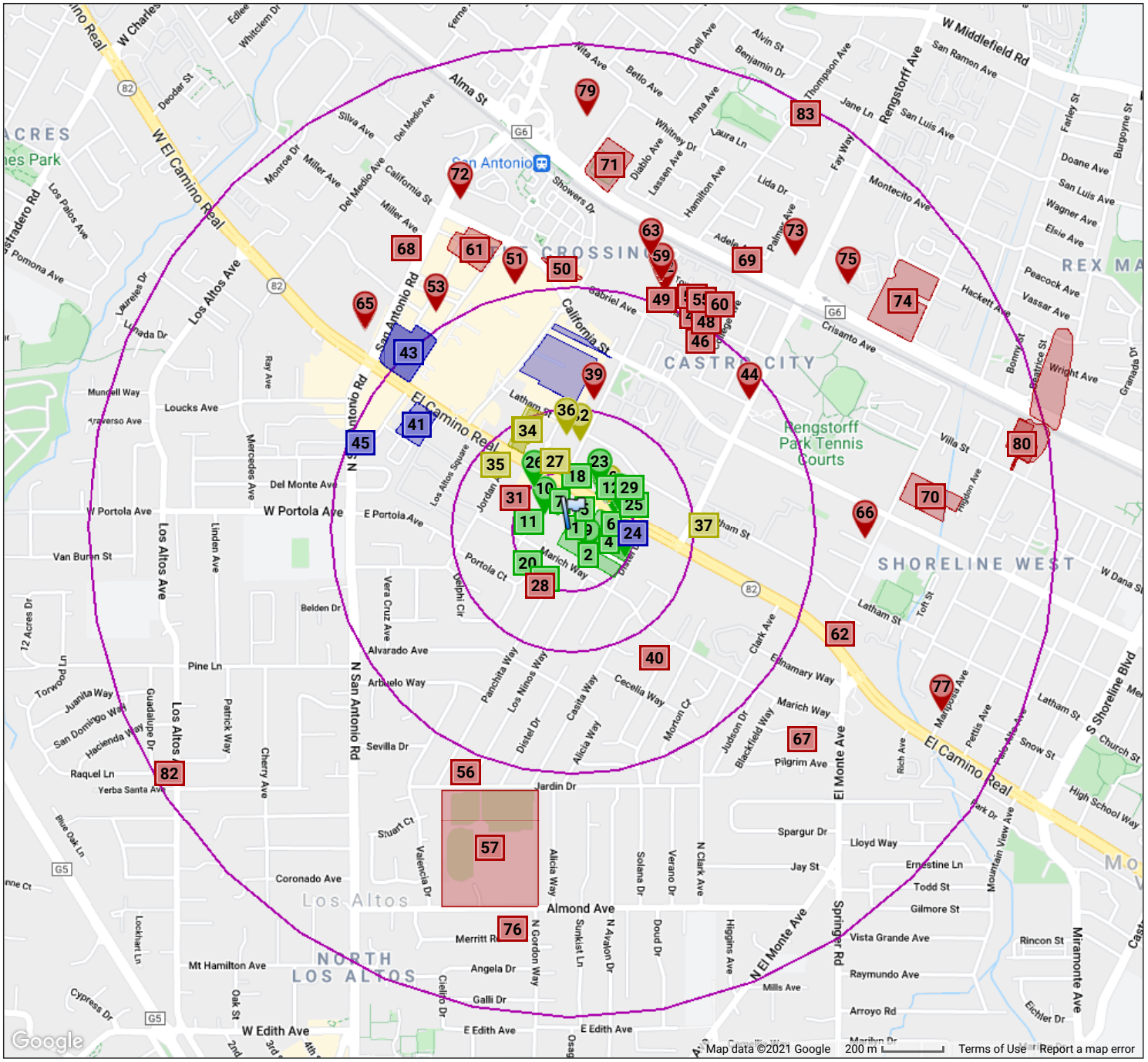
Subject Property

N

PIERS Environmental Services - www.pierses.com
1038 Redwood Hwy., Suite 100A - Mill Valley - CA - 94941 - v. 415-388-7900 - f.415-388-7909

Identified Hazardous Materials Sites Radius F

One Mile Map



Site Searched to One-Eighth Mile

Site Searched to One-Quarter Mile

Site Searched to One-Half Mile

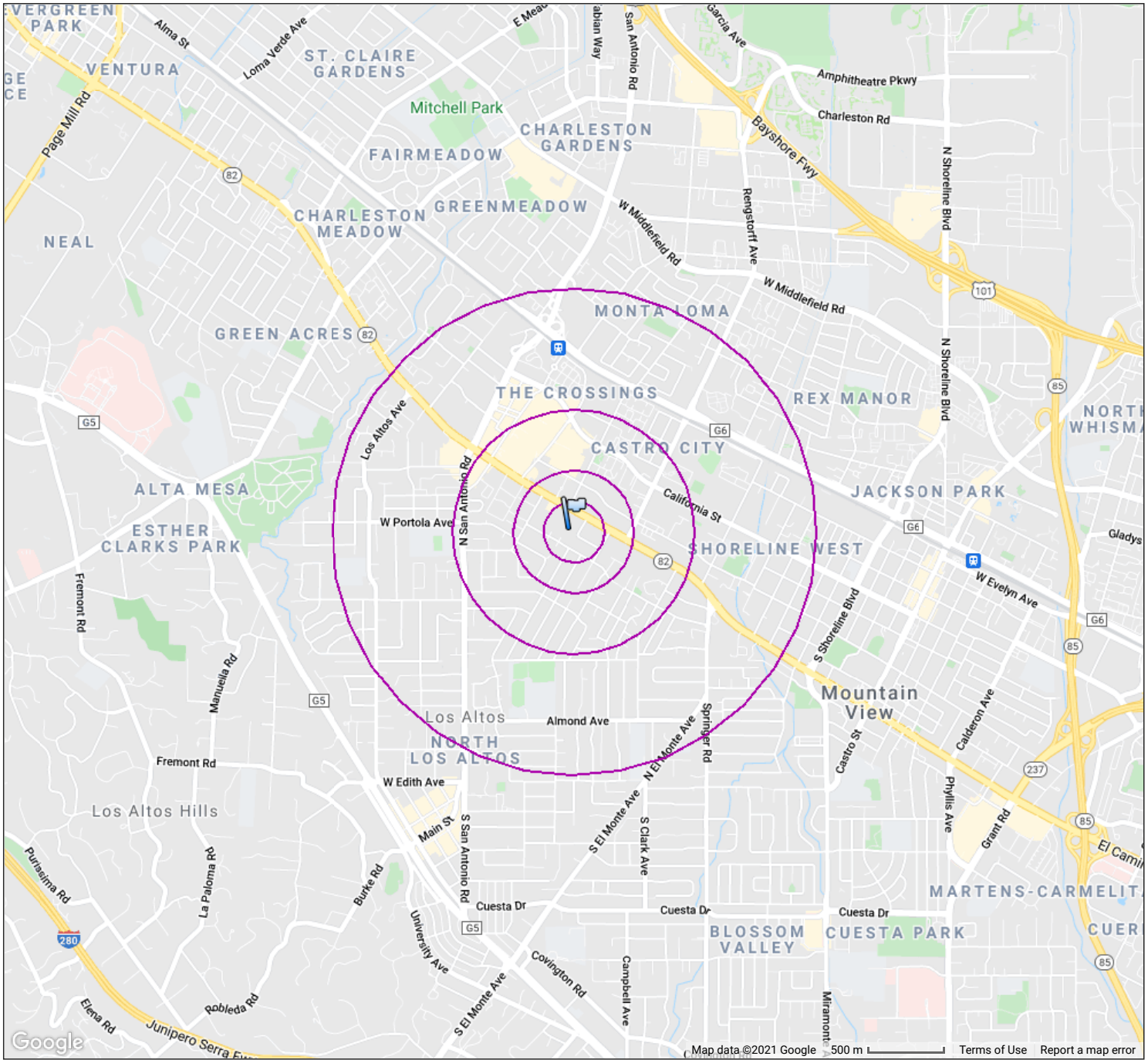
Site Searched to One Mile

Subject Property

N

Identified Hazardous Materials Sites Radius F

Site Vicinity Map



Subject Property

N

PIERS Environmental Services - www.pierses.com
1038 Redwood Hwy., Suite 100A - Mill Valley - CA - 94941 - v. 415-388-7900 - f.415-388-7909

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SITE DETAILS SUMMARY

Map#	DB Type	Site Name/Status	Address	Dist/Dir	Page
1A	HAZNET	1X MIDPENISULA REGIONAL OPEN SPACE DIST./Status Not Applicable or Not Provided By Agency	330 DISTEL CIRCLE, LOS ALTOS, CA	0 ft / North East	17
1B	HAZNET	MIDPENISULA REGIONAL OPEN SPACE DIST./Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	17
1C	HAZNET	US ARMY CORP OF ENGINEERS/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	17
1D	HAZNET	US ARMY CORP OF ENGINEERS/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	18
1E	HAZNET	US ARMY CORPS OF ENGINEERS/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	18
1F	HAZNET	US ARMY CORP OF ENGINEERS/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	18
1G	HAZNET	ALMADN AIR FORCE STATION/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	19
1H	HAZNET	MIDPENISULA REGIONAL OPEN SPACE DISTRICT/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	19
1I	HAZNET	MIDPENINSULA REGIONAL OPEN SPACE DISTRICT/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	20
1J	HAZNET	1X MIDPENISULA REGIONAL OPEN SPACE DIST./Status Not Applicable or Not Provided By Agency	330 DISTEL CIRCLE, LOS ALTOS, CA	0 ft / North East	20
1K	HAZNET	MIDPENISULA REGIONAL OPEN SPACE DIST./Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	20
1L	HAZNET	US ARMY CORP OF ENGINEERS/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	21
1M	HAZNET	US ARMY CORP OF ENGINEERS/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	21
1N	HAZNET	US ARMY CORP OF ENGINEERS/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	22
1O	HAZNET	ALMADN AIR FORCE STATION/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	22
1P	HAZNET	MIDPENISULA REGIONAL OPEN SPACE DISTRICT/Status Not Applicable or Not Provided By Agency	330 DISTEL CIR, LOS ALTOS, CA	0 ft / North East	23
2A	HAZNET	SUTTER BAY MEDICAL FOUNDATION/P.A.M.F/Status Not Applicable or Not Provided By Agency	370 DISTEL CIR, LOS ALTOS, CA	67 ft / South	24
2B	HAZNET	PALO ALTO MEDICAL FOUNDATION/Status Not Applicable or Not Provided By Agency	370 DISTEL CIRCLE, LOS ALTOS, CA	67 ft / South	24

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SITE DETAILS SUMMARY

2C	GENERATOR	SUTTER BAY MEDICAL FOUNDATION/P.A.M.F/Status Not Applicable or Not Provided By Agency	370 DISTEL CIR, LOS ALTOS, CA	67 ft / South	24
2D	HAZNET	SUTTER BAY MEDICAL FOUNDATION/P.A.M.F/Status Not Applicable or Not Provided By Agency	370 DISTEL CIR, LOS ALTOS, CA	67 ft / South	26
2E	HAZNET	PALO ALTO MEDICAL FOUNDATION/Status Not Applicable or Not Provided By Agency	370 DISTEL CIRCLE, LOS ALTOS, CA	67 ft / South	26
2F	GENERATOR	SUTTER BAY MEDICAL FOUNDATION/P.A.M.F/Status Not Applicable or Not Provided By Agency	370 DISTEL CIR, LOS ALTOS, CA	67 ft / South	27
3A	HAZNET	QSecure/Status Not Applicable or Not Provided By Agency	333 DISTEL CIR, LOS ALTOS, CA	126 ft / East	29
3B	HAZNET	QSecure/Status Not Applicable or Not Provided By Agency	333 DISTEL CIR, LOS ALTOS, CA	126 ft / East	29
4A	HAZNET	R2 TECHNOLOGY INC/Status Not Applicable or Not Provided By Agency	325 DISTEL CIRCLE, LOS ALTOS, CA	126 ft / East	30
4B	HAZNET	R2 TECHNOLOGY INC/Status Not Applicable or Not Provided By Agency	325 DISTEL CIRCLE, LOS ALTOS, CA	126 ft / East	30
5A	ERNS	Unknown/Status Not Applicable or Not Provided By Agency	5000 W. El Camino Real, LOS ALTOS, CA	175 ft / North West	30
5B	ERNS	Unknown/Status Not Applicable or Not Provided By Agency	5000 W. EL CAMINO REAL, LOS ALTOS, CA	175 ft / North West	31
6A	HAZNET	LOS ALTOS FAMILY CHIROPRACTIC/Status Not Applicable or Not Provided By Agency	5050 EL CAMINO REAL #200, LOS ALTOS, CA	231 ft / East	32
6B	HAZNET	FOOTHILL CHIROPRACTIC GROUP/Status Not Applicable or Not Provided By Agency	5050 EL CAMINO REAL,#200, LOS ALTOS, CA	231 ft / East	33
6C	HAZNET	FOOTHILL CHIROPRACTIC GROUP/Status Not Applicable or Not Provided By Agency	5050 EL CAMINO REAL,#200, LOS ALTOS, CA	231 ft / East	33
7A	HAZNET	SKYLINE HEIGHTS LLC/Status Not Applicable or Not Provided By Agency	4970 EL CAMINO REAL, LOS ALTOS, CA	231 ft / North	34
7B	GENERATOR	SKYLINE HEIGHTS LLC/Status Not Applicable or Not Provided By Agency	4970 EL CAMINO REAL, LOS ALTOS, CA	231 ft / North	35
7C	HAZNET	SKYLINE HEIGHTS LLC/Status Not Applicable or Not Provided By Agency	4970 EL CAMINO REAL, LOS ALTOS, CA	231 ft / North	35
7D	GENERATOR	SKYLINE HEIGHTS LLC/Status Not Applicable or Not Provided By Agency	4970 EL CAMINO REAL, LOS ALTOS, CA	231 ft / North	36
8A	GENERATOR	PALO ALTO MEDICAL FOUNDATION/Status Not Applicable or Not Provided By Agency	370 DISTEL CL, LOS ALTOS, CA	316 ft / South East	37
8B	GENERATOR	Sutter Bay MEDICAL FOUNDATION/Status Not Applicable or Not Provided By Agency	370 DISTEL CL, LOS ALTOS, CA	316 ft / South East	37
9A	HAZNET	PALO ALTO MEDICVAL FOUNDATION/Status Not Applicable or Not Provided By Agency	370 DISTEL CRICLE, LOS ALTOS, CA	330 ft / South East	38

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SITE DETAILS SUMMARY

	10A	HAZNET	1X NORDSTROMS/Status Not Applicable or Not Provided By Agency	4966 EL CAMINO REAL, PALO ALTO, CA	331 ft / North West	38
	11A	HAZNET	KUMAR SRIKANTAN/Status Not Applicable or Not Provided By Agency	281 MARICH WAY, LOS ALTOS, CA	424 ft / West	39
	12A	HAZNET	LMV MOUNTAIN VIEW II HOLDINGS, LP./Status Not Applicable or Not Provided By Agency	2280-2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	473 ft / North East	39
	12B	HAZNET	LMV MOUNTAIN VIEW II HOLDINGS, LP./Status Not Applicable or Not Provided By Agency	2280-2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	473 ft / North East	39
	13A	CSL	Former Platinum Cleaners/Certified	2290 West El Camino Real, MOUNTAIN VIEW, CA	473 ft / North East	40
	14A	HAZNET	SPINAL & SPORTS CARE CENTER/Status Not Applicable or Not Provided By Agency	2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	480 ft / North East	46
	14B	HAZNET	OLIVE TREE DENTAL/Status Not Applicable or Not Provided By Agency	2290 W. EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA	480 ft / North East	46
	14C	HAZNET	DELIA'S CLEANERS INC/Status Not Applicable or Not Provided By Agency	2290 W EL CAMINO REAL STE 1, MOUNTAIN VIEW, CA	480 ft / North East	46
	14D	HAZNET	SPINAL & SPORTS CARE CENTER/Status Not Applicable or Not Provided By Agency	2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	480 ft / North East	47
	14E	HAZNET	OLIVE TREE DENTAL/Status Not Applicable or Not Provided By Agency	2290 W. EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA	480 ft / North East	48
	14F	HAZNET	DELIA'S CLEANERS INC/Status Not Applicable or Not Provided By Agency	2290 W EL CAMINO REAL STE 1, MOUNTAIN VIEW, CA	480 ft / North East	48
	15A	HAZNET	MARNA LONGAKIT/Status Not Applicable or Not Provided By Agency	2290 W EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA	482 ft / North East	49
	15B	HAZNET	Platinum Cleaners/Status Not Applicable or Not Provided By Agency	2290 W El Camino Real, MOUNTAIN VIEW, CA	482 ft / North East	49
	15C	HAZNET	DELIA'S CLEANERS INC/Status Not Applicable or Not Provided By Agency	2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	482 ft / North East	50
	15D	HAZNET	PURE CLEANERS/Status Not Applicable or Not Provided By Agency	2290-A EL CAMINO REAL, MOUNTAIN VIEW, CA	482 ft / North East	50
	15E	HAZNET	Platinum Cleaners/Status Not Applicable or Not Provided By Agency	2290 W El Camino Real, MOUNTAIN VIEW, CA	482 ft / North East	50
	16A	GENERATOR	DCI MANAGEMENT GROUP NO 77/Status Not Applicable or Not Provided By Agency	2290 EL CAMINO REAL NO 1, MOUNTAIN VIEW, CA	484 ft / North East	51
	17A	HAZNET	MIDPENINSULA REGIONAL OPEN SPACE DISTRICT/Status Not Applicable or Not Provided By Agency	5050 EL CAMINO REAL, LOS ALTOS, CA	508 ft / East	52
	18A	HAZNET	OFF-RAMP THE/Status Not Applicable or Not Provided By Agency	2320 EL CAMINO REAL, MOUNTAIN VIEW, CA	508 ft / North	52
	19A	HAZMAT	Platinum Cleaners/Status Not Applicable or Not Provided By Agency	2290 El Camino Real West Unit 1, MOUNTAIN VIEW, CA	510 ft / North East	53

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SITE DETAILS SUMMARY

19B	HAZNET	LENNAR HOMES OF CALIFORNIA/Status Not Applicable or Not Provided By Agency	2290 W EL CAMINO REAL, MOUNTAIN VIEW, CA	510 ft / North East	54
19C	HAZNET	LENNAR HOMES OF CALIFORNIA/Status Not Applicable or Not Provided By Agency	2290 W EL CAMINO REAL, MOUNTAIN VIEW, CA	510 ft / North East	54
20A	HAZNET	MARY SCHEN/Status Not Applicable or Not Provided By Agency	306 MARICH WAY, LOS ALTOS, CA	541 ft / South West	54
20B	HAZNET	MARY SCHEN/Status Not Applicable or Not Provided By Agency	306 MARICH WAY, LOS ALTOS, CA	541 ft / South West	55
21A	HAZNET	JANE CHEN/Status Not Applicable or Not Provided By Agency	736 PANCHITA WAY, LOS ALTOS, CA	565 ft / South West	55
21B	HAZNET	CHEN, JANE AND GLEN/Status Not Applicable or Not Provided By Agency	736 PANCHITA WAY, LOS ALTOS, CA	565 ft / South West	56
21C	HAZNET	JANE CHEN/Status Not Applicable or Not Provided By Agency	736 PANCHITA WAY, LOS ALTOS, CA	565 ft / South West	56
21D	HAZNET	CHEN, JANE AND GLEN/Status Not Applicable or Not Provided By Agency	736 PANCHITA WAY, LOS ALTOS, CA	565 ft / South West	56
22A	HAZNET	LMV MOUNTAIN VIEW II HOLDINGS, LP./Status Not Applicable or Not Provided By Agency	2268 WEST EL CAMINO REAL ROAD, MOUNTAIN VIEW, CA	566 ft / East	57
22B	HAZNET	LMV MOUNTAIN VIEW II HOLDINGS, LP./Status Not Applicable or Not Provided By Agency	2268 W.EL CAMINO REAL RD., MOUNTAIN VIEW, CA	566 ft / East	57
22C	HAZNET	LMV MOUNTAIN VIEW II HOLDINGS, LP./Status Not Applicable or Not Provided By Agency	2268 W.EL CAMINO REAL RD., MOUNTAIN VIEW, CA	566 ft / East	58
23A	HAZNET	FORMER PLATINUM CLEANERS/Status Not Applicable or Not Provided By Agency	2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	567 ft / North East	58
23B	HAZNET	FORMER PLATINUM CLEANERS/Status Not Applicable or Not Provided By Agency	2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	567 ft / North East	58
24A	HAZNET	1X WALTHER'S TILE AND FLOOR COVERING/Status Not Applicable or Not Provided By Agency	5084 EL CAMINO REAL, LOS ALTOS, CA	576 ft / East	59
24B	LUST	Walter's Floors/Completed - Case Closed	5084 El Camino Real, LOS ALTOS, CA	576 ft / East	59
24C	LUST	Walter's Floors/Status Not Applicable or Not Provided By Agency	5084 EL CAMINO REAL, LOS ALTOS, CA	576 ft / East	60
25A	GENERATOR	UNITED RENTALS NORTHWEST INC/Status Not Applicable or Not Provided By Agency	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA	603 ft / East	60
25B	HAZNET	TAYLOR RENTAL/Status Not Applicable or Not Provided By Agency	2246 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	603 ft / East	61
25C	HAZNET	TAYLOR RENTAL/Status Not Applicable or Not Provided By Agency	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA	603 ft / East	61
25D	HAZNET	UNITED RENTALS INC #420/Status Not Applicable or Not Provided By Agency	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA	603 ft / East	61

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SITE DETAILS SUMMARY

	25E	HAZNET	TAYLOR RENTALS/Status Not Applicable or Not Provided By Agency	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA	603 ft / East	62
	25F	HAZNET	TAYLOR RENTAL/Status Not Applicable or Not Provided By Agency	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA	603 ft / East	62
	25G	HAZNET	UNITED RENTALS INC #420/Status Not Applicable or Not Provided By Agency	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA	603 ft / East	63
	25H	GENERATOR	TAYLOR RENTALS/Status Not Applicable or Not Provided By Agency	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA	603 ft / East	64
	26A	GENERATOR	KITTY CLEANERS/Status Not Applicable or Not Provided By Agency	910 NEW CLEANERS, EAST PALO ALTO, CA	605 ft / North West	65
	27A	HAZMAT	Palo Alto Medical Foundation/Status Not Applicable or Not Provided By Agency	2350 El Camino Real West, MOUNTAIN VIEW, CA	618 ft / North	66
	27B	HAZMAT	Sutter Bay Medical Foundation/Status Not Applicable or Not Provided By Agency	2350 EL CAMINO REAL WEST, MOUNTAIN VIEW, CA	618 ft / North	67
	28A	HAZNET	728 PANCHITA LLC/Status Not Applicable or Not Provided By Agency	728 PANCHITA WAY, LOS ALTOS, CA	650 ft / South West	67
	28B	GENERATOR	728 PANCHITA LLC/Status Not Applicable or Not Provided By Agency	728 PANCHITA WAY, LOS ALTOS, CA	650 ft / South West	67
	28C	HAZNET	728 PANCHITA LLC/Status Not Applicable or Not Provided By Agency	728 PANCHITA WAY, LOS ALTOS, CA	650 ft / South West	68
	28D	TSD	728 PANCHITA LLC/Status Not Applicable or Not Provided By Agency	728 PANCHITA WAY, LOS ALTOS, CA	650 ft / South West	68
	29A	HAZNET	LMV MOUNTAIN VIEW II HOLDINGS, LP./Status Not Applicable or Not Provided By Agency	2241 LATHAM ST., MOUNTAIN VIEW, CA	656 ft / North East	70
	29B	HAZNET	LMV MOUNTAIN VIEW II HOLDINGS, LP./Status Not Applicable or Not Provided By Agency	2241 LATHAM ST., MOUNTAIN VIEW, CA	656 ft / North East	70
	29C	HAZNET	LMV MOUNTAIN VIEW II HOLDINGS, LP./Status Not Applicable or Not Provided By Agency	2241 LATHAM ST., MOUNTAIN VIEW, CA	656 ft / North East	71
	30A	HAZNET	LTK ASSOCIATES INC/Status Not Applicable or Not Provided By Agency	740 DISTEL DR, LOS ALTOS, CA	657 ft / South East	71
	30B	HAZNET	LTK ASSOCIATES INC/Status Not Applicable or Not Provided By Agency	740 DISTEL DR, LOS ALTOS, CA	657 ft / South East	71
	31A	TSD	INNOVUSION, INC./Status Not Applicable or Not Provided By Agency	4920 EL CAMINO REAL, STE 100, LOS ALTOS, CA	680 ft / North West	72
	32A	HAZMAT	Domizile Homeowners Association/Status Not Applicable or Not Provided By Agency	550 Ortega Avenue, MOUNTAIN VIEW, CA	972 ft / North	73
	33A	HAZMAT	Boston Properties, L.P./Status Not Applicable or Not Provided By Agency	2440 El Camino Real West, MOUNTAIN VIEW, CA	997 ft / North West	74
	33B	HAZMAT	Boston Properties, L.P./Status Not Applicable or Not Provided By Agency	2440 EL CAMINO REAL WEST, MOUNTAIN VIEW, CA	997 ft / North West	75

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SITE DETAILS SUMMARY

34A	HAZMAT	Avalon Towers On The Peninsula/Status Not Applicable or Not Provided By Agency	2400 El Camino Real West, MOUNTAIN VIEW, CA	1002 ft / North West	75
34B	HAZMAT	Avalon Towers On The Peninsula/Status Not Applicable or Not Provided By Agency	2400 EL CAMINO REAL WEST, MOUNTAIN VIEW, CA	1002 ft / North West	76
35A	HAZMAT	Jack in the Box #0421/Status Not Applicable or Not Provided By Agency	4896 EL CAMINO REAL, LOS ALTOS, CA	1019 ft / North West	76
36A	HAZMAT	Domizile Homeowners Association/Status Not Applicable or Not Provided By Agency	550 ORTEGA AVENUE, MOUNTAIN VIEW, CA	1026 ft / North	77
37A	HAZMAT	7-ELEVEN INC. STORE #16687/Status Not Applicable or Not Provided By Agency	615 S Rengstorff Ave, MOUNTAIN VIEW, CA	1310 ft / East	77
37B	HAZMAT	7-ELEVEN INC. STORE #16687/Status Not Applicable or Not Provided By Agency	615 S RENGSTORFF AVE, MOUNTAIN VIEW, CA	1310 ft / East	78
38A	LUST	Digas/Completed - Case Closed	555 Showers Dr, MOUNTAIN VIEW, CA	1392 ft / North	78
38B	LUST	Digas/Status Not Applicable or Not Provided By Agency	555 SHOWERS DR, MOUNTAIN VIEW, CA	1392 ft / North	80
39A	TSD	LIHUI LIN AND CHUCK GWO/Status Not Applicable or Not Provided By Agency	400 A ORTEGA AVE, MOUNTAIN VIEW, CA	1440 ft / North	80
40A	TSD	SOPHIA VOLKEL/Status Not Applicable or Not Provided By Agency	1026 KAREN WAY, MOUNTAIN VIEW, CA	1586 ft / South East	82
41A	LUST	LOS ALTOS GARDEN SUPPLY/Completed - Case Closed	4730 EL CAMINO REAL, LOS ALTOS, CA	1900 ft / North West	83
42A	LUST	Quality Tune-Up #1/Status Not Applicable or Not Provided By Agency	2580 EL CAMINO REAL, MOUNTAIN VIEW, CA	2396 ft / North West	84
43A	LUST	Quality Tune-Up #1/Completed - Case Closed	2580 El Camino Real, MOUNTAIN VIEW, CA	2396 ft / North West	85
44A	TSD	JASON CHIN/Status Not Applicable or Not Provided By Agency	255 SOUTH RENGSTORFF AVE, MOUNTAIN VIEW, CA	2404 ft / North East	86
44B	TSD	NANCY TATE/Status Not Applicable or Not Provided By Agency	255 SOUTH RENGSTORFF AVE, MOUNTAIN VIEW, CA	2404 ft / North East	88
45A	LUST	UNOCAL #4918/Completed - Case Closed	895 N. SAN ANTONIO ROAD, LOS ALTOS, CA	2456 ft / West	89
46A	TSD	LIN MI/Status Not Applicable or Not Provided By Agency	169 ORTEGA AVENUE, MOUNTAIN VIEW, CA	2461 ft / North East	93
47A	CSL	PLESSEY #2/No Further Action	2251, 2257, 2283 AND 2287 MORA DRIVE, MOUNTAIN VIEW, CA	2618 ft / North East	95
48A	CSL	SYMTRON CORP./No Further Action	2235-2245 MORA DR., MOUNTAIN VIEW, CA	2622 ft / North East	98
49A	CSL	SYMTRON #2/No Further Action	111 ORTEGA AVENUE, MOUNTAIN VIEW, CA	2624 ft / North East	107
50A	CSL	IRM COST SHARING SITE/Open - Verification Monitoring	2520 CALIFORNIA STREET, MOUNTAIN VIEW, CA	2716 ft / North	112

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SITE DETAILS SUMMARY

50B	CSL	IRM COST SHARING SITE/Status Not Applicable or Not Provided By Agency	2520 CALIFORNIA STREET, MOUNTAIN VIEW, CA	2716 ft / North	115
51A	CSL	Proposed San Antonio Elementary School/Active	435 San Antonio Road, 2535 California Street, 350, 506, 510-520 Showers Dri, MOUNTAIN VIEW, CA	2745 ft / North	115
52A	CSL	PLESSEY INC. [NPDES]/Completed - Case Closed	2294 MORA DR, MOUNTAIN VIEW, CA	2786 ft / North East	117
52B	CSL	PLESSEY INC. [NPDES]/Status Not Applicable or Not Provided By Agency	2294 MORA DR, MOUNTAIN VIEW, CA	2786 ft / North East	118
53A	CSL	Sears Store #1238/Completed - Case Closed	455 San Antonio Road, MOUNTAIN VIEW, CA	2787 ft / North West	118
53B	CSL	Sears Store #1238/Status Not Applicable or Not Provided By Agency	455 SAN ANTONIO ROAD, MOUNTAIN VIEW, CA	2787 ft / North West	121
54A	CSL	PLESSEY MICRO SCIENCE/Certified / Operation & Maintenance	2274 MORA DRIVE, MOUNTAIN VIEW, CA	2806 ft / North East	121
55A	CSL	PLESSEY #3/No Further Action	2256 MORA DRIVE, MOUNTAIN VIEW, CA	2807 ft / North East	128
56A	TSD	JOANNE STANLEY/Status Not Applicable or Not Provided By Agency	416 LOS NINOS WAY, LOS ALTOS, CA	2827 ft / South West	132
57A	CSL	Los Altos High School Expansion/Active	201 Almond Avenue, LOS ALTOS, CA	2836 ft / South	133
58A	CSL	TRW/VIDAR/Certified O&M - Land Use Restrictions Only	77 ORTEGA AVENUE, MOUNTAIN VIEW, CA	2872 ft / North East	136
59A	DEED	TRW/VIDAR/Status Not Applicable or Not Provided By Agency	77 ORTEGA AVENUE, MOUNTAIN VIEW, CA	2882 ft / North East	143
60A	DEED	MORA DRIVE/Status Not Applicable or Not Provided By Agency	2221-2291 MORA DRIVE, MOUNTAIN VIEW, CA	2891 ft / North East	145
60B	CSL	Mora Drive/Active	2221-2291 Mora Drive, MOUNTAIN VIEW, CA	2891 ft / North East	146
61A	TSD	UNITED RENTALS (NORTH AMERICA), INC/Status Not Applicable or Not Provided By Agency	409 SAN ANTONIO RD, MOUNTAIN VIEW, CA	2981 ft / North West	154
62A	TSD	LensCrafters #3016/Status Not Applicable or Not Provided By Agency	1898 W El Camino Real, MOUNTAIN VIEW, CA	3042 ft / East	155
62B	TSD	LensCrafters #3016/Status Not Applicable or Not Provided By Agency	1898 W EL CAMINO REAL, MOUNTAIN VIEW, CA	3042 ft / East	156
63A	TSD	JUDY CHEANG & ANDREW PACE/Status Not Applicable or Not Provided By Agency	49 SHOWERS DR #A142, MOUNTAIN VIEW, CA	3110 ft / North	156
63B	TSD	KOUSHIK GHOSH/Status Not Applicable or Not Provided By Agency	49 SHOWERS DR #A140, MOUNTAIN VIEW, CA	3110 ft / North	158
64A	CSL	World Plaza/Status Not Applicable or Not Provided By Agency	660 SAN ANTONIO ROAD, MOUNTAIN VIEW, CA	3117 ft / North West	159
65A	CSL	World Plaza/Open - Verification Monitoring	660 San Antonio Road, MOUNTAIN VIEW, CA	3119 ft / North West	159

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SITE DETAILS SUMMARY

	66A	TSD	JAY ZELENKOV/Status Not Applicable or Not Provided By Agency	1910 MOUNT VERNON COURT, MOUNTAIN VIEW, CA	3197 ft / East	163
	67A	TSD	SANDRA CARRICO/Status Not Applicable or Not Provided By Agency	1843 ANTHONY CT, MOUNTAIN VIEW, CA	3283 ft / South East	165
	68A	CSL	Former Firestone/Completed - Case Closed	462 San Antonio Road, MOUNTAIN VIEW, CA	3419 ft / North West	166
	68B	LUST	Firestone Store No. 3670/Completed - Case Closed	462 San Antonio Rd, MOUNTAIN VIEW, CA	3419 ft / North West	168
	68C	CSL	Former Firestone/Status Not Applicable or Not Provided By Agency	462 SAN ANTONIO ROAD, MOUNTAIN VIEW, CA	3419 ft / North West	169
	68D	LUST	Firestone Store No. 3670/Status Not Applicable or Not Provided By Agency	462 SAN ANTONIO RD, MOUNTAIN VIEW, CA	3419 ft / North West	169
	69A	TSD	ALEX CHABAN/Status Not Applicable or Not Provided By Agency	2351 ADELE AVE, MOUNTAIN VIEW, CA	3446 ft / North East	169
	70A	CSL	Regency Apartments/Completed - Case Closed	333 Escuela Avenue, MOUNTAIN VIEW, CA	3562 ft / East	171
	70B	CSL	Regency Apartments/Status Not Applicable or Not Provided By Agency	333 ESCUELA AVENUE, MOUNTAIN VIEW, CA	3562 ft / East	173
	71A	TSD	The Rails/Status Not Applicable or Not Provided By Agency	100 Mayfield Ave, MOUNTAIN VIEW, CA	3702 ft / North	173
	72A	CSL	MVSA/Active	225 San Antonio Road, 2580 California Street, 201 San Antonio Circle, MOUNTAIN VIEW, CA	3788 ft / North	174
	73A	CSL	Sunbeam Cleaners/Open - Inactive	128 N. Rengstorff Avenue, MOUNTAIN VIEW, CA	3852 ft / North East	176
	73B	CSL	Sunbeam Cleaners/Status Not Applicable or Not Provided By Agency	128 N. RENGSTORFF AVENUE, MOUNTAIN VIEW, CA	3852 ft / North East	178
	74A	TSD	PAULSON PARK APARTMENTS/Status Not Applicable or Not Provided By Agency	111 MONTEBELLO AVE., MOUNTAIN VIEW, CA	3943 ft / North East	178
	75A	TSD	API NORTH PARK LLC/Status Not Applicable or Not Provided By Agency	111 N RENGSTROFF AVENUE, MOUNTAIN VIEW, CA	4028 ft / North East	180
	76A	TSD	ANNE GEOFF & DAVID OULA/Status Not Applicable or Not Provided By Agency	257 MERRITT RD, LOS ALTOS, CA	4310 ft / South	182
	77A	TSD	PRITHI TRIVEDI/Status Not Applicable or Not Provided By Agency	725 MARIPOSA AVE UNIT 204, MOUNTAIN VIEW, CA	4495 ft / East	183
	78A	CSL	Mayfield Project/Completed - Case Closed	San Antonio Road and Alma Street, MOUNTAIN VIEW, CA	4501 ft / North	185
	79A	CSL	Mayfield Project/Status Not Applicable or Not Provided By Agency	SAN ANTONIO ROAD AND ALMA STREET, MOUNTAIN VIEW, CA	4505 ft / North	187
	80A	CSL	FORMER JASCO CHEMICAL COMPANY/Open - Verification Monitoring	1710 VILLA ST, MOUNTAIN VIEW, CA	4795 ft / East	187
	80B	CSL	JASCO CHEMICAL CO/Refer: RWQCB	1710 VILLA STREET, MOUNTAIN VIEW, CA	4795 ft / East	190

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SITE DETAILS SUMMARY

80C	CSL	FORMER JASCO CHEMICAL COMPANY/Status Not Applicable or Not Provided By Agency	1710 VILLA ST, MOUNTAIN VIEW, CA	4795 ft / East	192
81A	NPL	JASCO CHEMICAL CORP./Deleted from the Final NPL	1710 VILLA ST, MOUNTAIN VIEW, CA	4804 ft / East	192
82A	TSD	LINDA POTTER/Status Not Applicable or Not Provided By Agency	416 LOS ALTOS AVE, LOS ALTOS, CA	5044 ft / South West	195
83A	TSD	ROHAN GROVER/Status Not Applicable or Not Provided By Agency	2371 THOMPSON CT, MOUNTAIN VIEW, CA	5150 ft / North East	197

Identified Hazardous Materials Sites Radius F

Subject Property Sites

1

1X MIDPENISULA REGIONAL OPEN SPACE DIST.~ALMADN AIR FORCE STATION~MIDPENINSULA REGIONAL OPEN SPACE DISTRICT~MIDPENISULA REGIONAL OPEN SPACE DIST.~MIDPENISULA REGIONAL OPEN SPACE DISTRICT~US ARMY CORP OF ENGINEERS~US ARMY CORPS OF ENGINEERS
Records: 1A,1B,1C,1D,1E,1F,1G,1H,1I,1J,1K,1L,1M,1N,1O,1P,

Site ID: 1730709033
Distance: 0 ft, North East

1A

1X MIDPENISULA REGIONAL OPEN SPACE DIST.
330 DISTEL CIRCLE, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC000703192

Record Details

Owner Name	MIDPENISULA REG. OPEN SPA. DIS	Operator Or Contact Name	BUCKY MACE/REAL PROPERTY MANG.
Operator Or Contact Phone	4159495500	Status	INACTIVE
Inactive Date	10/25/2000	Record Entered	1/8/1992
Last Update	10/25/2000	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	, ,
Operator Or Contact Address	, ,	Mailing Address	--, MT. VIEW, CA 940400000

1B

MIDPENISULA REGIONAL OPEN SPACE DIST.
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002599053

Record Details

Owner Name	MIDPENISULA REG. OPEN SPA. DIS	Owner Phone	6506911200
Operator Or Contact Name	KIRK LENGINGTON	Operator Or Contact Phone	6506911200
Status	INACTIVE	Inactive Date	7/4/2006 4:25:00 PM
Record Entered	1/4/2006 4:25:00 PM	Last Update	1/4/2006 4:25:00 PM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	330 DISTEL CIR, LOS ALTOS, CA 940220000	Operator Or Contact Address	330 DISTEL CIR, LOS ALTOS, CA 940220000
Mailing Address	330 DISTEL CIR, LOS ALTOS, CA 940220000		

1C

US ARMY CORP OF ENGINEERS
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002611256

Record Details

Owner Name	US ARMY	Owner Phone	9165577452

Operator Or Contact Name	GERALD EINCENT	Operator Or Contact Phone	9165577452
Status	INACTIVE	Inactive Date	6/6/2007 1:58:53 PM
Record Entered	12/7/2006 1:58:53 PM	Last Update	6/21/2007 1:43:36 PM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	1325 J ST, SACRAMENTO, CA 958142922	Operator Or Contact Address	1325 J ST, SACRAMENTO, CA 958142922
Mailing Address	1325 J ST, SACRAMENTO, CA 958142922		

1D

US ARMY CORP OF ENGINEERS
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002624102

RECORD DETAILS

Owner Name	US ARMY	Owner Phone	9165577452
Operator Or Contact Name	GERALD EINCENT	Operator Or Contact Phone	9165577452
Status	INACTIVE	Inactive Date	5/19/2008 9:57:01 AM
Record Entered	11/20/2007 9:57:01 AM	Last Update	6/11/2008 2:35:03 PM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	1325 J ST, SACRAMENTO, CA 958142922	Operator Or Contact Address	1325 J ST, SACRAMENTO, CA 958142922
Mailing Address	1325 J ST, SACRAMENTO, CA 958142922		

1E

US ARMY CORPS OF ENGINEERS
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002630669

RECORD DETAILS

Owner Name	US ARMY CORPS OF ENGINEERS	Owner Phone	9165577452
Operator Or Contact Name	GERALD VINCENT	Operator Or Contact Phone	9165577452
Status	INACTIVE	Inactive Date	11/20/2008 10:53:15 AM
Record Entered	5/23/2008 10:53:15 AM	Last Update	12/16/2008 4:43:43 PM
Transporter Registration	N/A	Owner Address	330 DISTEL CIR, LOS ALTOS, CA 940021404
Operator Or Contact Address	330 DISTEL CIR, LOS ALTOS, CA 940021404	Mailing Address	1325 J ST, SACRAMENTO, CA 958142928

1F

US ARMY CORP OF ENGINEERS
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002636173

RECORD DETAILS

Owner Name	US ARMY	Owner Phone	9165577452
Operator Or Contact Name	GERALD EINCENT	Operator Or Contact Phone	9165577452
Status	INACTIVE	Inactive Date	4/27/2009 10:29:01 AM
Record Entered	10/28/2008 10:29:01 AM	Last Update	5/18/2009 5:28:28 PM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	1325 J ST, SACRAMENTO, CA 958142922	Operator Or Contact Address	1325 J ST, SACRAMENTO, CA 958142922
Mailing Address	1325 J ST, SACRAMENTO, CA 958142922		

1G

ALMADN AIR FORCE STATION
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002637235

RECORD DETAILS

Owner Name	US ARMY CORP OF ENGINEERS	Owner Phone	9165577407
Operator Or Contact Name	GERALD VINCENT	Operator Or Contact Phone	9165577407
Status	INACTIVE	Inactive Date	6/2/2009 8:56:19 AM
Record Entered	12/3/2008 8:56:19 AM	Last Update	7/15/2009 3:22:16 PM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	1325 J ST, SACRAMENTO, CA 95814	Operator Or Contact Address	1325 J ST, SACRAMENTO, CA 95814
Mailing Address	1325 J ST, SACRAMENTO, CA 95814		

1H

MIDPENISULA REGIONAL OPEN SPACE DISTRICT
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002661612

RECORD DETAILS

Owner Name	MIDPENISULA REG OPEN SPACE DIST	Owner Phone	6506911200
Operator Or Contact Name	GINA COONY	Operator Or Contact Phone	6506911200
Status	INACTIVE	Inactive Date	7/10/2011 1:25:45 PM
Record Entered	1/10/2011 1:25:45 PM	Last Update	1/10/2011 1:25:45 PM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	330 DISTEL CIR, LOS ALTOS, CA 940221404	Operator Or Contact Address	330 DISTEL CIR, LOS ALTOS, CA 940221404
Mailing Address	330 DISTEL CIR, LOS ALTOS, CA 940221404		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SUBJECT PROPERTY SITES

1I

MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002725584

RECORD DETAILS

Owner Name	MIDPENINSULA REGIONAL OPEN SPACE DI	Owner Phone	6506911200
Operator Or Contact Name	REGINA COONY	Operator Or Contact Phone	6506911200
Status	INACTIVE	Inactive Date	7/4/2013 11:04:00 AM
Record Entered	4/4/2013 11:04:00 AM	Last Update	7/5/2013 3:00:01 AM
Transporter Registration	N/A	Owner Address	330 DISTEL CIR, LOS ALTOS, CA 92044
Operator Or Contact Address	330 DISTEL CIR, LOS ALTOS, CA 940221404	Mailing Address	MOUNT UMUNHUM, LOS GATOS, CA 95032

1J

1X MIDPENISULA REGIONAL OPEN SPACE DIST.
330 DISTEL CIRCLE, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC000703192

RECORD DETAILS

Contact Name	BUCKY MACE/REAL PROPERTY MANG.	Contact Phone	4159495500
Id Number Type	State provisional or emergency number	Mailing Address	--, MT. VIEW, CA 940400000

MANIFEST SUMMARY

Year	2009	Manifest Details	0.1668 tons of Unspecified oil-containing waste disposed of by Unknown`0.075 tons of Other organic solids disposed of by Unknown`0.09 tons of Unspecified solvent mixture disposed of by FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER SITE`0.095 tons of Waste oil and mixed oil disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`

1K

MIDPENISULA REGIONAL OPEN SPACE DIST.
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002599053

RECORD DETAILS

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SUBJECT PROPERTY SITES

Contact Name	KIRK LENGINGTON	Contact Phone	6506911200
Id Number Type	State provisional or emergency number	Mailing Address	330 DISTEL CIR, LOS ALTOS, CA 940220000

MANIFEST SUMMARY

Year	2006	Manifest Details	0.2 tons of Other organic solids disposed of by RECYCLER`

1L

US ARMY CORP OF ENGINEERS
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002611256

RECORD DETAILS

Contact Name	GERALD EINCENT	Contact Phone	9165577452
Id Number Type	State provisional or emergency number	Mailing Address	1325 J ST, SACRAMENTO, CA 958142922

MANIFEST SUMMARY

Year	2007	Manifest Details	0.4 tons of Other organic solids disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`0.2 tons of Waste oil and mixed oil disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`4.02 tons of Unspecified organic liquid mixture disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`

1M

US ARMY CORP OF ENGINEERS
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002624102

RECORD DETAILS

Contact Name	GERALD EINCENT	Contact Phone	9165577452
Id Number Type	State provisional or emergency number	Mailing Address	1325 J ST, SACRAMENTO, CA 958142922

MANIFEST SUMMARY

Year	2007	Manifest Details	0.02 tons of Unknown disposed of by

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SUBJECT PROPERTY SITES

LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`0.07 tons of Other organic solids disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL( TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

1N

US ARMY CORP OF ENGINEERS
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002636173

RECORD DETAILS

Contact Name	GERALD EINCENT	Contact Phone	9165577452
Id Number Type	State provisional or emergency number	Mailing Address	1325 J ST, SACRAMENTO, CA 958142922

MANIFEST SUMMARY

Year	2008	Manifest Details	6.255 tons of Unspecified oil-containing waste disposed of by FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER SITE`

10

ALMADN AIR FORCE STATION
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002637235

RECORD DETAILS

Contact Name	GERALD VINCENT	Contact Phone	9165577407
Id Number Type	State provisional or emergency number	Mailing Address	1325 J ST, SACRAMENTO, CA 95814

MANIFEST SUMMARY

Year	2008	Manifest Details	45.08061 tons of Polychlorinated biphenyls and material containing PCBs disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SUBJECT PROPERTY SITES

1P

MIDPENISULA REGIONAL OPEN SPACE DISTRICT
330 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002661612

RECORD DETAILS

Contact Name	GINA COONY	Contact Phone	6506911200
Id Number Type	State provisional or emergency number	Mailing Address	330 DISTEL CIR, LOS ALTOS, CA 940221404

MANIFEST SUMMARY

Year	2011	Manifest Details	0.005 tons of Other inorganic solid waste disposed of by Unknown`0.53006 tons of Polychlorinated biphenyls and material containing PCBs disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`1.25 tons of Other inorganic solid waste disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`628 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL( TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

2 PALO ALTO MEDICAL FOUNDATION~SUTTER BAY MEDICAL FOUNDATION/P.A.M.F
Records: 2A,2B,2C,2D,2E,2F,

Site ID: 364401725
Distance: 67 ft, South

2A SUTTER BAY MEDICAL FOUNDATION/P.A.M.F
370 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAL000093164

Record Details

Owner Name	PALO ALTO MEDICAL FOUNDATION	Owner Phone	6509343577
Operator Or Contact Name	VICTORIA FIGUEROA	Operator Or Contact Phone	6509343577
Status	ACTIVE	Record Entered	7/26/1994
Last Update	8/18/2020 1:23:50 PM	Naics	62211
Transporter Registration	N/A	Owner Address	333 DISTEL CIRCLE, LOS ALTOS, CA 940220000
Operator Or Contact Address	333 DISTEL CIRCLE, LOS ALTOS, CA 94022	Mailing Address	333 DISTEL CIRCLE, LOS ALTOS, CA 940220000

2B PALO ALTO MEDICAL FOUNDATION
370 DISTEL CIRCLE, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAL000135421

Record Details

Owner Name	PALO ALTO MEDICAL FOUNDATION	Owner Phone	6509343565
Operator Or Contact Name	ANABEL VARGAS	Operator Or Contact Phone	6509343565
Status	INACTIVE	Inactive Date	6/30/2016
Record Entered	4/25/1994	Last Update	1/12/2017 12:49:35 PM
Naics	621111	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	2350 W EL CAMINO REAL RM 152, MOUNTAIN VIEW, CA 94040
Operator Or Contact Address	2350 W EL CAMINO REAL RM 152, MOUNTAIN VIEW, CA 94040	Mailing Address	2350 W EL CAMINO REAL RM 152, MOUNTAIN VIEW, CA 94040

2C SUTTER BAY MEDICAL FOUNDATION/P.A.M.F
370 DISTEL CIR, LOS ALTOS, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: Federal EPA's eManifest database

Record ID:
NAEMANIF-CAL000093164

Record Details

Number Of Manifests In 2019	1

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Federal Yearly Manifest Totals

Number Of Line Items	1	Year	2019
Federal Waste Code	U002	Non Acute Quantity	1.360545
Acute Quantity	0	Waste Description	2-PROPANONE (I) (OR) ACETONE (I)

Number Of Line Items	1	Year	2019
Federal Waste Code	U010	Non Acute Quantity	1.360545
Acute Quantity	0	Waste Description	AZIRINO [2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[(AMINOCARBONYL)OXY]METHYL]-1,1A,2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA, 8AALPHA, 8BALPHA)]- (OR) MITOMYCIN C

Number Of Line Items	1	Year	2019
Federal Waste Code	U035	Non Acute Quantity	1.360545
Acute Quantity	0	Waste Description	BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL

Number Of Line Items	1	Year	2019
Federal Waste Code	U058	Non Acute Quantity	1.360545
Acute Quantity	0	Waste Description	2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE

Number Of Line Items	1	Year	2019
Federal Waste Code	U059	Non Acute Quantity	1.360545
Acute Quantity	0	Waste Description	5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY)-ALPHA-L-LYXO-HEXOPYRANOSYL)OXY]-7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8S-CIS)- (OR) DAUNOMYCIN

State Yearly Manifest Totals

Number Of Line Items	1	Year	2019
State Waste Code	311	Non Acute Quantity	1.360545
Acute Quantity	0	Waste Description	Pharmaceutical waste

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

2D

SUTTER BAY MEDICAL FOUNDATION/P.A.M.F
370 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAL000093164

RECORD DETAILS

Contact Name	VICTORIA FIGUEROA	Contact Phone	6509343577
Id Number Type	State permanent number	Mailing Address	333 DISTEL CIRCLE, LOS ALTOS, CA 940220000

MANIFEST SUMMARY

Year	2019	Manifest Details	0.00150 tons of Pharmaceutical waste disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`

2E

PALO ALTO MEDICAL FOUNDATION
370 DISTEL CIRCLE, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAL000135421

RECORD DETAILS

Contact Name	RICHARD BOURQUE	Contact Phone	6508532857
Id Number Type	State permanent number	Mailing Address	795 EL CAMINO REAL, PALO ALTO, CA 943010000

MANIFEST SUMMARY

Year	1994	Manifest Details	.3127 tons of Photochemicals/photoprocessing waste disposed of by Unknown`.0208 tons of Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by Disposal, other`.9673 tons of Photochemicals/photoprocessing waste disposed of by Treatment, incineration`
Year	1995	Manifest Details	.1251 tons of Photochemicals/photoprocessing waste disposed of by Unknown`.3127 tons of Photochemicals/photoprocessing waste disposed of by Treatment, incineration`.6254 tons of Photochemicals/photoprocessing waste disposed of by Recycler`.0625 tons of Photochemicals/photoprocessing waste disposed of by Transfer station`.0208 tons of Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by Recycler`.0208 tons of

			Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by Disposal, other`
Year	1996	Manifest Details	.0624 tons of Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by Recycler`.7503 tons of Photochemicals/photoprocessing waste disposed of by Transfer station`.0625 tons of Photochemicals/photoprocessing waste disposed of by Transfer station`
Year	1997	Manifest Details	.0416 tons of Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by Recycler`
Year	1998	Manifest Details	.0166 tons of Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by Recycler`
Year	2000	Manifest Details	2.84 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	2001	Manifest Details	0.06 tons of Photochemicals/photoprocessing waste disposed of by Unknown`0 tons of Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by Recycler`0.75 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	2004	Manifest Details	1.68 tons of Asbestos containing waste disposed of by Disposal, landfill`

2F

SUTTER BAY MEDICAL FOUNDATION/P.A.M.F
370 DISTEL CIR, LOS ALTOS, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRA00-CAL000093164

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/7-/1994
Non Notifier	Not a non-notifier	Acknowledge Date	1994-07-26 00:00:00.0
Location Country	US	Contact Phone	650-934-3577 x
Contact Fax	650-934-3588	Contact Email Address	FACILITIES2@PAMF.ORG
Fed Waste Generator	Not a Generator	State Waste Generator	Small Quantity Generator
Short Term Generator	No	Importer Activity	No
Mixed Waste Generator	No	Transporter	No
Transfer	No	Tsd Activity	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Facility			
Recycler Activity	No	Onsite Burner Exemption	No
Furnace Exemption	No	Underground Injection Activity	No
Off Site Receipt	No	Universal Waste Dest Facility	Yes
Used Oil Transporter	No	Used Oil Transfer Facility	No
Used Oil Processor	No	Used Oil Refiner	No
Used Oil Burner	No	Used Oil Market Burner	No
Used Oil Spec Marketer	No	Large Quantity Handlers Of Universal Wastes	No
Recognized Trader Importer	No	Recognized Trader Exporter	No
Slab Importer	No	Slab Exporter	No
Public Notes	oracle.sql.CLOB@6bc0a62b	Subpart P Healthcare	N
Subpart P Reverse Distributor	N	Location Latitude	37.395751
Location Longitude	-122.105217	Location Gis Primary	N
Location Gis Origin	AG	Contact Address	2350 W EL CAMINO REAL, MOUNTAIN VIEW, CA 94040
Contact Name	DIANA ECHOLS	Naics	GENERAL MEDICAL AND SURGICAL HOSPITALS
Violations	No Violations	Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000093164&pgm_sys_acrnm_in=RCRAINFO

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	PALO ALTO MEDICAL FOUNDATION
Owner Operator Type	O	Phone	650-934-3577 x
Address	2350 W EL CAMINO REAL, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	DIANA ECHOLS
Owner Operator Type	O	Phone	650-934-3577 x
Address	2350 W EL CAMINO REAL, MOUNTAIN VIEW, CA 94040		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

3

QSecure
Records: 3A,3B,

Site ID: -503649680
Distance: 126 ft, East

3A

QSecure
333 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAL000322798

RECORD DETAILS

Owner Name	QSECURE	Owner Phone	6509406440
Operator Or Contact Name	MATTHEW CHO	Operator Or Contact Phone	6509406440
Status	INACTIVE	Inactive Date	6/30/2012
Record Entered	7/30/2007 8:25:08 AM	Last Update	1/5/2015 10:08:16 AM
Naics	45291	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	333 DISTEL CIR, LOS ALTOS, CA 940221478
Operator Or Contact Address	333 DISTEL CIRCLE, LOS ALTOS, CA 940221478	Mailing Address	333 DISTEL CIR, LOS ALTOS, CA 940221478

3B

QSecure
333 DISTEL CIR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAL000322798

RECORD DETAILS

Contact Name	MATTHEW CHO	Contact Phone	6509406440
Id Number Type	State permanent number	Mailing Address	333 DISTEL CIR, LOS ALTOS, CA 940221478

MANIFEST SUMMARY

Year	2013	Manifest Details	0.0075 tons of Laboratory waste chemicals disposed of by DISCHARGE TO SEWER/POTW OR NPDES(WITH PRIOR STORAGE--WITH OR WITHOUT TREATMENT)`0.0525 tons of Off-specification, aged or surplus organics disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`0.153 tons of Unspecified organic liquid mixture disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

4 R2 TECHNOLOGY INC
Records: 4A,4B,
Site ID: 2666497101
Distance: 126 ft, East

4A R2 TECHNOLOGY INC
325 DISTEL CIRCLE, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID:
CAHAZWTS-CAL000157705

Record Details

Owner Name	HAROLD RUTHERFORD	Operator Or Contact Name	ROBERT GIBBS DIRECTOR OF MFG
Operator Or Contact Phone	6509887359	Status	INACTIVE
Inactive Date	6/30/2000	Record Entered	7/15/1996
Last Update	4/19/2002 12:13:03 PM	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	730 DISTEL DR, LOS ALTOS, CA
Operator Or Contact Address	INACT 00VQ FINAL NOTICE - BATCH, LOS ALTOS, CA 940221521	Mailing Address	325 DISTEL CIRCLE, LOS ALTOS, CA 940221521

4B R2 TECHNOLOGY INC
325 DISTEL CIRCLE, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!
Record ID:
NAHWTSXX-CAL000157705

Record Details

Contact Name	ROBERT GIBBS DIRECTOR OF MFG	Contact Phone	6509887359
Id Number Type	State permanent number	Mailing Address	325 DISTEL CIRCLE, LOS ALTOS, CA 940221521

Manifest Summary

Year	2000	Manifest Details	0.07 tons of Unspecified oil-containing waste disposed of by Recycler`

5 Unknown
Records: 5A,5B,
Site ID: 616213118
Distance: 175 ft, North West

5A Unknown
5000 W. El Camino Real, LOS ALTOS, CA
Type: Emergency Response Notification System (ERNS)
Source: California Office of Emergency Services RIMS Database
Record ID:
CARIMS04-04-1219

Record Details

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Substance	mineral oil	Bbls	0
Cups	0	Cuft	0
Gals	130	Grams	0
Lbs	0	Liters	0
Oz	0	Pts	0
Qts	0	Sheen	0
Tons	0	Unknown	0
Description	Pad mounted transformer sprung a leak. Substance flowed into dirt under the pad.	Contained	Yes
Incidentdate Time	3/2/200412:00:00 AM	Site	Merchant/Business
Injuries	0	Fatals	0
Evacs	0	Cleanup	Reporting Party
List	CARIMS04		

5B

Unknown
5000 W. EL CAMINO REAL, LOS ALTOS, CA
Type: Emergency Response Notification System (ERNS)
Source: National Response Center's Emergency Response Notification System list

Record ID:
NAERNS04-715110

RECORD DETAILS

Description Of Incident	MATERIAL RELEASED FROM AN ELECTRIC PAD MOUNTED TRANSFORMER DUE TO EXTERNAL COROSSION. TRANSFORMER DOES NOT CONTAIN ANY PCB'S.	Type Of Incident	FIXED
Incident Cause	EQUIPMENT FAILURE	Incident Date Time	3/2/2004 8:00:00 AM
Incident Type Date Refers To	DISCOVERED		

SPECIAL PROGRAM INFORMATION

Date Time Received	3/4/2004 1:53:40 PM	Date Time Complete	3/4/2004 1:57:26 PM
Responsible Company	PACIFIC GAS AND ELECTRIC	Responsible Org Type	PUBLIC UTILITY
Source	TELEPHONE	Responsible Party Location	DALY CITY, CA 94014

INCIDENTS

Type Of Fixed Object	TRANSFORMER	Power Generating Facility	No
Npdes Compliance	Unknown	Dot Regulated	Unknown
Pipeline Above Ground	ABOVE	Exposed Underwater	No
Pipeline Covered	Unknown	Grade Crossing	No
Device Operational	Yes	Brake Failure	No
Tank Above Ground	ABOVE	Transportable Container	Unknown

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Tank Regulated	Unknown	Allision	No
Structure Operational	Unknown	Sub Part C Testing Req	XXX
Passenger Route	XXX	Passenger Delay	XXX

INCIDENT DETAILS

Fire Involved	No	Fire Extinguished	Unknown
Any Evacuations	No	Any Injuries	No
Any Fatalities	No	Any Damages	No
Air Corridor Closed	No	Waterway Closed	No
Road Closed	No	Major Artery	No
Track Closed	No	Media Interest	NONE
Medium Desc	LAND	Additional Medium Info	SOIL
Release Secured	Yes	Description Of Remedial Action	REMOVED THE EQUIPMENT, EXCAVATED SOIL, CLEANUP COMPLETED, REPAIRS MADE
Weather Conditions	CLEAR	Air Temperature	65
Water Supply Contaminated	Unknown	Community Impact	No
Additional Info	CALLER WILL NOTIFY OES AND HEALTH DEPT.	Offshore	No
Passengers Transferred	UNK		

MATERIAL INVOLVED

Chris Code	OMN	Cas Number	000000-00-0
Amount Of Material	130	Unit Of Measure	GALLON(S)
Name Of Material	OIL, MISC: MINERAL	If Reached Water	NO

6 FOOTHILL CHIROPRACTIC GROUP~LOS ALTOS FAMILY CHIROPRACTIC
Records: 6A,6B,6C,
Site ID: 442588844
Distance: 231 ft, East

6A LOS ALTOS FAMILY CHIROPRACTIC
5050 EL CAMINO REAL #200, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID:
CAHAZWTS-CAL000206711

RECORD DETAILS

Owner Name	DEBORAH MOSCA, DC	Owner Phone	6509343700
Operator Or Contact Name	DEBORAH MOSCA, DC/OWNER	Operator Or Contact Phone	6509343700
Status	INACTIVE	Inactive Date	7/3/2003
Record Entered	1/15/1999	Last Update	10/23/2003 8:35:33 AM
Transporter Registration	N/A	Owner Address	5050 EL CAMINO REAL #200, LOS ALTOS, CA 940220000

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Operator Or Contact Address	5050 EL CAMINO REAL #200, LOS ALTOS, CA 940220000	Mailing Address	851 FREMONT AVE #111, LOS ALTOS, CA 940240000

6B

FOOTHILL CHIROPRACTIC GROUP
5050 EL CAMINO REAL,#200, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAL921435796

RECORD DETAILS

Owner Name	FOOTHILL CHIROPRACTIC GROUP IN	Owner Phone	6509488900
Operator Or Contact Name	KAREN PATRICK-MGR	Operator Or Contact Phone	6509488900
Status	INACTIVE	Inactive Date	6/30/2002
Record Entered	5/22/1992	Last Update	10/23/2003 8:35:33 AM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	102 THIRD STREET, LOS ALTOS, CA 940222700	Operator Or Contact Address	INACTIVE PER VQ01 - BMI, LOS ALTOS, CA 940222700
Mailing Address	102 THIRD STREET, LOS ALTOS, CA 940222700		

6C

FOOTHILL CHIROPRACTIC GROUP
5050 EL CAMINO REAL,#200, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAL921435796

RECORD DETAILS

Contact Name	KAREN PATRICK-MGR	Contact Phone	6509488900
Id Number Type	State permanent number	Mailing Address	102 THIRD STREET, LOS ALTOS, CA 940222700

MANIFEST SUMMARY

Year	1993	Manifest Details	.2418 tons of Photochemicals/photoprocessing waste disposed of by Treatment, incineration`
Year	1994	Manifest Details	.1251 tons of Photochemicals/photoprocessing waste disposed of by Unknown`.2502 tons of Photochemicals/photoprocessing waste disposed of by Treatment, incineration`.1251 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1995	Manifest Details	.1251 tons of Photochemicals/photoprocessing waste disposed of by Recycler`.1251 tons of Photochemicals/photoprocessing waste disposed of by Treatment, incineration`

Year	1996	Manifest Details	.1250 tons of Photochemicals/photoprocessing waste disposed of by Transfer station`.2502 tons of Photochemicals/photoprocessing waste disposed of by Recycler`.1251 tons of Photochemicals/photoprocessing waste disposed of by Transfer station`.1042 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1997	Manifest Details	.5211 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1998	Manifest Details	.1875 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1999	Manifest Details	.2084 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	2000	Manifest Details	0.37 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	2001	Manifest Details	0.25 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	2002	Manifest Details	0.25 tons of Photochemicals/photoprocessing waste disposed of by Recycler`

7

SKYLINE HEIGHTS LLC
Records: 7A,7B,7C,7D,

Site ID: 239398659
Distance: 231 ft, North

7A

SKYLINE HEIGHTS LLC
4970 EL CAMINO REAL, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC003034547

RECORD DETAILS

Owner Name	SKYLINE HEIGHTS LLC	Owner Phone	6509178600
Operator Or Contact Name	SKYLINE HEIGHTS LLC	Operator Or Contact Phone	6509178600
Status	INACTIVE	Inactive Date	12/18/2019 2:45:12 PM
Record Entered	9/18/2019 2:45:12 PM	Last Update	12/19/2019 3:00:23 AM
Naics	999999	Transporter Registration	N/A
Owner Address	4970 EL CAMINO REAL, LOS ALTOS, CA 94022	Operator Or Contact Address	4970 EL CAMINO REAL, LOS ALTOS, CA 94022
Mailing Address	4970 EL CAMINO REAL, LOS ALTOS, CA 94022		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

7B

SKYLINE HEIGHTS LLC
4970 EL CAMINO REAL, LOS ALTOS, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: Federal EPA's eManifest database

Record ID:
NAEMANIF-CAC003034547

Record Details

Number Of Manifests In 2019	12	Number Of Manifests In 2020	1

Federal Yearly Manifest Totals

Number Of Line Items	12	Year	2019
Federal Waste Code	Not Identified	Non Acute Quantity	48000.0275
Acute Quantity	0	Waste Description	Not Identified

Number Of Line Items	1	Year	2020
Federal Waste Code	Not Identified	Non Acute Quantity	4571.431
Acute Quantity	0	Waste Description	Not Identified

State Yearly Manifest Totals

Number Of Line Items	12	Year	2019
State Waste Code	151	Non Acute Quantity	48000.0275
Acute Quantity	0	Waste Description	Asbestos-containing waste

Number Of Line Items	1	Year	2020
State Waste Code	151	Non Acute Quantity	4571.431
Acute Quantity	0	Waste Description	Asbestos-containing waste

7C

SKYLINE HEIGHTS LLC
4970 EL CAMINO REAL, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC003034547

Record Details

Contact Name	SKYLINE HEIGHTS LLC	Contact Phone	6509178600
Id Number Type	State provisional or emergency number	Mailing Address	4970 EL CAMINO REAL, LOS ALTOS, CA 94022

Manifest Summary

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Year	2019	Manifest Details	12.65000 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

7D

SKYLINE HEIGHTS LLC
4970 EL CAMINO REAL, LOS ALTOS, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRA00-CAC003034547

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/9-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-09-18 00:00:00.0
Location Street2	STE 220	Location Country	US
Contact Phone	650-917-8600 x	Contact Email Address	CATHY.BARFIELD@ATIRESTORATION.COM
Fed Waste Generator	Not a Generator	State Waste Generator	Small Quantity Generator
Short Term Generator	No	Importer Activity	No
Transporter	No	Transfer Facility	No
Tsd Activity	No	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	No	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@1ea31bb4
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Gis Primary	N	Contact Address	4970 EL CAMINO REAL STE 220, LOS ALTOS, CA 94022

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Contact Name	SKYLINE HEIGHTS LLC	Naics	ALL OTHER WASTE MANAGEMENT SERVICES
Violations	No Violations	Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003034547&pgm_sys_acrnm_in=RCRAINFO

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	SKYLINE HEIGHTS LLC
Owner Operator Type	O	Phone	650-917-8600 x
Address	4970 EL CAMINO REAL STE 220, LOS ALTOS, CA 94022		

Owner Operator Indicator	CP	Owner Operator Name	SKYLINE HEIGHTS LLC
Owner Operator Type	O	Phone	650-917-8600 x
Address	4970 EL CAMINO REAL STE 220, LOS ALTOS, CA 94022		

8 PALO ALTO MEDICAL FOUNDATION~Sutter Bay MEDICAL FOUNDATION
Records: 8A,8B,

Site ID: 1935084613
Distance: 316 ft, South East

8A PALO ALTO MEDICAL FOUNDATION
370 DISTEL CL, LOS ALTOS, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: California EPA's CUPA facilities database

Record ID:
CACUPAGN-10352287

Record Details

Phone	4152545200	Owner Name	PALO ALTO MEDICAL FOUNDATION
Primary Regulator	Santa Clara County Environmental Health	Hazardous Materials Business Plan Facility	No
Accidental Release Prevention Facility	No	Ust Facility	No
Aboveground Storage Tank	No	Hazardous Waste Generator	Yes
Recycler	No	Household Hazardous Waste Collection	No
Onsite Hazardous Waste Treatment	No	Mailing Address	FACILITIES OFFICE SUPERVISOR, MOUNTAIN VIEW, CA 94040
Owner Address	370 DISTEL CL, LOS ALTOS, CA 94022		

8B Sutter Bay MEDICAL FOUNDATION
370 DISTEL CL, LOS ALTOS, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: California EPA Site Portal

Record ID:
CAREGGEN-141389

Record Details

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Ei Id	10352287	Facility Program	Hazardous Waste Generator

9 PALO ALTO MEDICVAL FOUNDATION
Records: 9A,
Site ID: 590831875
Distance: 330 ft, South East

9A PALO ALTO MEDICVAL FOUNDATION
370 DISTEL CRICLE, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID:
CAHAZWTS-CAC002913555

Record Details

Owner Name	SUTTER BAY MEDICAL FOUNDATION	Owner Phone	6509343577
Operator Or Contact Name	DIANA ECHOLS	Operator Or Contact Phone	6509343577
Status	INACTIVE	Inactive Date	9/7/2017 3:00:27 AM
Record Entered	6/7/2017 10:35:31 AM	Last Update	9/7/2017 3:00:27 AM
Naics	621111	Transporter Registration	N/A
Owner Address	2350 W. EL CAMINO REAL, MOUNTAIN VIEW, CA 94040	Operator Or Contact Address	2350 W. EL CAMINO REAL, MOUNTAIN VIEW, CA 94040
Mailing Address	2350 W. EL CAMINO REAL, MOUNTAIN VIEW, CA 94040		

10 1X NORDSTROMS
Records: 10A,
Site ID: -719131218
Distance: 331 ft, North West

10A 1X NORDSTROMS
4966 EL CAMINO REAL, PALO ALTO, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID:
CAHAZWTS-CAC000566272

Record Details

Owner Name	NORDSTROMS	Operator Or Contact Name	TONY VILLA/OWNER'S AGENT
Operator Or Contact Phone	4157955938	Status	INACTIVE
Inactive Date	10/25/2000	Record Entered	2/14/1991
Last Update	10/25/2000	Transporter Registration	N/A
Owner Address	, ,	Operator Or Contact Address	, ,
Mailing Address	37599 FIBERT ST, NEWARK, CA 945600009		

11 KUMAR SRIKANTAN
Records: 11A,
Site ID: -1849277476
Distance: 424 ft, West

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

11A KUMAR SRIKANTAN
281 MARICH WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID: CAHAZWTS-CAC002680838

Record Details

Owner Name	KUMAR SRIKANTAN	Owner Phone	6503967721
Operator Or Contact Name	KUMAR SRIKANTAN	Operator Or Contact Phone	6503967721
Status	INACTIVE	Inactive Date	5/30/2012 11:39:16 AM
Record Entered	12/1/2011 11:39:16 AM	Last Update	12/1/2011 11:39:16 AM
Transporter Registration	N/A	Owner Address	281 MARICH WAY, LOS ALTOS, CA 940221403
Operator Or Contact Address	281 MARICH WAY, LOS ALTOS, CA 940221403	Mailing Address	281 MARICH WAY, LOS ALTOS, CA 940221403

12 LMV MOUNTAIN VIEW II HOLDINGS, LP.
Records: 12A,12B,
Site ID: 1316933142
Distance: 473 ft, North East

12A LMV MOUNTAIN VIEW II HOLDINGS, LP.
2280-2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID: CAHAZWTS-CAC002918592

Record Details

Owner Name	LMV MOUNTAIN VIEW II HOLDINGS, LP.	Owner Phone	4159754983
Operator Or Contact Name	SARAH CONVERSE	Operator Or Contact Phone	4159754983
Status	INACTIVE	Inactive Date	10/12/2017 3:00:26 AM
Record Entered	7/12/2017 2:34:09 PM	Last Update	10/12/2017 3:00:26 AM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656	Operator Or Contact Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656
Mailing Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656		

12B LMV MOUNTAIN VIEW II HOLDINGS, LP.
2280-2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!
Record ID: NAHWTSXX-CAC002918592

Record Details

Contact Name	SARAH CONVERSE	Contact Phone	4159754983
Id Number Type	State provisional or emergency number	Mailing Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

MANIFEST SUMMARY

Year	2017	Manifest Details	0.69 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

13 Former Platinum Cleaners
Records: 13A,

Site ID: 1061335668
Distance: 473 ft, North East

13A Former Platinum Cleaners
2290 West El Camino Real, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID:
CAENSTOR-60002117

RECORD DETAILS

Site Type	Voluntary Cleanup	Site Type Detailed	Voluntary Cleanup
Acres	1.55	Apn	148-36-17, 14836017
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Project Manager	Jayantha Randeni
Supervisor	Mark Piros	Division Branch	Cleanup Berkeley
Site Code	202021	Congressional District	18
Status	Certified	Status Date	2018-02-23 00:00:00
Past Uses	DRY CLEANING	Funding	Responsible Party
Potential Media Affected Description	Indoor Air, Soil, Soil Vapor	Potential Coc Description	Tetrachloroethylene (PCE)
Confirmed Coc Description	Tetrachloroethylene (PCE)	Site Mgmt Req Description	NONE SPECIFIED
Estimated Status	Closed case or No Further Action		

ALIAS NAMES FOR SITES

Alias Type	Alternate Name	Alias	El Camino Village, LLC
Alias Type	APN	Alias	148-36-17
Alias Type	APN	Alias	14836017
Alias Type	Project Code (Site Code)	Alias	202021
Alias Type	Envirostor ID Number	Alias	60002117

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

COMPLETED ACTIONS

There were a total of 317 records in the Completed Actions table. We are only displaying 50 of those in this report in order to keep the size of this report manageable. If you would like the full site record, please contact the responsible regulatory agency noted above.

Area Name	PROJECT WIDE	Document Type	Certification
Completed Date	2/23/2018 12:00:00 AM	Comments	DTSC certified that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal action is necessary.

Area Name	PROJECT WIDE	Document Type	Fact Sheets
Completed Date	1/26/2016 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Pilot/Treatability Study Report
Completed Date	12/18/2014 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Site Characterization Workplan
Completed Date	5/29/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	7/2/2015 12:00:00 AM	Comments	The soil gas sampling included in the Additional Site Characterization Workplan was repeated due to leakage in the sampling equipment that occurred during the first sampling event.

Area Name	PROJECT WIDE	Document Type	Site Characterization Report
Completed Date	9/4/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Removal Action Workplan
Completed Date	3/4/2016 12:00:00 AM	Comments	Soil vapor extraction is identified in the Removal Action Workplan as the selected remedy for the Site to address tetrachloroethene and trichloroethene in soil vapor at the site and on an adjacent property.

Area Name	PROJECT WIDE	Document Type	Fact Sheets
Completed Date	1/26/2016 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Public Notice
Completed Date	1/26/2016 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	3/2/2017 12:00:00 AM	Comments	The soil vapor extraction system operated continuously on the site from April 2016 through October 2016. There was a 47-day shutdown for rebound assessment that followed and the system was briefly operated in December 2016 and January 2017. DTSC approved

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

decommissioning of the soil vapor extraction system in a March 9, 2017 letter.

Area Name	PROJECT WIDE	Document Type	Pilot/Treatability Study Report
Completed Date	1/15/2015 12:00:00 AM	Comments	The Second Vapor-Extraction Pilot-Study Evaluation report presents the results of a soil vapor extraction pilot study that was conducted using one multi-phase extraction well for 8 days and 2 extraction wells for 7 days. This study was completed prior to DTSC becoming involved at the Site.

Area Name	PROJECT WIDE	Document Type	Technical Workplan
Completed Date	5/17/2017 12:00:00 AM	Comments	The Soil Management Plan provides procedures for managing potentially contaminated soil excavated for the subterranean parking garage of the proposed development project.

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	3/10/2017 12:00:00 AM	Comments	The report summarizes soil gas remediation activities at the Site since the soil vapor extraction (SVE) system was initially started in April 2016. A total of 16.7 pounds of tetrachloroethylene (PCE) was removed by the SVE system and soil gas concentrations beneath the Site are below the removal goal of 3,900 micrograms per cubic meter established for residential development.

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	4/17/2017 12:00:00 AM	Comments	The Plan summarizes the results of soil sampling conducted at the Site to profile for disposal and/or reuse the soil that will be generated as part of the excavation required for the proposed subterranean parking garage.

Area Name	PROJECT WIDE	Document Type	Application
Completed Date	10/2/2014 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Community Profile
Completed Date	9/24/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Phase 1
Completed Date	12/15/2014 12:00:00 AM	Comments	The Phase I Environmental Site Assessment was conducted to identify recognized environmental conditions at the Site. The findings and conclusions of the Report were based on the results of a reconnaissance-level site visit and review of available and pertinent background information. This assessment was completed prior to DTSC becoming involved at the Site.

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	12/15/2014 12:00:00 AM	Comments	The Additional Phase II Environmental

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Assessment report presents the results of subsurface soil-gas, soil, and groundwater sampling that was performed to evaluate the lateral and vertical extent of impact from PCE and other volatile organic compounds. These investigations were completed prior to DTSC becoming involved at the Site.

Area Name	PROJECT WIDE	Document Type	Pre-HARP Form
Completed Date	6/4/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	12/12/2014 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	CEQA - Notice of Exemption
Completed Date	3/2/2016 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Annual Oversight Cost Estimate
Completed Date	10/6/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Annual Oversight Cost Estimate
Completed Date	9/28/2016 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Pilot/Treatability Study Report
Completed Date	12/18/2014 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Site Characterization Workplan
Completed Date	5/29/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	7/2/2015 12:00:00 AM	Comments	The soil gas sampling included in the Additional Site Characterization Workplan was repeated due to leakage in the sampling equipment that occurred during the first sampling event.

Area Name	PROJECT WIDE	Document Type	Site Characterization Report
Completed Date	9/4/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Removal Action Workplan
Completed Date	3/4/2016 12:00:00 AM	Comments	Soil vapor extraction is identified in the Removal Action Workplan as the selected remedy for the Site to address tetrachloroethene and trichloroethene in soil vapor at the site and on an adjacent property.

Area Name	PROJECT WIDE	Document Type	Fact Sheets
Completed Date	1/26/2016 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Public Notice
Completed Date	1/26/2016 12:00:00 AM		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	3/2/2017 12:00:00 AM	Comments	The soil vapor extraction system operated continuously on the site from April 2016 through October 2016. There was a 47-day shutdown for rebound assessment that followed and the system was briefly operated in December 2016 and January 2017. DTSC approved decommissioning of the soil vapor extraction system in a March 9, 2017 letter.

Area Name	PROJECT WIDE	Document Type	Pilot/Treatability Study Report
Completed Date	1/15/2015 12:00:00 AM	Comments	The Second Vapor-Extraction Pilot-Study Evaluation report presents the results of a soil vapor extraction pilot study that was conducted using one multi-phase extraction well for 8 days and 2 extraction wells for 7 days. This study was completed prior to DTSC becoming involved at the Site.

Area Name	PROJECT WIDE	Document Type	Technical Workplan
Completed Date	5/17/2017 12:00:00 AM	Comments	The Soil Management Plan provides procedures for managing potentially contaminated soil excavated for the subterranean parking garage of the proposed development project.

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	3/10/2017 12:00:00 AM	Comments	The report summarizes soil gas remediation activities at the Site since the soil vapor extraction (SVE) system was initially started in April 2016. A total of 16.7 pounds of tetrachloroethylene (PCE) was removed by the SVE system and soil gas concentrations beneath the Site are below the removal goal of 3,900 micrograms per cubic meter established for residential development.

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	4/17/2017 12:00:00 AM	Comments	The Plan summarizes the results of soil sampling conducted at the Site to profile for disposal and/or reuse the soil that will be generated as part of the excavation required for the proposed subterranean parking garage.

Area Name	PROJECT WIDE	Document Type	Application
Completed Date	10/2/2014 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Community Profile
Completed Date	9/24/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Phase 1
Completed Date	12/15/2014 12:00:00 AM	Comments	The Phase I Environmental Site Assessment was conducted to identify recognized environmental conditions at the Site. The findings and conclusions of the Report were based on the

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

results of a reconnaissance-level site visit and review of available and pertinent background information. This assessment was completed prior to DTSC becoming involved at the Site.

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	12/15/2014 12:00:00 AM	Comments	The Additional Phase II Environmental Assessment report presents the results of subsurface soil-gas, soil, and groundwater sampling that was performed to evaluate the lateral and vertical extent of impact from PCE and other volatile organic compounds. These investigations were completed prior to DTSC becoming involved at the Site.

Area Name	PROJECT WIDE	Document Type	Pre-HARP Form
Completed Date	6/4/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	12/12/2014 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	CEQA - Notice of Exemption
Completed Date	3/2/2016 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Annual Oversight Cost Estimate
Completed Date	10/6/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Annual Oversight Cost Estimate
Completed Date	9/28/2016 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Annual Oversight Cost Estimate
Completed Date	9/26/2017 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Pilot/Treatability Study Report
Completed Date	12/18/2014 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Site Characterization Workplan
Completed Date	5/29/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	7/2/2015 12:00:00 AM	Comments	The soil gas sampling included in the Additional Site Characterization Workplan was repeated due to leakage in the sampling equipment that occurred during the first sampling event.

Area Name	PROJECT WIDE	Document Type	Site Characterization Report
Completed Date	9/4/2015 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Removal Action Workplan
Completed Date	3/4/2016 12:00:00 AM	Comments	Soil vapor extraction is identified in the

Removal Action Workplan as the selected remedy for the Site to address tetrachloroethene and trichloroethene in soil vapor at the site and on an adjacent property.

14

DELIA'S CLEANERS INC~OLIVE TREE DENTAL~SPINAL & SPORTS CARE CENTER
Records: 14A,14B,14C,14D,14E,14F,

Site ID: -1317208246
Distance: 480 ft, North East

14A

SPINAL & SPORTS CARE CENTER
2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAL000121131

RECORD DETAILS

Owner Name	JOHN MCDANIEL	Owner Phone	6509671152
Operator Or Contact Name	JOHN MCDANIEL	Operator Or Contact Phone	6509671152
Status	INACTIVE	Inactive Date	6/30/2002
Record Entered	6/29/1993	Last Update	9/27/2005 3:01:00 PM
Naics	62131	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	2290 W EL CAMINO REAL STE 8, MOUNTAIN VIEW, CA 940400000
Operator Or Contact Address	2290 W EL CAMINO REAL STE 8, MOUNTAIN VIEW, CA 940400000	Mailing Address	2290 W EL CAMINO REAL STE 8, MOUNTAIN VIEW, CA 940400000

14B

OLIVE TREE DENTAL
2290 W. EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAL000331785

RECORD DETAILS

Owner Name	MARNA MAE LONGAKIT	Owner Phone	6509388870
Operator Or Contact Name	MARNA MAE LONGAKIT	Operator Or Contact Phone	6509388870
Status	INACTIVE	Inactive Date	6/30/2014
Record Entered	4/17/2008 9:19:29 AM	Last Update	1/5/2015 10:08:16 AM
Naics	62121	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	2290 W EL CAMINO REAL ste 3, MOUNTAIN VIEW, CA 940400000
Operator Or Contact Address	2290 W. EL CAMINO REAL, MOUNTAIN VIEW, CA 940400000	Mailing Address	2290 W. EL CAMINO REAL, MOUNTAIN VIEW, CA 940400000

14C

DELIA'S CLEANERS INC
2290 W EL CAMINO REAL STE 1, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAR000063586

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

RECORD DETAILS

Owner Name	DCI MGMT GROUP	Owner Phone	4082485415
Operator Or Contact Name	DEBORAH SANDS, REGIONAL MGR	Operator Or Contact Phone	4082485415
Status	INACTIVE	Inactive Date	9/21/2004
Record Entered	4/27/2000	Last Update	10/25/2005 3:49:39 PM
Naics	81232	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	1190 S BASCOM AVE #108, SAN JOSE, CA 951280000
Operator Or Contact Address	1190 S BASCOM AVE #108, SAN JOSE, CA 951280000	Mailing Address	1190 S BASCOM AVE #108, SAN JOSE, CA 951280000

14D

SPINAL & SPORTS CARE CENTER
2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAL000121131

RECORD DETAILS

Contact Name	JOHN MCDANIEL	Contact Phone	6509671152
Id Number Type	State permanent number	Mailing Address	2290 W EL CAMINO REAL STE 8, MOUNTAIN VIEW, CA 940400000

MANIFEST SUMMARY

Year	1993	Manifest Details	.0791 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1994	Manifest Details	.1000 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1995	Manifest Details	.1959 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1996	Manifest Details	.1959 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1997	Manifest Details	.1208 tons of Photochemicals/photoprocessing waste disposed of by Recycler`
Year	1998	Manifest Details	.1042 tons of Photochemicals/photoprocessing waste disposed of by Recycler`.1125 tons of Photochemicals/photoprocessing waste disposed of by Recycler`

Year	2004	Manifest Details	0.06 tons of Photochemicals/photoprocessing waste disposed of by Recycler`

14E

OLIVE TREE DENTAL
2290 W. EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAL000331785

RECORD DETAILS

Contact Name	MARNA MAE LONGAKIT	Contact Phone	6509388870
Id Number Type	State permanent number	Mailing Address	2290 W. EL CAMINO REAL, MOUNTAIN VIEW, CA 940400000

MANIFEST SUMMARY

Year	2008	Manifest Details	0.017 tons of Unspecified organic liquid mixture disposed of by FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER SITE`
Year	2010	Manifest Details	tons of Unspecified oil-containing waste disposed of by Unknown` tons of Unspecified organic liquid mixture disposed of by Unknown` tons of Liquids with pH <= 2 with metals disposed of by Unknown`0.017 tons of Unspecified organic liquid mixture disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`
Year	2012	Manifest Details	0.017 tons of Unspecified organic liquid mixture disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`
Year	2013	Manifest Details	0.017 tons of Unspecified organic liquid mixture disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`

14F

DELIA'S CLEANERS INC
2290 W EL CAMINO REAL STE 1, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAR000063586

RECORD DETAILS

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Contact Name	DEBORAH SANDS, REGIONAL MGR	Contact Phone	4082485415
Id Number Type	Federal permanent number	Mailing Address	1190 S BASCOM AVE #108, SAN JOSE, CA 951280000

MANIFEST SUMMARY

Year	2004	Manifest Details	0.26 tons of Liquids with halogenated organic compounds >= 1,000 Mg./L disposed of by Unknown`0.03 tons of Solids or sludges with halogenated organic compounds >= 1,000 Mg./L disposed of by Unknown`0.3 tons of Liquids with halogenated organic compounds >= 1,000 Mg./L disposed of by Transfer station`0.31 tons of Solids or sludges with halogenated organic compounds >= 1,000 Mg./L disposed of by Transfer station`

15

DELIA'S CLEANERS INC~MARNA LONGAKIT~Platinum Cleaners~PURE CLEANERS
Records: 15A,15B,15C,15D,15E,

Site ID: 2035577211
Distance: 482 ft, North East

15A

MARNA LONGAKIT
2290 W EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAC002653793

RECORD DETAILS

Owner Name	MARNA LONGAKET	Owner Phone	6509388870
Operator Or Contact Name	INA ANDRADE	Operator Or Contact Phone	6509388870
Status	INACTIVE	Inactive Date	11/16/2010 9:43:02 AM
Record Entered	5/19/2010 9:43:02 AM	Last Update	12/1/2010 2:39:12 PM
Transporter Registration	N/A	Owner Address	2290 W EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA 940401632
Operator Or Contact Address	2290 W EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA 940401632	Mailing Address	2290 W EL CAMINO REAL STE 3, MOUNTAIN VIEW, CA 940401632

15B

Platinum Cleaners
2290 W El Camino Real, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAC002703954

RECORD DETAILS

Owner Name	El Camino Village	Owner Phone	4087399717
Operator Or Contact Name	Behnaz Varasteh	Operator Or Contact Phone	6509409100
Status	INACTIVE	Inactive Date	12/3/2012 11:23:28 AM
Record Entered	9/4/2012 11:23:28 AM	Last Update	12/20/2012 3:24:07 PM
Are California Manifests	Yes	Transporter Registration	N/A

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Owner Address	2290 W El Camino Real, MOUNTAIN VIEW, CA 94040	Operator Or Contact Address	2290 W EL CAMINO REAL, MOUNTAIN VIEW, CA 940401631
Mailing Address	2290 W El Camino Real, MOUNTAIN VIEW, CA 94040		

15C

DELIA'S CLEANERS INC
2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAL000100829

Record Details

Owner Name	DELIA'S CLEANERS INC	Owner Phone	4082485415
Operator Or Contact Name	JOE RODRIGUEZ	Operator Or Contact Phone	4082485415
Status	INACTIVE	Inactive Date	6/30/2001
Record Entered	5/15/1997	Last Update	9/18/2001
Transporter Registration	N/A	Owner Address	550 S WINCHESTER SUITE 620, SAN JOSE, CA 951280000
Operator Or Contact Address	INACTIVE PER VQ01 - BMI, SAN JOSE, CA 951280000	Mailing Address	1190 S BASCOM AVE #108, SAN JOSE, CA 951280000

15D

PURE CLEANERS
2290-A EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAL000287343

Record Details

Owner Name	FLOWERGATE INC	Owner Phone	4084029732
Operator Or Contact Name	DUC NGUYEN	Operator Or Contact Phone	6509643869
Status	INACTIVE	Inactive Date	6/30/2005 10:01:00 AM
Record Entered	10/20/2004 8:43:18 AM	Last Update	4/11/2006 8:35:00 AM
Naics	81232	Transporter Registration	N/A
Owner Address	105 HILLTOP DR, LOS GATOS, CA 95032	Operator Or Contact Address	2290-A EL CAMINO REAL, MOUNTAIN VIEW, CA 94040
Mailing Address	2290-A EL CAMINO REAL, MOUNTAIN VIEW, CA 94040		

15E

Platinum Cleaners
2290 W El Camino Real, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002703954

Record Details

Contact Name	Behnaz Varasteh	Contact Phone	6509409100
Id Number Type	State provisional or emergency number	Mailing Address	2290 W El Camino Real, MOUNTAIN VIEW,

CA 94040

MANIFEST SUMMARY

Year	2012	Manifest Details	0.02 tons of Off-specification, aged or surplus inorganics disposed of by OTHER RECOVERY OF RECLAMATION FOR REUSE INCLUDING ACID REGENERATION, ORGANICS RECOVERY ECT`

16

DCI MANAGEMENT GROUP NO 77
Records: 16A,

Site ID: -357792323
Distance: 484 ft, North East

16A

DCI MANAGEMENT GROUP NO 77
2290 EL CAMINO REAL NO 1, MOUNTAIN VIEW, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRA00-CAR000063586

RECORD DETAILS

Source Type	Notification	Receive Date	-1/2-/1999
Non Notifier	Not a non-notifier	Acknowledge Date	1999-12-22 00:00:00.0
Location Country	US	Land Type	Private
Contact Phone	408-248-5415 x	Fed Waste Generator	Small Quantity Generator
Short Term Generator	No	Importer Activity	No
Mixed Waste Generator	No	Transporter	No
Transfer Facility	No	Tsd Activity	No
Recycler Activity	No	Onsite Burner Exemption	No
Furnace Exemption	No	Underground Injection Activity	No
Off Site Receipt	No	Universal Waste Dest Facility	No
Used Oil Transporter	No	Used Oil Transfer Facility	No
Used Oil Processor	No	Used Oil Refiner	No
Used Oil Burner	No	Used Oil Market Burner	No
Used Oil Spec Marketer	No	Large Quantity Handlers Of Universal Wastes	No
Recognized Trader Importer	No	Recognized Trader Exporter	No
Slab Importer	No	Slab Exporter	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.397126	Location Longitude	-122.104692
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	550 S WINCHESTER BLVD STE 620, SAN JOSE, CA 95128	Contact Name	TONY BARAJAS
Wastes	TETRACHLOROETHYLENE	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAR000063586&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	DCI MANAGEMENT GROUP
Owner Operator Type	P	Phone	408-248-5415 x
Address	550 S WINCHESTER BLVD STE 620, SAN JOSE, CA 95128		

17 MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
Records: 17A,
Site ID: 1145358213
Distance: 508 ft, East

17A MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
5050 EL CAMINO REAL, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID: CAHAZWTS-CAC003104757

Record Details

Owner Name	MIDPENINSULA REGIONAL OPEN SPACE DI	Owner Phone	6506256589
Operator Or Contact Name	TANISHA WERNER	Operator Or Contact Phone	6506256589
Status	ACTIVE	Record Entered	2/9/2021 11:56:43 AM
Last Update	2/9/2021 11:56:43 AM	Naics	236220
Transporter Registration	N/A	Owner Address	330 DISTEL CIRCLE, LOS ALTOS, CA 94022
Operator Or Contact Address	330 DISTEL CIRCLE, LOS ALTOS, CA 94022	Mailing Address	330 DISTEL CIRCLE, LOS ALTOS, CA 94022

18 OFF-RAMP THE
Records: 18A,
Site ID: -815769774
Distance: 508 ft, North

18A OFF-RAMP THE
2320 EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID: CAHAZWTS-CAL000011220

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

RECORD DETAILS

Owner Name	THE OFF RAMP	Operator Or Contact Name	LINDA SMITH ACCTS MGR
Operator Or Contact Phone	4082492848	Status	INACTIVE
Inactive Date	6/30/2000	Record Entered	11/14/1989
Last Update	9/27/2000	Transporter Registration	N/A
Owner Address	, ,	Operator Or Contact Address	INACTIVE PER VQ00 - BMI, SANTA CLARA, CA 950500000
Mailing Address	2320 W EL CAMINO REAL, MOUNTAIN VIEW, CA 940400000		

19 LENNAR HOMES OF CALIFORNIA~Platinum Cleaners
Records: 19A,19B,19C,

Site ID: -1435289600
Distance: 510 ft, North East

19A Platinum Cleaners
2290 El Camino Real West Unit 1, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA's CUPA facilities database

Record ID:
CACUPAHM-10349851

RECORD DETAILS

Phone	650-940-9100	Operator Name	Behnaz Varasteh
Operator Phone	650-940-9100	Owner Name	Pink Ribbon Corporation
Owner Phone	408-219-4130	Owner Country	United States
E Contact Name	Behnaz Varasteh	E Contact Phone	(408) 402-9732
E Contact Mailing Address	20336 Northbrook Sq.	E Contact Country	United States
Primary Regulator	Santa Clara County Environmental Health	Hazardous Materials Business Plan Facility	Yes
Hazardous Materials Business Plan Regulator	Mountain View Fire Department	Accidental Release Prevention Facility	No
Accidental Release Prevention Regulator	Santa Clara County Environmental Health	Ust Facility	No
Ust Regulator	Mountain View Fire Department	Aboveground Storage Tank	No
Aboveground Storage Tank Regulator	Santa Clara County Environmental Health	Hazardous Waste Generator	No
Recycler	No	Recycler Regulator	Santa Clara County Environmental Health
Household Hazardous Waste Collection	No	Onsite Hazardous Waste Treatment	No
Mailing Address	20336 Northbrook Sq., Cupertino, CA 95014	Owner Address	20336 Northbrook Sq., Cupertino, CA 95014
E Contact Address	Cupertino, CA 95014		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

19B

LENNAR HOMES OF CALIFORNIA
2290 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002937477

Record Details

Owner Name	LENNAR HOMES OF CALIFORNIA	Owner Phone	9254872530
Operator Or Contact Name	CHRISTOPHER MORGAN	Operator Or Contact Phone	9254872530
Status	INACTIVE	Inactive Date	2/21/2018 3:00:25 AM
Record Entered	11/21/2017 9:53:23 AM	Last Update	2/21/2018 3:00:25 AM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	2603 CAMINO RAMON STE 525, SAN RAMON, CA 94583	Operator Or Contact Address	2603 CAMINO RAMON STE 525, SAN RAMON, CA 94583
Mailing Address	2603 CAMINO RAMON STE 525, SAN RAMON, CA 94583		

19C

LENNAR HOMES OF CALIFORNIA
2290 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002937477

Record Details

Contact Name	CHRISTOPHER MORGAN	Contact Phone	9254872530
Id Number Type	State provisional or emergency number	Mailing Address	2603 CAMINO RAMON STE 525, SAN RAMON, CA 94583

Manifest Summary

Year	2017	Manifest Details	0.5 tons of Other empty containers 30 gallons or more disposed of by OTHER TREATMENT`

20

MARY SCHEN
Records: 20A,20B,

Site ID: -1433948976
Distance: 541 ft, South West

20A

MARY SCHEN
306 MARICH WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002673154

Record Details

Owner Name	MARY SCHEN	Owner Phone	6509410188
Operator Or Contact Name	MARY SCHEN	Operator Or Contact Phone	6509410188

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Status	INACTIVE	Inactive Date	2/5/2012 2:30:51 PM
Record Entered	8/8/2011 2:30:51 PM	Last Update	8/8/2011 2:30:51 PM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	306 MARICH WAY, LOS ALTOS, CA 940221509	Operator Or Contact Address	306 MARICH WAY, LOS ALTOS, CA 940221509
Mailing Address	306 MARICH WAY, LOS ALTOS, CA 940221509		

20B

MARY SCHEN
306 MARICH WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID: NAHWTSXX-CAC002673154

Record Details

Contact Name	MARY SCHEN	Contact Phone	6509410188
Id Number Type	State provisional or emergency number	Mailing Address	306 MARICH WAY, LOS ALTOS, CA 940221509

Manifest Summary

Year	2011	Manifest Details	0.4 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

21

CHEN, JANE AND GLEN~JANE CHEN
Records: 21A,21B,21C,21D,

Site ID: 2073983069
Distance: 565 ft, South West

21A

JANE CHEN
736 PANCHITA WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAC002667041

Record Details

Owner Name	JANE CHEN	Owner Phone	4083686413
Operator Or Contact Name	JANE CHEN	Operator Or Contact Phone	4083686413
Status	INACTIVE	Inactive Date	11/10/2011 11:31:05 AM
Record Entered	5/13/2011 11:31:05 AM	Last Update	5/13/2011 11:31:05 AM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	736 PANCHITA WAY, LOS ALTOS, CA 940221517	Operator Or Contact Address	736 PANCHITA WAY, LOS ALTOS, CA 940221517
Mailing Address	736 PANCHITA WAY, LOS ALTOS, CA 940221517		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

21B

CHEN, JANE AND GLEN
736 PANCHITA WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002822616

Record Details

Owner Name	CHEN, JANE AND GLEN	Owner Phone	4082813826
Operator Or Contact Name	CHEN, JANE AND GLEN	Operator Or Contact Phone	4082813826
Status	INACTIVE	Inactive Date	10/19/2015 9:12:55 AM
Record Entered	7/20/2015 9:12:55 AM	Last Update	10/20/2015 3:00:19 AM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	736 PANCHITA WAY, LOS ALTOS, CA 94022	Operator Or Contact Address	736 PANCHITA WAY, LOS ALTOS, CA 94022
Mailing Address	736 PANCHITA WAY, LOS ALTOS, CA 94022		

21C

JANE CHEN
736 PANCHITA WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002667041

Record Details

Contact Name	JANE CHEN	Contact Phone	4083686413
Id Number Type	State provisional or emergency number	Mailing Address	736 PANCHITA WAY, LOS ALTOS, CA 940221517

Manifest Summary

Year	2011	Manifest Details	0.4 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

21D

CHEN, JANE AND GLEN
736 PANCHITA WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC002822616

Record Details

Contact Name	CHEN, JANE AND GLEN	Contact Phone	4082813826
Id Number Type	State provisional or emergency number	Mailing Address	736 PANCHITA WAY, LOS ALTOS, CA

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

94022

Manifest Summary

Year	2015	Manifest Details	6.9 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

22

LMV MOUNTAIN VIEW II HOLDINGS, LP.
Records: 22A,22B,22C,

Site ID: 1555823458
Distance: 566 ft, East

22A

LMV MOUNTAIN VIEW II HOLDINGS, LP.
2268 WEST EL CAMINO REAL ROAD, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002917313

Record Details

Owner Name	LMV MOUNTAIN VIEW II HOLDINGS, LP.	Owner Phone	4159754161
Operator Or Contact Name	BRAD HOTTLE	Operator Or Contact Phone	4159754161
Status	INACTIVE	Inactive Date	10/3/2017 3:00:20 AM
Record Entered	7/3/2017 12:55:14 PM	Last Update	10/3/2017 3:00:20 AM
Transporter Registration	N/A	Owner Address	492 9TH STREET #300, OAKLAND, CA 94607
Operator Or Contact Address	492 9TH ST. #300, OAKLAND, CA 94607	Mailing Address	492 9TH STREET #300, OAKLAND, CA 94607

22B

LMV MOUNTAIN VIEW II HOLDINGS, LP.
2268 W.EL CAMINO REAL RD., MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC002920658

Record Details

Owner Name	LMV MOUNTAIN VIEW II HOLDINGS, LP.	Owner Phone	4159754982
Operator Or Contact Name	PETER SHELLINGER	Operator Or Contact Phone	4159754982
Status	INACTIVE	Inactive Date	10/26/2017 3:00:28 AM
Record Entered	7/26/2017 1:12:07 PM	Last Update	10/26/2017 3:00:28 AM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656	Operator Or Contact Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656
Mailing Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

22C LMV MOUNTAIN VIEW II HOLDINGS, LP.
2268 W.EL CAMINO REAL RD., MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID: NAHWTSXX-CAC002920658

Record Details

Contact Name	PETER SHELLINGER	Contact Phone	4159754982
Id Number Type	State provisional or emergency number	Mailing Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656

Manifest Summary

Year	2017	Manifest Details	1.61 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

23 FORMER PLATINUM CLEANERS
Records: 23A,23B,

Site ID: -74059710
Distance: 567 ft, North East

23A FORMER PLATINUM CLEANERS
2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAC002930617

Record Details

Owner Name	LENNAR MULTIFAMILY COMMUNITIES	Owner Phone	4159754161
Operator Or Contact Name	BRAD HOTTLE	Operator Or Contact Phone	4159754161
Status	INACTIVE	Inactive Date	1/3/2018 3:00:16 AM
Record Entered	10/3/2017 7:39:21 AM	Last Update	1/3/2018 3:00:16 AM
Naics	562212	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	492 9TH STREET, OAKLAND, CA 94607
Operator Or Contact Address	492 9TH STREET, OAKLAND, CA 94607	Mailing Address	492 9TH STREET, OAKLAND, CA 94607

23B FORMER PLATINUM CLEANERS
2290 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID: NAHWTSXX-CAC002930617

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Record Details

Contact Name	BRAD HOTTLE	Contact Phone	4159754161
Id Number Type	State provisional or emergency number	Mailing Address	492 9TH STREET, OAKLAND, CA 94607

Manifest Summary

Year	2017	Manifest Details	50.76 tons of Contaminated soil from site clean-up disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

24

1X WALTHER'S TILE AND FLOOR COVERING~Walter's Floors
Records: 24A,24B,24C,

Site ID: -568063715
Distance: 576 ft, East

24A

1X WALTHER'S TILE AND FLOOR COVERING
5084 EL CAMINO REAL, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC000053621

Record Details

Operator Or Contact Name	MIKE BAVILACQUA	Operator Or Contact Phone	4159681657
Status	INACTIVE	Inactive Date	10/25/2000
Record Entered	12/15/1987	Last Update	10/25/2000
Transporter Registration	N/A	Owner Address	, ,
Operator Or Contact Address	, ,	Mailing Address	5084 EL CAMINO REAL, LOS ALTOS, CA 940220000

24B

Walter's Floors
5084 El Camino Real, LOS ALTOS, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California State Water Resources Control Board's Geotracker Leaking Underground Storage Tank list

Record ID:
CALUSTCA-T0608501552

Record Details

Case Type	LUST Cleanup Site	Status	Completed - Case Closed
Status Date	4/12/1996 12:00:00 AM	Cuf Case	NO
Lead Agency	SANTA CLARA COUNTY LOP	Local Agency	SANTA CLARA COUNTY LOP
File Location	All Files are on GeoTracker or in the Local Agency Database	Potential Contaminants Of Concern	Gasoline
Potential Media Affected	Soil	Begin Date	12/14/1992 12:00:00 AM
Estimated Status	Closed case or No Further Action		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Site Status History

Status	Open - Case Begin Date	Status Date	1992-12-14 00:00:00
Status	Completed - Case Closed	Status Date	1996-04-12 00:00:00

Site Regulatory Activities

Action Type	Other	Date	1992-12-14 00:00:00
Action	Leak Reported		
Action Type	ENFORCEMENT	Date	1996-04-12 00:00:00
Action	Closure/No Further Action Letter		
Action Type	RESPONSE	Date	1996-04-12 00:00:00
Action	Other Report / Document		

24C

Walter's Floors
5084 EL CAMINO REAL, LOS ALTOS, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California EPA Site Portal

Record ID: CAREGLST-240621

Record Details

Facility Program	Leaking Underground Storage Tank Cleanup Site

25

TAYLOR RENTAL~TAYLOR RENTALS~UNITED RENTALS INC #420~UNITED RENTALS NORTHWEST INC
Records: 25A,25B,25C,25D,25E,25F,25G,25H,

Site ID: 1537636489
Distance: 603 ft, East

25A

UNITED RENTALS NORTHWEST INC
2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: California EPA's CUPA facilities database

Record ID: CACUPAGN-10349716

Record Details

Phone	6509688301	Owner Name	UNITED RENTALS NORTHWEST INC
Primary Regulator	Santa Clara County Environmental Health	Hazardous Materials Business Plan Facility	No
Hazardous Materials Business Plan Regulator	Mountain View Fire Department	Accidental Release Prevention Facility	No
Accidental Release Prevention Regulator	Santa Clara County Environmental Health	Ust Facility	No
Ust Regulator	Mountain View Fire Department	Aboveground Storage Tank	No
Aboveground	Santa Clara County Environmental Health	Hazardous Waste	Yes

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Storage Tank Regulator		Generator	
Recycler	No	Recycler Regulator	Santa Clara County Environmental Health
Household Hazardous Waste Collection	No	Onsite Hazardous Waste Treatment	No
Mailing Address	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA 94040	Owner Address	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA 94040

25B

TAYLOR RENTAL
2246 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC000711696

Record Details

Owner Name	STANLEY WORKS	Operator Or Contact Name	TIM STRAWN
Operator Or Contact Phone	8053883775	Status	INACTIVE
Inactive Date	10/25/2000	Record Entered	8/31/1993
Last Update	10/25/2000	Transporter Registration	N/A
Owner Address	2246 WEST EL CAMINO REAL, MOUNTAIN VIEW, CA	Operator Or Contact Address	C/o ENSR, CAMARILLO, CA 930120000
Mailing Address	1000 STANLEY DRIVE, NEW BRITIAN, CT 060530000		

25C

TAYLOR RENTAL
2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAC000948136

Record Details

Owner Name	TAYLOR RENTAL CORP	Owner Phone	2032299100
Operator Or Contact Name	TIM STRAWN/CONTRACTOR	Operator Or Contact Phone	8053883775
Status	INACTIVE	Inactive Date	10/25/2000
Record Entered	9/1/1993	Last Update	10/25/2000
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	CONT: KEN CESKA, ,	Operator Or Contact Address	FAC MGR:RON HARMON, 4159688301, ,
Mailing Address	1000 STANLEY DR, NEW BRITAIN, CT 060530000		

25D

UNITED RENTALS INC #420
2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAD983672197

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Record Details

Owner Name	UNITED RENTALS NORTHWEST INC	Owner Phone	3036741320
Operator Or Contact Name	KIM NEMMERS, DIR OF ENV. MGMT.	Operator Or Contact Phone	3036741320
Status	INACTIVE	Inactive Date	6/30/2009
Record Entered	12/8/1995	Last Update	11/22/2010 5:59:50 PM
Naics	23499	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	5 GREENWICH OFFICE PARK, GREENWICH, CT 068300000
Operator Or Contact Address	791 E 64TH AVE, DENVER, CO 802290000	Mailing Address	791 E 64TH AVE, DENVER, CO 802290000

25E

TAYLOR RENTALS
2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID:
CAHAZWTS-CAL912212775

Record Details

Owner Name	R PRUNETTI	Owner Phone	4156888301
Status	INACTIVE	Inactive Date	6/30/1998
Record Entered	8/9/1991	Last Update	4/27/1999
Transporter Registration	N/A	Owner Address	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA 940400000
Operator Or Contact Address	INACT PER 98VQ FINAL NOTICE, ,	Mailing Address	2446 W EL CAMINO REAL, MOUNTAIN VIEW, CA 940401421

25F

TAYLOR RENTAL
2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC000948136

Record Details

Contact Name	TAYLOR RENTAL CORP	Contact Phone	2032299100
Id Number Type	State provisional or emergency number	Mailing Address	1000 STANLEY DR, NEW BRITAIN, CT 060530000

Manifest Summary

Year	1993	Manifest Details	.7500 tons of Other empty containers 30 gallons or more disposed of by Recycler`

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

25G

UNITED RENTALS INC #420
2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAD983672197

RECORD DETAILS

Contact Name	KIM NEMMERS, DIR OF ENV. MGMT.	Contact Phone	3036741320
Id Number Type	Federal permanent or provisional number. State provisional before 1988.	Mailing Address	791 E 64TH AVE, DENVER, CO 802290000

MANIFEST SUMMARY

Year	1995	Manifest Details	3.7530 tons of Waste oil and mixed oil disposed of by Recycler`
Year	1999	Manifest Details	.2293 tons of Unspecified oil-containing waste disposed of by Transfer station`
Year	2000	Manifest Details	0.02 tons of Empty containers less than 30 gallons disposed of by Recycler`0.25 tons of Other organic solids disposed of by Transfer station`
Year	2001	Manifest Details	0.45 tons of Other organic solids disposed of by Transfer station`1 tons of Contaminated soil from site clean-up disposed of by Transfer station`
Year	2002	Manifest Details	0.07 tons of Unspecified oil-containing waste disposed of by Transfer station`0.15 tons of Other organic solids disposed of by Transfer station`
Year	2003	Manifest Details	0.8 tons of Other organic solids disposed of by Transfer station`
Year	2008	Manifest Details	0.0462 tons of Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`0.15 tons of Unspecified sludge waste disposed of by OTHER RECOVERY OF RECLAMATION FOR REUSE INCLUDING ACID REGENERATION, ORGANICS RECOVERY ECT`0.05 tons of Latex waste disposed of by OTHER RECOVERY OF RECLAMATION FOR REUSE INCLUDING ACID REGENERATION, ORGANICS RECOVERY ECT`0.4 tons of Waste oil and mixed oil disposed of by FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

SITE`0.15 tons of Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.) disposed of by FUEL BLENDING PRIOR TO ENERGY RECOVERY AT ANOTHER SITE`

Year	2009	Manifest Details	0.0528 tons of Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) disposed of by STORAGE, BULKING, AND/OR TRANSFER OFF SITE--NO TREATMENT/REOVERY (H010-H129) OR (H131-H135)`

25H

TAYLOR RENTALS
2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRA00-CAD983672197

RECORD DETAILS

Source Type	Notification	Receive Date	-0/7-/1993
Non Notifier	Not a non-notifier	Acknowledge Date	1993-09-08 00:00:00.0
Location Country	US	Land Type	Private
Contact Phone	415-968-8301 x	Fed Waste Generator	Small Quantity Generator
Short Term Generator	No	Importer Activity	No
Mixed Waste Generator	No	Transporter	No
Transfer Facility	No	Tsd Activity	No
Recycler Activity	No	Onsite Burner Exemption	No
Furnace Exemption	No	Underground Injection Activity	No
Off Site Receipt	No	Universal Waste Dest Facility	No
Used Oil Transporter	No	Used Oil Transfer Facility	No
Used Oil Processor	No	Used Oil Refiner	No
Used Oil Burner	No	Used Oil Market Burner	No
Used Oil Spec Marketer	No	Large Quantity Handlers Of Universal Wastes	No
Recognized Trader Importer	No	Recognized Trader Exporter	No
Slab Importer	No	Slab Exporter	No
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location	37.386811	Location	-122.08588

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Latitude		Longitude	
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	2246 W EL CAMINO REAL, MOUNTAIN VIEW, CA 94040	Contact Name	RON HARMON
Violations	No Violations	Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAD983672197&pgm_sys_acrnm_in=RCRAINFO

OWNER AND OPERATOR INFO

Owner Operator Indicator	CO	Owner Operator Name	TAYLOR RENTAL
Owner Operator Type	P	Phone	203-225-5111 x
Address	P O BOX 8000, NEW BRITAIN, CT 06050		

26

KITTY CLEANERS
Records: 26A,

Site ID: -1868525698
Distance: 605 ft, North West

26A

KITTY CLEANERS
910 NEW CLEANERS, EAST PALO ALTO, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRA00-CAD981660244

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/9-/1996
Non Notifier	Not a non-notifier	Acknowledge Date	1991-03-31 00:00:00.0
Location Country	US	Contact Phone	x
Fed Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	No	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	No	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Subpart P Healthcare	N
Subpart P Reverse Distributor	N	Location Latitude	0
Location Longitude	0	Location Gis Primary	N
Location Gis Origin	AG	Naics	DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPERATED)
Violations	No Violations	Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAD981660244&pgm_sys_acrnm_in=RCRAINFO

OWNER AND OPERATOR INFO

Owner Operator Indicator	CP	Owner Operator Name	NOT REQUIRED
Owner Operator Type	P	Phone	415-555-1212 x

Owner Operator Indicator	CO	Owner Operator Name	GAMBLIN LEE
Owner Operator Type	P	Phone	415-555-1212 x

27 Palo Alto Medical Foundation~Sutter Bay Medical Foundation
Records: 27A,27B,

Site ID: -2147332826
Distance: 618 ft, North

27A Palo Alto Medical Foundation
2350 El Camino Real West, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA's CUPA facilities database

Record ID:
CACUPAHM-10350088

RECORD DETAILS

Phone	650-934-3577	Operator Name	Don OHare
Operator Phone	650-934-7898	Owner Name	Palo Alto Medical Foundation
Owner Phone	650-934-3577	Owner Country	United States
E Contact Name	Sheri Klapper	E Contact Phone	(650) 691-6135
E Contact Mailing Address	2350 W. El Camino Real	E Contact Country	United States
Primary Regulator	Santa Clara County Environmental Health	Hazardous Materials Business Plan Facility	Yes
Hazardous Materials Business Plan Regulator	Mountain View Fire Department	Accidental Release Prevention Facility	No
Accidental Release Prevention Regulator	Santa Clara County Environmental Health	Ust Facility	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Ust Regulator	Mountain View Fire Department	Aboveground Storage Tank	No
Aboveground Storage Tank Regulator	Santa Clara County Environmental Health	Hazardous Waste Generator	No
Recycler	No	Recycler Regulator	Santa Clara County Environmental Health
Household Hazardous Waste Collection	No	Onsite Hazardous Waste Treatment	No
Mailing Address	2350 W. El Camino Real, Mountain View, CA 94040	Owner Address	2350 W. El Camino Real, Mountain View, CA 94040
E Contact Address	Mountain View, CA 94040		

27B

Sutter Bay Medical Foundation
2350 EL CAMINO REAL WEST, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA Site Portal

Record ID: CAREGHAZ-55196

Record Details

Ei Id	10350088	Facility Program	Chemical Storage Facilities

28

728 PANCHITA LLC
Records: 28A,28B,28C,28D,

Site ID: 376112022
Distance: 650 ft, South West

28A

728 PANCHITA LLC
728 PANCHITA WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAC003018628

Record Details

Owner Name	728 PANCHITA LLC	Owner Phone	6509413223
Operator Or Contact Name	728 PANCHITA LLC	Operator Or Contact Phone	6509413223
Status	INACTIVE	Inactive Date	9/6/2019 8:49:13 AM
Record Entered	6/7/2019 8:49:13 AM	Last Update	9/7/2019 3:00:24 AM
Transporter Registration	N/A	Owner Address	1276 LINCOLN AVE, SAN JOSE, CA 95125
Operator Or Contact Address	1276 LINCOLN AVE, SAN JOSE, CA 95125	Mailing Address	1276 LINCOLN AVE, SAN JOSE, CA 95125

28B

728 PANCHITA LLC
728 PANCHITA WAY, LOS ALTOS, CA
Type: Small and Large Quantity Generators (GENERATOR)
Source: Federal EPA's eManifest database

Record ID: NAEMANIF-CAC003018628

Record Details

Number Of Manifests In 2019	1

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Federal Yearly Manifest Totals

Number Of Line Items	1	Year	2019
Federal Waste Code	Not Identified	Non Acute Quantity	1523.8104
Acute Quantity	0	Waste Description	Not Identified

State Yearly Manifest Totals

Number Of Line Items	1	Year	2019
State Waste Code	151	Non Acute Quantity	1523.8104
Acute Quantity	0	Waste Description	Asbestos-containing waste

28C

728 PANCHITA LLC
728 PANCHITA WAY, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!

Record ID:
NAHWTSXX-CAC003018628

Record Details

Contact Name	728 PANCHITA LLC	Contact Phone	6509413223
Id Number Type	State provisional or emergency number	Mailing Address	1276 LINCOLN AVE, SAN JOSE, CA 95125

Manifest Summary

Year	2019	Manifest Details	0.46000 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

28D

728 PANCHITA LLC
728 PANCHITA WAY, LOS ALTOS, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003018628

Record Details

Source Type	Implementer	Receive Date	-0/6-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-06-07 00:00:00.0
Location Country	US	Contact Phone	650-941-3223 x
Contact Email Address	BROOKE@BSBBUILDER.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@647982fc
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.394468	Location Longitude	-122.106978
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	1276 LINCOLN AVE #105, SAN JOSE, CA 95125	Contact Name	728 PANCHITA LLC
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003018628&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	728 PANCHITA LLC
Owner Operator Type	O	Phone	650-941-3223 x
Address	1276 LINCOLN AVE #105, SAN JOSE, CA 95125		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Owner Operator Indicator	CP	Owner Operator Name	728 PANCHITA LLC
Owner Operator Type	O	Phone	650-941-3223 x
Address	1276 LINCOLN AVE #105, SAN JOSE, CA 95125		

29

LMV MOUNTAIN VIEW II HOLDINGS, LP.
Records: 29A,29B,29C,

Site ID: 1429917857
Distance: 656 ft, North East

29A

LMV MOUNTAIN VIEW II HOLDINGS, LP.
2241 LATHAM ST., MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAC002917305

Record Details

Owner Name	LMV MOUNTAIN VIEW II HOLDINGS, LP.	Owner Phone	4159754161
Operator Or Contact Name	BRAD HOTTLE	Operator Or Contact Phone	4159754161
Status	INACTIVE	Inactive Date	10/3/2017 3:00:20 AM
Record Entered	7/3/2017 12:41:49 PM	Last Update	10/3/2017 3:00:20 AM
Transporter Registration	N/A	Owner Address	492 9TH ST. #300, OAKLAND, CA 94607
Operator Or Contact Address	492 9TH ST. #300, OAKLAND, CA 94607	Mailing Address	492 9TH ST. #300, OAKLAND, CA 94607

29B

LMV MOUNTAIN VIEW II HOLDINGS, LP.
2241 LATHAM ST., MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List

Record ID: CAHAZWTS-CAC002920667

Record Details

Owner Name	LMV MOUNTAIN VIEW II HOLDINGS, LP	Owner Phone	4159754982
Operator Or Contact Name	PETER SHELLINGER	Operator Or Contact Phone	4159754982
Status	INACTIVE	Inactive Date	10/26/2017 3:00:27 AM
Record Entered	7/26/2017 1:28:11 PM	Last Update	10/26/2017 3:00:27 AM
Are California Manifests	Yes	Transporter Registration	N/A
Owner Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656	Operator Or Contact Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656
Mailing Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

29C LMV MOUNTAIN VIEW II HOLDINGS, LP.
2241 LATHAM ST., MOUNTAIN VIEW, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!
Record ID: NAHWTSXX-CAC002920667

Record Details

Contact Name	PETER SHELLINGER	Contact Phone	4159754982
Id Number Type	State provisional or emergency number	Mailing Address	95 ENTERPRISE #200, ALISO VIEJO, CA 92656

Manifest Summary

Year	2017	Manifest Details	0.69 tons of Asbestos containing waste disposed of by LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL(TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)`

30 LTK ASSOCIATES INC
Records: 30A,30B,
Site ID: 1678206095
Distance: 657 ft, South East

30A LTK ASSOCIATES INC
740 DISTEL DR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California DTSC's Hazardous Waste Tracking System's Facilities List
Record ID: CAHAZWTS-CAL000196818

Record Details

Owner Name	LTK ASSOCIATES INC	Operator Or Contact Name	RAY URIBES
Operator Or Contact Phone	6509678465	Status	INACTIVE
Inactive Date	6/30/2002	Record Entered	1/19/1999
Last Update	2/2/2005 4:45:41 PM	Are California Manifests	Yes
Transporter Registration	N/A	Owner Address	740 DISTEL DR, LOS ALTOS, CA 940400000
Operator Or Contact Address	=L, ,	Mailing Address	740 DISTEL DR, LOS ALTOS, CA 940400000

30B LTK ASSOCIATES INC
740 DISTEL DR, LOS ALTOS, CA
Type: Hazardous Waste Information System (HAZNET)
Source: California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!
Record ID: NAHWTSXX-CAL000196818

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Record Details

Contact Name	LTK ASSOCIATES INC	Contact Phone	0000000000
Id Number Type	State permanent number	Mailing Address	740 DISTEL DR, LOS ALTOS, CA 940400000

Manifest Summary

Year	1999	Manifest Details	.0000 tons of Unknown disposed of by Invalid disposal code`.0166 tons of Photochemicals/photoprocessing waste disposed of by Recycler`

31

INNOVUSION, INC.
Records: 31A,

Site ID: -959175752
Distance: 680 ft, North West

31A

INNOVUSION, INC.
4920 EL CAMINO REAL, STE 100, LOS ALTOS, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003016057

Record Details

Source Type	Implementer	Receive Date	-0/5-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-05-21 00:00:00.0
Location Country	US	Contact Phone	408-687-8853 x
Contact Email Address	LISA.TIAN@INNOVUSION.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil	No	Used Oil Spec	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Market Burner		Marketer	
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@6adfca8d
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.397277	Location Longitude	-122.107959
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	4920 EL CAMINO REAL, STE 100, LOS ALTOS, CA 94022	Contact Name	LISA TIAN
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003016057&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	JUNWEI BAO
Owner Operator Type	O	Phone	650-963-9573 x
Address	4920 EL CAMINO REAL, STE 100, LOS ALTOS, CA 94022		

Owner Operator Indicator	CP	Owner Operator Name	LISA TIAN
Owner Operator Type	O	Phone	408-687-8853 x
Address	4920 EL CAMINO REAL, STE 100, LOS ALTOS, CA 94022		

32 Domizile Homeowners Association
Records: 32A,
Site ID: 1555400321
Distance: 972 ft, North

32A Domizile Homeowners Association
550 Ortega Avenue, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA's CUPA facilities database
Record ID:
CACUPAHM-10353868

Record Details

Phone	650-210-0085	Operator Name	Nagi Chami

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Operator Phone	650-210-0085	Owner Name	Tri-State Enterprises
Owner Phone	650-210-0085	Owner Country	United States
E Contact Name	Nagi Chami	E Contact Phone	650-210-0085
E Contact Mailing Address	2133 Leghorn Street	E Contact Country	United States
Primary Regulator	Santa Clara County Environmental Health	Hazardous Materials Business Plan Facility	Yes
Hazardous Materials Business Plan Regulator	Mountain View Fire Department	Accidental Release Prevention Facility	No
Accidental Release Prevention Regulator	Santa Clara County Environmental Health	Ust Facility	No
Ust Regulator	Mountain View Fire Department	Aboveground Storage Tank	No
Aboveground Storage Tank Regulator	Santa Clara County Environmental Health	Hazardous Waste Generator	No
Recycler	No	Recycler Regulator	Santa Clara County Environmental Health
Household Hazardous Waste Collection	No	Onsite Hazardous Waste Treatment	No
Mailing Address	2133 Leghorn Street, Mountain View, CA 94043	Owner Address	2133 Leghorn Street, Mountain View, CA 94043
E Contact Address	Mountain View, CA 94043		

33

BOSTON PROPERTIES LIMITED PARTNERSHIPBP WEST EL CAMINO LLC~Boston Properties, L.P.~BXP WEST EL CAMINO LP~DIALOG CORP INC~KNIGHT-RIDDER INFORMATION INC~RAISING A READER~TISHMAN SPEYER PROPERTIES
Records: 33A,33B,

Site ID: 2146249385
Distance: 997 ft, North West

33A

Boston Properties, L.P.
2440 El Camino Real West, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA's CUPA facilities database

Record ID: CACUPAHM-10350277

RECORD DETAILS

Phone	650-873-7870	Operator Name	Boston Properties
Operator Phone	650-873-7870	Owner Name	Boston Properties, L.P.
Owner Phone	650-873-7870	Owner Country	United States
E Contact Name	Rene Guibert	E Contact Phone	650-873-7870
E Contact Mailing Address	601 Gateway Blvd., Ste. 930	E Contact Country	United States
Primary Regulator	Santa Clara County Environmental Health	Hazardous Materials Business Plan Facility	Yes
Hazardous Materials Business Plan Regulator	Mountain View Fire Department	Accidental Release Prevention Facility	No
Accidental Release	Santa Clara County Environmental Health	Ust Facility	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Prevention Regulator			
Ust Regulator	Mountain View Fire Department	Aboveground Storage Tank	No
Aboveground Storage Tank Regulator	Santa Clara County Environmental Health	Hazardous Waste Generator	Yes
Recycler	No	Recycler Regulator	Santa Clara County Environmental Health
Household Hazardous Waste Collection	No	Onsite Hazardous Waste Treatment	No
Mailing Address	601 Gateway Blvd., Ste. 930, South San Francisco, CA 94080	Owner Address	601 Gateway Blvd., Ste. 930, South San Francisco, CA 94080
E Contact Address	South San Francisco, CA 94080		

33B Boston Properties, L.P.
2440 EL CAMINO REAL WEST, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA Site Portal
Record ID: CAREGHAZ-13150

Record Details

Ei Id	10350277	Facility Program	Chemical Storage Facilities

34 Avalon Towers On The Peninsula
Records: 34A,34B,
Site ID: 1364583313
Distance: 1002 ft, North West

34A Avalon Towers On The Peninsula
2400 El Camino Real West, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA's CUPA facilities database
Record ID: CACUPAHM-10350196

Record Details

Phone	650-969-7777	Fax	650-969-7783
Operator Name	Ashley Toledo	Operator Phone	650-969-7777
Owner Name	Avalon Bay Communities	Owner Phone	408-983-1500
Owner Country	United States	E Contact Name	Ashley Toledo
E Contact Phone	650-969-7777	E Contact Mailing Address	2400 W. El Camino Real
E Contact Country	United States	Primary Regulator	Santa Clara County Environmental Health
Hazardous Materials Business Plan Facility	Yes	Hazardous Materials Business Plan Regulator	Mountain View Fire Department
Accidental Release Prevention Facility	No	Accidental Release Prevention Regulator	Santa Clara County Environmental Health
Ust Facility	No	Ust Regulator	Mountain View Fire Department
Aboveground Storage Tank	No	Aboveground Storage Tank Regulator	Santa Clara County Environmental Health
Hazardous Waste	No	Recycler	No

Generator			
Recycler Regulator	Santa Clara County Environmental Health	Household Hazardous Waste Collection	No
Onsite Hazardous Waste Treatment	No	Mailing Address	2400 W. El Camino Real, Mountain View, CA 94040
Owner Address	400 Race Street, #200, San Jose, CA 95126	E Contact Address	ashley_toledo@avalonbay.com, Mountain View, CA 94040

34B

Avalon Towers On The Peninsula
2400 EL CAMINO REAL WEST, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA Site Portal

Record ID: CAREGHAZ-96622

RECORD DETAILS

Ei Id	10350196	Facility Program	Chemical Storage Facilities

VIOLATIONS

Violation Date	5/18/2017 12:00:00 AM	Citation	Un-Specified
Violation Description	Business Plan Program - Administration/Documentation - General Local Ordinance	Violation Division	Mountain View Fire Department
Violation Program	HMRRP	Violation Source	CERS

35

Jack in the Box #0421
Records: 35A,

Site ID: 428762048
Distance: 1019 ft, North West

35A

Jack in the Box #0421
4896 EL CAMINO REAL, LOS ALTOS, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA Site Portal

Record ID: CAREGHAZ-416141

RECORD DETAILS

Ei Id	10720996	Facility Program	Chemical Storage Facilities

VIOLATIONS

Violation Date	7/6/2018 12:00:00 AM	Citation	HSC 6.95 25505.1 - California Health and Safety Code, Chapter 6.95, Section(s) 25505.1
Violation Description	Failure to provide a copy of the business plan to the owner or the owner's agent within five working days after receiving a request for a copy from the owner or the owner's agent.	Violation Notes	Returned to compliance on 01/28/2019. Facility employees could not provide verification that facility has notified the property owner in writing of their compliance with the Hazardous Materials Business Plan.
Violation Division	Santa Clara County Environmental Health	Violation Program	HMRRP
Violation Source	CERS		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Violation Date	7/6/2018 12:00:00 AM	Citation	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description	Failure to complete and electronically submit a site map with all required content.	Violation Notes	Returned to compliance on 01/28/2019. Site map does not appear to show correct layout of the facility. When asked, employees on-site could not locate the carbon dioxide using the map. After calling a manager for assistance, the cylinder was located in a storage closet that is only accesible through an external door at the back ot the shop. Revise map to show correct layout and access to this cylinder and resubmit.
Violation Division	Santa Clara County Environmental Health	Violation Program	HMRRP
Violation Source	CERS		

Violation Date	7/6/2018 12:00:00 AM	Citation	HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description	Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.	Violation Notes	Returned to compliance on 01/28/2019. Annual training logs for emergency response and hazards associated with reportable chemicals were not available for inspection. Forward copies of annual training logs for all employees on-site to HMCD office for review.
Violation Division	Santa Clara County Environmental Health	Violation Program	HMRRP
Violation Source	CERS		

36 Domizile Homeowners Association
Records: 36A,
Site ID: 13489284
Distance: 1026 ft, North

36A Domizile Homeowners Association
550 ORTEGA AVENUE, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA Site Portal
Record ID:
CAREGHAZ-112314

Record Details

Ei Id	10353868	Facility Program	Chemical Storage Facilities

37 7-ELEVEN INC. STORE #16687
Records: 37A,37B,
Site ID: 231632237
Distance: 1310 ft, East

37A 7-ELEVEN INC. STORE #16687
615 S Rengstorff Ave, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA's CUPA facilities database
Record ID:
CACUPAHM-10465384

Record Details

Phone	680-968-9077	Operator Name	7-ELEVEN INC.
Operator Phone	650-968-9077	Owner Name	7-ELEVEN INC.
Owner Phone	972-828-6586	Owner Country	United States

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

E Contact Name	RICHARD MILLS: MANAGER, DEVELOPMENT ADMINISTRATION	E Contact Phone	972-828-6586
E Contact Mailing Address	1722 ROUTH STREET	E Contact Country	United States
Primary Regulator	Santa Clara County Environmental Health	Hazardous Materials Business Plan Facility	Yes
Hazardous Materials Business Plan Regulator	Mountain View Fire Department	Accidental Release Prevention Facility	No
Accidental Release Prevention Regulator	Santa Clara County Environmental Health	Ust Facility	No
Ust Regulator	Mountain View Fire Department	Aboveground Storage Tank	No
Aboveground Storage Tank Regulator	Santa Clara County Environmental Health	Hazardous Waste Generator	No
Recycler	No	Recycler Regulator	Mountain View Fire Department
Household Hazardous Waste Collection	No	Onsite Hazardous Waste Treatment	No
Mailing Address	1722 ROUTH STREET, DALLAS, TX 75201	Owner Address	1722 ROUTH STREET, DALLAS, TX 75201
E Contact Address	RICHARD.MILLS@7-11.COM, DALLAS, TX 75201		

37B

7-ELEVEN INC. STORE #16687
615 S RENGSTORFF AVE, MOUNTAIN VIEW, CA
Type: Hazardous Materials Storage and Incident Records (HAZMAT)
Source: California EPA Site Portal

Record ID: CAREGHAZ-964

Record Details

Ei Id	10465384	Facility Program	Chemical Storage Facilities

38

1X GEMCO/LUCKY STORES INC~CVS Pharmacy #16113~CVS PHARMACY #16113~Digas~HOWARD TIRE~T0322~TARGET STORE #322~TARGET STORE T0322~TARGET T0322~TIRE SERVICE BY WHEEL WORKS~WHEEL WORKS # 8218~Wheel Works #122173~Wheel Works #8218
Records: 38A,38B,

Site ID: -833790931
Distance: 1392 ft, North

38A

Digas
555 Showers Dr, MOUNTAIN VIEW, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California State Water Resources Control Board's Geotracker Leaking Underground Storage Tank list

Record ID: CALUSTCA-T0608500515

Record Details

Case Type	LUST Cleanup Site	Status	Completed - Case Closed
Status Date	9/17/1997 12:00:00 AM	Cuf Case	YES
Lead Agency	SANTA CLARA COUNTY LOP	Local Agency	SANTA CLARA COUNTY LOP
File Location	All Files are on GeoTracker or in the Local	Potential	Gasoline

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

	Agency Database	Contaminants Of Concern	
Potential Media Affected	Other Groundwater (uses other than drinking water)	Begin Date	10/2/1986 12:00:00 AM
Estimated Status	Closed case or No Further Action		

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	1986-10-02 00:00:00
Status	Open - Site Assessment	Status Date	1986-10-02 00:00:00
Status	Open - Site Assessment	Status Date	1993-06-07 00:00:00
Status	Open - Remediation	Status Date	1993-12-01 00:00:00
Status	Completed - Case Closed	Status Date	1997-09-17 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	RESPONSE	Date	1985-01-01 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1986-10-02 00:00:00
Action	Other Report / Document		
Action Type	Other	Date	1986-10-02 00:00:00
Action	Leak Reported		
Action Type	RESPONSE	Date	1986-11-07 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1987-11-11 00:00:00
Action	Other Report / Document		
Action Type	ENFORCEMENT	Date	1992-05-20 00:00:00
Action	Notice of Violation - #40125		
Action Type	RESPONSE	Date	1993-01-01 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1993-01-01 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1993-06-07 00:00:00
Action	Other Report / Document		

SURROUNDING SITES DETAILS

Action Type	REMEDIATION	Date	1993-12-01 00:00:00
Action	Pump & Treat (P&T) Groundwater		
Action Type	RESPONSE	Date	1995-05-27 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1996-01-01 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1996-02-16 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1997-01-01 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1997-01-01 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1997-01-01 00:00:00
Action	Other Report / Document		
Action Type	ENFORCEMENT	Date	1997-09-17 00:00:00
Action	Closure/No Further Action Letter		
Action Type	RESPONSE	Date	2003-03-06 00:00:00
Action	Other Report / Document		

38B

Digas
555 SHOWERS DR, MOUNTAIN VIEW, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California EPA Site Portal

Record ID:
CAREGLST-255904

RECORD DETAILS

Facility Program	Leaking Underground Storage Tank Cleanup Site

39

LIHUI LIN AND CHUCK GWO
Records: 39A,

Site ID: -1833369090
Distance: 1440 ft, North

39A

LIHUI LIN AND CHUCK GWO
400 A ORTEGA AVE, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003008125

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/4-/2019
Non Notifier	Not a non-notifier	Acknowledge	2019-04-01 00:00:00.0

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

		Date	
Location Street2	UNIT 203	Location Country	US
Contact Phone	650-208-0182 x	Contact Email Address	MARIAE@PWSEI.COM
Fed Waste Generator	Not a Generator	State Waste Generator	Small Quantity Generator
Short Term Generator	No	Importer Activity	No
Mixed Waste Generator	No	Transporter	No
Transfer Facility	No	Tsd Activity	Yes
Recycler Activity	No	Onsite Burner Exemption	No
Furnace Exemption	No	Underground Injection Activity	No
Off Site Receipt	No	Universal Waste Dest Facility	Yes
Used Oil Transporter	No	Used Oil Transfer Facility	No
Used Oil Processor	No	Used Oil Refiner	No
Used Oil Burner	No	Used Oil Market Burner	No
Used Oil Spec Marketer	No	Subpart K College	No
Subpart K Hospital	No	Subpart K Nonprofit	No
Subpart K Withdrawal	No	Large Quantity Handlers Of Universal Wastes	No
Recognized Trader Importer	No	Recognized Trader Exporter	No
Slab Importer	No	Slab Exporter	No
Public Notes	oracle.sql.CLOB@2de76566	Subpart P Healthcare	N
Subpart P Reverse Distributor	N	Location Latitude	37.400139
Location Longitude	-122.105381	Location Gis Primary	N
Location Gis Origin	AG	Contact Address	400 A ORTEGA AVE UNIT 203, MOUNTAIN VIEW, CA 94040
Contact Name	CHUCK GWO	Naics	ALL OTHER WASTE MANAGEMENT SERVICES
Violations	No Violations	Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003008125&pgm_sys_acrnm_in=RCRAINFO

Owner and Operator Info

SURROUNDING SITES DETAILS

Owner Operator Indicator	CO	Owner Operator Name	LIHUI LIN AND CHUCK GWO
Owner Operator Type	O	Phone	650-208-0182 x
Address	400 A ORTEGA AVE UNIT 203, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	CHUCK GWO
Owner Operator Type	O	Phone	650-208-0182 x
Address	400 A ORTEGA AVE UNIT 203, MOUNTAIN VIEW, CA 94040		

40

SOPHIA VOLKEL
Records: 40A,

Site ID: -357692088
Distance: 1586 ft, South East

40A

SOPHIA VOLKEL
1026 KAREN WAY, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003008696

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/4-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-04-04 00:00:00.0
Location Country	US	Contact Phone	650-814-7108 x
Contact Email Address	ALEJANDRAMALDONADO@ALLIANCE-ENVIRO.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@1eb0b697
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.392307	Location Longitude	-122.1027
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	1026 KAREN WAY, MOUNTAIN VIEW, CA 94040	Contact Name	SOPHIA VOLKEL
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003008696&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	SOPHIA VOLKEL
Owner Operator Type	O	Phone	650-814-7108 x
Address	1026 KAREN WAY, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	SOPHIA VOLKEL
Owner Operator Type	O	Phone	650-814-7108 x
Address	1026 KAREN WAY, MOUNTAIN VIEW, CA 94040		

41 LOS ALTOS GARDEN SUPPLY~LOS ALTOS SUPPLY & GARDEN
Records: 41A,
Site ID: -2034278670
Distance: 1900 ft, North West

41A LOS ALTOS GARDEN SUPPLY
4730 EL CAMINO REAL, LOS ALTOS, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California State Water Resources Control Board's Geotracker Leaking Underground Storage Tank list
Record ID: CALUSTCA-T0608501940

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Record Details

Case Type	LUST Cleanup Site	Status	Completed - Case Closed
Status Date	4/29/1996 12:00:00 AM	Cuf Case	NO
Lead Agency	SAN FRANCISCO BAY RWQCB (REGION 2)	Local Agency	SANTA CLARA COUNTY LOP
Rb Case Number	43-2112	Potential Contaminants Of Concern	Diesel
Potential Media Affected	Soil	Begin Date	11/13/1995 12:00:00 AM
How Discovered	Tank Closure	Estimated Status	Closed case or No Further Action

Site Status History

Status	Open - Case Begin Date	Status Date	1995-11-13 00:00:00
Status	Completed - Case Closed	Status Date	1996-04-29 00:00:00

Site Regulatory Activities

Action Type	Other	Date	1995-11-13 00:00:00
Action	Leak Discovery		
Action Type	Other	Date	1995-11-13 00:00:00
Action	Leak Stopped		
Action Type	Other	Date	1995-12-04 00:00:00
Action	Leak Reported		
Action Type	ENFORCEMENT	Date	1996-04-29 00:00:00
Action	Closure/No Further Action Letter - #43-2112		

42

1X DMSR INC.~DMSR INCDBA QUALITY TUNEUP #1~Quality Tune-Up #1
Records: 42A,

Site ID: 1851034538
Distance: 2396 ft, North West

42A

Quality Tune-Up #1
2580 EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California EPA Site Portal

Record ID:
CAREGLST-239058

Record Details

Facility Program	Leaking Underground Storage Tank Cleanup Site

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

43

Quality Tune-Up #1
Records: 43A,

Site ID: 3074841946
Distance: 2396 ft, North West

43A

Quality Tune-Up #1
2580 El Camino Real, MOUNTAIN VIEW, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California State Water Resources Control Board's Geotracker Leaking Underground Storage Tank list

Record ID:
CALUSTCA-T0608501080

RECORD DETAILS

Case Type	LUST Cleanup Site	Status	Completed - Case Closed
Status Date	9/30/1996 12:00:00 AM	Cuf Case	YES
Lead Agency	SANTA CLARA COUNTY LOP	Local Agency	SANTA CLARA COUNTY LOP
File Location	All Files are on GeoTracker or in the Local Agency Database	Potential Contaminants Of Concern	Gasoline
Potential Media Affected	Other Groundwater (uses other than drinking water)	Begin Date	5/16/1986 12:00:00 AM
Estimated Status	Closed case or No Further Action		

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	1986-05-16 00:00:00
Status	Open - Site Assessment	Status Date	1986-05-16 00:00:00
Status	Open - Site Assessment	Status Date	1988-03-09 00:00:00
Status	Completed - Case Closed	Status Date	1996-09-30 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	Other	Date	1986-05-29 00:00:00
Action	Leak Reported		
Action Type	ENFORCEMENT	Date	1987-10-26 00:00:00
Action	Notice of Responsibility - #40126		
Action Type	REMEDIATION	Date	1988-12-12 00:00:00
Action	Excavation		
Action Type	ENFORCEMENT	Date	1995-08-31 00:00:00
Action	Staff Letter - #30081		
Action Type	RESPONSE	Date	1995-10-15 00:00:00
Action	Monitoring Report - Quarterly		

SURROUNDING SITES DETAILS

Action Type	RESPONSE	Date	1996-01-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1996-04-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	ENFORCEMENT	Date	1996-05-21 00:00:00
Action	Staff Letter - #30089		
Action Type	RESPONSE	Date	1996-07-15 00:00:00
Action	Remedial Progress Report		
Action Type	RESPONSE	Date	1996-09-30 00:00:00
Action	Other Report / Document		
Action Type	ENFORCEMENT	Date	1996-09-30 00:00:00
Action	Closure/No Further Action Letter		

44

BAATE, AMRUTA~BALTHAEOR, JASON~CAMILLE - MARDER TRUST~COMPASS MANAGEMENT GROUP~EASWAR SWAMINGTHAN~GEORGINA VARDOVA~JACKSON, LENE~JACLYN MCBRIDE~JACQUELINE MCBRIDE~JAMES DEDY~JASON CHIN~KARL SMITH~MARIA DEGMAR~MICHAEL SIMMS~MICHELLE VHAU~MOLLY TAYLOR~NANCY TATE~PAULA WILSON~SIMONS, DERRICK~YEVGANY YERMANOV
Records: 44A,44B,

Site ID: -2138733538
Distance: 2404 ft, North East

44A

JASON CHIN
255 SOUTH RENGSTORFF AVE, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003007136

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/3-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-03-25 00:00:00.0
Location Street2	UNIT 5	Location Country	US
Contact Phone	408-295-7767 x	Contact Email Address	MARIAE@PWSEI.COM
Fed Waste Generator	Not a Generator	State Waste Generator	Small Quantity Generator
Short Term Generator	No	Importer Activity	No
Mixed Waste Generator	No	Transporter	No
Transfer Facility	No	Tsd Activity	Yes
Recycler Activity	No	Onsite Burner Exemption	No
Furnace	No	Underground	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Exemption		Injection Activity	
Off Site Receipt	No	Universal Waste Dest Facility	Yes
Used Oil Transporter	No	Used Oil Transfer Facility	No
Used Oil Processor	No	Used Oil Refiner	No
Used Oil Burner	No	Used Oil Market Burner	No
Used Oil Spec Marketer	No	Subpart K College	No
Subpart K Hospital	No	Subpart K Nonprofit	No
Subpart K Withdrawal	No	Large Quantity Handlers Of Universal Wastes	No
Recognized Trader Importer	No	Recognized Trader Exporter	No
Slab Importer	No	Slab Exporter	No
Public Notes	oracle.sql.CLOB@5c2fc966	Subpart P Healthcare	N
Subpart P Reverse Distributor	N	Location Latitude	37.399473
Location Longitude	-122.098023	Location Gis Primary	N
Location Gis Origin	AG	Contact Address	255 SOUTH RENGSTORFF AVE UNIT 5, MOUNTAIN VIEW, CA 94040
Contact Name	JASON CHIN	Naics	ALL OTHER WASTE MANAGEMENT SERVICES
Violations	No Violations	Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003007136&pgm_sys_acrnm_in=RCRAINFO

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	JASON CHIN
Owner Operator Type	O	Phone	408-295-7767 x
Address	255 SOUTH RENGSTORFF AVE UNIT 5, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	JASON CHIN
Owner Operator Type	O	Phone	408-295-7767 x
Address	255 SOUTH RENGSTORFF AVE UNIT 5, MOUNTAIN VIEW, CA 94040		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

44B

NANCY TATE
255 SOUTH RENGSTORFF AVE, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003007137

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/3-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-03-25 00:00:00.0
Location Street2	UNIT 6	Location Country	US
Contact Phone	408-295-7767 x	Contact Email Address	MARIAE@PWSEI.COM
Fed Waste Generator	Not a Generator	State Waste Generator	Small Quantity Generator
Short Term Generator	No	Importer Activity	No
Mixed Waste Generator	No	Transporter	No
Transfer Facility	No	Tsd Activity	Yes
Recycler Activity	No	Onsite Burner Exemption	No
Furnace Exemption	No	Underground Injection Activity	No
Off Site Receipt	No	Universal Waste Dest Facility	Yes
Used Oil Transporter	No	Used Oil Transfer Facility	No
Used Oil Processor	No	Used Oil Refiner	No
Used Oil Burner	No	Used Oil Market Burner	No
Used Oil Spec Marketer	No	Subpart K College	No
Subpart K Hospital	No	Subpart K Nonprofit	No
Subpart K Withdrawal	No	Large Quantity Handlers Of Universal Wastes	No
Recognized Trader Importer	No	Recognized Trader Exporter	No
Slab Importer	No	Slab Exporter	No
Public Notes	oracle.sql.CLOB@e7a235d	Subpart P Healthcare	N
Subpart P Reverse Distributor	N	Location Latitude	37.399473
Location	-122.098023	Location Gis	N

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Longitude		Primary	
Location Gis Origin	AG	Contact Address	255 SOUTH RENGSTORFF AVE UNIT 6, MOUNTAIN VIEW, CA 94040
Contact Name	NANCY TATE	Naics	ALL OTHER WASTE MANAGEMENT SERVICES
Violations	No Violations	Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003007137&pgm_sys_acrnm_in=RCRAINFO

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	NANCY TATE
Owner Operator Type	O	Phone	408-295-7767 x
Address	255 SOUTH RENGSTORFF AVE UNIT 6, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	NANCY TATE
Owner Operator Type	O	Phone	408-295-7767 x
Address	255 SOUTH RENGSTORFF AVE UNIT 6, MOUNTAIN VIEW, CA 94040		

45 **UNOCAL #4918**
Records: 45A,
Site ID: 666207645
Distance: 2456 ft, West

45A **UNOCAL #4918**
895 N. SAN ANTONIO ROAD, LOS ALTOS, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California State Water Resources Control Board's Geotracker Leaking Underground Storage Tank list
Record ID: CALUSTCA-T0608500150

Record Details

Case Type	LUST Cleanup Site	Status	Completed - Case Closed
Status Date	3/11/2013 12:00:00 AM	Cuf Case	YES
Lead Agency	SANTA CLARA COUNTY LOP	Rb Case Number	21-067
Loc Case Number	06S2W20E01f	File Location	All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants Of Concern	Diesel, MTBE / TBA / Other Fuel Oxygenates, Gasoline	Potential Media Affected	Other Groundwater (uses other than drinking water)
Site History	The Site is a former Unocal-branded service station, which was located at the northeast corner at the intersection of North San Antonio Road and Sherwood Avenue in Los Altos, California. Original (first generation) Site features included a station building, two 10,000-gallon gasoline underground storage tanks (USTs) located near the northwest corner of the Site, and two product dispenser islands. In 1985, the two 10,000-gallon gasoline USTs (second generation) were installed in the southwest	Begin Date	6/25/1992 12:00:00 AM

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

	corner of the Site. The station building, USTs (second generation), and dispenser islands were removed in 1992, and the Site remains a vacant lot except for a consists primarily of commercial and residential properties. Soil vapor extraction with air sparge were used to remediate the site.		
How Discovered	Tank Closure	Stop Method	Close and Replace Tank
Estimated Status	Closed case or No Further Action		

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	1992-06-25 00:00:00
Status	Open - Site Assessment	Status Date	1992-08-17 00:00:00
Status	Open - Site Assessment	Status Date	1992-08-20 00:00:00
Status	Open - Remediation	Status Date	2001-12-06 00:00:00
Status	Open - Verification Monitoring	Status Date	2008-11-20 00:00:00
Status	Open - Eligible for Closure	Status Date	2012-11-02 00:00:00
Status	Completed - Case Closed	Status Date	2013-03-11 00:00:00

SITE REGULATORY ACTIVITIES

There were a total of 67 records in the Site Regulatory Activities table. We are only displaying 50 of those in this report in order to keep the size of this report manageable. If you would like the full site record, please contact the responsible regulatory agency noted above.

Action Type	Other	Date	1992-06-25 00:00:00
Action	Leak Stopped		
Action Type	Other	Date	1992-06-25 00:00:00
Action	Leak Discovery		
Action Type	REMEDIATION	Date	1992-07-01 00:00:00
Action	Excavation		
Action Type	Other	Date	1992-07-09 00:00:00
Action	Leak Reported		
Action Type	RESPONSE	Date	1992-07-09 00:00:00
Action	Unauthorized Release Form		
Action Type	RESPONSE	Date	1992-07-17 00:00:00

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Action	Tank Removal Report / UST Sampling Report		
Action Type	RESPONSE	Date	1993-02-09 00:00:00
Action	Other Workplan		
Action Type	ENFORCEMENT	Date	1993-02-25 00:00:00
Action	Notice of Responsibility - #40127		
Action Type	RESPONSE	Date	1993-09-10 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1994-04-05 00:00:00
Action	Other Workplan		
Action Type	RESPONSE	Date	1994-06-20 00:00:00
Action	Other Workplan		
Action Type	RESPONSE	Date	1994-11-02 00:00:00
Action	Other Workplan		
Action Type	RESPONSE	Date	1995-02-06 00:00:00
Action	CAP/RAP - Feasibility Study Report		
Action Type	RESPONSE	Date	1995-04-11 00:00:00
Action	Other Workplan		
Action Type	ENFORCEMENT	Date	1995-05-31 00:00:00
Action	Staff Letter - #30094		
Action Type	RESPONSE	Date	1995-06-02 00:00:00
Action	Other Workplan		
Action Type	RESPONSE	Date	1995-07-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1995-10-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1996-01-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1996-04-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1996-07-11 00:00:00
Action	Monitoring Report - Quarterly		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Action Type	RESPONSE	Date	1996-10-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1997-01-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1997-04-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1997-07-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1997-10-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1998-01-15 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	1998-05-18 00:00:00
Action	Interim Remedial Action Report		
Action Type	RESPONSE	Date	1998-06-26 00:00:00
Action	Soil Vapor Intrusion Investigation Workplan		
Action Type	RESPONSE	Date	1998-10-01 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	1998-10-01 00:00:00
Action	CAP/RAP - Other Report		
Action Type	RESPONSE	Date	1999-01-21 00:00:00
Action	Correspondence		
Action Type	REMEDIATION	Date	2001-09-05 00:00:00
Action	Soil Vapor Extraction (SVE)		
Action Type	RESPONSE	Date	2004-09-13 00:00:00
Action	Well Destruction Workplan		
Action Type	RESPONSE	Date	2007-07-05 00:00:00
Action	Soil Vapor Intrusion Investigation Workplan		
Action Type	RESPONSE	Date	2007-11-01 00:00:00
Action	Well Installation Report		
Action Type	RESPONSE	Date	2009-02-26 00:00:00
Action	Other Report / Document		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Action Type	ENFORCEMENT	Date	2009-03-18 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2009-07-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	ENFORCEMENT	Date	2009-08-12 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2009-10-30 00:00:00
Action	Remedial Progress Report		
Action Type	RESPONSE	Date	2010-01-31 00:00:00
Action	Monitoring Report - Semi-Annually		
Action Type	RESPONSE	Date	2010-07-31 00:00:00
Action	Monitoring Report - Semi-Annually		
Action Type	ENFORCEMENT	Date	2010-08-25 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2010-10-31 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	ENFORCEMENT	Date	2010-11-12 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2011-01-31 00:00:00
Action	Monitoring Report - Semi-Annually		
Action Type	RESPONSE	Date	2011-04-29 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2011-07-08 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	2011-07-12 00:00:00
Action	Other Report / Document		

46

LIN MI
Records: 46A,

Site ID: -1360407560
Distance: 2461 ft, North East

46A

LIN MI
169 ORTEGA AVENUE, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003008694

RECORD DETAILS

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Source Type	Implementer	Receive Date	-0/4-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-04-04 00:00:00.0
Location Country	US	Contact Phone	650-213-2939 x
Contact Email Address	MELISA@ENV-REM.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@23f48e1c
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.401903	Location Longitude	-122.101133
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	169 ORTEGA AVENUE, MOUNTAIN VIEW, CA 94040	Contact Name	LIN MI
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003008694&pgm_sys_acrnm_in=RCRAINFO		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	LIN MI
Owner Operator Type	O	Phone	650-213-2939 x
Address	169 ORTEGA AVENUE, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	LIN MI
Owner Operator Type	O	Phone	650-213-2939 x
Address	169 ORTEGA AVENUE, MOUNTAIN VIEW, CA 94040		

47 PLESSEY #2
Records: 47A,
Site ID: -767564924
Distance: 2618 ft, North East

47A PLESSEY #2
2251, 2257, 2283 AND 2287 MORA DRIVE, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List
Record ID:
CAENSTOR-43360131

Record Details

Site Type	State Response	Site Type Detailed	State Response or NPL
Acres	0.43	Apn	147-54-010, 147-54-011, 147-54-012, 147-54-014, 147-54-015
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Supervisor	Mark Piros
Division Branch	Cleanup Berkeley	Site Code	201102
Congressional District	18	Status	No Further Action
Status Date	2002-05-15 00:00:00	Past Uses	MANUFACTURING-ELECTRONIC
Funding	Responsible Party	Potential Media Affected Description	Other Groundwater affected (uses other than drinking water)
Potential Coc Description	Tetrachloroethylene (PCE), Trichloroethylene (TCE)	Confirmed Coc Description	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Site Mgmt Req Description	NONE SPECIFIED	Estimated Status	Closed case or No Further Action

Alias Names for Sites

Alias Type	Alternate Name	Alias	PLESSEY #2
Alias Type	APN	Alias	147-54-010

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Alias Type	APN	Alias	147-54-011
Alias Type	APN	Alias	147-54-012
Alias Type	APN	Alias	147-54-014
Alias Type	APN	Alias	147-54-015
Alias Type	EPA (FRS #)	Alias	110033611615
Alias Type	Project Code (Site Code)	Alias	201102
Alias Type	Envirostor ID Number	Alias	43360131

COMPLETED ACTIONS

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/9/2001 12:00:00 AM	Comments	Completed PEA. Phase 2 Remedial

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

48 SYMTRON CORP MOUNTAIN VIEW DIV~SYMTRON CORP.~TITAN LABORATORIES
Records: 48A,

Site ID: -491324142
Distance: 2622 ft, North East

48A SYMTRON CORP.
2235-2245 MORA DR., MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID:
CAENSTOR-43360124

RECORD DETAILS

Site Type	State Response	Site Type Detailed	State Response or NPL
Acres	0.59	Apn	147-54-016, 147-54-017, 147-54-018, 147-54-019, 148-33-017
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Supervisor	Mark Piros
Division Branch	Cleanup Berkeley	Site Code	200315
Congressional District	18	Status	No Further Action
Status Date	2001-06-29 00:00:00	Past Uses	MANUFACTURING-OTHER
Funding	Responsible Party	Potential Media Affected Description	Other Groundwater affected (uses other than drinking water)
Potential Coc Description	Lead, Tetrachloroethylene (PCE), Trichloroethylene (TCE)	Confirmed Coc Description	Lead, Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Site Mgmt Req Description	NONE SPECIFIED	Estimated Status	Closed case or No Further Action

ALIAS NAMES FOR SITES

Alias Type	Alternate Name	Alias	ELEXSYS INTERNATIONAL
Alias Type	Alternate Name	Alias	SANMINA CORPORATION
Alias Type	Alternate Name	Alias	SYMTRON CORP.
Alias Type	APN	Alias	147-54-016
Alias Type	APN	Alias	147-54-017
Alias Type	APN	Alias	147-54-018

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Alias Type	APN	Alias	147-54-019
Alias Type	APN	Alias	148-33-017
Alias Type	EPA Identification Number	Alias	CAD000819821
Alias Type	EPA (FRS #)	Alias	110033618912
Alias Type	Project Code (Site Code)	Alias	200315
Alias Type	Envirostor ID Number	Alias	43360124

COMPLETED ACTIONS

There were a total of 91 records in the Completed Actions table. We are only displaying 50 of those in this report in order to keep the size of this report manageable. If you would like the full site record, please contact the responsible regulatory agency noted above.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	6/29/2001 12:00:00 AM	Comments	Completed RIFS. The results did not indicate a groundwater contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Removal Action Completion Report
Completed Date	1/10/1995 12:00:00 AM	Comments	Completed RA. Approximately 1.5 cubic yards of soil was excavated and disposed off-site. The building was steam cleaned. In addition, 3 cubic yards of ground concrete was disposed off-site as part of the removal of the concrete sump and clarifer.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	11/13/1992 12:00:00 AM	Comments	Approved PEA. Shallow soil samples showed copper as high as 7,900 ppm and lead as high as 2,000 ppm. Other metal contaminants were also found in soil along with tetrachloroethylene as high as 940 ppm, and 1,1,1-TCA as high as 440 ppm. Although Symtron is located in an area known to have have groundwater problems, no groundwater investigation was conducted.

Area Name	PROJECT WIDE	Document Type	Site Screening
Completed Date	9/24/1991 12:00:00 AM	Comments	Completed Site Screening. Copper,lead and volatile organics have been detected in the soil. Site referred to DTSC by Mountain View Fire Department. 2227 Mora Drive address housed Symtron's hazardous materials storage area where acids, bases, oxidizers, & flammable liquids, as well as copper animated plates, were kept. 2235 Mora housed offices, photo darkroom,

wet and dry quality control labs, and process operations. 2245 Mora operations included copper etching and black oxide operations & clean rooms used for Symtron's dry process. Symtron operated an onsite waste water treatment plant. Treated waste water and effluent went directly to the Mountain View sewer via an inground sump which served as a final clarifier. Closure sampling was conducted in March 1991 and included soil concrete chip, and wipe samples. Copper was detected as high as 7,900 ppm and 1,600 ppm in soil and concrete chip samples respectively. Lead was detected as high as 1,000 ppm in soil. Volatile organic compounds (VOCs) all tested below 1 ppm.

Area Name	PROJECT WIDE	Document Type	Other Report
Completed Date	9/27/2012 12:00:00 AM	Comments	Presents results of soil samples collected from this site, and soil and soil gas results from adjacent sites. This work not conducted under DTSC oversight.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	1/16/1997 12:00:00 AM	Comments	Issued IS&E Order to Elexsys International which was later acquired by Sanmina Corporation requiring site investigation and if appropriate, site remediation.

Area Name	PROJECT WIDE	Document Type	Correspondence
Completed Date	12/2/2011 12:00:00 AM	Comments	Close cost recovery account.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	6/29/2001 12:00:00 AM	Comments	Completed RIFS. The results did not indicate a groundwater contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Removal Action Completion Report
Completed Date	1/10/1995 12:00:00 AM	Comments	Completed RA. Approximately 1.5 cubic yards of soil was excavated and disposed off-site. The building was steam cleaned. In addition, 3 cubic yards of ground concrete was disposed off-site as part of the removal of the concrete sump and clarifer.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	11/13/1992 12:00:00 AM	Comments	Approved PEA. Shallow soil samples showed copper as high as 7,900 ppm and lead as high as 2,000 ppm. Other metal contaminants were also found in soil along with tetrachloroethylene as high as 940 ppm, and 1,1,1-TCA as high as 440 ppm. Although Symtron is located in an area known to have have groundwater problems, no groundwater investigation was conducted.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Site Screening
Completed Date	9/24/1991 12:00:00 AM	Comments	Completed Site Screening. Copper,lead and volatile organics have been detected in the soil. Site referred to DTSC by Mountain View Fire Department. 2227 Mora Drive address housed Symtron's hazardous materials storage area where acids, bases, oxidizers, & flammable liquids, as well as copper animated plates, were kept. 2235 Mora housed offices, photo darkroom, wet and dry quality control labs, and process operations. 2245 Mora operations included copper etching and black oxide operations & clean rooms used for Symtron's dry process. Symtron operated an onsite waste water treatment plant. Treated waste water and effluent went directly to the Mountain View sewer via an inground sump which served as a final clarifier. Closure sampling was conducted in March 1991 and included soil concrete chip, and wipe samples. Copper was detected as high as 7,900 ppm and 1,600 ppm in soil and concrete chip samples respectively. Lead was detected as high as 1,000 ppm in soil. Volatile organic compounds (VOCs) all tested below 1 ppm.

Area Name	PROJECT WIDE	Document Type	Other Report
Completed Date	9/27/2012 12:00:00 AM	Comments	Presents results of soil samples collected from this site, and soil and soil gas results from adjacent sites. This work not conducted under DTSC oversight.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	1/16/1997 12:00:00 AM	Comments	Issued IS&E Order to Elexsys International which was later acquired by Sanmina Corporation requiring site investigation and if appropriate, site remediation.

Area Name	PROJECT WIDE	Document Type	Correspondence
Completed Date	12/2/2011 12:00:00 AM	Comments	Close cost recovery account.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	6/29/2001 12:00:00 AM	Comments	Completed RIFS. The results did not indicate a groundwater contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Removal Action Completion Report
Completed Date	1/10/1995 12:00:00 AM	Comments	Completed RA. Approximately 1.5 cubic yards of soil was excavated and disposed off-site. The building was steam cleaned. In addition, 3 cubic yards of ground concrete was disposed off-site as part of the removal of the concrete sump and clarifer.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	11/13/1992 12:00:00 AM	Comments	Approved PEA. Shallow soil samples showed copper as high as 7,900 ppm and lead as high

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

as 2,000 ppm. Other metal contaminants were also found in soil along with tetrachloroethylene as high as 940 ppm, and 1,1,1-TCA as high as 440 ppm. Although Symtron is located in an area known to have have groundwater problems, no groundwater investigation was conducted.

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Completed Date	12/2/2011 12:00:00 AM	Comments	Close cost recovery account.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

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IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

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Completed Date	6/29/2001 12:00:00 AM	Comments	Completed RIFS. The results did not indicate a groundwater contamination source on the property.

49

PRINTING CLUB~PRINTING CLUB THE~SYMTRON #2
Records: 49A,

Site ID: -1547684368
Distance: 2624 ft, North East

49A

SYMTRON #2
111 ORTEGA AVENUE, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID: CAENSTOR-43360130

RECORD DETAILS

Site Type	State Response	Site Type Detailed	State Response or NPL
Acres	0.2	Apn	147-54-009, 148-33-009
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Supervisor	Mark Piros
Division Branch	Cleanup Berkeley	Site Code	201137
Congressional District	18	Status	No Further Action
Status Date	2001-06-29 00:00:00	Past Uses	MANUFACTURING-ELECTRONIC
Funding	Responsible Party	Potential Media Affected Description	Other Groundwater affected (uses other than drinking water)
Potential Coc	Tetrachloroethylene (PCE),	Confirmed Coc	Tetrachloroethylene (PCE), Trichloroethylene

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Description	Trichloroethylene (TCE)	Description	(TCE)
Site Mgmt Req Description	NONE SPECIFIED	Estimated Status	Closed case or No Further Action

ALIAS NAMES FOR SITES

Alias Type	Alternate Name	Alias	ELEXSYS
Alias Type	Alternate Name	Alias	SANMINA
Alias Type	APN	Alias	147-54-009
Alias Type	APN	Alias	148-33-009
Alias Type	EPA Identification Number	Alias	CAD000819821
Alias Type	EPA (FRS #)	Alias	110033618903
Alias Type	Project Code (Site Code)	Alias	201137
Alias Type	Envirostor ID Number	Alias	43360130

COMPLETED ACTIONS

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	6/29/2001 12:00:00 AM	Comments	Completed RIFS. The results did not indicate a contamination source on the property.

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Completed Date	8/19/1998 12:00:00 AM	Comments	Issued I or SE Order to Sanmina Corporation.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	6/29/2001 12:00:00 AM	Comments	Completed RIFS. The results did not indicate a contamination source on the property.

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IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

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Completed Date	8/19/1998 12:00:00 AM	Comments	Issued I or SE Order to Sanmina Corporation.

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IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

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50 CALIFORNIA CLEANERS~IRM COST SHARING SITE
Records: 50A,50B,

Site ID: 1820739804
Distance: 2716 ft, North

50A IRM COST SHARING SITE
2520 CALIFORNIA STREET, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID:
CACSLLIS-SL18311731

RECORD DETAILS

Case Type	Cleanup Program Site	Status	Open - Verification Monitoring
Status Date	7/1/2002 12:00:00 AM	Cuf Case	NO
Lead Agency	SAN FRANCISCO BAY RWQCB (REGION 2)	Rb Case Number	43S0426
File Location	Regional Board	Potential Contaminants Of Concern	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Potential Media Affected	Other Groundwater (uses other than drinking water), Soil Vapor	Site History	This site is a small shopping center. A dry cleaner formerly occupied one of the tenant spaces. There was a release of tetrachloroethene (PCE), a solvent used in dry cleaning, to soil and groundwater. Only low levels of PCE were found in soil. Elevated levels of PCE were found in groundwater and a groundwater extraction and treatment system was installed and operated to cleanup groundwater. The extraction and treatment system was shut down when it was no longer significantly reducing PCE levels in groundwater.
Begin Date	1/1/1991 12:00:00 AM	How Discovered	Site Assessment/Site Investigation
How Discovered Description	Soil and groundwater sampled.	Stop Method	Other Means
Stop Description	Site no longer used for dry cleaning	Estimated Status	Case is Open

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	1991-01-01 00:00:00
Status	Open - Verification Monitoring	Status Date	2002-07-01 00:00:00

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

SITE REGULATORY ACTIVITIES

Action Type	Other	Date	1991-01-01 00:00:00
Action	Leak Reported		
Action Type	Other	Date	1991-01-01 00:00:00
Action	Leak Discovery		
Action Type	REMEDIATION	Date	1992-11-01 00:00:00
Action	Pump & Treat (P&T) Groundwater		
Action Type	ENFORCEMENT	Date	1995-12-19 00:00:00
Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	ENFORCEMENT	Date	1996-02-02 00:00:00
Action	Staff Letter - #0436		
Action Type	ENFORCEMENT	Date	1996-05-03 00:00:00
Action	Staff Letter - #0436		
Action Type	RESPONSE	Date	1999-12-23 00:00:00
Action	Monitoring Report - Annually		
Action Type	ENFORCEMENT	Date	2008-01-21 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2008-10-07 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2013-06-28 00:00:00
Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	ENFORCEMENT	Date	2014-07-18 00:00:00
Action	Cost Recovery Agreement / N. of Reimbursement - #43S0426		
Action Type	ENFORCEMENT	Date	2015-03-18 00:00:00
Action	Letter - Notice - #43S0426		
Action Type	ENFORCEMENT	Date	2015-05-26 00:00:00
Action	Meeting		
Action Type	RESPONSE	Date	2015-06-01 00:00:00
Action	Other Report / Document		
Action Type	ENFORCEMENT	Date	2015-06-05 00:00:00
Action	Technical Correspondence / Assistance /		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

	Other		
Action Type	ENFORCEMENT	Date	2015-06-26 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	ENFORCEMENT	Date	2015-07-09 00:00:00
Action	Annual Estimation Letter - #43S0426		
Action Type	ENFORCEMENT	Date	2015-07-30 00:00:00
Action	Site Visit / Inspection / Sampling		
Action Type	RESPONSE	Date	2015-07-31 00:00:00
Action	Correspondence		
Action Type	RESPONSE	Date	2015-07-31 00:00:00
Action	Email Correspondence		
Action Type	ENFORCEMENT	Date	2015-07-31 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	RESPONSE	Date	2015-10-02 00:00:00
Action	Soil Vapor Intrusion Investigation Report		
Action Type	ENFORCEMENT	Date	2017-02-22 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2017-06-14 00:00:00
Action	Site Visit / Inspection / Sampling		
Action Type	RESPONSE	Date	2017-10-30 00:00:00
Action	Corrective Action Plan / Remedial Action Plan		
Action Type	ENFORCEMENT	Date	2018-03-30 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	ENFORCEMENT	Date	2018-04-13 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	ENFORCEMENT	Date	2018-07-26 00:00:00
Action	Annual Estimation Letter		
Action Type	ENFORCEMENT	Date	2019-08-14 00:00:00
Action	Annual Estimation Letter		

SURROUNDING SITES DETAILS

Action Type	ENFORCEMENT	Date	2019-10-16 00:00:00
Action	Email Correspondence		
Action Type	RESPONSE	Date	2020-01-09 00:00:00
Action	Other Report / Document		
Action Type	ENFORCEMENT	Date	2020-06-01 00:00:00
Action	Email Correspondence		
Action Type	ENFORCEMENT	Date	2020-06-25 00:00:00
Action	Annual Estimation Letter		
Action Type	RESPONSE	Date	2020-10-12 00:00:00
Action	CAP/RAP - Other Report		

50B

IRM COST SHARING SITE
2520 CALIFORNIA STREET, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal

Record ID: CAREGCSL-212490

RECORD DETAILS

Facility Program	Cleanup Program Site

51

Proposed San Antonio Elementary School
Records: 51A,

Site ID: -954646253
Distance: 2745 ft, North

51A

Proposed San Antonio Elementary School
435 San Antonio Road, 2535 California Street, 350, 506, 510-520 Showers Dri, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID: CAENSTOR-60002949

RECORD DETAILS

Site Type	School Investigation	Site Type Detailed	School
Acres	11.7	Apn	14822009, 14822010, 14822011, 14822012, 14822013
National Priorities List	NO	Regulatory Agencies Involved	SANTA CLARA COUNTY
Lead Agency	SANTA CLARA COUNTY	Project Manager	Jose Luevano
Supervisor	Jose Salcedo	Division Branch	Northern California Schools & Santa Susana
Site Code	204321	Congressional District	18
Status	Active	Status Date	2020-02-19 00:00:00
Past Uses	AGRICULTURAL-ORCHARD, RETAIL	Funding	School District
Potential Media Affected Description	Soil	Potential Coc Description	Arsenic, Chlordane, DDD, DDE, DDT, Endrin, Lead, Polychlorinated biphenyls (PCBs), Polynuclear aromatic hydrocarbons (PAHs),

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

			Toxaphene, TPH-diesel, TPH-MOTOR OIL, Aldrin, Dieldrin, Endosulfan, Heptachlor, Heptachlor epoxide, HCH (alpha), HCH (beta), HCH (gamma) Lindane, HCH-technical, Mirex
Site Mgmt Req Description	NONE SPECIFIED	Estimated Status	Case is Open

ALIAS NAMES FOR SITES

Alias Type	APN	Alias	14822009
Alias Type	APN	Alias	14822010
Alias Type	APN	Alias	14822011
Alias Type	APN	Alias	14822012
Alias Type	APN	Alias	14822013
Alias Type	Project Code (Site Code)	Alias	204321
Alias Type	Envirostor ID Number	Alias	60002949

COMPLETED ACTIONS

Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement Application
Completed Date	2/20/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement Application
Completed Date	2/20/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	7/28/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement
Completed Date	7/16/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Project Management
Completed Date	8/14/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement Application
Completed Date	2/20/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Workplan

SURROUNDING SITES DETAILS

Completed Date	12/16/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	7/28/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	1/22/2021 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Project Management
Completed Date	8/14/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement
Completed Date	7/16/2020 12:00:00 AM		

52

PLESSEY INC. [NPDES]
Records: 52A,52B,

Site ID: -425632650
Distance: 2786 ft, North East

52A

PLESSEY INC. [NPDES]
2294 MORA DR, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID:
CACSLLIS-SL0608508217

RECORD DETAILS

Case Type	Cleanup Program Site	Status	Completed - Case Closed
Status Date	11/3/2009 12:00:00 AM	Cuf Case	NO
Lead Agency	SAN FRANCISCO BAY RWQCB (REGION 2)	Rb Case Number	43s1033
Potential Contaminants Of Concern	* Solvents	Potential Media Affected	Other Groundwater (uses other than drinking water)
Site History	No Water Board oversight of cleanup at this site. This case is included in Geotracker because the site is covered by the Water Boards NPDES general permits for discharges from pump and treat systems to surface waters (one each for fuels- and VOC-impacted sites). This can happen for two reasons: (i) the site is overseen by another agency (e.g., USEPA or DTSC) and needs coverage under one of the NPDES general permits or (ii) construction dewatering in an area of groundwater contamination necessitates NPDES general permit coverage. Including this case in Geotracker helps staff to receive and review required NPDES reports. The Water Board issued a Notice of Termination for this facility on November 3, 2009.	Begin Date	1/1/1990 12:00:00 AM
Estimated Status	Closed case or No Further Action		

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	1990-01-01 00:00:00

Identified Hazardous Materials Sites Radius R

Surrounding Sites Details

Status	Open - Inactive	Status Date	1990-01-01 00:00:00
Status	Open - Remediation	Status Date	1990-01-01 00:00:00
Status	Completed - Case Closed	Status Date	2009-11-03 00:00:00

Site Regulatory Activities

Action Type	Other	Date	1965-01-02 00:00:00
Action	Leak Reported		
Action Type	REMEDIATION	Date	1990-01-01 00:00:00
Action	Pump & Treat (P&T) Groundwater		

52B

PLESSEY INC. [NPDES]
2294 MORA DR, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal

Record ID: CAREGCSL-252720

Record Details

Facility Program	Cleanup Program Site

53

Sears Store #1238
Records: 53A,53B,

Site ID: 1074766
Distance: 2787 ft, North West

53A

Sears Store #1238
455 San Antonio Road, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID: CACSLLIS-T10000003139

Record Details

Case Type	Cleanup Program Site	Status	Completed - Case Closed
Status Date	11/23/2011 12:00:00 AM	Cuf Case	NO
Lead Agency	SANTA CLARA COUNTY LOP	Loc Case Number	06S2W20D02s
Potential Contaminants Of Concern	Waste Oil / Motor / Hydraulic / Lubricating	Potential Media Affected	Other Groundwater (uses other than drinking water), Soil
Site History	April 2011, employees noted that the freight elevator did not rise up to the floor level of the 2nd floor. Elevator maintenance company came out and added oil to the system and did not note a leak at that time. The release was reported to OES on 4/18/11. In May, the elevator jack was removed. Groundwater entered the elevator shaft and is normally pumped out with a sump pump to the sanitary sewer. The sump pump was shut off. The cylinder has been capped with a concrete slurry to stop the flow of groundwater	Begin Date	4/18/2011 12:00:00 AM

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

	into the elevator pit.		
How Discovered	Visual	How Discovered Description	elevator maintenance call; elevator not rising
Stop Method	Close and Remove Tank	Stop Description	removed elevator jack
Estimated Status	Closed case or No Further Action		

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	2011-04-18 00:00:00
Status	Open - Site Assessment	Status Date	2011-07-13 00:00:00
Status	Completed - Case Closed	Status Date	2011-11-23 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	Other	Date	2011-04-18 00:00:00
Action	Leak Discovery		
Action Type	RESPONSE	Date	2011-04-18 00:00:00
Action	Other Report / Document		
Action Type	Other	Date	2011-04-18 00:00:00
Action	Leak Reported		
Action Type	REMEDIATION	Date	2011-05-25 00:00:00
Action	Pump & Treat (P&T) Groundwater		
Action Type	Other	Date	2011-05-27 00:00:00
Action	Leak Stopped		
Action Type	ENFORCEMENT	Date	2011-06-20 00:00:00
Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	ENFORCEMENT	Date	2011-07-14 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2011-08-15 00:00:00
Action	Correspondence		
Action Type	ENFORCEMENT	Date	2011-09-01 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	RESPONSE	Date	2011-09-06 00:00:00
Action	Soil and Water Investigation Workplan - Regulator Responded		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Action Type	ENFORCEMENT	Date	2011-09-13 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2011-09-13 00:00:00
Action	Site Assessment Report		
Action Type	RESPONSE	Date	2011-09-14 00:00:00
Action	Correspondence		
Action Type	ENFORCEMENT	Date	2011-10-14 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	ENFORCEMENT	Date	2011-10-17 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2011-10-19 00:00:00
Action	Site Visit / Inspection / Sampling		
Action Type	ENFORCEMENT	Date	2011-10-20 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	ENFORCEMENT	Date	2011-10-21 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2011-10-21 00:00:00
Action	Interim Remedial Action Plan		
Action Type	ENFORCEMENT	Date	2011-10-24 00:00:00
Action	Site Visit / Inspection / Sampling		
Action Type	ENFORCEMENT	Date	2011-10-25 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2011-10-25 00:00:00
Action	Correspondence		
Action Type	RESPONSE	Date	2011-10-28 00:00:00
Action	Correspondence		
Action Type	RESPONSE	Date	2011-10-31 00:00:00
Action	Correspondence		
Action Type	RESPONSE	Date	2011-11-20 00:00:00
Action	Correspondence		
Action Type	ENFORCEMENT	Date	2011-11-23 00:00:00

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Action	Closure/No Further Action Letter		
Action Type	RESPONSE	Date	2012-01-23 00:00:00
Action	Site Assessment Report		

53B

Sears Store #1238
455 SAN ANTONIO ROAD, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal

Record ID: CAREGCSL-244523

Record Details

Facility Program	Cleanup Program Site

54

2294 Mora Dr., Plessey~2294 MORA DR., PLESSEY~DTSC FORMER PLESSEY MICROSCIENCE SITE~Photo Graphics Printing~PHOTO GRAPHICS PRINTING INC~PLESSEY MICRO SCIENC~PLESSEY MICRO SCIENCE~PLESSEY MICRO SCIENCE INC
Records: 54A,

Site ID: -1797473990
Distance: 2806 ft, North East

54A

PLESSEY MICRO SCIENCE
2274 MORA DRIVE, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID: CAENSTOR-43360069

Record Details

Site Type	State Response	Site Type Detailed	State Response or NPL
Acres	0.58	Apn	147-54-026, 147-54-027, 147-54-028, 147-54-029, 147-54-030, 14833022, 14833023, 14833024, 14833025, 14833026
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Project Manager	Henry Wong
Supervisor	John Karachewski	Division Branch	Cleanup Berkeley
Site Code	200080	Congressional District	18
Status	Certified / Operation & Maintenance	Status Date	2007-06-28 00:00:00
Past Uses	MANUFACTURING-ELECTRONIC	Funding	Orphan Funds
Potential Media Affected Description	Other Groundwater affected (uses other than drinking water)	Potential Coc Description	Benzene, Tetrachloroethylene (PCE), Trichloroethylene (TCE), Vinyl chloride, Chloroform, Chromium VI, 1,2-Dichloroethylene (cis), Ethylbenzene, Toluene, Xylenes
Confirmed Coc Description	Benzene, Tetrachloroethylene (PCE), Trichloroethylene (TCE), Vinyl chloride, Chloroform, Chromium VI, 1,2-Dichloroethylene (cis), Ethylbenzene, Toluene, Xylenes	Site Mgmt Req Description	NONE SPECIFIED
Estimated Status	Case is Open		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Alias Names for Sites

Alias Type	APN	Alias	147-54-026
Alias Type	APN	Alias	147-54-027
Alias Type	APN	Alias	147-54-028
Alias Type	APN	Alias	147-54-029
Alias Type	APN	Alias	147-54-030
Alias Type	APN	Alias	14833022
Alias Type	APN	Alias	14833023
Alias Type	APN	Alias	14833024
Alias Type	APN	Alias	14833025
Alias Type	APN	Alias	14833026
Alias Type	EPA Identification Number	Alias	CAD009440371
Alias Type	EPA (FRS #)	Alias	110002636470
Alias Type	PCode	Alias	P21047
Alias Type	Project Code (Site Code)	Alias	200080
Alias Type	Project Code (Site Code)	Alias	200080
Alias Type	Envirostor ID Number	Alias	43360069

Completed Actions

There were a total of 2368 records in the Completed Actions table. We are only displaying 50 of those in this report in order to keep the size of this report manageable. If you would like the full site record, please contact the responsible regulatory agency noted above.

Area Name	PROJECT WIDE	Document Type	Correspondence
Completed Date	8/11/2016 12:00:00 AM	Comments	Stop work order for contract which expired on July 31, 2016.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Imminent and/or Subst. Endangerment Determination
Completed Date	6/25/2015 12:00:00 AM	Comments	Imminent and Substantial Endangerment Determination for the former Plessey parcels.

Area Name	PROJECT WIDE	Document Type	Work Notice
Completed Date	2/4/2015 12:00:00 AM	Comments	March 2015 GW monitoring

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	7/3/2018 12:00:00 AM	Comments	The Groundwater Sampling Report documents groundwater investigation conducted on 5/8/18 at nine temporary borings within the approximately 5.2-acre Mora Drive project area.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	9/18/1987 12:00:00 AM	Comments	DTSC issued RAO to Plessey Incorporated.

Area Name	PROJECT WIDE	Document Type	* Discovery
Completed Date	12/1/1981 12:00:00 AM	Comments	DTSC's Abandoned Site Program discovered site.

Area Name	PROJECT WIDE	Document Type	Monitoring Report
Completed Date	1/22/2019 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	9/18/1987 12:00:00 AM	Comments	DTSC issued RAO to Plessey Incorporated.

Area Name	PROJECT WIDE	Document Type	* Discovery
Completed Date	12/1/1981 12:00:00 AM	Comments	DTSC's Abandoned Site Program discovered site.

Area Name	PROJECT WIDE	Document Type	Technical Workplan
Completed Date	4/20/2018 12:00:00 AM	Comments	The Work Plan proposes soil gas sampling at an approximately 5.2-acre residential development area located east of the Mora Drive and Ortega Avenue intersection in Mountain View, California. DTSC is overseeing environmental investigation and cleanup of a 1.0-acre parcel, identified as the Plessey Micro Science site, within the 5.2-acre residential development area. Since the Work Plan proposes several soil gas sampling locations within the Plessey Micro Science site, DTSC commented on the Work Plan.

Area Name	PROJECT WIDE	Document Type	State/Federal Funded Site Work Order
Completed Date	6/19/2018 12:00:00 AM	Comments	DTSC issued the Stop Work Order for Contract 16-T4229 because (a) all works under this contract were completed and (b) the contract will expire on June 30, 2018.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Correspondence
Completed Date	4/13/2016 12:00:00 AM	Comments	CANCELLATION OF CONTRACT No.: 14-T3967

Area Name	PROJECT WIDE	Document Type	Long Term Monitoring Report
Completed Date	8/6/2012 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	9/22/2011 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	4/13/2012 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Long Term Monitoring Report
Completed Date	10/29/2009 12:00:00 AM	Comments	report approved

Area Name	PROJECT WIDE	Document Type	Design/Implementation Workplan
Completed Date	1/12/2000 12:00:00 AM	Comments	Approved Design. The remedial enhancement plan to address full plume containment and/or groundwater remediation was approved. Four wells will be installed further downgradient at the northern boundary of the TRW/Vidar site. The extraction wells will be connected to the existing treatment system.

Area Name	PROJECT WIDE	Document Type	Design/Implementation Workplan
Completed Date	10/13/1999 12:00:00 AM	Comments	Approved Remedial Design for source control remedial enhancement to address soil and groundwater contamination near the source areas. Ten dual-phase vertical extraction wells will be installed within the Site near the former underground tank locations. The extraction wells will be connected to the existing treatment system.

Area Name	PROJECT WIDE	Document Type	Removal Action Completion Report
Completed Date	10/24/2002 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Removal Action Completion Report
Completed Date	10/24/2002 12:00:00 AM	Comments	Completed Remedial Action. Ten dual-phase (vapor and groundwater) extraction wells behind the onsite buildings, and four extraction wells downgradient at the northern boundary of the adjacent TRW/Vidar Site (77 Ortega Drive) were installed. The new extraction wells were connected to the existing treatment system at the Site.

Area Name	PROJECT WIDE	Document Type	Remedial Action Completion Report
Completed Date	2/7/2000 12:00:00 AM	Comments	Completed RA. Soil vapor extraction (SVE) and air inlet wells were abandoned. 600 cubic yards

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

of soil was excavated in the former SVE area, aerated and redeposited.

Area Name	PROJECT WIDE	Document Type	Operations and Maintenance Manual
Completed Date	4/15/1997 12:00:00 AM	Comments	Amended Operation and Maintenance Plan for air stripper

Area Name	PROJECT WIDE	Document Type	Design/Implementation Workplan
Completed Date	9/12/1996 12:00:00 AM	Comments	Approved design for horizontal extraction wells to enhance the existing remedial system. The design was not implemented due to access issues.

Area Name	PROJECT WIDE	Document Type	Removal Action Completion Report
Completed Date	11/16/1993 12:00:00 AM	Comments	Completed RA. Grondwater extraction at Well T-6 by the existing remedial system was stopped due to detection of dense non-aqueous phase liquid (DNAPL) of trichloroethylene. The DNAPL was pumped and collected in a baker tank and treated onsite.

Area Name	PROJECT WIDE	Document Type	Remedial Action Completion Report
Completed Date	6/24/1993 12:00:00 AM	Comments	Completed RA. Soil vapor extraction/treatment and groundwater extraction/treatment system constructed with three goundwater extraction wells, and 34 soil vapor extraction and 25 air inlet wells were installed. Soil vapor was was treated using carbon absorption. Groundwater was treated using ultra violet ligh/hydrogen peroxide. The units were constructed inside the building at 2296 Mora Drive and include a volatile organic compound and water separator unit, a UV/peroxide unit, and a liquid carbon absorption unit. Treated water is discharged to the sanitary sewer under permit from the City of Mountain View or to the storm drain under a permit from the Regional Water Quality Control Board.

Area Name	PROJECT WIDE	Document Type	Operations and Maintenance Manual
Completed Date	6/30/1992 12:00:00 AM	Comments	Completed Operation and Maintenance Plan

Area Name	PROJECT WIDE	Document Type	Design/Implementation Workplan
Completed Date	6/30/1992 12:00:00 AM	Comments	Completed Remedial Design for SVE system.

Area Name	PROJECT WIDE	Document Type	Remedial Action Plan
Completed Date	5/5/1992 12:00:00 AM	Comments	Approved RAP. Soil cleanup by soil vapor extraction/treatment with activated carbon, and groundwater extraction/ treament by ultra-violet peroxidation which was constructed during the pilot study.

Area Name	PROJECT WIDE	Document Type	Remedial Action Completion Report

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Completed Date	10/25/1991 12:00:00 AM	Comments	Completed RA. Five concrete underground tanks (A,B,C,D and F) were removed from a location behind the commercial buildings located at 2274-2296 Mora Drive. Tank E was removed in August 1989. The excavated pits were backfilled with clean fill approximately 455 cubic yards of soil were removed, aerated and disposed offsite. A soil vapor extraction system was installed to remediate the remaining volatile organic compounds in soil in other site areas. Initiated August 17, 1991 and completed October 25, 1991.

Area Name	PROJECT WIDE	Document Type	Operations and Maintenance Report
Completed Date	4/7/2009 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	6/7/1991 12:00:00 AM	Comments	Completed RIFS.

Area Name	PROJECT WIDE	Document Type	Long Term Monitoring Report
Completed Date	4/29/2011 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Remedial Action Completion Report
Completed Date	10/30/1989 12:00:00 AM	Comments	Pilot testing of an ultra-violet(UV)/peroxidation system designed to treat groundwater.

Area Name	PROJECT WIDE	Document Type	Public Participation Plan / Community Relations Plan
Completed Date	10/30/1989 12:00:00 AM	Comments	Approved Pubilc Participation Plan.

Area Name	PROJECT WIDE	Document Type	Remedial Action Completion Report
Completed Date	8/11/1989 12:00:00 AM	Comments	Completed RA. A 200-gallon underground tank (Tank E) was removed. Soil surrounding the tank was contaminated with TCE and PCE. Contaminated soil was excavated and aerated. Excavated pit was backfilled with clean fill.

Area Name	PROJECT WIDE	Document Type	Preliminary Assessment Report
Completed Date	1/20/1987 12:00:00 AM	Comments	Completed Site Screening

Area Name	PROJECT WIDE	Document Type	Preliminary Assessment Report
Completed Date	12/1/1985 12:00:00 AM	Comments	Completed PA. In January 1982, samples were collected from standing water in two of the tanks and the results detected perchloroethylene (PCE), chromium, and xylene. Investigations were conducted to delineate the lateral extent of the soil and groundwater contamination originating from releases at the tanks. Trichloroethylene (TCE), PCE, dichlorethylene (DCE), benzene, toluene, xylene and ethylbenzene were detected in the groundwater. These chemicals and chromium were also detected in the soils near the tanks.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Design/Implementation Workplan
Completed Date	6/8/2005 12:00:00 AM	Comments	Remedial Design for SVE enhancement. Horizontal wells constructed in source area and connected to the existing SVE and treatment system.

Area Name	PROJECT WIDE	Document Type	Operations and Maintenance Report
Completed Date	8/15/2006 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Remedial Investigation Report
Completed Date	5/3/2005 12:00:00 AM	Comments	Approved soil investigation report which recommended HRC injection pilot study and horizontal well installation for SVE enhancement

Area Name	PROJECT WIDE	Document Type	Technical Workplan
Completed Date	10/20/2004 12:00:00 AM	Comments	Workplan for Soil Investigation and HRC Pilot Study

Area Name	PROJECT WIDE	Document Type	Operations and Maintenance Report
Completed Date	1/27/2005 12:00:00 AM	Comments	Second Half 2004 Progress and Operation, Monitoring and Maintenance Report

Area Name	PROJECT WIDE	Document Type	Operations and Maintenance Report
Completed Date	8/2/2005 12:00:00 AM	Comments	First Half 2005 Progress and Operation, Monitoring and Maintenance Report

Area Name	PROJECT WIDE	Document Type	Design/Implementation Workplan
Completed Date	10/19/1995 12:00:00 AM	Comments	Approved Remedial Design for expanding the soil and groundwater remedial system. The UV/Peroxide unit of the groundwater remediation system was replaced with an air stripper.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation Report
Completed Date	7/1/1993 12:00:00 AM	Comments	Soil and Groundwater Investigation-Garibaldi/2280 Mora Drive property

Area Name	PROJECT WIDE	Document Type	Risk Assessment Report
Completed Date	9/4/1997 12:00:00 AM	Comments	Risk-Based Soil Goals for Site Remediation Report

Area Name	PROJECT WIDE	Document Type	Risk Assessment Report
Completed Date	6/21/1991 12:00:00 AM	Comments	Pre-Remediation Exposure Assessment Report

Area Name	PROJECT WIDE	Document Type	Remedial Investigation Report
Completed Date	6/16/1999 12:00:00 AM		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Area Name	PROJECT WIDE	Document Type	Fact Sheets
Completed Date	8/15/1990 12:00:00 AM	Comments	Fact sheet announces the public comment period on proposed interim site cleanup activities.

Area Name	PROJECT WIDE	Document Type	Fact Sheets
Completed Date	8/1/1989 12:00:00 AM	Comments	Fact sheet summarizes site investigation conducted to date.

Future Actions

Area Name	PROJECT WIDE	Document Type	5 Year Review Reports
Due Date	2023		

Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Due Date	2021		

Area Name	PROJECT WIDE	Document Type	Certification
Due Date	2021		

55 PLESSEY #3~SMALL BUSINESS ADMIN. AGENCY OF US GOVT.
Records: 55A,
Site ID: 502147870
Distance: 2807 ft, North East

55A PLESSEY #3
2256 MORA DRIVE, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List
Record ID:
CAENSTOR-43360135

Record Details

Site Type	State Response	Site Type Detailed	State Response or NPL
Acres	0.17	Apn	147-54-024, 147-54-025, 148-33-021
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Supervisor	Mark Piros
Division Branch	Cleanup Berkeley	Site Code	201358
Congressional District	18	Status	No Further Action
Status Date	2001-10-05 00:00:00	Past Uses	MANUFACTURING-ELECTRONIC
Funding	Responsible Party	Potential Media Affected Description	Other Groundwater affected (uses other than drinking water)
Potential Coc Description	Tetrachloroethylene (PCE), Trichloroethylene (TCE)	Confirmed Coc Description	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Site Mgmt Req Description	NONE SPECIFIED	Estimated Status	Closed case or No Further Action

Alias Names for Sites

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Alias Type	Alternate Name	Alias	PLESSEY #3
Alias Type	APN	Alias	147-54-024
Alias Type	APN	Alias	147-54-025
Alias Type	APN	Alias	148-33-021
Alias Type	EPA (FRS #)	Alias	110033611624
Alias Type	Project Code (Site Code)	Alias	201358
Alias Type	Envirostor ID Number	Alias	43360135

COMPLETED ACTIONS

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.
Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.
Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.
Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.
Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.
Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Completed Date	10/15/2001 12:00:00 AM	Comments	Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	11/28/2000 12:00:00 AM	Comments	Issued I&SE Order.

56 JOANNE STANLEY
Records: 56A,

Site ID: 1256948793
Distance: 2827 ft, South West

56A JOANNE STANLEY
416 LOS NINOS WAY, LOS ALTOS, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003006988

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/3-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-03-22 00:00:00.0
Location Country	US	Contact Phone	650-455-7051 x
Contact Email Address	MELISA@ENV-REM.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity	No	Recognized	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Handlers Of Universal Wastes		Trader Importer	
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@7f62eaf9
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.388874	Location Longitude	-122.109727
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	416 LOS NINOS WAY, LOS ALTOS, CA 94022	Contact Name	JOANNE STANLEY
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003006988&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	JOANNE STANLEY
Owner Operator Type	O	Phone	650-455-7051 x
Address	416 LOS NINOS WAY, LOS ALTOS, CA 94022		

Owner Operator Indicator	CP	Owner Operator Name	JOANNE STANLEY
Owner Operator Type	O	Phone	650-455-7051 x
Address	416 LOS NINOS WAY, LOS ALTOS, CA 94022		

57

LOS ALTOS HIGH SCHOOL~Los Altos High School Expansion~LOS ALTOS HS~MOUNTAIN VIEW LOS ALTOS HIGH SCHOOL DISTRICT~MOUNTAIN VIEW LOS ALTOS UNION HIGH~MVLAUSD/LOS ALTOS HIGH SCHOOL
Records: 57A,

Site ID: 1847356688
Distance: 2836 ft, South

57A

Los Altos High School Expansion
201 Almond Avenue, LOS ALTOS, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID: CAENSTOR-60002914

Record Details

Site Type	School Cleanup	Site Type Detailed	School
Acres	2	Apn	NONE SPECIFIED
National Priorities List	NO	Regulatory Agencies Involved	SANTA CLARA COUNTY

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Lead Agency	SANTA CLARA COUNTY	Project Manager	Letitia Shen
Supervisor	Jose Salcedo	Division Branch	Northern California Schools & Santa Susana
Site Code	204320	Congressional District	18
Status	Active	Status Date	2019-12-06 00:00:00
Past Uses	AGRICULTURAL-ROW CROPS, UNDERGROUND STORAGE TANKS, SCHOOL-HIGH SCHOOL	Funding	Not Applicable
Potential Media Affected Description	Soil, Soil Vapor	Potential Coc Description	Lead, Naturally Occurring Asbestos (NOA), Polychlorinated biphenyls (PCBs), TPH-diesel, TPH-MOTOR OIL, Dieldrin
Confirmed Coc Description	Lead, Polychlorinated biphenyls (PCBs), TPH-diesel, TPH-MOTOR OIL, Dieldrin, Naturally Occurring Asbestos (NOA)	Site Mgmt Req Description	NONE SPECIFIED
Estimated Status	Case is Open		

ALIAS NAMES FOR SITES

Alias Type	Project Code (Site Code)	Alias	204320
Alias Type	Envirostor ID Number	Alias	60002914

COMPLETED ACTIONS

Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	6/5/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Pre-HARP Form
Completed Date	6/5/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement Application
Completed Date	12/12/2019 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Other Report
Completed Date	12/18/2019 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement
Completed Date	1/29/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement Application
Completed Date	12/12/2019 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Other Report
Completed Date	12/18/2019 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Workplan
Completed Date	5/26/2020 12:00:00 AM		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement
Completed Date	1/29/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Workplan
Completed Date	5/26/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Public Notice
Completed Date	8/19/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement Application
Completed Date	12/12/2019 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Other Report
Completed Date	12/18/2019 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement
Completed Date	1/29/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	School Cleanup Agreement
Completed Date	9/16/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Pre-HARP Form
Completed Date	6/5/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement Application
Completed Date	12/12/2019 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Other Report
Completed Date	12/18/2019 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Workplan
Completed Date	5/26/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Fieldwork
Completed Date	6/5/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	Environmental Oversight Agreement
Completed Date	1/29/2020 12:00:00 AM		
Area Name	PROJECT WIDE	Document Type	School Cleanup Agreement
Completed Date	9/16/2020 12:00:00 AM		

Future Actions

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Removal Action Completion Report
Due Date	2021		
Area Name	PROJECT WIDE	Document Type	Certification
Due Date	2021		

SCHEDULED ACTIONS

Area Name	PROJECT WIDE	Document Type	Removal Action Workplan
Due Date	2021-04-15 00:00:00		
Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Due Date	2020-10-13 00:00:00		

58 TRW/VIDAR
Records: 58A,

Site ID: -1096927808
Distance: 2872 ft, North East

58A TRW/VIDAR
77 ORTEGA AVENUE, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID:
CAENSTOR-43360128

RECORD DETAILS

Site Type	State Response	Site Type Detailed	State Response or NPL
Acres	9	Apn	147-54-031, 147-54-037, 147-54-038, 147-54-039, 14835001, 14835002, 14835003, 14835004, 14835005, 14835006, 14835007, 14835008, 14835009, 14835010, 14835011, 14835012, 14835013, 14835014, 14835015, 14835016, 14835017, 14835018, 14835019, 14835020, 14835021, 14835022, 14835023, 14835024, 14835025, 14835026, 14835027, 14835028, 14835029, 14835030, 14835031, 14835032, 14835033, 14835034, 14835035, 14835037, 14835038, 14835039, 14835040, 14835041, 14835042, 14835043, 14835044, 14835045, 14835046, 14835047, 14835048, 14835049, 14835050, 14835051, 14835052, 14835053, 14835054, 14835055, 14835056, 14835057, 14835058, 14835059, 14835060
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Project Manager	Henry Wong
Supervisor	John Karachewski	Division Branch	Cleanup Berkeley
Site Code	200080	Congressional District	18
Special Program	Prospective Purchaser Program	Status	Certified O&M - Land Use Restrictions Only
Status Date	2010-09-28 00:00:00	Past Uses	MANUFACTURING-ELECTRONIC
Funding	Responsible Party	Potential Media Affected	Other Groundwater affected (uses other than drinking water)

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

		Description	
Potential Coc Description	Tetrachloroethylene (PCE), Trichloroethylene (TCE), Vinyl chloride, 1,1-Dichloroethylene, 1,2-Dichloroethylene (cis), Xylenes	Confirmed Coc Description	Tetrachloroethylene (PCE), Trichloroethylene (TCE), Vinyl chloride, 1,1-Dichloroethylene, 1,2-Dichloroethylene (cis), Xylenes
Site Mgmt Req Description	No groundwater extraction at any depth without approval, No oil or gas extraction at any depth, Only extraction of groundwater for site remediation permitted	Estimated Status	Closed case or No Further Action

ALIAS NAMES FOR SITES

There were a total of 68 records in the Alias Names for Sites table. We are only displaying 50 of those in this report in order to keep the size of this report manageable. If you would like the full site record, please contact the responsible regulatory agency noted above.

Alias Type	APN	Alias	14835020
Alias Type	APN	Alias	14835021
Alias Type	APN	Alias	14835022
Alias Type	APN	Alias	14835023
Alias Type	APN	Alias	14835024
Alias Type	APN	Alias	14835025
Alias Type	APN	Alias	14835026
Alias Type	APN	Alias	14835027
Alias Type	APN	Alias	14835028
Alias Type	APN	Alias	14835029
Alias Type	APN	Alias	14835030
Alias Type	APN	Alias	14835031
Alias Type	APN	Alias	14835032
Alias Type	APN	Alias	14835033
Alias Type	APN	Alias	14835034

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Alias Type	APN	Alias	14835035
Alias Type	APN	Alias	14835037
Alias Type	APN	Alias	14835038
Alias Type	APN	Alias	14835039
Alias Type	APN	Alias	14835040
Alias Type	APN	Alias	14835041
Alias Type	APN	Alias	14835042
Alias Type	APN	Alias	14835043
Alias Type	APN	Alias	14835044
Alias Type	APN	Alias	14835045
Alias Type	APN	Alias	14835046
Alias Type	APN	Alias	14835047
Alias Type	APN	Alias	14835048
Alias Type	APN	Alias	14835049
Alias Type	APN	Alias	14835050
Alias Type	APN	Alias	14835051
Alias Type	APN	Alias	14835052
Alias Type	APN	Alias	14835053
Alias Type	APN	Alias	14835054
Alias Type	APN	Alias	14835055
Alias Type	APN	Alias	14835056

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Alias Type	APN	Alias	14835057
Alias Type	APN	Alias	14835058
Alias Type	APN	Alias	14835059
Alias Type	APN	Alias	14835060
Alias Type	APN	Alias	14835005
Alias Type	APN	Alias	14835006
Alias Type	APN	Alias	14835007
Alias Type	APN	Alias	14835008
Alias Type	APN	Alias	14835009
Alias Type	APN	Alias	14835010
Alias Type	APN	Alias	14835011
Alias Type	APN	Alias	14835012
Alias Type	APN	Alias	14835013
Alias Type	APN	Alias	14835014

COMPLETED ACTIONS

There were a total of 78 records in the Completed Actions table. We are only displaying 50 of those in this report in order to keep the size of this report manageable. If you would like the full site record, please contact the responsible regulatory agency noted above.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.
Area Name	PROJECT WIDE	Document Type	Prospective Purchaser Agreement

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Completed Date	2/10/2000 12:00:00 AM	Comments	Signed PPA.
Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Completed Date	7/10/2001 12:00:00 AM	Comments	Recorded Deed Restriction.
Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	3/25/1998 12:00:00 AM	Comments	Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	3/17/1997 12:00:00 AM	Comments	Signed VCA.
Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.
Area Name	PROJECT WIDE	Document Type	Prospective Purchaser Agreement
Completed Date	2/10/2000 12:00:00 AM	Comments	Signed PPA.
Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Completed Date	7/10/2001 12:00:00 AM	Comments	Recorded Deed Restriction.
Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	3/25/1998 12:00:00 AM	Comments	Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	3/17/1997 12:00:00 AM	Comments	Signed VCA.
Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.
Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Completed Date	7/10/2001 12:00:00 AM	Comments	Recorded Deed Restriction.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Prospective Purchaser Agreement
Completed Date	2/10/2000 12:00:00 AM	Comments	Signed PPA.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	3/25/1998 12:00:00 AM	Comments	Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	3/17/1997 12:00:00 AM	Comments	Signed VCA.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.

Area Name	PROJECT WIDE	Document Type	Prospective Purchaser Agreement
Completed Date	2/10/2000 12:00:00 AM	Comments	Signed PPA.

Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Completed Date	7/10/2001 12:00:00 AM	Comments	Recorded Deed Restriction.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	3/25/1998 12:00:00 AM	Comments	Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	3/17/1997 12:00:00 AM	Comments	Signed VCA.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.

Area Name	PROJECT WIDE	Document Type	Prospective Purchaser Agreement
Completed Date	2/10/2000 12:00:00 AM	Comments	Signed PPA.

Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Completed Date	7/10/2001 12:00:00 AM	Comments	Recorded Deed Restriction.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	3/25/1998 12:00:00 AM	Comments	Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	3/17/1997 12:00:00 AM	Comments	Signed VCA.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.

Area Name	PROJECT WIDE	Document Type	Prospective Purchaser Agreement
Completed Date	2/10/2000 12:00:00 AM	Comments	Signed PPA.

Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Completed Date	7/10/2001 12:00:00 AM	Comments	Recorded Deed Restriction.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	3/25/1998 12:00:00 AM	Comments	Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	3/17/1997 12:00:00 AM	Comments	Signed VCA.

Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.

Area Name	PROJECT WIDE	Document Type	Prospective Purchaser Agreement
Completed Date	2/10/2000 12:00:00 AM	Comments	Signed PPA.

Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Completed Date	7/10/2001 12:00:00 AM	Comments	Recorded Deed Restriction.

Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	3/25/1998 12:00:00 AM	Comments	Issued IS&E Order to TRW, Inc, TRW

Surrounding Sites Details

Foundation and Plessey, Inc., VCA terminated

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	3/17/1997 12:00:00 AM	Comments	Signed VCA.
Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.
Area Name	PROJECT WIDE	Document Type	Prospective Purchaser Agreement
Completed Date	2/10/2000 12:00:00 AM	Comments	Signed PPA.
Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Completed Date	7/10/2001 12:00:00 AM	Comments	Recorded Deed Restriction.
Area Name	PROJECT WIDE	Document Type	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date	3/25/1998 12:00:00 AM	Comments	Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	3/17/1997 12:00:00 AM	Comments	Signed VCA.
Area Name	PROJECT WIDE	Document Type	Remedial Investigation / Feasibility Study
Completed Date	11/1/2000 12:00:00 AM	Comments	Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Consultation
Completed Date	1/16/1998 12:00:00 AM	Comments	Completed VCA Consultation.

59 TRW~TRW INC~TRW/VIDAR
Records: 59A,
Site ID: 751760443
Distance: 2882 ft, North East

59A TRW/VIDAR
77 ORTEGA AVENUE, MOUNTAIN VIEW, CA
Type: Deed Restrictions/Environmental Covenants (DEED)
Source: California Department of Toxic Substances Control's Deed Restrictions list
Record ID:
CACADEED-43360128

Record Details

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Sitetype	STATE RESPONSE	New Enviroscreen Score	36-40%
Url	https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=43360128&starttab=landuserestrictions		

SITE DETAILS

Restrictions	NO EXCAVATION OF CONTAMINATED SOILS WITHOUT AGENCY REVIEW AND APPROVAL NO GROUNDWATER EXTRACTION AT ANY DEPTH WITHOUT APPROVAL NO OIL OR GAS EXTRACTION AT ANY DEPTH ONLY EXTRACTION OF GROUNDWATER FOR SITE REMEDIATION PERMITTED RAISING OF FOOD PROHIBITED	Restrictions Link	https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/5219541251/TRW%20Deed%20Restriction%2Epdf
Cleanup Status	CERTIFIED O&M - LAND USE RESTRICTIONS ONLY AS OF 9/28/2010	Site Size	ACRES: 9 ACRES
Oversight Agencies	DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY	Past Uses That Caused Contamination	MANUFACTURING - ELECTRONIC
Potential Conaminants Of Concern	VOLATILE ORGANICS (8260B VOCS)	Potential Media Affected	OTHER GROUNDWATER AFFECTED (USES OTHER THAN DRINKING WATER)
Site History	The Site is adjacent and downgradient of the Plessey Micro Science site at 2274-2296 Mora Drive. Plessey used underground neutralization tanks in its printed circuit board manufacturing activities at the Plessey site. Investigations found that the tanks leaked VOCs and contaminated		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

the surrounding soil and groundwater that extended to the Site. The investigations conducted on site did not find source areas at the Site. Groundwater contamination at the Site is addressed as part of the Plessey site cleanup. Ryland Homes acquired the Site in 2001 and redeveloped it into townhomes with restrictions on groundwater use.

RECORDING DETAILS

Area	PROJECT WIDE	Date Recorded	7/10/2001

60

1X RAY TOLLNER~Mora Drive~MORA DRIVE
Records: 60A,60B,

Site ID: -2129254720
Distance: 2891 ft, North East

60A

MORA DRIVE
2221-2291 MORA DRIVE, MOUNTAIN VIEW, CA
Type: Deed Restrictions/Environmental Covenants (DEED)
Source: California Department of Toxic Substances Control's Deed Restrictions list

Record ID: CACADEED-60002502

RECORD DETAILS

Sitetype	VOLUNTARY CLEANUP	New Enviroscreen Score	36-40%
Url	https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60002502&starttab=landuserestrictions		

SITE DETAILS

Restrictions	ACTIVITIES PROHIBITED WHICH DISTURB THE REMEDY AND MONITORING SYSTEMS WITHOUT APPROVAL LAND USE COVENANT MAINTAIN MONITORING OF GROUNDWATER NO GROUNDWATER EXTRACTION AT ANY DEPTH WITHOUT APPROVAL NOTIFY AFTER	Restrictions Link	https://www.envirostor.dtsc.ca.gov/public/view_document?docurl=/public/deliverable_documents/8190615594/Land%20Use%20Covenant%20%5B

Identified Hazardous Materials Sites Radius R

Surrounding Sites Details

	CHANGE OF PROPERTY OWNER NOTIFY DAMAGES TO REMEDY AND MONITORING SYSTEMS UPON DISCOVERY NOTIFY PRIOR TO DEVELOPMENT NOTIFY PRIOR TO SUBSURFACE WORK		
Cleanup Status	ACTIVE AS OF 4/27/2017	Site Size	ACRES: 4 ACRES
Oversight Agencies	DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY	Past Uses That Caused Contamination	MANUFACTURING - ELECTRONIC
Potential Conaminants Of Concern	TETRACHLOROETHYLENE (PCE) TRICHLOROETHYLENE (TCE)	Potential Media Affected	SOIL VAPOR
Site History	The Mora Drive Site was formerly commercial/industrial. It includes several former DTSC sites: PLESSEY #2 (43360131), PLESSEY #3 (43360135), and SYMTRON CORP. (43360124) all of which were determined to require no further action. Lennar conducted sampling in 2015, 2016 and 2017 to confirm that the site has elevated levels of tetrachloroethylene and trichloroethylene in soil gas. Lennar plans to develop the property into residential.		

Recording Details

Area	PROJECT WIDE	Date Recorded	8/2/2019

60B

Mora Drive
2221-2291 Mora Drive, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID: CAENSTOR-60002502

Record Details

Site Type	Voluntary Cleanup	Site Type Detailed	Voluntary Cleanup
Acres	4	Apn	14833009, 14833010, 14833013, 14833014, 14833015, 14833016, 14833017, 14833018, 14833019
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Project Manager	Henry Wong
Supervisor	John Karachewski	Division Branch	Cleanup Berkeley

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Site Code	202139	Congressional District	18
Special Program	Voluntary Cleanup Program	Status	Active
Status Date	2017-04-27 00:00:00	Past Uses	MANUFACTURING-ELECTRONIC
Funding	Responsible Party	Potential Media Affected Description	Soil Vapor
Potential Coc Description	Tetrachloroethylene (PCE), Trichloroethylene (TCE)	Confirmed Coc Description	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Site Mgmt Req Description	NONE SPECIFIED	Estimated Status	Case is Open

ALIAS NAMES FOR SITES

Alias Type	APN	Alias	14833009
Alias Type	APN	Alias	14833010
Alias Type	APN	Alias	14833013
Alias Type	APN	Alias	14833014
Alias Type	APN	Alias	14833015
Alias Type	APN	Alias	14833016
Alias Type	APN	Alias	14833017
Alias Type	APN	Alias	14833018
Alias Type	APN	Alias	14833019
Alias Type	Project Code (Site Code)	Alias	202139
Alias Type	Envirostor ID Number	Alias	60002502

COMPLETED ACTIONS

There were a total of 302 records in the Completed Actions table. We are only displaying 50 of those in this report in order to keep the size of this report manageable. If you would like the full site record, please contact the responsible regulatory agency noted above.

Area Name	PROJECT WIDE	Document Type	Operation & Maintenance Order/Agreement
Completed Date	8/2/2019 12:00:00 AM	Comments	DTSC executed an Operation and Maintenance Agreement with Lennar for (a) implementation of the DTSC-approved Vapor Intrusion Mitigation Plan dated 6/28/19, (b) operation

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

and maintenance of the installed vapor intrusion mitigation system as specified in the DTSC-approved Operation and Maintenance Plan dated 6/28/19, and (c) reimbursement of DTSC oversight costs.

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	4/30/2018 12:00:00 AM	Comments	Soil Gas Sampling, April 27, 2017

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	4/30/2018 12:00:00 AM	Comments	Preliminary Data Gap Evaluation, September 27, 2012

Area Name	PROJECT WIDE	Document Type	Application
Completed Date	4/27/2017 12:00:00 AM	Comments	Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.

Area Name	PROJECT WIDE	Document Type	Soils Management Plan
Completed Date	5/19/2017 12:00:00 AM	Comments	The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	5/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.

Area Name	PROJECT WIDE	Document Type	Application
Completed Date	4/27/2017 12:00:00 AM	Comments	Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.

Area Name	PROJECT WIDE	Document Type	Soils Management Plan
Completed Date	5/19/2017 12:00:00 AM	Comments	The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement Termination Notification
Completed Date	9/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreements (VCA) scope of work specifies that DTSC review and provide comments on the Site Management

Plan. Since DTSC completed the Site Management Plan review process, the VCAs scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	5/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.

Area Name	PROJECT WIDE	Document Type	Application
Completed Date	4/27/2017 12:00:00 AM	Comments	Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.

Area Name	PROJECT WIDE	Document Type	Soils Management Plan
Completed Date	5/19/2017 12:00:00 AM	Comments	The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement Termination Notification
Completed Date	9/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreements (VCA) scope of work specifies that DTSC review and provide comments on the Site Management Plan. Since DTSC completed the Site Management Plan review process, the VCAs scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	5/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.

Area Name	PROJECT WIDE	Document Type	Soils Management Plan
Completed Date	5/19/2017 12:00:00 AM	Comments	The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement Termination

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

			Notification
Completed Date	9/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreements (VCA) scope of work specifies that DTSC review and provide comments on the Site Management Plan. Since DTSC completed the Site Management Plan review process, the VCAs scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.
Area Name	PROJECT WIDE	Document Type	Application
Completed Date	4/27/2017 12:00:00 AM	Comments	Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	5/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.
Area Name	PROJECT WIDE	Document Type	Application
Completed Date	4/27/2017 12:00:00 AM	Comments	Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.
Area Name	PROJECT WIDE	Document Type	Soils Management Plan
Completed Date	5/19/2017 12:00:00 AM	Comments	The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement Termination Notification
Completed Date	9/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreements (VCA) scope of work specifies that DTSC review and provide comments on the Site Management Plan. Since DTSC completed the Site Management Plan review process, the VCAs scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	5/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Completed Date	6/19/2018 12:00:00 AM	Comments	DTSC and Lennar executed the Voluntary Cleanup Agreement, Docket No. HSA-FY17/18-136, for overseeing activities performed at the project site.

Area Name	PROJECT WIDE	Document Type	Application
Completed Date	4/27/2017 12:00:00 AM	Comments	Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.

Area Name	PROJECT WIDE	Document Type	Soils Management Plan
Completed Date	5/19/2017 12:00:00 AM	Comments	The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement Termination Notification
Completed Date	9/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreements (VCA) scope of work specifies that DTSC review and provide comments on the Site Management Plan. Since DTSC completed the Site Management Plan review process, the VCAs scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	5/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.

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Completed Date	6/19/2018 12:00:00 AM	Comments	DTSC and Lennar executed the Voluntary Cleanup Agreement, Docket No. HSA-FY17/18-136, for overseeing activities performed at the project site.

Area Name	PROJECT WIDE	Document Type	Application
Completed Date	4/27/2017 12:00:00 AM	Comments	Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.

Area Name	PROJECT WIDE	Document Type	Soils Management Plan
Completed Date	5/19/2017 12:00:00 AM	Comments	The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement Termination Notification
Completed Date	9/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreements (VCA) scope of work specifies that DTSC review and provide comments on the Site Management Plan. Since DTSC completed the Site Management Plan review process, the VCAs scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	4/30/2018 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	4/30/2018 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Technical Report
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Completed Date	4/30/2018 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Technical Report
Completed Date	4/30/2018 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	5/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	6/19/2018 12:00:00 AM	Comments	DTSC and Lennar executed the Voluntary Cleanup Agreement, Docket No. HSA-FY17/18-136, for overseeing activities performed at the project site.

Area Name	PROJECT WIDE	Document Type	Application
Completed Date	4/27/2017 12:00:00 AM	Comments	Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.

Area Name	PROJECT WIDE	Document Type	Soils Management Plan
Completed Date	5/19/2017 12:00:00 AM	Comments	The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement Termination Notification
Completed Date	9/19/2017 12:00:00 AM	Comments	The Voluntary Cleanup Agreements (VCA) scope of work specifies that DTSC review and provide comments on the Site Management Plan. Since DTSC completed the Site Management Plan review process, the VCAs scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.

Area Name	PROJECT WIDE	Document Type	Technical Workplan
Completed Date	7/3/2019 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Removal Action Workplan
Completed Date	6/28/2019 12:00:00 AM		

Area Name	PROJECT WIDE	Document Type	Fact Sheets
Completed Date	5/10/2019 12:00:00 AM	Comments	DTSC mailed the Community Update on 5/10/2019 to approximately 550 addresses on the project's mailing list announcing the 30-day public comment period for the Removal Action Workplan to begin on 5/14/2019.

Area Name	PROJECT WIDE	Document Type	Public Notice
Completed Date	5/13/2019 12:00:00 AM	Comments	DTSC published a Public Notice on the 5/13/2019 printed version of the Mercury News announcing that the 30-day public comment period for the Removal Action Workplan will begin on 5/14/2019.

FUTURE ACTIONS

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Area Name	PROJECT WIDE	Document Type	5 Year Review Reports
Due Date	2024		
Area Name	PROJECT WIDE	Document Type	Certification
Due Date	2021		

61 1X S.F.W. WOOLWORTH COMPANY~Hyatt Centric Hotel~UNITED RENTALS (NORTH AMERICA) INC~UNITED RENTALS (NORTH AMERICA), INC
Records: 61A,

Site ID: -1632170472
Distance: 2981 ft, North West

61A UNITED RENTALS (NORTH AMERICA), INC
409 SAN ANTONIO RD, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003018263

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/6-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-06-05 00:00:00.0
Location Country	US	Contact Phone	405-623-5407 x
Contact Email Address	DMELTON@EMIOK.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal	No	Recognized Trader Importer	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Wastes			
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@679ecc80
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.404663	Location Longitude	-122.111505
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	791 EAST 64TH AVENUE, DENVER, CO 80229	Contact Name	DENNIS MELTON
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003018263&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	UNITED RENTALS (NORTH AMERICA), INC
Owner Operator Type	O	Phone	405-623-5407 x
Address	791 EAST 64TH AVENUE, DENVER, CO 80229		

Owner Operator Indicator	CP	Owner Operator Name	DENNIS MELTON
Owner Operator Type	O	Phone	405-623-5407 x
Address	791 EAST 64TH AVENUE, DENVER, CO 80229		

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LensCrafters #3016~LENSCRAFTERS #3016~PHOTO DRIVE UP~PHOTO DRIVE UP MT VIEW~RITZ CAMERA CENTERS, INC. DBA WOLF 1344~WOLF CAMERA NO 958
Records: 62A,62B,

Site ID: 646785372
Distance: 3042 ft, East

62A

LensCrafters #3016
1898 W El Camino Real, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: California EPA's CUPA facilities database

Record ID: CACUPATS-10642411

Record Details

Phone	650-961-2861	Fax	650-961-2890
Operator Name	LensCrafters # 3016	Operator Phone	650-961-2837
Owner Name	Luxottica	Owner Phone	513-765-6000
E Contact Name	Jackie Richardson	E Contact Phone	513-765-4311
E Contact Mailing Address	4000 Luxottica Place	Primary Regulator	Santa Clara County Environmental Health
Hazardous	Yes	Hazardous	Mountain View Fire Department

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Materials Business Plan Facility		Materials Business Plan Regulator	
Accidental Release Prevention Facility	No	Accidental Release Prevention Regulator	Santa Clara County Environmental Health
Ust Facility	No	Ust Regulator	Mountain View Fire Department
Aboveground Storage Tank	No	Aboveground Storage Tank Regulator	Santa Clara County Environmental Health
Hazardous Waste Generator	Yes	Recycler	No
Recycler Regulator	Mountain View Fire Department	Household Hazardous Waste Collection	No
Onsite Hazardous Waste Treatment	Yes	Mailing Address	1898 W El Camino Real, Mountain View, CA 94040
Owner Address	4000 Luxottica Place, Mason, OH 45040	E Contact Address	jrichard@luxotticaretail.com, Mason, OH 45040

62B

LensCrafters #3016
1898 W EL CAMINO REAL, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: California EPA Site Portal

Record ID: CAREGTSD-357194

Record Details

Ei Id	10642411	Facility Program	Hazardous Waste Onsite Treatment

63

ANDY YU~JAY GILL~JUDY CHEANG & ANDREW PACE~KOUSHIK GHOSH~KUMAR HEMENDRA
Records: 63A,63B,

Site ID: 1584995937
Distance: 3110 ft, North

63A

JUDY CHEANG & ANDREW PACE
49 SHOWERS DR #A142, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID: NARCRATS-CAC003012076

Record Details

Source Type	Implementer	Receive Date	-0/4-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-04-25 00:00:00.0
Location Country	US	Contact Phone	801-916-7828 x
Contact Email Address	JOHN@JWHARS.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

		Activity	
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@483bc09f
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.404198	Location Longitude	-122.102735
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	49 SHOWERS DR #A142, MOUNTAIN VIEW, CA 94040	Contact Name	JUDY CHEANG & ANDREW PACE
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003012076&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	JUDY CHEANG & ANDREW PACE
Owner Operator Type	O	Phone	801-916-7828 x
Address	49 SHOWERS DR #A142, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	JUDY CHEANG & ANDREW PACE
Owner Operator Type	O	Phone	801-916-7828 x

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Address: 49 SHOWERS DR #A142, MOUNTAIN VIEW, CA 94040

63B

KOUSHIK GHOSH
49 SHOWERS DR #A140, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003015425

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/5-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-05-16 00:00:00.0
Location Country	US	Contact Phone	425-301-0969 x
Contact Email Address	JOHN@JWHARS.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@5dafof97
Subpart P Healthcare	N	Subpart P Reverse Distributor	N

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Location Latitude	37.404198	Location Longitude	-122.102735
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	49 SHOWERS DR #A140, MOUNTAIN VIEW, CA 94040	Contact Name	KOUSHIK GHOSH
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003015425&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	KOUSHIK GHOSH
Owner Operator Type	O	Phone	425-301-0969 x
Address	49 SHOWERS DR #A140, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	KOUSHIK GHOSH
Owner Operator Type	O	Phone	425-301-0969 x
Address	49 SHOWERS DR #A140, MOUNTAIN VIEW, CA 94040		

64

World Plaza
Records: 64A,

Site ID: 216338957
Distance: 3117 ft, North West

64A

World Plaza
660 SAN ANTONIO ROAD, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal

Record ID: CAREGCSL-204872

Record Details

Facility Program	Cleanup Program Site

65

World Plaza
Records: 65A,

Site ID: 368976716
Distance: 3119 ft, North West

65A

World Plaza
660 San Antonio Road, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID: CACSLLIS-T10000005126

Record Details

Case Type	Cleanup Program Site	Status	Open - Verification Monitoring
Status Date	4/20/2018 12:00:00 AM	Cuf Case	NO

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

Lead Agency	SANTA CLARA COUNTY LOP	Local Agency	SANTA CLARA COUNTY LOP
Loc Case Number	06S2W20D03s	File Location	All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants Of Concern	Tetrachloroethylene (PCE)	Potential Media Affected	Soil, Soil Vapor
Site History	Release of PCE from a dry cleaner. A dry cleaner known to use PCE operated at this site from 1988-2002. It is reported that subsequent dry cleaners at this location did not use PCE. PCE has been detected in soil vapor.	Begin Date	12/1/2002 12:00:00 AM
How Discovered	Site Assessment/Site Investigation	Stop Method	Remove Contents
Stop Description	date estimated; discontinued use of Perc	Estimated Status	Case is Open

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	2002-12-01 00:00:00
Status	Open - Site Assessment	Status Date	2013-08-29 00:00:00
Status	Open - Remediation	Status Date	2016-04-21 00:00:00
Status	Open - Verification Monitoring	Status Date	2018-04-20 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	Other	Date	2002-12-01 00:00:00
Action	Leak Stopped		
Action Type	RESPONSE	Date	2012-01-15 00:00:00
Action	Site Assessment Report		
Action Type	RESPONSE	Date	2012-10-26 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2013-03-21 00:00:00
Action	Soil Vapor Intrusion Investigation Report		
Action Type	RESPONSE	Date	2013-06-07 00:00:00
Action	Other Report / Document		
Action Type	Other	Date	2013-07-24 00:00:00
Action	Leak Reported		
Action Type	ENFORCEMENT	Date	2013-08-08 00:00:00
Action	Letter - Notice		
Action Type	ENFORCEMENT	Date	2013-08-20 00:00:00

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	ENFORCEMENT	Date	2013-09-03 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2013-09-26 00:00:00
Action	Site Investigation		
Action Type	RESPONSE	Date	2013-10-31 00:00:00
Action	Site Investigation Workplan - Regulator Responded		
Action Type	ENFORCEMENT	Date	2013-11-06 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2013-12-11 00:00:00
Action	Site Visit / Inspection / Sampling		
Action Type	ENFORCEMENT	Date	2014-02-28 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2014-03-10 00:00:00
Action	Site Assessment Report		
Action Type	RESPONSE	Date	2014-04-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	2014-07-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	2014-10-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	ENFORCEMENT	Date	2014-11-10 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2015-01-14 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2015-02-09 00:00:00
Action	Corrective Action Plan / Remedial Action Plan - Regulator Responded		
Action Type	ENFORCEMENT	Date	2015-02-19 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2015-06-30 00:00:00
Action	Remedial Progress Report - Regulator		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

	Responded		
Action Type	ENFORCEMENT	Date	2015-07-08 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2015-08-06 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2015-09-04 00:00:00
Action	Soil Vapor Intrusion Investigation Workplan - Regulator Responded		
Action Type	RESPONSE	Date	2015-10-19 00:00:00
Action	Well Installation Report		
Action Type	RESPONSE	Date	2015-10-30 00:00:00
Action	Monitoring Report - Annually		
Action Type	ENFORCEMENT	Date	2016-01-28 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2016-04-21 00:00:00
Action	Email Correspondence		
Action Type	RESPONSE	Date	2016-06-30 00:00:00
Action	Remedial Progress Report		
Action Type	ENFORCEMENT	Date	2016-07-26 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2016-10-30 00:00:00
Action	Remedial Progress Report		
Action Type	ENFORCEMENT	Date	2016-12-08 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2017-01-23 00:00:00
Action	Correspondence		
Action Type	RESPONSE	Date	2017-01-30 00:00:00
Action	Remedial Progress Report		
Action Type	ENFORCEMENT	Date	2017-01-31 00:00:00
Action	Email Correspondence		
Action Type	ENFORCEMENT	Date	2017-08-04 00:00:00
Action	Staff Letter		

SURROUNDING SITES DETAILS

Action Type	RESPONSE	Date	2017-09-22 00:00:00
Action	Soil Vapor Intrusion Investigation Workplan		
Action Type	ENFORCEMENT	Date	2018-04-20 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2018-04-30 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2018-07-30 00:00:00
Action	Monitoring Report - Semi-Annually		
Action Type	RESPONSE	Date	2019-01-30 00:00:00
Action	Monitoring Report - Semi-Annually		
Action Type	ENFORCEMENT	Date	2019-02-12 00:00:00
Action	Letter - Notice		
Action Type	ENFORCEMENT	Date	2020-01-16 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2020-03-06 00:00:00
Action	Other Report / Document		

66

JAY ZELENKOV
Records: 66A,

Site ID: -1911130494
Distance: 3197 ft, East

66A

JAY ZELENKOV
1910 MOUNT VERNON COURT, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003017377

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/5-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-05-30 00:00:00.0
Location Country	US	Contact Phone	415-712-5016 x
Contact Email Address	SHACARRAHENDERSON@ALLIANCE-ENVIRO.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner	No	Furnace	No

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Exemption		Exemption	
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@3131d2c4
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.396215	Location Longitude	-122.095233
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	1910 MOUNT VERNON COURT, MOUNTAIN VIEW, CA 94040	Contact Name	JAY ZELENKOV
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003017377&pgm_sys_acrnm_in=RCRAINFO		

OWNER AND OPERATOR INFO

Owner Operator Indicator	CO	Owner Operator Name	JAY ZELENKOV
Owner Operator Type	O	Phone	415-712-5016 x
Address	1910 MOUNT VERNON COURT, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	JAY ZELENKOV
Owner Operator Type	O	Phone	415-712-5016 x
Address	1910 MOUNT VERNON COURT, MOUNTAIN VIEW, CA 94040		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

67 SANDRA CARRICO
Records: 67A,

Site ID: 528652685
Distance: 3283 ft, South East

67A SANDRA CARRICO
1843 ANTHONY CT, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003008592

Record Details

Source Type	Implementer	Receive Date	-0/4-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-04-03 00:00:00.0
Location Country	US	Contact Phone	650-996-7799 x
Contact Email Address	ELIZABETH.GARCIA@SYNERGYCOMPANIES.ORG	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@729aa3df
Subpart P	N	Subpart P	N

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Healthcare		Reverse Distributor	
Location Latitude	37.390239	Location Longitude	-122.097605
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	1843 ANTHONY CT, MOUNTAIN VIEW, CA 94040	Contact Name	SANDRA CARRICO
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003008592&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	SANDRA CARRICO
Owner Operator Type	O	Phone	650-996-7799 x
Address	1843 ANTHONY CT, MOUNTAIN VIEW, CA 94040		

Owner Operator Indicator	CP	Owner Operator Name	SANDRA CARRICO
Owner Operator Type	O	Phone	650-996-7799 x
Address	1843 ANTHONY CT, MOUNTAIN VIEW, CA 94040		

68

1X FIRESTONE TIRE & RUBBER CO~FIRESTONE #3670~Firestone Complete Auto Care # 3670~FIRESTONE COMPLETE AUTO CARE # 3670~FIRESTONE STORE #3670~Firestone Store No. 3670~Former Firestone
Records: 68A,68B,68C,68D,

Site ID: -1733678253
Distance: 3419 ft, North West

68A

Former Firestone
462 San Antonio Road, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID: CACSLLIS-T10000005884

Record Details

Case Type	Cleanup Program Site	Status	Completed - Case Closed
Status Date	10/29/2014 12:00:00 AM	Cuf Case	NO
Lead Agency	SANTA CLARA COUNTY LOP	Loc Case Number	06S2W17N05s
File Location	All Files are on GeoTracker or in the Local Agency Database	Potential Contaminants Of Concern	Waste Oil / Motor / Hydraulic / Lubricating
Potential Media Affected	Other Groundwater (uses other than drinking water), Soil	Site History	Former Firestone automotive facility. Contamination was found during removal of the hoists at the site. Impacted soil was excavated and removed.
Begin Date	1/31/2014 12:00:00 AM	How Discovered	Tank Closure
Stop Method	Close and Remove Tank	Estimated Status	Closed case or No Further Action

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	2014-01-31 00:00:00
Status	Open - Remediation	Status Date	2014-04-30 00:00:00
Status	Completed - Case Closed	Status Date	2014-10-29 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	REMEDIATION	Date	2014-01-01 00:00:00
Action	Excavation		
Action Type	Other	Date	2014-01-31 00:00:00
Action	Leak Discovery		
Action Type	Other	Date	2014-01-31 00:00:00
Action	Leak Stopped		
Action Type	Other	Date	2014-02-10 00:00:00
Action	Leak Reported		
Action Type	RESPONSE	Date	2014-02-10 00:00:00
Action	Correspondence		
Action Type	ENFORCEMENT	Date	2014-04-09 00:00:00
Action	Letter - Notice		
Action Type	RESPONSE	Date	2014-04-09 00:00:00
Action	Correspondence		
Action Type	RESPONSE	Date	2014-04-15 00:00:00
Action	Removal Action Work Plan - Regulator Responded		
Action Type	ENFORCEMENT	Date	2014-04-18 00:00:00
Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	ENFORCEMENT	Date	2014-05-05 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2014-05-28 00:00:00
Action	Site Visit / Inspection / Sampling		
Action Type	RESPONSE	Date	2014-05-30 00:00:00
Action	Correspondence		

Action Type	ENFORCEMENT	Date	2014-05-30 00:00:00
Action	Site Visit / Inspection / Sampling		
Action Type	ENFORCEMENT	Date	2014-06-05 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2014-08-28 00:00:00
Action	Request for Closure		
Action Type	RESPONSE	Date	2014-09-02 00:00:00
Action	Request for Closure		
Action Type	RESPONSE	Date	2014-09-05 00:00:00
Action	Site Assessment Report		
Action Type	RESPONSE	Date	2014-10-01 00:00:00
Action	Request for Closure		
Action Type	ENFORCEMENT	Date	2014-10-29 00:00:00
Action	Closure/No Further Action Letter		

68B

Firestone Store No. 3670
462 San Antonio Rd, MOUNTAIN VIEW, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California State Water Resources Control Board's Geotracker Leaking Underground Storage Tank list

Record ID:
CALUSTCA-T0608508015

RECORD DETAILS

Case Type	LUST Cleanup Site	Status	Completed - Case Closed
Status Date	4/14/1999 12:00:00 AM	Cuf Case	NO
Lead Agency	SANTA CLARA COUNTY LOP	Local Agency	SANTA CLARA COUNTY LOP
File Location	All Files are on GeoTracker or in the Local Agency Database	Potential Contaminants Of Concern	Waste Oil / Motor / Hydraulic / Lubricating
Potential Media Affected	Soil	Begin Date	1/1/1998 12:00:00 AM
Estimated Status	Closed case or No Further Action		

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	1998-01-01 00:00:00
Status	Open - Site Assessment	Status Date	1999-04-01 00:00:00
Status	Completed - Case Closed	Status Date	1999-04-14 00:00:00

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

SITE REGULATORY ACTIVITIES

Action Type	Other	Date	1998-01-01 00:00:00
Action	Leak Reported		
Action Type	RESPONSE	Date	1998-02-20 00:00:00
Action	Other Report / Document		
Action Type	ENFORCEMENT	Date	1999-04-14 00:00:00
Action	Closure/No Further Action Letter		
Action Type	RESPONSE	Date	1999-04-14 00:00:00
Action	Other Report / Document		

68C

Former Firestone
462 SAN ANTONIO ROAD, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal

Record ID:
CAREGCSL-236489

RECORD DETAILS

Facility Program	Cleanup Program Site

68D

Firestone Store No. 3670
462 SAN ANTONIO RD, MOUNTAIN VIEW, CA
Type: Leaking Underground Storage Tanks (LUST)
Source: California EPA Site Portal

Record ID:
CAREGLST-201487

RECORD DETAILS

Facility Program	Leaking Underground Storage Tank Cleanup Site

69

ALEX CHABAN
Records: 69A,

Site ID: 937539293
Distance: 3446 ft, North East

69A

ALEX CHABAN
2351 ADELE AVE, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003013903

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/5-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-05-07 00:00:00.0
Location Country	US	Contact Phone	650-793-4967 x
Contact Email Address	MARIA.CARBAJAL@SYNERGYCOMPANIES.ORG	Fed Waste Generator	Not a Generator

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@4bbc4680
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.404306	Location Longitude	-122.09945
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	2351 ADELE AVE, MOUNTAIN VIEW, CA 94043	Contact Name	ALEX CHABAN
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003013903&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	ALEX CHABAN
Owner Operator Type	O	Phone	650-793-4967 x
Address	2351 ADELE AVE, MOUNTAIN VIEW, CA		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

94043

Owner Operator Indicator	CP	Owner Operator Name	ALEX CHABAN
Owner Operator Type	O	Phone	650-793-4967 x
Address	2351 ADELE AVE, MOUNTAIN VIEW, CA 94043		

70 REGANCE AT MT VIEW~REGENCY @ MOUNTAIN VIEW~Regency Apartments~REGENCY APARTMENTS~REGENCY AT MOUNTAIN VIEW~REGENCY AT MT VIEW~REGENCY OF MOUNTAIN VIEW~THE REGENCY AT MOUNTAIN VIEW~WILBUR PROPERTIES~WILBUR PROPERTIES INC
Records: 70A,70B,

Site ID: 4331650
Distance: 3562 ft, East

70A Regency Apartments
333 Escuela Avenue, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID:
CACSLLIS-T10000005158

RECORD DETAILS

Case Type	Cleanup Program Site	Status	Completed - Case Closed
Status Date	10/27/2015 12:00:00 AM	Cuf Case	NO
Lead Agency	SANTA CLARA COUNTY LOP	Local Agency	SANTA CLARA COUNTY LOP
Loc Case Number	06S2W21E01s	File Location	All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants Of Concern	Waste Oil / Motor / Hydraulic / Lubricating	Potential Media Affected	Other Groundwater (uses other than drinking water), Soil
Site History	2013 In May, borings were advanced near and in the interpreted downgradient direction of the 3 elevators located onsite to assess if they had leaked. The assessment was conducted based on the age of the elevators and not due to any reports of releases from the elevators. The elevators had been installed around 1970. Soil samples were not submitted for chemical analysis. Groundwater was encountered between 24-28 feet below the ground surface (ft bgs) and rose in the borings to 22-23 ft bgs. 3 grab groundwater samples were collected and reported to have maximum concentrations of 83 parts per billion (ppb) Phenol, 170 ppb Total Petroleum Hydrocarbons (TPH) as Diesel (TPHd), 310 ppb TPH as Motor Oil (TPHmo). The use of silica gel cleanup on the samples reported maximum TPH concentrations of 150 ppb TPHd and TPHmo was not present above the laboratory reporting limit of 250 ppb. 2014 In March, 3 groundwater monitoring wells (MW1 through MW3) were installed onsite to 35 ft bgs. Groundwater monitoring commenced at that time. Initial sampling of the wells reported maximum concentrations that were flagged by the laboratory as being estimated values of 32 ppb TPHd, 220 ppb TPHmo, 4.2 ppb Benzidine,	Begin Date	7/22/2013 12:00:00 AM

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

	0.24 ppb Benzo(a)anthracene, 0.41 ppb Bis (2-ethylhexyl) Phthalate, 0.2 ppb Chrysene, 0.28 ppb Fluoranthene, 0.29 ppb Pyrene, and 0.39 ppb Nitro-benzene. Polychlorinated Biphenyls (PCBs) were not reported to be present above the laboratory reporting limits. 2015 In March, the final groundwater monitoring event was conducted and reported a maximum concentration of 60 ppb TPHd. In addition, maximum concentrations of 180 ppb TPHmo, 9.5 ppb Bis (2-ethylhexyl) Phthalate, 4.7 ppb Diethyl Phthalate were flagged by the lab as being estimated values.		
How Discovered Description	unknown	Stop Description	unknown
Estimated Status	Closed case or No Further Action		

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	2013-07-22 00:00:00
Status	Open - Site Assessment	Status Date	2013-09-16 00:00:00
Status	Completed - Case Closed	Status Date	2015-10-27 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	Other	Date	2013-07-22 00:00:00
Action	Leak Reported		
Action Type	RESPONSE	Date	2013-07-23 00:00:00
Action	Correspondence		
Action Type	ENFORCEMENT	Date	2013-07-24 00:00:00
Action	Letter - Notice		
Action Type	ENFORCEMENT	Date	2013-08-02 00:00:00
Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	RESPONSE	Date	2013-10-03 00:00:00
Action	Site Investigation		
Action Type	ENFORCEMENT	Date	2013-10-08 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2013-11-22 00:00:00
Action	Preliminary Site Assessment Workplan - Regulator Responded		
Action Type	ENFORCEMENT	Date	2014-01-15 00:00:00

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Action	Staff Letter		
Action Type	RESPONSE	Date	2014-05-16 00:00:00
Action	Well Installation Report		
Action Type	ENFORCEMENT	Date	2014-08-05 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2014-10-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	2015-01-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	ENFORCEMENT	Date	2015-04-06 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2015-04-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	2015-07-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	ENFORCEMENT	Date	2015-09-10 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2015-10-27 00:00:00
Action	Closure/No Further Action Letter		

70B

Regency Apartments
333 ESCUELA AVENUE, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal

Record ID: CAREGCSL-219827

RECORD DETAILS

Facility Program	Cleanup Program Site

71

GOOGLE INC.~GOOGLE LLC - THE RAILS~GOOGLE, LLC - THE RAILS~HEWLETT-PACKARD COMPANY~JL AMONETT CO~LOON~SAN ANTONIO STATION OWNER LLC~SAN ANTONIO STATION OWNER, LLC~The Rails~WAYMO LLC
Records: 71A,

Site ID: -507592964
Distance: 3702 ft, North

71A

The Rails
100 Mayfield Ave, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: California EPA's CUPA facilities database

Record ID: CACUPATS-10627294

RECORD DETAILS

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Phone	(650) 253-0000	Operator Name	Google, Inc.
Operator Phone	(650) 253-0000	Owner Name	Google, Inc
Owner Phone	(650) 253-0000	E Contact Name	Ed Baylosis
E Contact Phone	9254137150	E Contact Mailing Address	1600 Amphitheater Pkwy
Primary Regulator	Santa Clara County Environmental Health	Hazardous Materials Business Plan Facility	Yes
Hazardous Materials Business Plan Regulator	Mountain View Fire Department	Accidental Release Prevention Facility	No
Accidental Release Prevention Regulator	Santa Clara County Environmental Health	Ust Facility	No
Ust Regulator	Mountain View Fire Department	Aboveground Storage Tank	No
Aboveground Storage Tank Regulator	Santa Clara County Environmental Health	Hazardous Waste Generator	Yes
Recycler	No	Recycler Regulator	Mountain View Fire Department
Household Hazardous Waste Collection	No	Onsite Hazardous Waste Treatment	Yes
Mailing Address	1600 Amphitheatre Parkway, Mountain View, CA 94043	Owner Address	1600 Amphitheatre Parkway, Mountain View, CA 94043
E Contact Address	edbaylosis@google.com, Mountain View, CA 94043		

72

MVSA
Records: 72A,

Site ID: -221662081
Distance: 3788 ft, North

72A

MVSA
225 San Antonio Road, 2580 California Street, 201 San Antonio Circle, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID: CAENSTOR-60002855

RECORD DETAILS

Site Type	Voluntary Cleanup	Site Type Detailed	Voluntary Cleanup
Acres	8.33	Apn	NONE SPECIFIED
National Priorities List	NO	Regulatory Agencies Involved	SMBRP
Lead Agency	SMBRP	Project Manager	Jovanne Villamater
Supervisor	Cheryl Prowell	Division Branch	Cleanup Berkeley
Site Code	202267	Congressional District	18
Special Program	Voluntary Cleanup Program	Status	Active
Status Date	2019-07-02 00:00:00	Past Uses	NONE SPECIFIED
Funding	Responsible Party	Potential Media Affected	NONE SPECIFIED

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

		Description	
Potential Coc Description	NONE SPECIFIED	Confirmed Coc Description	NONE SPECIFIED
Site Mgmt Req Description	NONE SPECIFIED	Estimated Status	Case is Open

ALIAS NAMES FOR SITES

Alias Type	Project Code (Site Code)	Alias	202267
Alias Type	Envirostor ID Number	Alias	60002855

COMPLETED ACTIONS

Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	9/13/2019 12:00:00 AM	Comments	Standard Voluntary Agreement signed by proponent on September 9, 2019, and DTSC on September 13, 2019.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	9/13/2019 12:00:00 AM	Comments	Standard Voluntary Agreement signed by proponent on September 9, 2019, and DTSC on September 13, 2019.
Area Name	PROJECT WIDE	Document Type	Voluntary Cleanup Agreement
Completed Date	9/13/2019 12:00:00 AM	Comments	Standard Voluntary Agreement signed by proponent on September 9, 2019, and DTSC on September 13, 2019.
Area Name	PROJECT WIDE	Document Type	Standard Voluntary Agreement
Completed Date	9/13/2019 12:00:00 AM	Comments	Standard Voluntary Agreement signed by proponent on September 9, 2019, and DTSC on September 13, 2019.
Area Name	PROJECT WIDE	Document Type	Annual Oversight Cost Estimate
Completed Date	10/5/2020 12:00:00 AM	Comments	Due to COVID-19 Pandemic, Annual Cost Estimate transmitted via email on 10/05/2020.
Area Name	PROJECT WIDE	Document Type	Standard Voluntary Agreement
Completed Date	9/13/2019 12:00:00 AM	Comments	Standard Voluntary Agreement signed by proponent on September 9, 2019, and DTSC on September 13, 2019.

FUTURE ACTIONS

Area Name	PROJECT WIDE	Document Type	Land Use Restriction
Due Date	2021		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

SCHEDULED ACTIONS

Area Name	PROJECT WIDE	Document Type	Preliminary Endangerment Assessment Report
Due Date	2021-04-08 00:00:00		

73

Sunbeam Cleaners
Records: 73A,73B,

Site ID: 161316250
Distance: 3852 ft, North East

73A

Sunbeam Cleaners
128 N. Rengstorff Avenue, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID: CACSLLIS-T10000008083

RECORD DETAILS

Case Type	Cleanup Program Site	Status	Open - Inactive
Status Date	12/3/2015 12:00:00 AM	Cuf Case	NO
Lead Agency	SANTA CLARA COUNTY LOP	Local Agency	SANTA CLARA COUNTY LOP
File Location	All Files are on GeoTracker or in the Local Agency Database	Potential Contaminants Of Concern	Tetrachloroethylene (PCE), Total Petroleum Hydrocarbons (TPH)
Potential Media Affected	Aquifer used for drinking water supply, Soil, Soil Vapor	Site History	Report from 2/5/1990 shows PCE at 24 ppb in groundwater and 320 ppb in soil. Soil vapor report from February 2019 shows PCE in soil vapor up to 38,000 micrograms per cubic meter and Trichloroethene in soil vapor up to 2,300 micrograms per cubic meter.
Begin Date	5/17/1988 12:00:00 AM	Estimated Status	Case is Open

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	1988-05-17 00:00:00
Status	Open - Inactive	Status Date	2015-12-03 00:00:00
Status	Open - Inactive	Status Date	2019-06-27 00:00:00
Status	Open - Assessment & Interim Remedial Action	Status Date	2019-09-30 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	RESPONSE	Date	1988-05-03 00:00:00
Action	Other Report / Document		
Action Type	Other	Date	1988-05-17 00:00:00
Action	Leak Began		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Action Type	Other	Date	1988-05-17 00:00:00
Action	Leak Reported		
Action Type	Other	Date	1988-05-17 00:00:00
Action	Leak Discovery		
Action Type	RESPONSE	Date	1988-06-16 00:00:00
Action	Correspondence		
Action Type	ENFORCEMENT	Date	1988-07-18 00:00:00
Action	Technical Correspondence / Assistance / Other - #2189.8302		
Action Type	RESPONSE	Date	1989-06-21 00:00:00
Action	Correspondence		
Action Type	RESPONSE	Date	1989-08-24 00:00:00
Action	Correspondence		
Action Type	RESPONSE	Date	1993-05-17 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2019-03-12 00:00:00
Action	Site Investigation		
Action Type	ENFORCEMENT	Date	2019-06-27 00:00:00
Action	Email Correspondence		
Action Type	ENFORCEMENT	Date	2019-09-03 00:00:00
Action	Letter - Notice		
Action Type	RESPONSE	Date	2019-09-03 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2019-09-12 00:00:00
Action	Site Investigation Workplan		
Action Type	ENFORCEMENT	Date	2019-09-30 00:00:00
Action	Voluntary Remedial Action Agreement		
Action Type	ENFORCEMENT	Date	2019-10-02 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2019-12-20 00:00:00
Action	Site Assessment Report		
Action Type	ENFORCEMENT	Date	2020-01-22 00:00:00

SURROUNDING SITES DETAILS

Action	Staff Letter		
Action Type	RESPONSE	Date	2020-04-24 00:00:00
Action	Soil Vapor Intrusion Investigation Report		
Action Type	ENFORCEMENT	Date	2020-06-01 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2020-07-17 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2020-07-17 00:00:00
Action	Other Workplan		
Action Type	ENFORCEMENT	Date	2020-09-21 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2020-10-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	ENFORCEMENT	Date	2020-11-17 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2021-01-29 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	2021-04-30 00:00:00
Action	Monitoring Report - Quarterly		
Action Type	RESPONSE	Date	2021-07-01 00:00:00
Action	Site Investigation Workplan		

73B

Sunbeam Cleaners
128 N. RENGSTORFF AVENUE, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal

Record ID:
CAREGCSL-361383

RECORD DETAILS

Facility Program	Cleanup Program Site

74

BEN MEDINA~MID PEN~PAULSON PARK~PAULSON PARK APARTMENTS~ZELAYA, OSMIN
Records: 74A,

Site ID: -1872633442
Distance: 3943 ft, North East

74A

PAULSON PARK APARTMENTS
111 MONTEBELLO AVE., MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003014560

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/5-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-05-10 00:00:00.0
Location Country	US	Contact Phone	650-339-8249 x
Contact Email Address	HOLLY.CASTRO@ATIRESTORATION.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@765eacfc
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.403118	Location Longitude	-122.093591
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	111 MONTEBELLO AVE., MOUNTAIN VIEW, CA 94043	Contact Name	JULIO OLIVOS
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations

SURROUNDING SITES DETAILS

Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003014560&pgm_sys_acrnm_in=RCRAINFO

OWNER AND OPERATOR INFO

Owner Operator Indicator	CO	Owner Operator Name	JULIO OLIVOS
Owner Operator Type	O	Phone	650-339-8249 x
Address	111 MONTEBELLO AVE., MOUNTAIN VIEW, CA 94043		

Owner Operator Indicator	CP	Owner Operator Name	JULIO OLIVOS
Owner Operator Type	O	Phone	650-339-8249 x
Address	111 MONTEBELLO AVE., MOUNTAIN VIEW, CA 94043		

75 API NORTH PARK LLC
Records: 75A,
Site ID: -1850187941
Distance: 4028 ft, North East

75A API NORTH PARK LLC
111 N RENGSTROFF AVENUE, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database
Record ID:
NARCRATS-CAC003018582

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/6-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-06-06 00:00:00.0
Location Country	US	Contact Phone	650-867-6021 x
Contact Email Address	HOLLY.CASTRO@ATIRESTORATION.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil	No	Used Oil	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Transfer Facility		Processor	
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@5c8de26f
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.403532	Location Longitude	-122.094734
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	1900 S NORFOLK SUITE 150, SAN MATEO, CA 94403	Contact Name	VICTOR FERNANDEZ
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003018582&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	VICTOR FERNANDEZ
Owner Operator Type	O	Phone	650-867-6011 x
Address	1900 S NORFOLK SUITE 150, SAN MATEO, CA 94403		

Owner Operator Indicator	CP	Owner Operator Name	VICTOR FERNANDEZ
Owner Operator Type	O	Phone	650-867-6021 x
Address	1900 S NORFOLK SUITE 150, SAN MATEO, CA 94403		

76 **ANNE GEOFF & DAVID OULA**
Records: 76A,

Site ID: -1927169467
Distance: 4310 ft, South

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

76A

ANNE GEOFF & DAVID OULA
257 MERRITT RD, LOS ALTOS, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003017517

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/5-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-05-31 00:00:00.0
Location Country	US	Contact Phone	408-218-3487 x
Contact Email Address	MARIA.CARBAJAL@SYNERGYCOMPANIES.ORG	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@2adce1ab
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.384145	Location Longitude	-122.108229

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Location Gis Primary	N	Location Gis Origin	AG
Contact Address	257 MERRITT RD, LOS ALTOS, CA 94022	Contact Name	ANNE GEOFF & DAVID OULA
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003017517&pgm_sys_acrnm_in=RCRAINFO		

OWNER AND OPERATOR INFO

Owner Operator Indicator	CO	Owner Operator Name	ANNE GEOFF & DAVID OULA
Owner Operator Type	O	Phone	408-218-3487 x
Address	257 MERRITT RD, LOS ALTOS, CA 94022		

Owner Operator Indicator	CP	Owner Operator Name	ANNE GEOFF & DAVID OULA
Owner Operator Type	O	Phone	408-218-3487 x
Address	257 MERRITT RD, LOS ALTOS, CA 94022		

77

PRITHI TRIVEDI~YULAN M. LEWIS
Records: 77A,

Site ID: -1314356768
Distance: 4495 ft, East

77A

PRITHI TRIVEDI
725 MARIPOSA AVE UNIT 204, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003010682

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/4-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-04-17 00:00:00.0
Location Country	US	Contact Phone	408-810-0782 x
Contact Email Address	PRITHI.TRIVEDI@GMAIL.COM	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No

SURROUNDING SITES DETAILS

Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@3dd9768b
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.390599	Location Longitude	-122.091534
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	725 MARIPOSA AVE UNIT 204, MOUNTAIN VIEW, CA 94041	Contact Name	PRITHI TRIVEDI
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003010682&pgm_sys_acrnm_in=RCRAINFO		

OWNER AND OPERATOR INFO

Owner Operator Indicator	CO	Owner Operator Name	PRITHI TRIVEDI
Owner Operator Type	O	Phone	408-810-0782 x
Address	725 MARIPOSA AVE UNIT 204, MOUNTAIN VIEW, CA 94041		

Owner Operator Indicator	CP	Owner Operator Name	PRITHI TRIVEDI
Owner Operator Type	O	Phone	408-810-0782 x
Address	725 MARIPOSA AVE UNIT 204, MOUNTAIN VIEW, CA 94041		

78 **Mayfield Project**
Records: 78A,

Site ID: -1605164068
Distance: 4501 ft, North

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS R

SURROUNDING SITES DETAILS

78A

Mayfield Project
San Antonio Road and Alma Street, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID:
CACSLLIS-T10000003512

RECORD DETAILS

Case Type	Cleanup Program Site	Status	Completed - Case Closed
Status Date	12/1/2015 12:00:00 AM	Cuf Case	NO
Lead Agency	SANTA CLARA COUNTY LOP	Local Agency	SANTA CLARA COUNTY LOP
Loc Case Number	06S2W17L02s	File Location	All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants Of Concern	Gasoline	Potential Media Affected	Other Groundwater (uses other than drinking water)
Site History	This is a 4 parcel redevelopment project. The parcels are located within both the city of Mountain View and Palo Alto. The parcel located in Palo Alto was occupied by a JC Penney's TBA facility that had underground storage tanks and the case for the tanks is associated with this case above. The LUFT case closure was separate from the remainder of the site. The site was historically a shopping center, which was then occupied by Hewlett Packard. The release is associated with the truck docks and sumps in the same area. Groundwater is very shallow at this site.	Begin Date	8/5/2011 12:00:00 AM
How Discovered	Site Assessment/Site Investigation	How Discovered Description	site assessment for redevelopment
Stop Method	Other Means	Stop Description	Systems to be removed during redevelopment
Estimated Status	Closed case or No Further Action		

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	2011-08-05 00:00:00
Status	Open - Site Assessment	Status Date	2012-01-31 00:00:00
Status	Completed - Case Closed	Status Date	2015-12-01 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	Other	Date	2011-08-05 00:00:00
Action	Leak Discovery		
Action Type	Other	Date	2011-08-11 00:00:00
Action	Leak Reported		
Action Type	ENFORCEMENT	Date	2011-12-22 00:00:00

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	RESPONSE	Date	2012-05-22 00:00:00
Action	Correspondence		
Action Type	ENFORCEMENT	Date	2012-06-01 00:00:00
Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	ENFORCEMENT	Date	2013-11-08 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2014-07-07 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2014-07-17 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2014-09-15 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2014-10-07 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2014-11-24 00:00:00
Action	Email Correspondence		
Action Type	RESPONSE	Date	2014-12-01 00:00:00
Action	Well Destruction Report		
Action Type	ENFORCEMENT	Date	2015-01-05 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2015-03-09 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2015-03-15 00:00:00
Action	Other Report / Document		
Action Type	ENFORCEMENT	Date	2015-10-06 00:00:00
Action	Staff Letter		
Action Type	RESPONSE	Date	2015-11-13 00:00:00
Action	Fact Sheets - Public Participation		
Action Type	ENFORCEMENT	Date	2015-12-01 00:00:00
Action	Closure/No Further Action Letter		

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

79 Mayfield Project
Records: 79A,

Site ID: 548041884
Distance: 4505 ft, North

79A Mayfield Project
SAN ANTONIO ROAD AND ALMA STREET, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal

Record ID:
CAREGCSL-201318

Record Details

Facility Program Cleanup Program Site

80 1710 Villa St., JASCO Chemical~1710 VILLA ST., JASCO CHEMICAL~FORMER JASCO CHEMICAL COMPANY~JASCO CHEM CORP~JASCO CHEMICAL CO~JASCO CHEMICAL CORP.~JASCO CHEMICAL CORPORATION
Records: 80A,80B,80C,

Site ID: 585823174
Distance: 4795 ft, East

80A FORMER JASCO CHEMICAL COMPANY
1710 VILLA ST, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California State Water Resources Control Board's Geotracker Cleanup Program Sites

Record ID:
CACSLLIS-T0608592706

Record Details

Case Type	Cleanup Program Site	Status	Open - Verification Monitoring
Status Date	2/1/2018 12:00:00 AM	Cuf Case	NO
Lead Agency	SAN FRANCISCO BAY RWQCB (REGION 2)	Local Agency	US ENVIRONMENTAL PROTECTION AGENCY
Rb Case Number	43S1137	Loc Case Number	CAD009103318
File Location	All Files are on GeoTracker or in the Local Agency Database	Potential Contaminants Of Concern	Other Solvent or Non-Petroleum Hydrocarbon, Tetrachloroethylene (PCE), Diesel
Potential Media Affected	Aquifer used for drinking water supply	Site History	Jasco Chemical Company began production at the Site in 1976. The production process involved repackaging bulk chemicals into small containers and blending compounds to produce proprietary products. Bulk solvents were received and stored on site before and after processing. A preliminary groundwater investigation conducted in June 1984 revealed the presence of chemicals in soil and groundwater of the same type as those used and stored at the Jasco facility. These chemicals included 1,1,1-trichloroethane, acetone, creosote, denatured alcohol, kerosene, lacquer thinner, methanol, methylene chloride and paint thinner. In September 1992, EPA issued a Record of Decision (ROD) to define the necessary action to: Address contaminated soils and groundwater, Prevent any further migration of contaminants into the groundwater, Prevent possible future exposure to the public to contaminated groundwater, Prevent contamination of the drinking water aquifer, and Provide long term protection to human health and the environment.

SURROUNDING SITES DETAILS

The remedy for the Jasco Chemical Company Superfund Site in Mountain View, California included groundwater extraction and treatment in accordance with the requirements of the ROD (1992) as modified by the Explanation of Significant Difference (ESD) (2002). Soil contamination on the Site was remediated using both excavation with on-site bio-treatment and dual vacuum extraction/soil vapor extraction. The Site was also subject to institutional controls to prevent exposure to future site construction workers and potential future residents. The Site reached construction completion in September 2002. The remedy is functioning as intended by the ROD, as modified by the 2002 and 2012 ESDs, and is considered to be complete. Contaminants remain in Site groundwater as a result of a documented offsite source. The EPA has delisted the site and the Water Board is the lead agency as of 12-2015. Their is a plan to redevelop the property for a residential land use. The Water Board will over see the implementation of the soil management plan and installation of vapor barriers as required.

Begin Date	10/30/1987 12:00:00 AM	How Discovered	Groundwater Monitoring, Subsurface Monitoring
How Discovered Description	Private Citizen Complaint	Stop Method	Change Operating Procedures, Close and Remove Tank, Other Means
Stop Description	Change in operations; UST removal	Estimated Status	Case is Open

SITE STATUS HISTORY

Status	Open - Case Begin Date	Status Date	1987-10-30 00:00:00
Status	Open - Site Assessment	Status Date	1990-09-05 00:00:00
Status	Open - Inactive	Status Date	2009-06-02 00:00:00
Status	Open - Referred	Status Date	2010-05-04 00:00:00
Status	Open - Site Assessment	Status Date	2010-05-04 00:00:00
Status	Open - Remediation	Status Date	2015-12-28 00:00:00
Status	Open - Verification Monitoring	Status Date	2018-02-01 00:00:00

SITE REGULATORY ACTIVITIES

Action Type	Other	Date	1983-01-30 00:00:00
Action	Leak Reported		
Action Type	REMEDIATION	Date	1987-01-01 00:00:00
Action	Excavation		

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Action Type	Other	Date	1987-10-02 00:00:00
Action	Leak Stopped		
Action Type	Other	Date	1987-10-30 00:00:00
Action	Leak Discovery		
Action Type	RESPONSE	Date	1992-06-01 00:00:00
Action	Fact Sheets - Public Participation		
Action Type	RESPONSE	Date	1992-09-30 00:00:00
Action	Record of Decision		
Action Type	RESPONSE	Date	2002-09-13 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2007-09-28 00:00:00
Action	Five Year Review Complete		
Action Type	ENFORCEMENT	Date	2010-02-24 00:00:00
Action	Deed Restriction / Land Use Restriction / Covenant		
Action Type	ENFORCEMENT	Date	2010-03-29 00:00:00
Action	Deed Restriction / Land Use Restriction / Covenant		
Action Type	ENFORCEMENT	Date	2010-05-04 00:00:00
Action	Referral to USEPA		
Action Type	RESPONSE	Date	2012-06-29 00:00:00
Action	Fact Sheets - Public Participation		
Action Type	RESPONSE	Date	2012-09-26 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2012-09-28 00:00:00
Action	Five Year Review Complete		
Action Type	ENFORCEMENT	Date	2015-12-07 00:00:00
Action	Cost Recovery Agreement / N. of Reimbursement		
Action Type	ENFORCEMENT	Date	2016-06-30 00:00:00
Action	Annual Estimation Letter - #43S1137		
Action Type	ENFORCEMENT	Date	2017-06-30 00:00:00
Action	Annual Estimation Letter		

Action Type	ENFORCEMENT	Date	2017-08-11 00:00:00
Action	13267 Requirement		
Action Type	ENFORCEMENT	Date	2018-09-06 00:00:00
Action	Staff Letter		
Action Type	ENFORCEMENT	Date	2018-12-27 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	ENFORCEMENT	Date	2019-06-28 00:00:00
Action	Annual Estimation Letter		
Action Type	ENFORCEMENT	Date	2019-12-12 00:00:00
Action	NPDES Permit		
Action Type	ENFORCEMENT	Date	2020-05-21 00:00:00
Action	Fact Sheets - Public Participation		
Action Type	ENFORCEMENT	Date	2020-05-22 00:00:00
Action	13267 Requirement		
Action Type	ENFORCEMENT	Date	2020-06-30 00:00:00
Action	Annual Estimation Letter		
Action Type	RESPONSE	Date	2020-07-31 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2020-07-31 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2020-09-16 00:00:00
Action	Other Report / Document		
Action Type	RESPONSE	Date	2020-09-18 00:00:00
Action	Correspondence		
Action Type	ENFORCEMENT	Date	2020-10-14 00:00:00
Action	Technical Correspondence / Assistance / Other		
Action Type	ENFORCEMENT	Date	2020-11-16 00:00:00
Action	Staff Letter		

80B

JASCO CHEMICAL CO
1710 VILLA STREET, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California Department of Toxic Substances Control's EnviroStor Cleanup Sites List

Record ID: CAENSTOR-43280119

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Record Details

Site Type	Federal Superfund	Site Type Detailed	State Response or NPL
Acres	2.05	Apn	154-02-001
National Priorities List	DELISTED	Regulatory Agencies Involved	US EPA
Lead Agency	US EPA	Supervisor	Referred - Not Assigned
Division Branch	Cleanup Berkeley	Congressional District	18
Status	Refer: RWQCB	Status Date	1990-01-10 00:00:00
Past Uses	NONE SPECIFIED	Potential Media Affected Description	NONE SPECIFIED
Potential Coc Description	NONE SPECIFIED	Confirmed Coc Description	NONE SPECIFIED
Site Mgmt Req Description	NONE SPECIFIED	Estimated Status	Referred to another agency. No longer updated

Alias Names for Sites

Alias Type	Alternate Name	Alias	JASCO CHEMICAL CORPORATION
Alias Type	APN	Alias	154-02-001
Alias Type	EPA Identification Number	Alias	CAD009103318
Alias Type	EPA (FRS #)	Alias	110001197259
Alias Type	GeoTracker Global ID	Alias	T0608592706
Alias Type	PCode	Alias	P23081
Alias Type	Envirostor ID Number	Alias	43280119

Completed Actions

Area Name	PROJECT WIDE	Document Type	National Priority List Delisting Document
Completed Date	12/27/2018 12:00:00 AM	Comments	DTSC concurs with delisting site from NPL.
Area Name	PROJECT WIDE	Document Type	National Priority List Delisting Document
Completed Date	12/27/2018 12:00:00 AM	Comments	DTSC concurs with delisting site from NPL.
Area Name	PROJECT WIDE	Document Type	National Priority List Delisting Document
Completed Date	12/27/2018 12:00:00 AM	Comments	DTSC concurs with delisting site from NPL.
Area Name	PROJECT WIDE	Document Type	National Priority List Delisting Document
Completed Date	12/27/2018 12:00:00 AM	Comments	DTSC concurs with delisting site from NPL.

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

80C FORMER JASCO CHEMICAL COMPANY
1710 VILLA ST, MOUNTAIN VIEW, CA
Type: Contaminated Sites List (CSL)
Source: California EPA Site Portal
Record ID: CAREGCSL-244869

RECORD DETAILS

Facility Program	Cleanup Program Site

81 JASCO CHEMICAL CORP.
Records: 81A,
Site ID: -954056591
Distance: 4804 ft, East

81A JASCO CHEMICAL CORP.
1710 VILLA ST, MOUNTAIN VIEW, CA
Type: National Priority List (Superfund) Sites (NPL)
Source: US EPA's Superfund Enterprise Management System Database
Record ID: NAFEDNPL-0901126

RECORD DETAILS

Region	09	Epa Id	CAD009103318
Superfund Alternative Agreement	N	Npl	Deleted from the Final NPL
Is Federal Facility	No	Ff Docket	N
Cerclis Web Link	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0901126&msspp=med		

ACTIONS

Region	09	Ff Docket	N
Ou	01	Action Name	PRP RA
Seq	1	Actual Start Date	1996-07-31 04:00:00
Actual Finish Date	2002-09-09 04:00:00	Qual	FR
Current Action Lead	EPA Ovrsght		

Region	09	Ff Docket	N
Ou	01	Action Name	PRP RD
Seq	1	Actual Start Date	1992-12-16 05:00:00
Actual Finish Date	1996-07-31 04:00:00	Current Action Lead	EPA Ovrsght

Region	09	Ff Docket	N
Ou	01	Action Name	PRP RI/FS
Seq	1	Actual Start Date	1988-12-21 05:00:00
Actual Finish Date	1992-09-30 04:00:00	Current Action Lead	EPA Ovrsght

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Region	09	Ff Docket	N
Ou	01	Action Name	TRTSTUDY
Seq	1	Actual Start Date	1994-06-15 04:00:00
Actual Finish Date	1998-02-01 05:00:00	Current Action Lead	EPA Ovrsght

Region	09	Ff Docket	N
Ou	00	Action Name	ST COOP
Seq	1	Actual Start Date	1989-09-15 04:00:00
Actual Finish Date	1989-09-15 04:00:00	Current Action Lead	EPA Ovrsght

Region	09	Ff Docket	N
Ou	00	Action Name	ADMIN REC
Seq	2	Actual Start Date	2020-05-11 05:00:00
Current Action Lead	EPA Perf		

Region	09	Ff Docket	N
Ou	00	Action Name	CI
Seq	2	Actual Start Date	2020-05-14 05:00:00
Current Action Lead	EPA Perf		

Region	09	Ff Docket	N
Ou	00	Action Name	CLSOUT R
Seq	1	Actual Start Date	2018-09-30 05:00:00
Actual Finish Date	2019-03-31 05:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	NOID
Seq	1	Actual Start Date	2020-05-26 05:00:00
Actual Finish Date	2020-09-30 05:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	HAZRANK
Seq	1	Actual Start Date	1987-06-01 04:00:00
Actual Finish Date	1987-06-01 04:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	PCOR
Seq	1	Actual Start Date	2002-09-20 04:00:00
Actual Finish Date	2002-09-20 04:00:00	Current Action Lead	EPA Perf

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

Region	09	Ff Docket	N
Ou	00	Action Name	PA
Seq	1	Actual Start Date	1986-12-01 05:00:00
Actual Finish Date	1986-12-01 05:00:00	Qual	L
Current Action Lead	EPA Perf		

Region	09	Ff Docket	N
Ou	01	Action Name	ROD
Seq	1	Actual Start Date	1992-09-30 04:00:00
Actual Finish Date	1992-09-30 04:00:00	Qual	R
Current Action Lead	EPA Perf		

Region	09	Ff Docket	N
Ou	00	Action Name	5 YEAR
Seq	2	Actual Start Date	2012-09-28 05:00:00
Actual Finish Date	2012-09-28 05:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	DISCVRY
Seq	1	Actual Start Date	1986-10-01 04:00:00
Actual Finish Date	1986-10-01 04:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	01	Action Name	ADMIN REC
Seq	1	Actual Start Date	1991-03-01 05:00:00
Actual Finish Date	1992-05-22 04:00:00	Qual	E
Current Action Lead	EPA Perf		

Region	09	Ff Docket	N
Ou	00	Action Name	RV ASSESS
Seq	1	Actual Start Date	1990-09-19 04:00:00
Actual Finish Date	1990-09-19 04:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	RV ASSESS
Seq	2	Actual Start Date	1991-04-11 04:00:00
Actual Finish Date	1991-04-11 04:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	NPL FINL
Seq	1	Actual Start Date	1989-10-04 04:00:00

SURROUNDING SITES DETAILS

Actual Finish Date	1989-10-04 04:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	CI
Seq	1	Actual Start Date	1988-04-20 04:00:00
Actual Finish Date	1988-07-01 04:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	PROPOSED
Seq	1	Actual Start Date	1988-06-24 04:00:00
Actual Finish Date	1988-06-24 04:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	TECH ASSIST
Seq	1	Actual Start Date	2011-03-03 05:00:00
Actual Finish Date	2011-03-03 05:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	5 YEAR
Seq	1	Actual Start Date	2006-12-12 05:00:00
Actual Finish Date	2007-09-28 04:00:00	Current Action Lead	EPA Perf

Region	09	Ff Docket	N
Ou	00	Action Name	SI
Seq	1	Actual Start Date	1987-06-01 04:00:00
Actual Finish Date	1987-06-01 04:00:00	Qual	H
Current Action Lead	EPA Perf		

Region	09	Ff Docket	N
Ou	00	Action Name	DELETION
Seq	1	Actual Start Date	2020-05-27 05:00:00
Actual Finish Date	2020-09-30 05:00:00	Current Action Lead	EPA Perf

82

LINDA POTTER
Records: 82A,

Site ID: 450806004
Distance: 5044 ft, South West

82A

LINDA POTTER
416 LOS ALTOS AVE, LOS ALTOS, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003017510

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SURROUNDING SITES DETAILS

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/5-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-05-31 00:00:00.0
Location Country	US	Contact Phone	650-223-3731 x
Contact Email Address	MARIA.CARBAJAL@SYNERGYCOMPANIES.ORG	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No
Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@435475ab
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.389042	Location Longitude	-122.120799
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	416 LOS ALTOS AVE, LOS ALTOS, CA 94022	Contact Name	LINDA POTTER
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations

SURROUNDING SITES DETAILS

Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003017510&pgm_sys_acrnm_in=RCRAINFO

OWNER AND OPERATOR INFO

Owner Operator Indicator	CO	Owner Operator Name	LINDA POTTER
Owner Operator Type	O	Phone	650-223-3731 x
Address	416 LOS ALTOS AVE, LOS ALTOS, CA 94022		

Owner Operator Indicator	CP	Owner Operator Name	LINDA POTTER
Owner Operator Type	O	Phone	650-223-3731 x
Address	416 LOS ALTOS AVE, LOS ALTOS, CA 94022		

83

ROHAN GOVER~ROHAN GROVER
Records: 83A,

Site ID: -278623746
Distance: 5150 ft, North East

83A

ROHAN GROVER
2371 THOMPSON CT, MOUNTAIN VIEW, CA
Type: Treatment, Storage and Disposal Sites (TSD)
Source: US EPA's Resource Conservation and Recovery Act Database

Record ID:
NARCRATS-CAC003019199

RECORD DETAILS

Source Type	Implementer	Receive Date	-0/6-/2019
Non Notifier	Not a non-notifier	Acknowledge Date	2019-06-11 00:00:00.0
Location Country	US	Contact Phone	408-371-4020 x
Contact Email Address	PAULBINESH@SBCGLOBAL.NET	Fed Waste Generator	Not a Generator
State Waste Generator	Small Quantity Generator	Short Term Generator	No
Importer Activity	No	Mixed Waste Generator	No
Transporter	No	Transfer Facility	No
Tsd Activity	Yes	Recycler Activity	No
Onsite Burner Exemption	No	Furnace Exemption	No
Underground Injection Activity	No	Off Site Receipt	No
Universal Waste Dest Facility	Yes	Used Oil Transporter	No
Used Oil Transfer Facility	No	Used Oil Processor	No

Identified Hazardous Materials Sites Radius F

Surrounding Sites Details

Used Oil Refiner	No	Used Oil Burner	No
Used Oil Market Burner	No	Used Oil Spec Marketer	No
Subpart K College	No	Subpart K Hospital	No
Subpart K Nonprofit	No	Subpart K Withdrawal	No
Large Quantity Handlers Of Universal Wastes	No	Recognized Trader Importer	No
Recognized Trader Exporter	No	Slab Importer	No
Slab Exporter	No	Public Notes	oracle.sql.CLOB@6d717772
Subpart P Healthcare	N	Subpart P Reverse Distributor	N
Location Latitude	37.408809	Location Longitude	-122.097446
Location Gis Primary	N	Location Gis Origin	AG
Contact Address	2371 THOMPSON CT, MOUNTAIN VIEW, CA 94043	Contact Name	ROHAN GROVER
Naics	ALL OTHER WASTE MANAGEMENT SERVICES	Violations	No Violations
Online Data Url	http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAC003019199&pgm_sys_acrnm_in=RCRAINFO		

Owner and Operator Info

Owner Operator Indicator	CO	Owner Operator Name	ROHAN GROVER
Owner Operator Type	O	Phone	408-371-4020 x
Address	2371 THOMPSON CT, MOUNTAIN VIEW, CA 94043		

Owner Operator Indicator	CP	Owner Operator Name	ROHAN GROVER
Owner Operator Type	O	Phone	408-371-4020 x
Address	2371 THOMPSON CT, MOUNTAIN VIEW, CA 94043		

Identified Hazardous Materials Sites Radius F

List of Unlocatable Sites

Address	Site Name(s)	Site Type(s)	Site ID(s)
HILLVIEW - ELEANOR, LOS ALTOS, CA	HILLVIEW - ELEANOR	SUPERFUND	NANFSEMS-0903431
SHORELINE REG PK STIERLIN RD, MOUNTAIN VIEW, CA	MOUNTAIN VIEW LDFL	SUPERFUND	NANFSEMS-0901759
Griffin Rd & Fremont Ave, LOS ALTOS, CA	Verizon Wireless Los Altos Downtown	HAZMAT	CACUPAHM-10144131
ADJ TO 97 HILLVIEW AVE, NRBY DRY CLEANER, LOS ALTOS, CA	HILLVIEW MAINTENANCE YARD	SUPERFUND	NANFSEMS-0903430

Identified Hazardous Materials Sites Radius F

Searched Databases

NPL: National Priority List Sites

Sites which are found on the NPL database or the Proposed NPL database. NPL sites are a special category among National Superfund (CERCLA) Sites listed in the Environmental Protection Agency's (EPA) CERCLIS database. NPL sites are of serious, high concern and priority based on a national comparison to sites needing investigations and contamination cleanup activities (remediation). These sites, some of the worst in the nation, normally contain high levels of various contaminants that have spread over relatively long distances and usually require long term, highly expensive remediation technologies. Proposed NPL sites are of serious concern and are in the process of being evaluated for categorization as National Priority List sites.Delisted NPL sites have been removed (delisted) from the NPL if no further response or action is appropriate at the site, per EPA guidelines.

- US EPA's Superfund Enterprise Management System Database

CORRACTS: Corrective Action Sites

CORRACTS (Corrective Action Sites) is a subset of data found within the Federal RCRA database (RCRIS) or other state database. RCRA Corrective Action is the process by which areas at a hazardous waste facility are evaluated and, if necessary, are cleaned up. Transportation, Storage and Disposal facilities are often also listed as CORRACTS facilities.

- California EPA Site Portal
- US EPA's Resource Conservation and Recovery Act Database

TSD: Treatment, Storage and Disposal Sites

TSDs are subsets of data found within the Federal RCRA database (RCRIS) or other state database. TSD sites treat, store and/or dispose of hazardous materials and are federally permitted. TSD facilities are often also listed as CORRACTS facilities.

- California EPA's CUPA facilities database
- California EPA Site Portal
- Fresno County CUPA Facilities List
- Marin County CUPA Facilities List
- Nevada County CUPA Facilities List
- San Francisdco Dept of Public Health HMUPA Facilities List
- US EPA's Resource Conservation and Recovery Act Database

DEFENSE: FUDS and DOD Sites

These sites are Formerly Used Defense Sites (FUDS) and Department of Defense (DOD sites). The U.S. Army Corps of Engineers and/or the U.S. Department of Defense is actively working or will be taking the necessary steps to address any cleanup activities needed on these properties.

- Army Corps of Engineers' Formerly Used Defense Interim Risk Management Sites Layer
- Army Corps of Engineers' Formerly Used Defense Projects Sites Sites Layer
- Army Corps of Engineers' Formerly Used Defense Properties Layer
- California Department of Toxic Substances Control's EnviroStor Cleanup Sites List
- California EPA Site Portal
- California State Water Resources Control Board's Geotracker Military Site Cleanup List
- Fresno County CUPA Facilities List

Identified Hazardous Materials Sites Radius F

Searched Databases

BROWN: Brownfields Cleanup and Reuse Database

The U.S. Environmental Protection Agency (EPA) defines a Brownfield site as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." Common examples of Brownfield sites are abandoned gas stations and dry cleaners, railroad properties, factories, and closed military bases. Brownfield sites are located throughout the country, and the U.S. EPA as well as state governments have compiled a listing of these sites. Voluntary Cleanup Program Sites are sometimes also included in this category.

- EPA's Assessment, Cleanup And Redevelopment Exchange System (ACRES) database

CSL: Contaminated Sites List

State or Local Contaminated Sites databases. These databases include local and state-designated hazardous waste sites, spill sites, superfund sites, voluntary cleanup program sites and land disposal sites. In general, these sites are currently undergoing remediation for on site contamination, remedation has been completed and/or remediation is proposed. In states where a specific Contaminated Sites database is not maintained, the CERCLIS database will contain applicable information on contaminated sites.

- California Department of Toxic Substances Control's EnviroStor Cleanup Sites List
- California Department of Toxic Substances Control's EnviroStor list
- California EPA Site Portal
- California State Water Resources Control Board's Geotracker Cleanup Program Sites
- California State Water Resources Control Board's Geotracker Landfill Cleanups List
- Fresno County CUPA Facilities List

DEED: List of Deed Restrictions

The implementation of recorded land use restrictions within property deeds is one of the methods agencies use to protect the public from unsafe exposures to hazardous substances and wastes. Sites with deed restrictions are often contaminated, however levels of contaminants and methods used to control migration of contaminants are controlled and approved by the agency. These are also called Environmental Covenants or Use Restrictions

- California Department of Toxic Substances Control's Deed Restrictions list
- California DTSC's HWMP Land Use Restrictions List

SEMS: Superfund Database

Sites which are found on the Superfund Enterprise Management System (SEMS) database. The SEMS database contains information on hazardous waste sites, site inspections, preliminary assessments, and remediation of hazardous waste sites under CERCLA (Superfund). The database contains general information on sites including location and status. This database includes those SEMS sites not included on the NPL or Proposed NPL databases. This includes archived sites determined to be "No Further Remedial Action Planned (NFRAP) sites are contained within this database. Archived sites may be properties where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require Federal Superfund action. The SEMS database is a newer version of the CERCLIS database and the current SEMS version does not export as much information as the CERCLIS database once did.

- US EPA's Superfund Enterprise Management System Database

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SEARCHED DATABASES

CONTROLS: INSTITUTIONAL AND ENGINEERING CONTROLS

U.S. EPA's and State Engineering Control Sites List and/or Institutional Control Sites List. The Engineering Control Sites list are facilities that have engineered controls in place, such as capping, containment, slurry walls, extraction wells and/or treatment methods that are intended to manage environmental and health risks by reducing contamination levels at a site, or limiting exposure pathways. The Institutional Control Sites list are administrative or legal devices, such as deed restrictions, to ensure that engineering controls stay in place and/or to ensure that land use restrictions stay in place.

- U.S. Environmental Protection Agency's Engineering Controls list

LUST: LEAKING UNDERGROUND STORAGE TANKS

Leaking Underground Storage Tank records contain an inventory of reported leaking underground fuel storage tank incidents. Thousands of underground storage tanks have leaked within the United States, and both open and closed cases are reported on this list. These leaks can affect subsurface soils and groundwater. Both state and local agencies oversee and track these sites.

- California EPA Site Portal
- California State Water Resources Control Board's Geotracker Leaking Underground Storage Tank list
- El Segundo City CUPA Remediation Tanks List
- EPA Region 4 Tribal Underground Storage Tank List
- Fresno County CUPA Facilities List
- U.S. EPA's Region 1 Leaking Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 10 Leaking Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 5 Leaking Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 6 Leaking Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 7 Leaking Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 8 Leaking Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 9 Leaking Underground Storage Tank list on Tribal lands

SWLF - SOLID WASTE LANDFILLES

The SWLF database contains information on solid waste facilities, operations, and disposal sites. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

- California EPA Site Portal
- California Integrated Waste Management Board's Landfill list
- Fresno County CUPA Facilities List
- Los Angeles County Methane Producing Landfills List
- Los Angeles County Public Health's Landfill list

WELLS: WATER WELLS

Public Water Wells. Due to security reasons, limited information on public wells is available.

- Municipal Water Wells

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SEARCHED DATABASES

HAZMAT: HAZARDOUS MATERIALS STORAGE AND INCIDENT RECORDS

This data includes information on hazardous materials storage, use and disposal sites as well as incident reports, hazardous materials inventory and business plan documents, spills and releases.

-
- Alameda County Environmental Health CUPA List
- CA DTSC Envirostor Hazardous Waste List
- Calaveras County CUPA Facilities List
- California Department of Toxic Substances Control's EnviroStor Cleanup Sites List
- California EPA's CUPA facilities database
- California EPA Site Portal
- California State Water Resources Control Board's Waste Discharge System list
- California State Water Resources Control Board's Waste Water Discharger list
- Contra Costa County's Site List
- Drug Enforcement Administration's Clandestine Drug Labs List
- Fresno County CUPA Facilities List
- Kern County CUPA Business Plan and HazMat Facilities List
- Los Angeles City CUPA Hazardous Materials Inventory List
- Marin County CUPA Facilities List
- Napa County's Local Oversight Program Hazardous Material Site list
- Napa County Hazardous Materials Inventory Database
- Nevada County CUPA Facilities List
- Roseville City CUPA Facilities List
- San Francisco Department of Public Health's Hazardous Material Site list
- San Mateo County Environmental Health's Business Inventory list
- U.S. Environmental Protection Agency's ECHO Database
- U.S. Environmental Protection Agency's Toxics Release Inventory Database 1987-2015
- U.S. Environmental Protection Agency's Toxics Release Inventory Database 2016 On
- Union City CUPA Historical Facilities List

Identified Hazardous Materials Sites Radius F

Searched Databases

ERNS: Emergency Response Notification System

Sites listed as having a reported release of oil and hazardous substances that have been called into the Federal and/or state agencies. Minor to major spills are reported and these cases are sometimes turned over to other regulatory agencies for further investigation.

- California EPA Site Portal
- California Office of Emergency Services RIMS Database
- National Response Center's Emergency Response Notification System list
- National Response Center's Emergency Response Notification System list 1989 and Prior
- Office of Hazardous Materials' Hazardous Materials Incident Database, 1993-2004
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2005-2006
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2007-2008
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2009
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2010
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2011
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2012
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2013
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2014
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2015
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2016
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2017
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2019
- Office of Hazardous Materials' Hazardous Materials Incident Database, 2020
- Office of Hazardous Materials Hazardous Materials Incident Database, 2018

GENERATOR: Small and Large Hazardous Materials Generators

GENERATORS is a subset of data found within the Federal RCRA database (RCRIS) or other state GENERATORS list. RCRA GENERATORS are federally permitted generators of varying amounts of hazardous materials. A listing on the GENERATOR database does not directly indicate a release has occurred, only that the site generates hazardous materials.

- Calaveras County CUPA Facilities List
- California EPA's CUPA facilities database
- California EPA Site Portal
- Contra Costa County Health Services Facilities Database
- Federal EPA's eManifest database
- Fresno County CUPA Facilities List
- Marin County CUPA Facilities List
- Nevada County CUPA Facilities List
- San Francisdco Dept of Public Health HMUPA Facilities List
- US EPA's Resource Conservation and Recovery Act Database

Identified Hazardous Materials Sites Radius F

Searched Databases

UST: Underground Storage Tank Sites

The databases include permitted active, inactive and closed UST facilities recorded with the below mentioned agencies. A listing on the UST databases does not directly indicate a release has occurred, only that the site currently or historically contained an underground storage tank.

- Abandoned Underground Storage Tank Intitiative
- Calaveras County CUPA Facilities List
- California EPA's CUPA facilities database
- California EPA Site Portal
- California State Water Resources Control Board's Underground Storage Tank List, Historical
- Contra Costa County Health Services Facilities Database
- EPA Region 4 Tribal Underground Storage Tank List
- Fresno County CUPA Facilities List
- Geotracker Distribution of CERS USTs
- Kern County Archived UST List
- Kern County Historical UST List
- Los Angeles City CUPA UST List
- Los Angeles City Historical UST List
- Marin County's Underground Storage Tank list
- Marin County CUPA Facilities List
- Napa County's Local Oversight Program Underground Storage Tank list
- Nevada County CUPA Facilities List
- Plumas County CUPA Closed UST Facilities List
- Riverside County CUPA Inactive UST Facilities List
- Roseville City CUPA Tanks List
- San Francisdco Dept of Public Health HMUPA Facilities List
- Santa Cruz County Environmental Health Services' Site Mitigation list
- U.S. EPA's Region 1 Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 10 Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 2 Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 5 Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 6 Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 7 Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 8 Underground Storage Tank list on Tribal lands
- U.S. EPA's Region 9 Underground Storage Tank list on Tribal lands

AST: Aboveground Storage Tank Facilities

Permitted active, inactive and closed AST facilities recorded with the state or local agencies are included. A listing on the AST database does not directly indicate a release has occurred, only that the site currently or historically contained an aboveground storage tank.

- California EPA's CUPA facilities database
- California EPA Site Portal
- Contra Costa County Health Services Facilities Database
- Fresno County CUPA Facilities List
- Los Angeles City CUPA AST List
- Marin County CUPA Facilities List
- Nevada County CUPA Facilities List
- Roseville City CUPA Facilities List

IDENTIFIED HAZARDOUS MATERIALS SITES RADIUS F

SEARCHED DATABASES

EMISSIONS: AIR EMISSIONS AND DRY CLEANER SITES

Sites found on various air emissions databases like dry cleaners and related facilities that have air emissions permits with the state and/or local air quality district.

- Amador Air Quality Management District Dry Cleaner List
- Antelope Valley Air Quality Management District Dry Cleaner List
- Bay Area Air Quality Management District Dry Cleaner List
- Butte County Air Quality Management District Dry Cleaner List
- Calaveras County AQMD Drycleaners inventory
- Eastern Kern Air Quality Management District Dry Cleaner List
- El Dorado Air Quality Management District Dry Cleaner List
- Feather River Air Quality Management District Dry Cleaner List
- Fed EPA Integrated Compliance Information System`Drycleaner Extract
- Glenn Air Quality Management District Dry Cleaner List
- Great Basin Air Pollution Control District Drycleaner Permits List
- Imperial Air Quality Management District Dry Cleaner List
- Lake County AQMD Drycleaners inventory
- Mendocino County AQMD Drycleaners inventory
- Mojave Desert Air Quality Management District Dry Cleaner List
- Monterey Air Quality Management District Dry Cleaner List
- North Coast Air Quality Management District Dry Cleaner List
- North Sonoma Air Pollution Control District Drycleaner Permits List
- Northern Sierra Air Quality Management District Dry Cleaner List
- Placer Air Quality Management District Dry Cleaner List
- Sacramento Air Quality Management District Dry Cleaner List
- San Diego Air Quality Management District Dry Cleaner List
- San Diego Air Quality Management District Retired Dry Cleaner List
- San Luis Obispo Air Quality Management District Dry Cleaner List
- Santa Barbara Air Quality Management District Dry Cleaner List
- South Coast AQMD Drycleaners inventory
- Stasta County AQMD Drycleaners inventory
- Tehama County AQMD Drycleaners inventory
- Tuolumne Air Quality Management District Dry Cleaner List
- Ventura Air Quality Management District Dry Cleaner List
- Yolo-Solano Air Quality Management District Dry Cleaner List

HAZNET: HAZARDOUS WASTE INFORMATION SYSTEM

HAZNET databases track hazardous materials from "cradle to grave". Some of the sites listed are licensed transportation companies but most are facilities that have had hazardous materials transported off the site or have received hazardous materials

- California Department of Toxic Substance Controls's Hazardous Waste Transportation System 1993-2012 Tanner List. Includes Nationally relevant data!
- California Department of Toxic Substances Control's Hazardous Waste Transporters list
- California DTSC's Hazardous Waste Tracking System's Facilities List
- New Jersey Dept of Environmental Protection's Manifest Database

APPENDIX D
HISTORICAL RESEARCH DOCUMENTATION

EAH - 330 Distel Cir

330 Distel Circle

Los Altos, CA 94022

Inquiry Number: 6522279.1

June 03, 2021

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

06/03/21

Site Name:

EAH - 330 Distel Cir
330 Distel Circle
Los Altos, CA 94022
EDR Inquiry # 6522279.1

Client Name:

Piers Environmental Services
1038 Redwood Highway
Mill Valley, CA 94941
Contact: Donal Manning

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Piers Environmental Services were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 43D0-4320-9C64

PO # 21215

Project EAH - 330 Distel Cir

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 43D0-4320-9C64

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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EAH - 330 Distel Cir
330 Distel Circle
Los Altos, CA 94022

Inquiry Number: 6522279.3
June 10, 2021

The EDR-City Directory Image Report

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Executive Summary

Findings

City Directory Images

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by infoUSA®

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1986	☑	☐	Haines Criss-Cross Directory
1980	☑	☐	Haines Criss-Cross Directory
1975	☐	☐	Haines Criss-Cross Directory
1971	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

330 Distel Circle
Los Altos, CA 94022

Year	CD Image	Source	
DISTEL CIR			
2017	pg A1	EDR Digital Archive	
2014	pg A2	EDR Digital Archive	
2010	pg A3	EDR Digital Archive	
2005	pg A4	EDR Digital Archive	
2000	pg A5	EDR Digital Archive	
1995	pg A6	EDR Digital Archive	
1992	pg A7	EDR Digital Archive	
1986	pg A8	Haines Criss-Cross Directory	
1980	pg A9	Haines Criss-Cross Directory	
1975	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

DISTEL CIR 2017

330 THORNEWOOD
333 KO, OLIVER
OLIVER L KO CPA
370 PALO ALTO MEDICAL FOUNDATION

DISTEL CIR 2014

330	THORNEWOOD
333	GLOWLINK COMMUNICATIONS TECH
370	BROWN LLOYD MD PALO ALTO MEDICAL FOU
	FLOYD JOYCELLEN MD PALO ALTO MEDICAL
	HUA NANCY MD PALO ALTO MEDICAL FOUND
	LASTUFKA FRANCIS MD PALO ALTO MEDICA
	MCGANN K PATTI MD PALO ALTO MEDICAL
	PALO ALTO MEDICAL FOUNDATION
	STRAW WILLIAM E MD PALO ALTO MEDICAL
	SUKHDEO SASTRI MD PALO ALTO MEDICAL
	SUTCLIFFE TRENNA MD PALO ALTO MEDICA
	WEIRICH ERICA MD PALO ALTO MEDICAL F
	WOO KIRSTIN MD PALO ALTO MEDICAL FOU

DISTEL CIR 2010

333 GLOWLINK COMMUNICATIONS TECH
KO, OLIVER
Q SECURE
370 PALO ALTO MEDICAL FOUNDATION

DISTEL CIR 2005

325	RADIAL LABS INC
330	KAIDARA INC
	KAIDARA SOFTWARE INC
	MIDPENINSULA REGIONAL OPEN SP
333	APPOTECH USA INC
	GLOWLINK COMMUNICATIONS TCH
	PHALANXBIO INC
	TUVOX INC
370	AMBERT CONSTRUCTION
	OLIVER LAIMING CO
	PACIFIC RIM SOURCING CORP
	PALO ALTO MEDICAL FOUNDATION
	PAMF CENTER

DISTEL CIR 2000

330	ALZHEIMERS ASSOCIATION
	MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
	OPEN SPACE DISTRICT MIDPENINSULA REGIONAL OPEN SPACE DISTRI
333	TALARIAN CORPORATION
370	ALTOS ENGINEERING APPLICATIONS INCORPORATED
	AMBERT CONSTRUCTION
	BLCK WILLIAM J MD PALO ALTO MEDICAL CLINIC FOUNDATION
	COSTALES FRED MD PALO ALTO MEDICAL FOUNDATION
	GAVIN THERESA MD PALO ALTO MEDICAL FOUNDATION
	HOOPER DAVID E MD PALO ALTO MEDICAL FOUNDATION
	KO OLIVER L CPA
	LIU ARTHUR C K MD PALO ALTO MEDICAL CLINIC LOS
	LOUIS ALLEN ASSOCIATES INCORPORATED
	M V DEVELOPMENT
	MARTINO JULIA MD PALO ALTO MEDICAL FOUNDATION
	MCGANN K PATTI MD PALO ALTO MEDICAL FOUNDATION
	MIL KERED INCORPORATED
	PACIFIC RIM SOURCING CORPORATION
	PALO ALTO MEDICAL FOUNDATION
	SEPETKA MARIA S MD PALO ALTO MEDICAL FOUNDATION
	STRAW WILLIAM E MD PALO ALTO MEDICAL FOUNDATION
	TRANS CONTINENTAL REAL ESTATE
	TRUJILLO LAUREL MD PALO ALTO MEDICAL FOUNDATION
	WONG JEFFREY H ATTORNEY LAW

DISTEL CIR 1995

330 INTERNATIONAL TECHNOLOGY GROUP
370 ALTOS ENGINEERING APPLICATIONS
BAYMARK BUSINESS PRODUCTS
DEWITT, E
LIR CORP
LOUIS ALLEN ASSOC INC
LOVE, ROBERT T
375 ASK COMPUTER SALES & SUPPORT

DISTEL CIR 1992

330 DESKTOP PRESENTATNS
INTL TECHNOLOGY GRP
370 ALTOS ENGRG APPLCTN
BAYMARK BSNS PRDCTS
L I R CORPORATION
375 ASK COMPUTER SYSTEM

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

DISTEL CIR 1986

DISTEL CIR 94022
LOS ALTOS

330	*BUCKINGHAM JEFFREY	961-2100	
	*CARMICHAEL A C JR	961-2100	
	*ELVERT CHARLES H JR	961-2100	7
	*FLAMER&COMPANY	961-2100	
	*GARCIA LEE A	961-2100	4
	*LENIHAN JAMES J	961-2100	
	*LEWIS JEFF	961-2100	
	*PERSONAL CMPTR INS	968-1615	5
	*PLAN&REVIEW ASSOCS	969-5900	9
	*RUTH ROGER	961-2100	4
	*SHEERER GARY P	961-2100	
375	*A S K COMPUTER SYST	969-4442	
	*ASK COMPUTER SYSTMS	969-4442	4
	*BUNDSEN&WALLACE	968-4475	3
395	XXXX	00	
	* 14 BUS 1 RES	0 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

DISTEL CIR 1980

DISTEL CIR 94022 LOS ALTOS

330	ARCHER THOMAS	961-2100	+0
	BUCKINGHAM J H	961-2100	+0
	CARMICHAEL A C JR	961-2100	6
	ELVERT CHARLES H JR	961-2100	7
	FLAMER A E	961-2100	6
	FLAMER COMPANY	961-2100	6
	HOME LIFE INS CO	969-5900	6
	LENIHAN INS INC	961-2100	+0
	LENIHAN JAMES J	961-2100	7
	PLAN&REVIEW ASSOC	969-5900	9
	SHEERER GARY P	961-2100	6
375.....	BUILDING		
	CARDILLO TRAVEL	964-6012	+0
3D	COLEHOWER ASSOC AGC	968-3060	9
8D	HERITAGE CMDTY CNSL	964-6633	8
6D	HOLMES PROPERTIES	964-8100	9
	INNOVATIVE REHABILI	965-8102	+0
	JUDD L S FARM INS	964-1165	9
	MCGHEE THOMAS L	969-7766	8
1D	MIDPENINSULA REGION	965-4717	9
1D	MIDPENSLA PARK DIST	965-4717	8
6B	NASH SHARON	964-6755	9
	NEO LIFE DISTRIBUTR	969-1033	+0
	ORAM JOSEPH L	969-7768	8
	ORAM MC GHEE INS	969-7765	+0
	ROSS KERSKE	965-3096	+0
	SEMPLICE STANLEY	969-6262	+0
	ST CALIF REHABILTN	969-3133	9
	STANFORD MICROSYSTM	965-4800	8
	STANLEY HOME PRDCTS	969-6262	8
3A	STATE FARM INS	964-1165	9
3D	STEWART JOHN	969-9331	9
	VARIAN ASSOCIATES	968-7630	8
	VARIAN ASSOCIATES	968-8141	8
	WATSON CHIROPRACTIC	969-1032	9
	WATSON CHRIS DC	969-1032	
A	MUTUAL OF OMAHA	964-8190	6
A	STANLEY HOME PRDCTS	961-6100	8
A	UNITED OF OMAHA	964-8190	6
375.....			
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Fidelity National Title PASSPORT

PROPERTY DETAIL REPORT

Subject Property Location

Report Date: 05/26/2021
Order ID: R42494740

Property Address	330 DISTEL CIR		
City, State & Zip	LOS ALTOS, CA 94022-1404		
County	SANTA CLARA COUNTY	Property Use	Office Bldg (General)
Mailing Address	330 DISTEL CIR, LOS ALTOS, CA 94022-1404	Parcel Number	170-04-051
Map Reference			
Thomas Bros Pg-Grid		Census Tract	5104.00

Legal Description

Lot Number		City / Municipality / Township	LOS ALTOS
Land Lot		Phase No.	
Block		Tract No.	5060
Section		Sec / Twn / Rng / Mer	
District		Recorder's Map Ref	
Abbrev. Description	PLAZA WEST LOT 2		

Current Ownership Information

Owner Name(s)	MIDPENINSULA REGIONAL OPEN SPACE DIST	Sale Price	
		Sale Date	
		Recording Date	
Vesting		Recorder Doc #	
		Book/Page	

Latest Full Sale Information

Details beyond coverage limitations

Financing Details at Time of Purchase

No financing details available

Loan Officer Insights

No details available

Lien History

Trans. ID	Recording Date	Lender	Amount	Purchase Money
No details available				

Property Characteristics

	Bedrooms		Year Built	1975	Living Area (SF)	12,120
	Bathrooms/Partial		Garage/No. of Cars		Price ($/SF)	
	Total Rooms		Stories/Floors	1 Story	Lot Size (SF/AC)	36,450/.84
	Construction Type		No. of Units	2	Fireplace	
	Exterior Walls		No. of Buildings		Pool	
	Roof Material/Type		Basement Type/Area		Heat Type	
	Foundation Type		Style		A/C	N
	Property Type	Office	View		Elevator	
	Land Use	Office Bldg (General)			Zoning	CT

Assessment & Taxes

	Assessment Year	2020	Tax Year		Tax Exemption	
	Total Taxable Value		Tax Amount	$	Tax Rate Area	11-001
	Land Value		Tax Account ID			
	Improvement Value		Tax Status			
	Improvement Ratio		Delinquent Tax Year			
	Total Value			Market Improvement Value		

Market Land Value		Market Value Year	

Fidelity National Title PASSPORT

ASSESSOR MAP REPORT

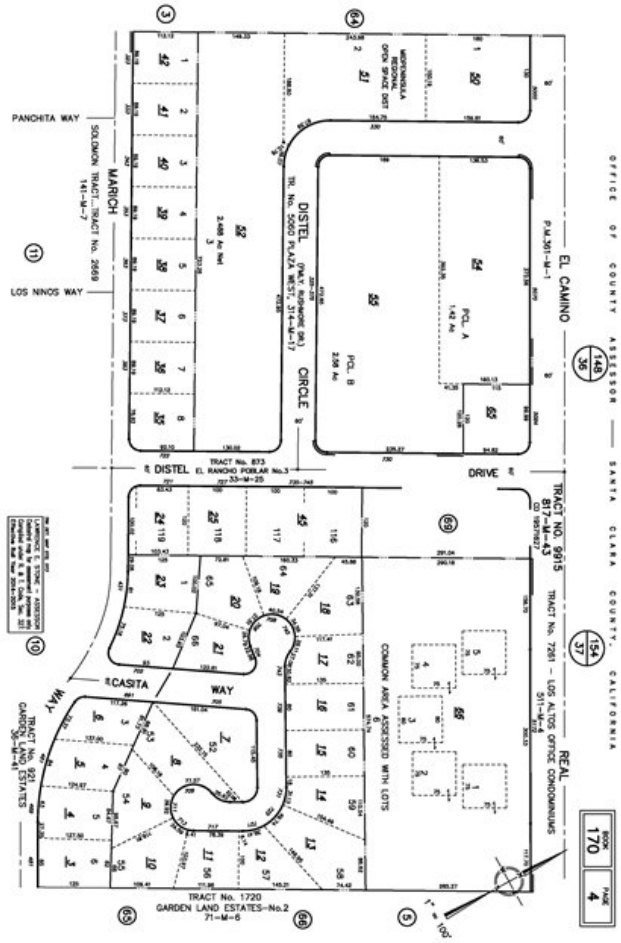
Subject Property Location

Report Date: 05/26/2021
Order ID: R42494741

Property Address	330 DISTEL CIR	Property Use	Office Bldg (General)
City, State & Zip	LOS ALTOS, CA 94022-1404	Parcel Number	170-04-051
County	SANTA CLARA COUNTY		
Mailing Address	330 DISTEL CIR, LOS ALTOS, CA 94022-1404		
Map Reference			

Click here to get the map in PDF

Click here to get the map in TIFF



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Phase I Environmental Site Assessment Report

Distel Circle Property
330 Distel Circle
Los Altos, California

County of Santa Clara, Facilities & Fleet Department

2310 North First Street, Suite 200 | Santa Clara, California 95131

November 24, 2020 | Project No. 402649015

Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Phase I Environmental Site Assessment Report

Distel Circle Property
330 Distel Circle
Los Altos, California

Ms. Diane New
County of Santa Clara, Facilities & Fleet Department
2310 North First Street, Suite 200 | Santa Clara, California 95131

November 24, 2020 | Project No. 402649015

Luke I. Swickard
Staff Environmental Scientist

Kris Larson
Principal Geologist

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B: SITE PHOTOGRAPHS
C: ENVIRONMENTAL DATA RESOURCES (EDR) RADIUS MAP REPORT
D: SITE DOCUMENTATION AND REGULATORY RECORDS
E: HISTORICAL RESEARCH DOCUMENTATION
F: VAPOR ENCROACHMENT SCREENING MATRIX

EXECUTIVE SUMMARY

Ninyo & Moore was retained by County of Santa Clara, Facilities & Fleet Department to perform a Phase I Environmental Site Assessment (ESA) on the Distel Circle Property located at 330 Distel Circle in Los Altos, California (site). The site is also identified as Santa Clara County Assessor's Parcel Number 170-04-51.

The objective of this ESA is to identify, to the extent feasible pursuant to the process described in ASTM E1527-13, recognized environmental conditions (RECs), which are defined by ASTM as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The results of this ESA are summarized below:

- Historical research revealed that the site was developed in the early 1900s with an orchard on the central and southern portions of the site. By the late 1940s, the orchard had been removed and the site was vacant. The site remained vacant until 1974 when a single-story commercial office building was constructed on the site. The commercial building is consistent with the current site building. No significant changes have occurred on the site since then.
- On November 13, 2020, Luke Swickard of Ninyo & Moore conducted a site reconnaissance of the property. The reconnaissance involved a visual inspection of the site, and observations of adjoining properties. At the time of the reconnaissance, the approximate 0.87-acre site was developed with a single-story office building that was occupied by the Midpeninsula Regional Open Space District (Midpeninsula). The office building included typical office space, a copy room, a board room, conference rooms, bathrooms, an electrical room, a staff kitchen, a computer/network room, a hot-water boiler room, and a lobby. The exterior of the building included an outdoor seating area to the west, bike storage lockers to the north, and a storage shed to the south.
- Interior construction materials included carpeting, ceramic floor tiles, painted and textured plaster walls, and plaster ceilings. Interior finishes appeared to be in good condition.
- The exterior of the building consisted of an asphalt parking area on the east side of the building.
- The areas surrounding the site consist primarily of retail/commercial buildings to the east, west and north, and residential development to the south.
- Based on our site visit, there are currently no wells on the site.
- Ninyo & Moore observed quantities of hazardous substances or petroleum products during the site reconnaissance including several one-gallon cans of paint, stain and primer. Evidence of leaks or spills was not observed around these containers.
- Indications of aboveground storage tanks (ASTs), underground storage tanks (USTs), or hazardous material spills or leaks, were not observed during the site reconnaissance.

- Review of an environmental database report obtained for this project indicated that the site is listed on several of the regulatory databases researched by Environmental Data Resources Inc. (EDR), including the HAZNET, HWTS, CIWQS, and FINDS databases under Midpeninsula; HAZNET and HWTS under The Army Corp of Engineers and the Almaden Air Force Station; FINDS and CIWQS for two ponds; and PEST LIC for a license to apply pesticides. The site was listed on the CIWQS database for having a permit for storm water construction in 2010, a 401 certification, and historical water status from 2012 to 2017. The site was listed on the HAZNET database from 2006 to 2011 for storing hazardous materials on-site and disposing of hazardous materials off-site. No violations were noted. Given the reported off-site disposal of wastes via hazardous waste manifest, it is unlikely to have an adverse impact on the site. HAZNET entries document the transportation of hazardous materials but are not necessarily indicative of a release and are therefore not likely to have impacted the environmental conditions at the site. The site was listed on the HWTS database for having tracked hazardous waste on-site from 1992 to 2000, 2006 to 2009, 2011, and 2013. No violations were noted. The site was also listed on the Facility Index System (FINDS) database. The FINDS is a central and common inventory of facilities monitored or regulated by EPA, with cross-references to the program office databases that have additional programmatic information about the facility. FINDS entries are not necessarily indicative of a release and are therefore not likely to have impacted the environmental conditions at the site. Allen Ishibashi, the site manager, assured Ninyo & Moore that these database listings were not associated with the site. Mr. Ishibashi stated that the site has been occupied by an office building since 1975 and occupied by Midpeninsula since 1990, therefore these database listings are either incorrectly listed in the EDR Radius report, or are associated with projects that are not on the site, but may have been managed via administrative functions or remediation activities by Midpeninsula, such as the Almaden Air force base purchased by Midpeninsula in 1986. Therefore, these database listings are not considered RECs.
- Several off-site facilities were located within the EDR search radius from the site. None of the listed facilities are considered to be a REC to the site at this time based on several factors, including distance from the site, location relative to the regional groundwater flow direction (e.g. hydraulically downgradient or crossgradient to the site), database listing type, and/or affected media (soil only). Refer to Section 5.1.2 for additional information regarding potential off site facilities of concern.
- Based on the completion of the Vapor Encroachment Condition (VEC) screening matrix, it is presumed unlikely that a VEC currently exists beneath the site.

CONCLUSIONS

Ninyo & Moore has performed this ESA in conformance with the scope and limitations of ASTM E1527-13 of the Distel Circle Property located at 330 Distel Circle in Los Altos, California. Based on the information compiled during the preparation of this report, this assessment has revealed no evidence of RECs in connection with the site at this time.

RECOMMENDATIONS

Based on the findings of this ESA, no further investigation is recommended at this time.

1. INTRODUCTION

Ninyo & Moore has performed this ESA in conformance with the scope and limitations of ASTM E1527-13 of the Distel Circle Property located at 330 Distel Circle in Los Altos, California (site). This ESA was conducted for County of Santa Clara, Facilities & Fleet Department. The following sections identify the purpose, the involved parties, the scope of services, and the limitations and exceptions associated with this ESA.

1.1. Purpose

In accordance with ASTM E1527-13, the objective of the ESA is to identify recognized environmental conditions. The term recognized environmental conditions (RECs) means "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions."

Identification of RECs will fall into three categories: existing REC (as defined above), Historical REC (HREC), or Controlled REC (CREC).

- HREC - An HREC is defined as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations (AULs), institutional controls, or engineering controls)."
- CREC - A CREC is defined as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products

allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, AULs, institutional controls, or engineering controls)."

1.2. Involved Parties

Mr. Randy Wheeler, Senior Geologist with Ninyo & Moore, was the Environmental Professional assigned to this project. Mr. Luke Swickard, Staff Environmental Scientist with Ninyo & Moore, conducted the site visit and performed agency records review. Mr. Kris Larson, Principal Geologist with Ninyo & Moore, performed project oversight and quality review. Resumes of these individuals are included in Appendix A.

1.3. Scope of Services

Ninyo & Moore's scope of services for this ESA included the following:

- Perform a site reconnaissance to visually and/or physically observe the interior and exterior of structures and other features on the site as well as visible exterior features of adjoining properties to identify areas of possibly contaminated surface soil or surface water, improperly stored hazardous materials, and possible risks of contamination from activities at the site and adjoining properties. Photographs of relevant site features are provided in Appendix B.
- Review of reasonably ascertainable standard environmental record sources including federal, state, and tribal regulatory agency databases for the site and for properties located within a specified radius of the site (Appendix C). The purpose of this review was to evaluate possible environmental impacts to the site and site vicinity activities. These databases list locations of known hazardous waste sites, leaking underground storage tanks (LUSTs), permitted facilities that utilize USTs, and facilities that use, store, or dispose of hazardous substances, hazardous wastes, and/or petroleum products.
- Review reasonably ascertainable additional environmental record sources, including local records and/or additional state or tribal records for the site and for properties located within a specified radius of the site. The purpose of the review was to evaluate possible environmental impacts to the site and site vicinity activities.
- Provide supporting documentation, when available (Appendix D).
- Review reasonably ascertainable standard physical setting sources including a current United States Geological Survey (USGS) 7.5-minute topographic map, and possibly including USGS and/or state groundwater and geologic maps, and soil maps. The purpose of this review was to note information about the geologic, hydrologic, and/or topographic characteristics of the site and site vicinity.
- Review reasonably ascertainable historical documents that may include aerial photographs, historical fire insurance maps, and/or city directories. The purpose of this review was to review obvious uses of the site from the present, back to the site's first developed use, or back to 1940, whichever is earlier (Appendix E).

- Perform interviews with present owners, operators, and occupants of the site as well as other knowledgeable parties as appropriate/available. The purpose of these interviews was to obtain information regarding potential RECs in connection with the site.
- Perform a preliminary vapor encroachment screening assessment on the site and adjoining properties (Appendix F).
- Prepare this ESA report documenting the methodology, reporting findings, significant data gaps, and conclusions, and providing opinions of the impact on the site of conditions noted in the findings section regarding RECs at the site.

1.4. Limitations and Exceptions

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document. The findings, opinions, and conclusions are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control. Ninyo & Moore cannot warrant or guarantee that not finding indicators of any particular hazardous material means that this particular hazardous material or any other hazardous materials do not exist on the site. Additional research, including invasive testing, can reduce the uncertainty, but no techniques now commonly employed can eliminate the uncertainty altogether.

1.5. Special Terms and Conditions

Ninyo & Moore was not made aware of any special terms and conditions associated with the site.

1.6. User Reliance

This report may be relied upon by, and is intended exclusively for, County of Santa Clara, Facilities & Fleet Department. Any use or reuse of the findings, opinions, and/or conclusions of this report by parties other than the client is undertaken at said parties' sole risk.

1.7. Physical Limitations

Physical limitations were not encountered during the site reconnaissance.

1.8. Data Gaps

A data gap is a "lack of or inability to obtain data required by this practice despite good faith efforts to gather such data." In completing this ESA, Ninyo & Moore encountered no significant data gaps that affect the ability of the environmental professional to identify RECs on the site.

2. SUBJECT SITE

The following sections provide a general description of the site and adjacent properties. Photographs taken during the site reconnaissance are provided in Appendix B.

2.1. Site Description

At the time of the site reconnaissance, the site was developed with a single-story office building occupied by the Midpeninsula Regional Open Space District (Midpeninsula). The site is located at 330 Distel Circle in Los Altos, California. The site is situated on one parcel totaling approximately 0.87 acres of land designated by Santa Clara County Assessor's Parcel Number 170-04-51. The Site Location is presented on Figure 1 and the Site Vicinity with additional information concerning the site and surrounding properties is presented on Figure 2.

2.2. Site Reconnaissance

On November 13, 2020, Mr. Luke Swickard, staff environmental scientist with Ninyo & Moore, conducted a site reconnaissance of the property. The reconnaissance involved a visual inspection of the site, and observations of adjoining properties. Mr. Allen Ishibashi, the site manager, escorted Mr. Swickard around the property during the site reconnaissance.

2.2.1. Site Improvements

At the time of the site reconnaissance, the site was improved with a single-story office building .The office building included typical office space, a copy room, a board room, conference rooms, bathrooms, an electrical room, a staff kitchen, a computer/network room, a hot-water boiler room, and a lobby. The exterior of the building included an outdoor seating area to the west, bike storage lockers to the north, a storage shed to the south, and a parking lot to the east. The following summarizes key on-site observations for indications of the following potential environmental concerns:

On-Site Observations		
Conditions	**Observed**	**Comments**
Hazardous Substances/Petroleum Products	Yes	Several one-gallon cans of paint and stain were located in a storage chest on the western portion of the site. No spills or leaks were observed.
Waste Generation/Storage/Disposal	Yes	A trash dumpster was located on the southern portion of the site.
Unidentified Substance Containers	No	
Storage Tanks (ASTs and/or USTs)	No	
Potential PCB-Containing Equipment	No	
Chemical/Petroleum Odors	No	

Conditions	Observed	Comments
Concrete Patches/Pads	No	
Pools of Liquid	No	
Sewage Discharge Pipes	No	
Floor Drains/Sumps	No	
Elevator	No	
Wells	No	
Drums	No	
Indications of Staining	No	
Stressed Vegetation	No	
Pits, Ponds, or Lagoons	No	
Waste Water Discharges/Disposal Systems	No	
Storm Water Systems	Yes	Strom drain inlets were noted in the parking lot on-site.
Septic Systems/Cesspools	No	
Municipal Solid Waste Disposal Areas	No	
Other Environmental Concerns or Conditions	No	

2.2.2. Roads

As shown on Figure 2, the site is accessible from Distel Circle to the east.

2.2.3. Site Occupants

At the time of the site reconnaissance, the building was occupied by the Midpeninsula Regional Open Space District.

2.2.4. Source of Potable Water

The City of Los Altos provides potable water to the site and vicinity.

2.2.5. Sewage Disposal System

The City of Los Altos provides municipal sewer service to the site and surrounding areas.

2.2.6. Source of Fuel for Heating and Cooling

The fuel source for the on-site heating and cooling systems was provided by PG&E.

2.3. Adjoining Properties

The following table lists the properties adjoining the site and associated land use. Based on the nature of the adjoining properties, information available in agency databases, and observations made during our site reconnaissance, it is not likely that these properties have impacted the environmental integrity of the site at this time.

Adjoining Properties	
Location	**Description**
North	5000 El Camino Real: Carl's Jr. fast food restaurant
South	370 Distel Circle: A parking lot for the Sutter Los Altos Center Lab
East	325 Distel Circle: A vacant office building across Distel Circle
West	4966 El Camino Real: including Rose Carson Kaplan Choi & White LLP, Optimal Asset Management Inc, and June Shao Withers MD. 4984 El Camino Real: PSDL Ventures LLC, HeartVista Inc, Robert W Johnson & Associates, and SutiSoft.

3. USER PROVIDED INFORMATION

The following sections summarize information provided by the user to assist the environmental professional in identifying the possibility of RECs in connection with the site and to fulfill the user's responsibilities in accordance with Section 6 of ASTM E1527-13. The User Questionnaire was completed by Mr. Ishibashi. A copy of the User Questionnaire is included in Appendix D.

3.1. Title Records

A Preliminary Title Report was not provided to Ninyo & Moore.

3.2. Environmental Liens or AULs

Ninyo & Moore was not informed of the existence of environmental liens or AULs associated with the site.

3.3. Specialized Knowledge

Ninyo & Moore was not informed of the existence of specialized knowledge regarding the site.

3.4. Commonly Known or Reasonably Ascertainable Information

Ninyo & Moore was not informed of the existence of commonly known or reasonably ascertainable information pertaining to the site that is material to the identification of RECs in connection with the site.

3.5. Valuation Reduction for Environmental Issues

Information pertaining to valuation reduction was not communicated to Ninyo & Moore for the purpose of this assessment.

3.6. Owner, Property Manager, and Occupant Information

The site is currently owned by the Midpeninsula Regional Open Space District.

3.7. Reason for Performing Phase I

This ESA has been completed for the exclusive use of County of Santa Clara, Facilities & Fleet Department as part of their due diligence of the property.

4. PHYSICAL SETTING

The following sections include discussions of topographic, geologic, and hydrologic conditions.

4.1. Topographic Conditions

Based on a review of the United States Geological Survey (USGS) 7.5-Minute Topographic Quadrangle Map Series of the Mountain View, CA 2012 Quadrangle, the site is situated at an elevation of approximately 86 feet above mean sea level. The topography of the site generally slopes towards the north-northeast.

4.2. Geology and Soil Conditions

The site is located in the Coast Range geomorphic province of California. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault. The San Andreas is more than 600 miles long, extending from Pt. Arena to the Gulf of California. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands (CGS, 2002).

The 1977 California Division of Mines and Geology, *Geologic Map of California*: (Jennings C.W.) shows the site to be underlain by Quaternary Older Alluvium Deposits (Qoa).

Based on our review of the EDR Radius Map report, the primary soil type beneath the site is mapped as Botella clay loam (EDR, 2020).

4.3. Site Hydrology

The following sections discuss the site hydrology in terms of surface water and groundwater.

4.3.1. Surface Waters

Surface waters, including ponds, streams, creeks, lagoons and other naturally-occurring bodies of water, were not observed on the site at the time of our reconnaissance.

4.3.2. Groundwater

Groundwater information for the site was not available. Ninyo & Moore reviewed the State Water Resources Control Board's GeoTracker website (GeoTracker) for groundwater information in the site vicinity. According to GeoTracker, groundwater information reported in a Third Quarter 2014 groundwater monitoring report for the Shell-branded service station located at 110 North Rengstorff Avenue (approximately 2,500 feet northwest of the site), the groundwater flow direction in the site vicinity was reported to be towards the northeast and the depth to groundwater was reported to be approximately 10 to 12 feet below ground surface. Groundwater depths and flow directions can vary due to seasonal variations, groundwater withdrawal or injection, and other factors.

5. RECORDS REVIEW

The following sections summarize records reviewed for the site.

5.1. Environmental Record Sources

Environmental Data Resources, Inc. (EDR) performed a computerized environmental information database search for the site and site vicinity. The EDR report included federal, state, and local databases. The review was conducted to evaluate whether or not the site or properties within the vicinity of the site have been listed as having experienced significant unauthorized releases of hazardous substances or other events with potentially adverse environmental effects for the site. A summary of the environmental databases searched, their corresponding search distance, and the number of listed off-site properties of potential environmental concern to the site are presented in the following table. A copy of the EDR Radius Map Report is presented in Appendix C.

Map Findings Summary								
Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
National Priority List		1	0	0	0	1	NR	1
RCRA - Small Quantity Generators		0.25	2	0	NR	NR	NR	2
Facility Index System/Facility Registry System	1	TP	NR	NR	NR	NR	NR	1
Records Of Decision		1	0	0	0	1	NR	1
RCRA - Non Generators / No Longer Regulated		0.25	5	9	NR	NR	NR	14
EDR Exclusive Historical Cleaners		0.125	1	NR	NR	NR	NR	1
Leaking Underground Fuel Tank Report (GEOTRACKER)		0.5	1	0	7	NR	NR	8
Hazardous Substance Storage Container Database		0.25	2	1	NR	NR	NR	3
Voluntary Cleanup Program Properties		0.5	1	0	0	NR	NR	1
Cleaner Facilities		0.25	2	1	NR	NR	NR	3
California Integrated Water Quality System	2	TP	NR	NR	NR	NR	NR	2
Bond Expenditure Plan		1	0	0	0	2	NR	2
"Cortese" Hazardous Waste & Substances Sites List		0.5	1	0	4	NR	NR	5
SWEEPS UST Listing		0.25	1	2	NR	NR	NR	3
CERS HAZ WASTE		0.25	1	1	NR	NR	NR	2
EnviroStor Database		1	1	0	3	8	NR	12
Calsites Database		1	0	0	0	2	NR	2
Hazardous Waste Tracking System	9	TP	NR	NR	NR	NR	NR	9
HIST LUST - Fuel Leak Site Activity Report		0.5	1	0	3	NR	NR	4
State Response Sites		1	0	0	3	3	NR	6
Hazardous Waste & Substance Site List		0.5	1	0	5	NR	NR	6

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Facility Inventory Database		0.25	1	2	NR	NR	NR	3
Facility and Manifest Data	7	TP	NR	NR	NR	NR	NR	7
Statewide SLIC Cases (GEOTRACKER)		0.5	0	1	2	NR	NR	3
Pesticide Regulation Licenses Listing	1	TP	NR	NR	NR	NR	NR	1
CUPA Facility List		0.25	10	7	NR	NR	NR	17

5.1.1. Regulatory Database Listings for the Site

The following table summarizes the database listings related to the site:

On-Site Database Listings	
Site Name	MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
Site Address	330 DISTEL CIRCLE
Database	CIWQS, HAZNET, HWTS
Comments	The site was listed on the CIWQS database for having a permit for storm water construction in 2010; on the HAZNET database for recycling, fuel blending, storing, disposing of in a landfill, several tons of unspecified solvent mixture, unspecified oil-containing waste, organic solids, waste/mixed oil, polychlorinated biphenyls, asbestos containing waste, and inorganic solid waste, in 2006, 2009, 2010, and 2011; and on the HWTS database for having tracked hazardous waste on-site from 1992 to 2000, 2006, 2011, and 2013. The site has been occupied by Midpeninsula since 1990 and has been used exclusively as an office space, therefore these database listings are likely associated with projects that are not on the site but may have been managed via administrative functions or remediation activities by Midpeninsula. These are not considered RECs.

Site Name	US ARMY CORP OF ENGINEERS
Site Address	330 DISTEL CIR
Database	HAZNET, HWTS
Comments	The site was listed on the HAZNET database for storing, fuel blending, and disposing of in a landfill, several tons of organic solids, unspecified organic liquid mixture, waste/mixed oil, and unspecified oil-containing waste, in 2007 and 2008; and on the HWTS database for having tracked hazardous waste on-site from 2006 to 2009. The site has been occupied by Midpeninsula since 1990 and has been used exclusively as an office space, therefore these database listings are likely associated with projects that are not on the site but may have been managed via administrative functions or remediation activities by Midpeninsula. These are not considered RECs.

Site Name	POND 07 AND 08
Site Address	330 DISTEL CIRCLE
Database	FINDS, CIWQS
Comments	The site was listed on the FINDS and CIWQS databases for 401 certification and historical status from 2012 to 2017. The site has been occupied by Midpeninsula since 1990 and has been used exclusively as an office space, therefore these database listings are likely associated with projects that are not on the site but may have been managed via administrative functions or remediation activities by Midpeninsula. These are not considered RECs.

Site Name	ALMADN AIR FORCE STATION
Site Address	330 DISTEL CIR
Database	HAZNET, HWTS
Comments	The site was listed on the HAZNET database for disposing of in a landfill, several tons of polychlorinated biphenyls and material containing polychlorinated biphenyls, in 2008 and 2009; and on the HWTS database for having tracked hazardous waste on-site from 2008 to 2009. The site has been occupied by Midpeninsula since 1990 and has been used exclusively as an office space, therefore these database listings are likely associated with projects that are not on the

Comments	site but may have been managed via administrative functions or remediation activities by Midpeninsula. These are not considered RECs.

Site Name	MICHAEL J BANKOSH
Site Address	330 DISTEL CIR
Database	PEST LIC
Comments	The site was listed on the PEST LIC database for having a license to apply pesticides to the site from 2019 to 2021. The site has been occupied by Midpeninsula since 1990 and has been used exclusively as an office space, therefore this database listing is likely associated with a project that is not on the site but may have been managed via administrative functions or remediation activities by Midpeninsula. This is not considered a REC.

5.1.2. Regulatory Database Listings for Off-Site Properties

Off-site properties/facilities listed in the **Map Findings Summary** table above were evaluated as to their potential to impact soil, soil vapor, and/or groundwater at the site. The following table presents the properties/facilities that were interpreted to represent a potential environmental concern to the site, based on their proximity to the site, the nature of the database on which they are listed, and/or the assumed direction of groundwater flow in the site vicinity. It is our opinion that there is a low likelihood that the off-site properties listed in the Facilities of Potential Concern table below (or other facilities listed in the Map Findings Summary table above) represent a REC to the site. This opinion is based on one or more of the following factors:

- The nature of the database(s) on which the property is listed, and/or because the property was not listed on a database that reports unauthorized releases of hazardous substances;
- Reported regulatory agency status (i.e., case closed);
- Reported nature of the case (i.e., soil contamination only);
- Reported distance of the property from the site; and/or
- Location of the property in relation to the site with respect to topography or expected groundwater flow direction (northeast).

Facilities of Potential Concern	
Site Name	SUTTER BAY MEDICAL FOUNDATION
Site Address	370 DISTEL CL
Distance from Site	187 feet
Direction from Site	SSE and crossgradient
Database	CERS HAZ WASTE, RCRA NonGen / NLR
Comments	This property was listed on the CERS HAZ WASTE database for being listed as a hazardous waste generator and having a compliance evaluation inspection done for the property in January 2019; and on the RCRA NonGen / NLR database for handling but not generating hazardous materials in 2018. These database listings are not considered RECs for the site.

Site Name	R2 TECHNOLOGY INC
Site Address	325 DISTEL CL
Distance from Site	71 feet
Direction from Site	ESE and crossgradient
Database	CUPA SANTA CLARA
Comments	This property was listed on the CUPA SANTA CLARA database for generating 100 kilograms to less than 5-tons per year of hazardous waste. No viuolations were reported. This database listing is not considered a REC for the site.

5.2. Additional Environmental Record Sources

To enhance and supplement the standard environmental record sources identified in Section 5.1, additional local and/or federal, state, or tribal records shall be checked when, in the judgement of the EP, such additional records (1) are reasonably ascertainable, (2) and sufficiently useful, accurate, and complete in light of the objective of the records review. Examples of additional record sources include department of health/environmental division, fire department, planning/building department, or local/regional water quality agencies. Ninyo & Moore contacted the following additional record sources:

- Santa Clara County Department of Environmental Health (SCCDEH)
- California Regional Water Quality Control Board (RWQCB)
- California Department of Toxic Substances Control (DTSC)
- State of California, Geologic Energy Management Division (CalGEM)

Descriptions of these agencies are provided in Sections 5.2.1 through 5.2.3 below.

5.2.1. State/County Environmental Record Sources

Ninyo & Moore reviewed the DTSC EnviroStor and the RWQCB Geotracker websites for hazardous substances or hazardous materials files for the site address. No records were available for the site through review of these agency databases.

The SCCDEH was contacted regarding hazardous materials or hazardous wastes records associated with the site address. The SCCDEH had no records on file for the site. Copies of the file review requests are included in Appendix D.

5.2.2. Local Record Sources

In completing this ESA, Ninyo & Moore concluded that contacting additional local record sources would not provide additional useful information in determining if a REC, HREC, CREC or de minimis condition exists at the site.

5.2.3. Gas & Oil Maps

According to the CalGEM Online Mapping System, the site does not lie within the administrative boundaries of an oil field and oil or gas wells are not located on the site.

5.3. Historical Use Information

Ninyo & Moore conducted a historical record search for the site. This included a review of one or more of the following resources that were found to be both reasonably ascertainable and useful for the purposes of this ESA: historical aerial photographs, historical fire insurance maps, historical topographic maps, land use records, and interviews with property representatives. Although one or more of the sources listed above provided limited information regarding the historical use of the site, the information gathered from the sources reviewed as

a whole is adequate to develop a history of the previous uses of the site and the surrounding area in accordance with Section 8.3 of ASTM E1527-13. The following sections summarize information obtained from the historical sources utilized for this assessment. The following table provides a list of historical sources reviewed for this ESA. Copies of historical research documentation, such as fire insurance maps, historical aerial photographs, and topographic maps, are provided in Appendix E.

Historical Use Information		
Data Type	**Year(s)**	**Data Limitations**
EDR Aerial Photo Decade Package (Inquiry Number 6253537.8S) Ship Date: November 04th, 2020	1939, 1943, 1948, 1950, 1956, 1963, 1968, 1974, 1982, 1991, 1998, 2006, 2009, 2012, 2016	Done
EDR City Directory Abstract (Inquiry Number 6253537.5S) Ship Date: November 09th, 2020	1971, 1976, 1981, 1985, 1992, 1995, 2000, 2005, 2010, 2014, 2017	Done
EDR Historical Topo Map (Inquiry Number 6253537.4S) Ship Date: November 04th, 2020	1897, 1899, 1902, 1943, 1947, 1948, 1953, 1955, 1961, 1968, 1973, 1980, 1981, 1994, 1995, 1997, 1999, 2012	Done
EDR Sanborn Map Search/Print (Inquiry Number 6253537.3S) Ship Date: November 04th, 2020		Map coverage not available

5.3.1. Sanborn Fire Insurance Maps

Ninyo & Moore requested historical fire insurance rate maps (Sanborn Maps) of the site through EDR. Sanborn Map coverage was not available for the site and surrounding areas. A copy of the Sanborn Map Report is included in Appendix E.

5.3.2. Historical Aerial Photographs

Ninyo & Moore reviewed historical aerial photographs of the site provided by EDR. A listing of the photographs reviewed is presented in the following table. Copies of the historical aerial photographs are provided in Appendix E.

Summary of Aerial Photographs			
Year(s)	**Source**	**Site Comments**	**Adjoining Area Comments**
1939	EDR	The site was noted to be agricultural land with an orchard on the central and southern portions of the site.	The areas surrounding the site were noted to be agricultural fields with orchards to the west and south of the site, as well as El Camino Real to the north of the site.
1943	EDR	The site was not mapped.	The site vicinity was not mapped.
1948	EDR	The site was noted to be vacant land with no orchards.	Several farm buildings were noted to the east and west of the site, and several commercial buildings were noted to the north of the site.
1950	EDR	No significant changes noted.	The orchards to the west of the site were removed.
1956	EDR	No significant changes noted.	Additional commercial development was noted to the north and east of the site.
1963	EDR	No significant changes noted.	A commercial building and parking lot were noted adjacent to the west of the site and additional commercial development was noted to the north, west and east of the site. Residential development was noted to the south of the site.
1968	EDR	No significant changes noted.	No significant changes noted.

Year(s)	Source	Site Comments	Adjoining Area Comments
1974	EDR	One commercial building was noted on the site. The size, location, and orientation of the building is consistent with the existing building.	Distel Circle was noted to the east of the site. Commercial buildings were noted to the east and southeast of the site, and residential development was noted to the southwest of the site.
1982	EDR	The commercial building on the site finished construction.	Two commercial buildings to the west of the site were replaced with three commercial buildings. Commercial buildings were noted adjacent to the north and northeast of the site.
1991	EDR	No significant changes noted.	An additional commercial building was noted to the west of the site.
1998	EDR	No significant changes noted.	No significant changes noted.
2006	EDR	No significant changes noted.	No significant changes noted.
2009	EDR	No significant changes noted.	No significant changes noted.
2012	EDR	No significant changes noted.	No significant changes noted.
2016	EDR	No significant changes noted.	No significant changes noted.

5.3.3. City Directories

Ninyo & Moore reviewed historical city directory listings for the site addresses to evaluate facilities of potential concern, which may have been historically located on the site. A summary of notable city directory listings is presented in the following table, and the EDR City Directory abstract is provided in Appendix E.

Summary of City Directory Listings	
Year(s)	**Notable Listings in Address Range of Site**
1971	Address not listed
1976	Carmichael A C, Flamer A E, Flamer Company, Home Life Insurance Co, Lenihan Insurance, Mill Ioabelle, Plan & Review Associates, and Sheerer Gary P
1981	AFFRS, Advanced CLR Tech, Allieo First Free RP, Archer Thomas, Buckingam J H, Capital Funding SV, Carmichael A C Jr, DRC Associate Inc, D R Clark & Co, Dunne Financial SV, ELvert Charles H Jr, Flamer A E, Flamer & Company, Fletcher Rickson Co, Gelormini Ottd CFP, Integrated Resources, Karmiga, Secretarial, Lenihan Insurance Inc, Management Consultant, Oriordan Sean MA, Overboard Financial Planning, Palmer Robert PHD, Plan & Review Associates, Progressive Personnel SV, Project Resources Inc, Rex Land & Associates, Sheerer Gary P, and West Coast Homes
1985	Buckingham Jeffery, Carmichael A C Jr, Coons Steve, Elvert Charles N Jr, Flamer A E, Flamer & Company, Garica Lee A, Leninan James J, Lewis Jeff, Personal Computer Insurance, Plan & Review Associates, Rutn Roger, and Sneerer Gary P
1992	Desktop Presentations, and Intl Technology Group
1995	Intl Technology Group
2000	Alzheimers Association, and Midpeninsula Regional Open Space District
2005	Kaidara Software Inc, and Midpeninsula Regional Open Space District
2010	Address not listed
2014	Thornewood
2017	Thornewood

5.3.4. Historical Topographic Maps

Ninyo & Moore reviewed historical topographic maps of the site provided by EDR. A listing of the maps reviewed is presented in the following table. Copies of the historical topographic maps are provided in Appendix E.

Summary of Topographic Maps		
Year(s)	**Quadrangle**	**Site Comments**
1897	Palo Alto	The site was mapped as vacant land.
1899	Palo Alto	No significant changes noted.
1902	Santa Cruz	No significant changes noted.
1943	Palo Alto	No significant changes noted.
1947	Palo Alto	No significant changes noted.
1948	Palo Alto	No significant changes noted.
1953	Palo Alto, Mountain View, Cupertino, Mindego Hill	No significant changes noted.
1961	Mountain View, Cupertino, Palo Alto, Mindego Hill	No significant changes noted.
1968	Mountain View, Mindego Hill, Cupertino, Palo Alto	No significant changes noted.
1973	Mindego Hill, Mountain View, Palo Alto, Cupertino	No significant changes noted.
1980	Mindego Hill, Cupertino, Mountain View	The site was mapped as urban land. Site features were not depicted on the 1980 map.
1994	Palo Alto, Mountain View, Cupertino, Mindego Hill	No significant changes noted.
1997	Mindego Hill, Mountain View, Palo Alto	No significant changes noted.
2012	Mountain View, Palo Alto, Cupertino, Mindego Hill	No buildings were mapped on the 2012 topographic map.

5.3.5. Title Records

A historical chain-of-title report was not requested by the Client for review by Ninyo & Moore during the completion of this report.

5.3.6. Recorded Environmental Liens and AULs

An environmental lien search report was not requested by the Client for review by Ninyo & Moore during the completion of this report.

5.3.7. Previous Investigations

Ninyo & Moore was provided a copy of a prior report completed for the site. The report is summarized below.

Summary of Previous Investigations		
Report Name	**Year(s)**	**Findings**
Limited Asbestos Survey Report For The Commercial Building Located At 330 Distel Circle Los Altos CA September 2008 Prepared For: Midpeninsula Regional Open Space District Prepared By: Abatement Analytics	2008	Abatement Analytics conducted an asbestos survey of the site in September 2008. Seventeen samples were taken from various rooms and materials throughout the site building. All samples tested negative for asbestos content. Abatement Analytics concluded that the site building contained no asbestos and could be demolished as necessary to facilitate a remodel.

5.4. Adjoining Property Use Information

Adjoining properties were described in Section 2.3. Based on our site visit and review of agency files, none of the adjoining properties are considered to have impacted the site at this time.

6. PRELIMINARY VAPOR ENCROACHMENT SCREENING

Ninyo & Moore conducted a preliminary vapor encroachment screen (pVES) for potential chemicals of concern (COC). The pVES was based on the guidelines presented in the ASTM E2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions. The purpose of the pVES was to identify a vapor encroachment condition (VEC), which is the presence or likely presence of COC vapors in sub-surface soils at the site as a result of a release of vapors from contaminated soil or groundwater either on or near the site. The potential for VECs beneath the site was evaluated using a Vapor Encroachment Screening Matrix (VESM). The VESM included performing a Search Distance Test to identify if there are any known or suspected contaminated sites surrounding or upgradient of the site within specific search radii, a COC Test (for those known or suspect contaminated sites identified within the Search Distance Test) to evaluate whether or not COC are likely to be present, and a Critical Distance Test to evaluate whether or not COC in a contaminated plume may be within the critical distance of the site (100 feet for non-petroleum hydrocarbon contaminants, and 30 feet for petroleum hydrocarbon contaminants).

Based on the completion of the VESM, it is presumed unlikely that a VEC currently exists beneath the site. A copy of the VESM is included in Appendix F.

7. INTERVIEWS

Interviews were conducted by Ninyo & Moore with the objective of obtaining information regarding potential environmental concerns in connection with the site.

7.1. Owner or Key Site Manager

Mr. Allen Ishibashi, the site manager, was interviewed during the site reconnaissance. According to Mr. Ishibashi, the site building was constructed in 1975 as a single-story office building. Mr. Ishibashi was not aware of any hazardous materials incidents, spills, leaks or violations related to the site. Mr. Ishibashi, assured Ninyo & Moore that the database listings were not associated with the site. Mr. Ishibashi stated that the site has been occupied by an office building since 1975 and occupied by Midpeninsula since 1990, therefore the database listings are either incorrectly listed in the EDR Radius report, or are associated with projects that are not on the site, but may have been managed via administrative functions or remediation activities by Midpeninsula. He further stated that since Midpeninsula purchases and remediates the property, if necessary, that the database listings must be associated with a property they purchased and subsequently remediated, not with the site. Specifically he

mentioned that they purchased the Almaden Air Force Base in 1986, where he assumes most of the database listings for the site are associated.

7.2. Past Owners

Past ownership entities were not made available to Ninyo & Moore during the preparation of this report. Therefore, interviews with past site owners was not conducted.

7.3. Environmental Regulatory Agency Inquiries

Ninyo & Moore submitted Public Records Requests for the site address to County, State, and Local environmental regulatory agencies. The following sections describe the agencies contacted and whether or not representatives from the agencies were interviewed.

7.3.1. State/County Environmental Agencies

Ninyo & Moore reviewed the California Department of Toxic Substances Control (DTSC) EnviroStor website and the Regional Water Quality Control Board (RWQCB) Geotracker website for hazardous substances or hazardous materials files for the site address. No records were available for the site. Based on this information, interviews were not conducted with DTSC or RWQCB representatives.

According to information provided by the SCCDEH, files and/or records of hazardous materials, hazardous wastes, USTs, ASTs were not available for the site. Based on this information, interviews were not conducted with SCCDEH representatives.

7.3.2. Local Environmental Agencies

Local regulatory agencies were not contacted during the preparation of this report since the site address was not listed on any regulatory database that indicated an unauthorized release or any spills, leaks or violations.

8. ASTM NON-SCOPE CONSIDERATIONS

Non-Scope considerations such as mold, radon, wetlands, asbestos, or flood zones were not addressed as part of this report.

9. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The following findings, opinions, conclusions and recommendations are provided.

9.1. Findings

- Historical research revealed that the site was developed in the early 1900s with an orchard on the central and southern portions of the site. By the late 1940s, the orchard had been removed and the site was vacant. The site remained vacant until 1974 when a single-story commercial office building was constructed on the site. The commercial building is consistent with the current site building. No significant changes have occurred on the site since then.

- On November 13, 2020, Luke Swickard of Ninyo & Moore conducted a site reconnaissance of the property. The reconnaissance involved a visual inspection of the site, and observations of adjoining properties. At the time of the reconnaissance, the approximate 0.87-acre site was developed with a single-story office building that was occupied by the Midpeninsula Regional Open Space District (Midpeninsula). The office building included typical office space, a copy room, a board room, conference rooms, bathrooms, an electrical room, a staff kitchen, a computer/network room, a hot-water boiler room, and a lobby. The exterior of the building included an outdoor seating area to the west, bike storage lockers to the north, and a storage shed to the south.
- Interior construction materials included carpeting, ceramic floor tiles, painted and textured plaster walls, and plaster ceilings. Interior finishes appeared to be in good condition.
- The exterior of the building consisted of an asphalt parking area on the east side of the building.
- The areas surrounding the site consist primarily of retail/commercial buildings to the east, west and north, and residential development to the south.
- Based on our site visit, there are currently no wells on the site.
- Ninyo & Moore observed quantities of hazardous substances or petroleum products during the site reconnaissance including several one-gallon cans of paint, stain and primer. Evidence of leaks or spills was not observed around these containers.
- Indications of aboveground storage tanks (ASTs), underground storage tanks (USTs), or hazardous material spills or leaks, were not observed during the site reconnaissance.
- Review of an environmental database report obtained for this project indicated that the site is listed on several of the regulatory databases researched by Environmental Data Resources Inc. (EDR), including the HAZNET, HWTS, CIWQS, and FINDS databases under Midpeninsula; HAZNET and HWTS under The Army Corp of Engineers and the Almaden Air Force Station; FINDS and CIWQS for two ponds; and PEST LIC for a license to apply pesticides. The site was listed on the CIWQS database for having a permit for storm water construction in 2010, a 401 certification, and historical water status from 2012 to 2017. The site was listed on the HAZNET database from 2006 to 2011 for storing hazardous materials on-site and disposing of hazardous materials off-site. No violations were noted. Given the reported off-site disposal of wastes via hazardous waste manifest, it is unlikely to have an adverse impact on the site. HAZNET entries document the transportation of hazardous materials but are not necessarily indicative of a release and are therefore not likely to have impacted the environmental conditions at the site. The site was listed on the HWTS database for having tracked hazardous waste on-site from 1992 to 2000, 2006 to 2009, 2011, and 2013. No violations were noted. The site was also listed on the Facility Index System (FINDS) database. The FINDS is a central and common inventory of facilities monitored or regulated by EPA, with cross-references to the program office databases that have additional programmatic

information about the facility. FINDS entries are not necessarily indicative of a release and are therefore not likely to have impacted the environmental conditions at the site. Allen Ishibashi, the site manager, assured Ninyo & Moore that these database listings were not associated with the site. Mr. Ishibashi stated that the site has been occupied by an office building since 1975 and occupied by Midpeninsula since 1990, therefore these database listings are either incorrectly listed in the EDR Radius report, or are associated with projects that are not on the site, but may have been managed via administrative functions or remediation activities by Midpeninsula, such as the Almaden Air force base purchased by Midpeninsula in 1986. Therefore, these database listings are not considered RECs.

- Several off-site facilities were located within the EDR search radius from the site. None of the listed facilities are considered to be a REC to the site at this time based on several factors, including distance from the site, location relative to the regional groundwater flow direction (e.g. hydraulically downgradient or crossgradient to the site), database listing type, and/or affected media (soil only). Refer to Section 5.1.2 for additional information regarding potential off site facilities of concern.
- Based on the completion of the Vapor Encroachment Condition (VEC) screening matrix, it is presumed unlikely that a VEC currently exists beneath the site.

9.2. Conclusions

Ninyo & Moore has performed this ESA in conformance with the scope and limitations of ASTM E1527-13 of the Distel Circle Property located at 330 Distel Circle in Los Altos, California. Based on the information compiled during the preparation of this report, this assessment has revealed no evidence of RECs in connection with the site at this time.

9.2.1. RECs

RECs were not identified during the preparation of this report.

9.2.2. CRECs

CRECs were not identified during the preparation of this report.

9.2.3. HRECs

HRECs were not identified during the preparation of this report.

9.2.4. De Minimis Conditions

De minimis conditions were not identified during the preparation of this report.

9.3. Recommendations

Based on the findings of this ESA, no further investigation is recommended at this time.

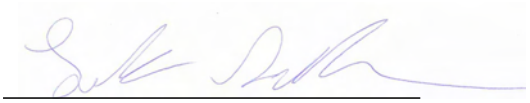
9.4. Limiting Conditions/Deviations

This report was prepared in accordance with ASTM E1527-13. No deviations from the standard occurred in this ESA. Based on the information gathered by Ninyo & Moore for the purposes of this ESA, it is Ninyo & Moore's opinion the data obtained from the site reconnaissance, records reviewed, and interviews conducted, is adequate to make a conclusion on the environmental condition of the site with respect to the existence or lack of RECs associated with the site.

10. ENVIRONMENTAL PROFESSIONAL STATEMENT

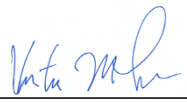
I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined by 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Site Assessor



Luke I. Swickard
Staff Environmental Scientist

Senior Reviewer



Kris Larson
Principal Geologist

Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Randy L. Wheeler - Senior Geologist, CEM 2127

11. REFERENCES

US Environmental Protection Agency (EPA). All Appropriate Inquiry (AAI), Title 40 of Code of Federal Regulations (CFR) Section 312.10.

ASTM International, 2013, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-13.

California Department of Conservation, California Geological Survey (CGS), 2010. California Geomorphic Provinces, Note 36.

Environmental Data Resources, Inc., 2020, The Environmental Data Resources Sanborn Map Report, dated November 4.

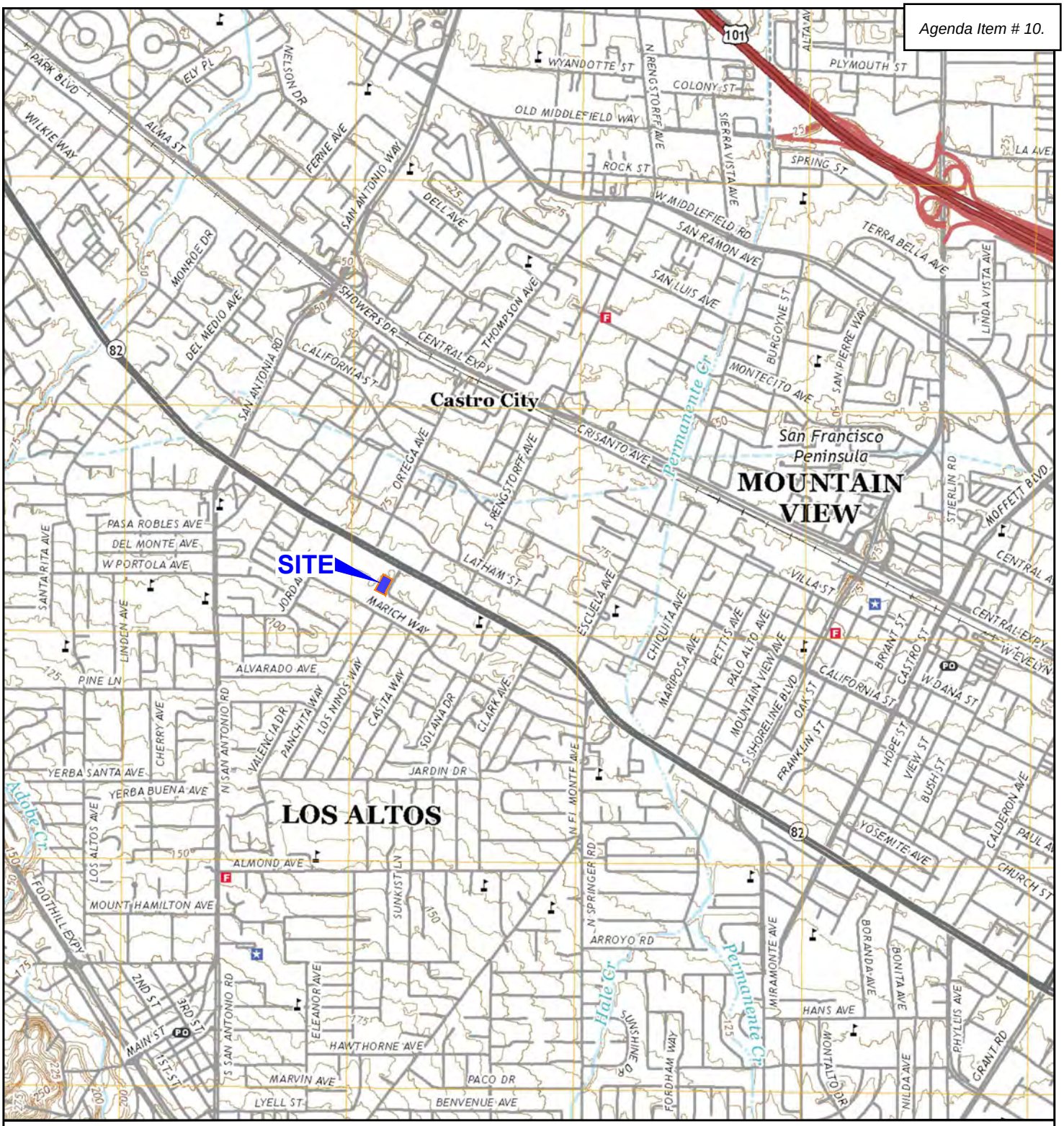
Environmental Data Resources, Inc., 2020, The Environmental Data Resources Aerial Photo Decade Package, dated November 4.

Environmental Data Resources, Inc., 2020, The Environmental Data Resources City Directory Report, dated November 9.

Environmental Data Resources, Inc., 2020, The Environmental Data Resources Historical Topographic Map Report, dated November 4.

Environmental Data Resources, Inc., 2020, The Environmental Data Resources Radius Map Report with GeoCheck, dated November 4.

FIGURES



NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE I REFERENCE: USGS, 2018

N

SCALE (FEET)
0 2,000 4,000

402649015.dwg 11/19/2020 AEK

FIGURE 1

SITE LOCATION

PHASE I ENVIRONMENTAL SITE ASSESSMENT
330 DISTEL CIRCLE
LOS ALTOS, CALIFORNIA
402649015 I 11

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

LEGEND

SITE BOUNDARY

NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE I REFERENCE: GOOGLE EARTH, 2020

N

SCALE (FEET)

0 125 250

402649015.dwg 11/19/2020 AEK

FIGURE 2

SITE PLAN

PHASE I ENVIRONMENTAL SITE ASSESSMENT
330 DISTEL CIRCLE
LOS ALTOS, CALIFORNIA
402649015 I

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Appendix A:

RESUMES

LUKE I. SWICKARD

Staff Environmental Scientist

EDUCATION

B.S., Environmental Science and Management, 2017, University of California, Davis

EXPERIENCE HIGHLIGHTS

Phase I and II Environmental Site Assessments

Storm Water Pollution Prevention Plans (SWPPP)

Underground Telecommunication Vault Sampling

Hazardous waste handling, storage and facility auditing

PROFESSIONAL AFFILIATIONS

As a Staff Environmental Scientist, Mr. Swickard conducts Phase I Environmental Site Assessments and assists with the planning and implementation of Phase II soil, soil gas, and groundwater investigations. Past project types have included single-family residential developments, commercial facilities, city redevelopment areas, and large scale agricultural lands.

REPRESENTATIVE PROJECT EXPERIENCE

Former Richmond Hospital, Richmond, California: Provided project support for the completion of a Phase I Environmental Site Assessment (ESA) of the former Richmond Hospital for potential redevelopment. Ninyo & Moore conducted the Phase I ESA to evaluate the potential for Recognized Environmental Conditions (RECs) on or adjacent to the site. Phase I ESA Activities included reviewing historical and regulatory environmental data, conducting a site reconnaissance and preparing the Phase I ESA Report.

Floating Photovoltaic (PV) Solar Array, Windsor, California: Provided project support for the completion of a Phase I Environmental Site Assessment (ESA) of a proposed floating PV solar array on an existing water treatment facility. Ninyo & Moore conducted the Phase I ESA to evaluate the potential for Recognized Environmental Conditions (RECs) adjacent to the site so that electrical infrastructure could be installed from the floating PV solar array to a collection system. Phase I ESA Activities included reviewing historical and regulatory environmental data, conducting a site reconnaissance and preparing the Phase I ESA Report.

Multi-family Housing Project, Mountain View, California: Provided project support for the completion of a Phase I Environmental Site Assessment (ESA) on a multi-family housing complex to evaluate the potential for Recognized Environmental Conditions (RECs) on and adjacent to the site for planned redevelopment of the property. Phase I ESA Activities included reviewing historical and regulatory environmental data, conducting a site reconnaissance and preparing the Phase I ESA Report.

Agricultural land, Capay Valley, California: Provided project support for the completion of a Phase I Environmental Site Assessment (ESA) on an approximate 310-acre agricultural property that is utilized for cattle grazing and olive orchards. The Phase I ESA was conducted to evaluate the potential for Recognized Environmental Conditions (RECs) on and adjacent to the site for on-gong use of the property. Phase I ESA Activities included reviewing historical and regulatory environmental data, conducting a site reconnaissance and preparing the Phase I ESA Report.

Randy L. Wheeler, CEM

Senior Geologist

EDUCATION

B.A., Geology, 1988, California State University, Sacramento

REGISTRATIONS/CERTIFICATIONS

Certified Environmental Manager #2127 (Nevada)

PROFESSIONAL AFFILIATIONS

Association of Environmental Professionals – Superior California Chapter

American Public Works Association (APWA)

As a Senior Geologist for Ninyo & Moore, Mr. Wheeler conducts Phase I Environmental Site Assessments (ESA) and assists with the planning and implementation of Phase II soil, soil gas, and groundwater investigations. Past project types have included single-family residential developments, large-scale commercial and industrial facilities, city redevelopment areas, and large scale agricultural lands. Mr. Wheeler has successfully authored winning proposals for US EPA Brownfield Assessment Grants, and wrote a Statement of Qualifications for the City of Sacramento that resulted in being selected as one of six consultants of choice for the City's Brownfield Assessment Grant projects.

EXPERIENCE

City of Stockton, Waterfront Brownfield Redevelopment, Stockton, California: Managed the Phase I ESA of a former industrial property for a local developer. The assessment identified several areas of potential contamination. The resulting follow up investigations are being managed by the City of Stockton under the direction of the California Regional Water Quality Control Board. Site assessment and remediation activities are being coordinated under U.S. Environmental Protection Agency grant funding.

City of West Sacramento, Brownfield Assessment Grant Study, West Sacramento, California: Managed and conducted assessments on over 290 parcels located in the City's central corridor, West Capitol Avenue, as part of the City's revitalization efforts of this area. The resulting Area Wide Assessment report has won the praise of both the Client and the US EPA for its format, content, and layout that documented the environmental conditions of these parcels. The City established as a priority updating the current land uses and perceived image of West Capitol Avenue from an outdated and outmoded highway commercial boulevard to a vibrant and modern central business district.

City of West Sacramento, Area-Wide Assessment, Washington District Redevelopment Area, West Sacramento, California: Project Manager for the implementation of the City of West Sacramento's Area Wide Assessment of the Washington District Redevelopment area in the northern part of West Sacramento. Responsible for implementing a US EPA Brownfield Assessment Grant, which included conducting an Area-Wide Assessment of approximately 83 individual parcels on 19 different residential and commercial neighborhood blocks located adjacent to the Sacramento River. The study included evaluating individual properties as well as entire neighborhood blocks for evidence of potential environmental conditions related to historical uses of the area dating back to the early 1900s when the area was referred to as Broderick. Results of the study were documented on block-specific property profile sheets which were used to select properties for additional study. The City of West Sacramento will utilize this information as part of their long-range redevelopment strategy for the area.

City of West Sacramento, West Capitol Avenue Community-Wide Assessment, West Sacramento, California: Project Manager for the implementation of the City of West Sacramento's Community Wide Assessment for West Capitol Avenue. Responsibilities included managing and implementing a US EPA Brownfield Assessment Grant, which included conducting a Community Wide Assessment of approximately 133 individual parcels within the study area. Services included compiling a list of street addresses provided by the City of West Sacramento, cross referencing the provided addresses with their respective Assessor's Parcel Number (APN), and the APN-listed property address for the respective parcel number, in order

Randy L. Wheeler
Senior Geologist

to identify which parcels were within the "Study Area" boundary. The parcel inventory database was the basis for conducting the Community Wide Assessment. Based on the parcel inventory, Mr. Wheeler conducted the Community Wide Assessment and performed all site reconnaissance fieldwork, historical research, agency database research, and color photography of each parcel. Site-specific data, along with historical research information was compiled into various data tables. Specific sites were ranked according to redevelopment potential, degree of suspected contamination, and environmental condition.

Yolo County, Esparto Brownfield Redevelopment, Esparto, California: Project Manager for the completion of a Community Wide Assessment (CWA) of approximately 800-900 individual parcels located within the community of Esparto utilizing the same methodologies employed during the Area Wide Assessment of the East End of West Capital Avenue, and the Community Wide Assessment of the west end of West Capital Avenue in West Sacramento (discussed above), Mr. Wheeler compiled a parcel inventory of sites within the study area. The parcel inventory database was the basis for conducting the CWA. Based on the compiled parcel inventory, the study area was narrowed down to approximately 533 individual Yolo County parcels. Site reconnaissance information was documented on standardized forms, allowing for a consistent collection of site information and documentation of key site features. Information compiled through the CWA was used by Yolo County to prioritize site that required follow-up Phase II investigation activities.

Association of Bay Area Governments/City of Oakland, Phase II ESA, Oakland, California: Task Order Manager for a Phase II ESA at a multi-parcel Brownfield Site where the City of Oakland intends to redevelop vacant lots. Designed a grid-based soil sampling and analysis plan to determine if the soil was contaminated. Collected soil samples to evaluate the presence of metals, petroleum hydrocarbons, semi-volatile organic compounds, VOC and asbestos. Evaluated results against RWQCB Tier 1 ESL and background metals concentrations in California soils and prepared report for client. Classified soil and coordinated disposal as hazardous waste to appropriate landfill facility.

City of West Sacramento, 422-424 C Street, West Sacramento, California: Project Manager for the completion of a Phase I ESA/AAI Report (ESL) of the 422-424 C Street property for the City of West Sacramento Grants and Community Development Department. Results of the ESL report revealed the site was initially developed for use as residential property and then re-developed for use as an automobile service station sometime prior to 1950. The ESL also noted that four UST were removed from the site in 1987. Although the site is considered "closed" by Yolo County, no soil or groundwater samples were collected at the time the UST were removed. Given the historical use of the site as an automotive repair facility, a Phase II environmental site assessment was conducted to assess the soil and groundwater from beneath the removed UST, investigate two existing automobile lifts to assess if the soil beneath and around the lifts has been impacted by hydraulic fluid contamination, and, collect soil samples from beneath and around an oil/water separator to evaluate the presence of waste oil contamination. The Phase II sampling was conducted in accordance with an approved SAP. The results of the Phase II investigation indicated detectable levels of petroleum hydrocarbons, and metals below regulatory limits. Based on these findings, no further action was recommended.

Santa Clara Valley Water District (SCVWD), Linear Phase I Environmental Site Assessments, Santa Clara County, California: Ninyo & Moore provided environmental services as a subconsultant to Overland, Pacific & Cutler, Inc. on behalf of the SCVWD. As Senior Project Manager, provided project coordination and implementation, field reconnaissance oversight, report preparation and oversight, project invoicing and client interactions. The project consists of conducting Phase I ESA of approximately 140 properties along Upper Llagas Creek, which the SCVWD is proposed to purchase portions of for implementing flood protection measures.

Former Speckles Sugar Facility, Woodland, California: Project Manager for the completion of a Phase I Environmental Site Assessment of a former sugar processing facility. The investigation was conducted as part of a due diligence to identify environmental liabilities prior to purchasing the property. Planned redevelopment activities included reclaiming several acres of the waste lime fields and demolishing portions of the processing facility. Mr. Wheeler compiled a list of Recognized Environmental Conditions that warranted resolution or further assessment. Two of these issues related to the prior use, and questionable abandonment, of seven previous fuel underground storage tanks. A Phase II subsurface assessment of the former UST area was completed and identified residual petroleum hydrocarbon impacts to soil and groundwater. Further Phase II assessment activities of the former UST areas were completed. A No Further Action Report was submitted to the Regional Water Quality Control Board for closure.

KRISTOPHER M. LARSON, PG, QSD/QSP

PRINCIPAL GEOLOGIST

EDUCATION

B.S., Geology, 1996, San Francisco State University

REGISTRATIONS AND CERTIFICATIONS

PG 8059 (California)

Qualified SWPP Developer/Practitioner Certificate No. 20715 (California)

EXPERIENCE HIGHLIGHTS

Santa Clara Valley Water District Upper Llagas Creek

County of Santa Clara Park and Recreation Environmental Services

San Jose Community College District Environmental Services

City of San Jose Environmental Services

City of Oakland On-Call Environmental Services Contract

Alameda and Contra Costa County Public Works Department As-Needed Environmental Services Contract

City of Oakland Public Works Department As-Needed Environmental Services Contract

Oakland Unified School District As-Needed Environmental Services Contract

Rodeo Waterfront Predevelopment Assessment

Phase I and II Environmental Site Assessments

LUFT, Soil, Soil Gas and Groundwater Investigations

Remedial Action Plan Preparation and Implementation

Investigation and Remediation of Burn Dump Sites

Pot of Oakland Risk Management Plan

As Principal Geologist, Mr. Larson is the Operations Manager for environmental services in Ninyo & Moore's Oakland office. In this capacity, he has served numerous important clients on a variety of environmental projects. His areas of expertise include transactional environmental due diligence, subsurface site characterization, storm water management, investigation and remediation of burn dumps, site remediation and construction/demolition planning and supervision. Prior to joining Ninyo & Moore Mr. Larson worked as an environmental specialist at the San Francisco Bay Regional Water Quality Control Board. He has worked closely with all local, State and Federal environmental agencies, including the DTSC, EPA, RWQCBs, Army Corps of Engineers, and numerous local oversight programs:

REPRESENTATIVE PROJECT EXPERIENCE

San Jose Community College District, San Jose, California: Principal Geologist for investigation and soil disposal for San Jose City College Moorepark Campus and the San Jose City College Evergreen Campus. Mr. Larson assisted in the project oversight which included soil sampling and investigation of petroleum hydrocarbon and metal impacted soil within the vicinity of a sink drain at the Evergreen Campus maintenance yard and soil stockpile sampling for disposal during utility installation on the Moorepark campus. The Evergreen campus work ins on-going, in will involve an expanded investigation to evaluate particular metals in soil.

Santa Clara Valley Water District Upper Llagas Creek Flood Protection Project, Morgan Hill and Gilroy, California: Mr. Larson is included as a Technical and QA/QC advisor for this project which includes the preparation of over 40 Phase I Environmental Site Assessments within areas of the Upper Llagas Creek for the Santa Clara Valley Water District (SCVWD). Mr. Larson's responsibilities include client correspondence and report review and report QA/QC. This project is on-going.

County of Santa Clara Park and Recreation Department, Santa Clara County , California: Project Manager for a Phase I and Phase II ESA on a 292-acre ranch located in an unincorporated area of the County of Santa Clara, which the County was purchasing and developing into a public park. The property was an active farm and ranch, containing 18 buildings with historical farm equipment. Based on our review of site historical documents and our site reconnaissance, we recommended a Phase II ESA, which included soil and groundwater sampling for pesticides, Title 22 metals, and petroleum hydrocarbon compounds. Based on the sample analytical results, low concentrations of all of the above mentioned compounds were detected in soil samples; however the concentrations were not such that remediation was recommended.

Judicial Council of California /Administrative Office of the Courts of California On-Call Environmental Services Contract: Principal-in-Charge for projects located in all of Northern California associated with the JCC-AOC On-Call contract. The scope of services for this contract includes preparation of Phase I and Phase II Environmental Site Assessment and Hazardous Building Material Surveys.

Rails to Trails, San Jose, California: Project Manager for the City of San Jose Rails to Trails Project in San Jose, California. Mr. Larson assisted in shallow soil sample collection along the Union Pacific Right-Of-Way (ROW), located between Minnesota Avenue and Lonus Street in San Jose. He also assisted in the preparation of a report summarizing the results of project activities. The report documented findings, conclusions, and recommendations regarding possible environmental impacts to the ROW.

REPRESENTATIVE PROJECT EXPERIENCE (continued)

Callander Associates and the City of East Palo Alto, Remedial Planning and Oversight for a Former Burn Dump, East Palo Alto, California: Project Manager for several environmental tasks relating to investigation and remediation of a former burn dump and planned future park at Cooley Landing in East Palo Alto. Mr. Larson was responsible for preparing the Remedial Action Plan and Soil and Groundwater Management Plan, and has prepared a draft version of the Operations and Maintenance Plan to be utilized once park construction is completed. Mr. Larson also oversaw soil and sediment sampling in the contaminated cover material over most of the site as well as within the wetlands area, and managed the oversight of the Engineered Cap installation.

Alameda County Public Works Agency On Call Environmental Services Contract, Alameda County, California: Principal-In-Charge for the ACPWA On-Call Environmental Services contract. The contract extends for four years, and includes a wide range of Environmental and Geotechnical Services, including preparation of Phase I and Phase II Environmental Site Assessments (ESAs), Remedial Action Plans (RAPs), oversight of remediation activities, Hazardous Building Material Surveys (HBMS) and oversight of hazardous material abatement activities. His project responsibilities include meetings with ACPWA Project Managers, assigning staff to ACPWA projects, oversight of project activities, and budget and report review.

City of Oakland Public Works Agency On Call Environmental Services Contract, Oakland, California: Principal-In-Charge for the City of Oakland On-Call Environmental Services contract. The scope of services for the contract includes preparation of Phase I and Phase II Environmental Site Assessments (ESAs), Remedial Action Plans (RAPs), and Soil Management Plans (SMPs). His project responsibilities include meetings with City of Oakland PWA Project Managers, assigning staff to PWA projects, oversight of project activities, and budget and report review.

Port of Oakland, Oakland Army Base Risk Management Plan (RMP), Oakland, California: Project Manager for implementation of the RMP during on going demolition and construction activities within the project area, which included a section of the former Oakland Army base now owned by the Port of Oakland. Our responsibilities for this project included client and regulatory correspondence relating to demolition oversight of several large former Army warehouse buildings, collecting soil and/or groundwater samples in RMP and Remedial Action Plan (RAP) areas, characterization of known and unknown contaminants in RAP and RMP areas, soil and groundwater remediation in RAP and RMP areas where impacted soil and groundwater exceeded site remediation goals, preparation of technical memos relating to each phase of demolition, characterization, and remediation activities, and closure reporting for those RMP and RAP areas that were cleaned up to remediation goals and regulatory guidelines.

Rodeo Waterfront Predevelopment Assessment, Rodeo, California: Project Manager for field activities at two adjacent waterfront properties on San Pablo Bay. His responsibilities included soil and groundwater sampling, installation of groundwater monitoring wells, cone penetration testing, data analysis and evaluation to define the nature and extent of contamination at the site that was historically a refinery and tar pit. Also is the Principal in Charge for the UST removal, and current soil and groundwater remediation and monitoring.

San Quentin State Correctional Treatment Center Site Characterization, Marin County, California: Mr. Larson was the Project Manager for a Phase II Environmental Site Assessment. He oversaw and provided technical oversight for a subsurface evaluation to further define the extent of soil and groundwater on-site, impacted by releases of petroleum hydrocarbons and chlorinated solvents from underground storage tanks at the San Quentin State Correctional Treatment Center.

Appendix B:

SITE PHOTOGRAPHS

1 : View along Distel Circle, facing south.

2 : View along Distel Circle, facing north.

3 : View of the entrance to the site from Distel Circle.

4 : View of the site sign.

5 : View of the eastern side of the site building.

6 : View of the southern side of the site building.

7 : View of the western side of the site building.

8 : View of the northern side of the site building.

9 : View of the site parking lot, facing south.

10 : View of the site parking lot, facing north.

11 : View of the lobby.

12 : View of the typical office space.

13 : View of the typical office space.

14 : View of the copy room.

15 : View of the board room.

16 : View of the electrical room.

17 : View of the building shower room.

18 : View of the hot-water boiler for the building.

19 : View of the water heater for the building.

20 : View of a typical conference room.

21 : View of the staff kitchen.

22 : View of the exterior seating area on the western side of the building.

23 : View of the bike lockers on the northern side of the building.

24 : View of the paint, primer, and stain cans.

25 : View of a storm drain in the parking lot.

26 : View of the trash dumpster enclosure.

27 : View of the site storage shed on the southern side of the site building.

28 : View of the property to the south of the site.

29 : View of the property to the east of the site.

30 : View of the property to the north of the site.

Appendix C:

ENVIRONMENTAL DATA RESOURCES (EDR) RADIUS MAP REPORT

Distel Circle Property
330 Distel Circle
Los Altos, CA 94022

Inquiry Number: 6253537.2s
November 04, 2020

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-8
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Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

330 DISTEL CIRCLE
LOS ALTOS, CA 94022

COORDINATES

Latitude (North):	37.3963710 - 37° 23' 46.93''
Longitude (West):	122.1058710 - 122° 6' 21.13''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	579144.0
UTM Y (Meters):	4139015.5
Elevation:	86 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5641106 MOUNTAIN VIEW, CA
Version Date:	2012
Northwest Map:	5640620 PALO ALTO, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
330 DISTEL CIRCLE
LOS ALTOS, CA 94022

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	US ARMY CORP OF ENGI	330 DISTEL CIR	HAZNET, HWTS		TP
A2	US ARMY CORP OF ENGI	330 DISTEL CIR	HAZNET, HWTS		TP
A3	MIDPENINSULA REGIONA	330 DISTEL CIRCLE	CIWQS		TP
A4	POND 07 AND 08	330 DISTEL CIRCLE	FINDS		TP
A5	1X MIDPENISULA REGIO	330 DISTEL CIRCLE	HAZNET, HWTS		TP
A6	MIDPENISULA REGIONAL	330 DISTEL CIR	HAZNET, HWTS		TP
A7	ALMADN AIR FORCE STA	330 DISTEL CIR	HAZNET, HWTS		TP
A8	US ARMY CORPS OF ENG	330 DISTEL CIR	HWTS		TP
A9	MICHAEL J BANKOSH	330 DISTEL CIR	PEST LIC		TP
A10	MIDPENINSULA REGIONA	330 DISTEL CIR	HWTS		TP
A11	US ARMY CORP OF ENGI	330 DISTEL CIR	HAZNET, HWTS		TP
A12	POND 07 AND 08	330 DISTEL CIRCLE	CIWQS		TP
A13	MIDPENISULA REGIONAL	330 DISTEL CIR	HAZNET, HWTS		TP
Reg	JASCO CHEM CORP	1710 VILLA ST	NPL, SEMS, RCRA-SQG, US ENG CONTROLS, US INST...	Same	4647, 0.880, East
A14	R2 TECHNOLOGY INC	325 DISTEL CL	CUPA Listings	Lower	71, 0.013, ESE
B15	PALO ALTO MEDICAL FO	370 DISTEL CL	CUPA Listings	Higher	187, 0.035, SSE
B16	SUTTER BAY MEDICAL F	370 DISTEL CL	CERS HAZ WASTE	Higher	187, 0.035, SSE
B17	SUTTER BAY MEDICAL F	370 DISTEL CIR	RCRA NonGen / NLR	Higher	227, 0.043, SE
C18	SKYLINE HEIGHTS LLC	4970 EL CAMINO REAL	RCRA NonGen / NLR	Lower	246, 0.047, NNW
D19	FORMER PLATINUM CLEA	2290 WEST EL CAMINO	ENVIROSTOR, VCP	Lower	284, 0.054, NE
D20	PURE CLEANERS	2290 EL CAMINO REAL	CUPA Listings	Lower	284, 0.054, NE
D21	PLATINUM CLEANERS	2290 W EL CAMINO REA	CUPA Listings	Lower	284, 0.054, NE
D22	DELIA'S CLEANERS INC	2290 W EL CAMINO REA	DRYCLEANERS	Lower	284, 0.054, NE
D23	DELIA'S CLEANERS	2290 W EL CAMINO REA	CUPA Listings	Lower	284, 0.054, NE
D24	DCI MANAGEMENT GROUP	2290 W EL CAMINO REA	EDR Hist Cleaner	Lower	284, 0.054, NE
D25	DCI MANAGEMENT GROUP	2290 EL CAMINO REAL	RCRA-SQG, FINDS, ECHO	Lower	284, 0.054, NE
D26	AVANTE	5050 EL CAMINO REAL	CUPA Listings	Lower	285, 0.054, East
D27	FOOTHILL CHIROPRACTI	5050 EL CAMINO REAL	CUPA Listings	Lower	285, 0.054, East
C28	PURE CLEANERS	2290-A EL CAMINO REA	DRYCLEANERS, HWTS	Lower	335, 0.063, North
B29	QSECURE	333 DISTEL CL	CUPA Listings	Higher	370, 0.070, SE
E30	SPINAL & SPORTS CARE	2200 EL CAMINO REAL	CUPA Listings	Lower	443, 0.084, ENE
E31	WALTER'S FLOORS	5084 EL CAMINO REAL	LUST, HIST LUST, Cortese, HIST CORTESE	Higher	525, 0.099, East
E32	TAYLOR RENTAL	2246 W EL CAMINO REA	SWEEPS UST, HIST UST, CA FID UST	Lower	536, 0.102, ENE
E33	TAYLOR RENTALS	2246 W EL CAMINO REA	RCRA-SQG	Lower	536, 0.102, ENE
E34	UNITED RENTALS NORTH	2246 W EL CAMINO REA	CUPA Listings	Lower	536, 0.102, ENE
E35	B & H EQUIPMENT CO	2246 W EL CAMINO REA	HIST UST	Lower	536, 0.102, ENE
F36	728 PANCHITA LLC	728 PANCHITA WAY	RCRA NonGen / NLR	Higher	622, 0.118, SSW
E37	PERFORMANCE BICYCLE	2124 W EL CAMINO REA	RCRA NonGen / NLR	Lower	623, 0.118, East
38	INNOVUSION, INC.	4920 EL CAMINO REAL,	RCRA NonGen / NLR	Lower	651, 0.123, WNW

MAPPED SITES SUMMARY

Target Property Address:
330 DISTEL CIRCLE
LOS ALTOS, CA 94022

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
F39	MIKE RYAN	722 PANCHITA WAY	RCRA NonGen / NLR	Higher	706, 0.134, SSW
40	LATHAM SQUARE APARTM	2250 LATHAM ST	RCRA NonGen / NLR	Lower	831, 0.157, NE
41	HEATH, RICHARD	2280 LAYTHM STREET #	RCRA NonGen / NLR	Lower	886, 0.168, NNE
42	JACK IN THE BOX #042	4896 EL CAMINO REAL	CUPA Listings, CERS	Lower	1007, 0.191, NW
G43	JOHN PEAR	410 ORTEGA AVE	HIST UST	Lower	1015, 0.192, North
G44	JOHN PEAR	410 ORTEGA AVE	SWEEPS UST, CA FID UST	Lower	1015, 0.192, North
H45	NATUROPATHIC OPTIONS	5150 EL CAMINO REAL	RCRA NonGen / NLR	Higher	1029, 0.195, ESE
I46	BXP WEST EL CAMINO L	2440 W EL CAMINO REA	RCRA NonGen / NLR	Lower	1034, 0.196, NNW
I47	BP WEST EL CAMINO LL	2440 W EL CAMINO REA	CUPA Listings, EMI, CERS	Lower	1034, 0.196, NNW
I48	BOSTON PROPERTIES, L	2440 EL CAMINO REAL	CERS HAZ WASTE, CERS	Lower	1034, 0.196, NNW
I49	ALPINE ANIMAL HOSPIT	2460 W EL CAMINO REA	CUPA Listings, HWTS	Lower	1067, 0.202, NW
I50	ALPINE ANIMAL HOSPIT	2460 W EL CAMINO REA	CUPA Listings	Lower	1067, 0.202, NW
I51	ALPINE ANIMAL HOSPIT	2460 EL CAMINO REAL	CUPA Listings	Lower	1067, 0.202, NW
G52	CANDIDA MALFERRARI	400 ORTEGA AVE	RCRA NonGen / NLR	Lower	1139, 0.216, North
H53	DOLLAR RENT A CAR	4294 EL CAMINO REAL	SWEEPS UST, CA FID UST, CUPA Listings, CERS	Higher	1192, 0.226, ESE
J54	MARTIN DAVIDSSON	646 PANCHITA WAY	RCRA NonGen / NLR	Higher	1216, 0.230, SSW
J55	MARTIN DAVIDSSON	646 PANCHITA WAY	RCRA NonGen / NLR	Higher	1216, 0.230, SSW
56	ONE HOUR CLEANERS	580 RENGSTORFF AVE N	CPS-SLIC, DRYCLEANERS, CERS	Lower	1253, 0.237, ENE
K57	PRIME DENTAL CARE	4846 EL CAMINO REAL	CUPA Listings	Lower	1277, 0.242, NW
K58	JUHYONG YI DDS PRIME	4846 EL CAMINO REAL	RCRA NonGen / NLR	Lower	1277, 0.242, NW
L59	DIGAS	555 SHOWERS DR	LUST, HIST LUST, Cortese, CERS	Lower	1725, 0.327, NNW
L60	TARGET T0322	555 SHOWERS DR	LUST, CERS HAZ WASTE, CUPA Listings, HIST CORTESE,...	Lower	1725, 0.327, NNW
M61	LOS ALTOS GARDEN SUP	4730 EL CAMINO REAL	LUST, Cortese, HIST CORTESE, CERS	Lower	2018, 0.382, NW
M62	LOS ALTOS GARDEN SUP	4730 EL CAMINO REAL	LUST, HIST UST	Lower	2018, 0.382, NW
N63	UNOCAL	895 SAN ANTONIO	HIST CORTESE	Lower	2436, 0.461, WNW
N64	UNOCAL #4918	895 N. SAN ANTONIO R	LUST, HIST LUST, Cortese, CERS	Lower	2436, 0.461, WNW
O65	SYMTRON #2	111 ORTEGA AVENUE	RESPONSE, ENVIROSTOR, CERS	Lower	2500, 0.473, NNE
P66	SYMTRON CORP MOUNTAI	2235 MORA DR	RCRA-SQG, RESPONSE, ENVIROSTOR, FINDS, ECHO, CERS	Lower	2515, 0.476, NNE
Q67	QUALITY TUNE-UP #1	2580 EL CAMINO REAL	LUST, HIST LUST, Cortese, HIST CORTESE	Lower	2538, 0.481, NW
Q68	QUALITY TUNE-UP #1	2580 EL CAMINO REAL	LUST, CERS	Lower	2538, 0.481, NW
R69	SYMTRON CORP.	22352245 MORA DR	HIST CORTESE	Lower	2557, 0.484, NNE
P70	PLESSEY #2	2251, 2257, 2283 AND	RESPONSE, ENVIROSTOR, CERS	Lower	2562, 0.485, NNE
71	IRM COST SHARING SIT	2520 CALIFORNIA STRE	CPS-SLIC, EMI, CERS	Lower	2623, 0.497, North
O72	PLESSEY INC. NPDES	2294 MORA DR	CPS-SLIC, CERS	Lower	2637, 0.499, NNE
R73	PLESSEY MICRO SCIENC	2274 MORA DRIVE	CA BOND EXP. PLAN	Lower	2652, 0.502, NNE
R74	PLESSEY MICRO SCIENC	2274 MORA DR	SEMS-ARCHIVE, HIST Cal-Sites, RCRA NonGen / NLR,...	Lower	2652, 0.502, NNE
R75	DTSC FORMER PLESSEY	2274 MORA DR	RESPONSE, ENVIROSTOR, Cortese, HAZNET, HIST...	Lower	2652, 0.502, NNE
P76	PLESSEY #3	2256 MORA DRIVE	RESPONSE, ENVIROSTOR, CERS	Lower	2659, 0.504, NNE
O77	TRW/VIDAR	77 ORTEGA AVENUE	RESPONSE, ENVIROSTOR, DEED, CERS	Lower	2702, 0.512, NNE

MAPPED SITES SUMMARY

Target Property Address:
330 DISTEL CIRCLE
LOS ALTOS, CA 94022

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
P78	MORA DRIVE	2221-2291 MORA DRIVE	ENVIROSTOR, VCP, DEED	Lower	2742, 0.519, NNE
79	PROPOSED SAN ANTONIO	435 SAN ANTONIO ROAD	ENVIROSTOR, SCH	Lower	3253, 0.616, NNW
80	SHELL SERVICE STATIO	110 N RENGSTORFF	RCRA-SQG, LUST, HIST LUST, SWEEPS UST, HIST UST,...	Lower	3446, 0.653, NE
81	MVSA	225 SAN ANTONIO ROAD	ENVIROSTOR, VCP	Lower	3605, 0.683, NNW
82	LOS ALTOS HS	201 ALMOND AVE	RCRA-SQG, ENVIROSTOR, SCH, CERS HAZ WASTE, FINDS,...	Higher	4010, 0.759, SSW
S83	JASCO CHEMICAL CORP.	1710 VILLA ST	ENVIROSTOR, HIST UST, ENF, CIWQS, CERS	Lower	4683, 0.887, East
S84	JASCO CHEMICAL CO	1710 VILLA STREET	HIST Cal-Sites	Lower	4683, 0.887, East
S85	JASCO CHEMICAL CORPO	1710 VILLA STREET	CA BOND EXP. PLAN, EMI	Lower	4683, 0.887, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
US ARMY CORP OF ENGI 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002624102 HWTS	N/A
US ARMY CORP OF ENGI 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002611256 HWTS	N/A
MIDPENINSULA REGIONA 330 DISTEL CIRCLE WOODSIDE, CA 94022	CIWQS	N/A
POND 07 AND 08 330 DISTEL CIRCLE LOS ALTOS, CA 94022	FINDS Registry ID:: 110065510593	N/A
1X MIDPENISULA REGIO 330 DISTEL CIRCLE LOS ALTOS, CA 94022	HAZNET GEPAID: CAC000703192 HWTS	N/A
MIDPENISULA REGIONAL 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002661612 HWTS	N/A
ALMADN AIR FORCE STA 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002637235 HWTS	N/A
US ARMY CORPS OF ENG 330 DISTEL CIR LOS ALTOS, CA 94022	HWTS	N/A
MICHAEL J BANKOSH 330 DISTEL CIR LOS ALTOS, CA 94022	PEST LIC	N/A
MIDPENINSULA REGIONA 330 DISTEL CIR LOS ALTOS, CA 94022	HWTS	N/A

EXECUTIVE SUMMARY

US ARMY CORP OF ENGI 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002636173 HWTS	N/A
POND 07 AND 08 330 DISTEL CIRCLE LOS ALTOS, CA	CIWQS	N/A
MIDPENISULA REGIONAL 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002599053 HWTS	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL ---- Proposed National Priority List Sites
NPL LIENS ---- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---- Federal Facility Site Information listing
SEMS ---- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---- RCRA - Large Quantity Generators

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RCRA-VSQG ---- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---- Land Use Control Information System
US ENG CONTROLS ---- Engineering Controls Sites List
US INST CONTROLS ---- Institutional Controls Sites List

Federal ERNS list

ERNS ---- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
UST ---- Active UST Facilities
AST ---- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---- Waste Management Unit Database
SWRCY ---- Recycler Database
HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- Delisted National Clandestine Laboratory Register

EXECUTIVE SUMMARY

SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register
PFAS ..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CERS TANKS ..... California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
RADINFO ..... Radiation Information Database
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ..... Incident and Accident Data
CONSENT ..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV ..... Indian Reservations
FUSRAP ..... Formerly Utilized Sites Remedial Action Program
UMTRA ..... Uranium Mill Tailings Sites
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem

EXECUTIVE SUMMARY

US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
ECHO ---- Enforcement & Compliance History Information
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
UXO ---- Unexploded Ordnance Sites
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
EMI ---- Emissions Inventory Data
ENF ---- Enforcement Action Listing
Financial Assurance ---- Financial Assurance Information Listing
ICE ---- ICE
HWP ---- EnviroStor Permitted Facilities Listing
HWT ---- Registered Hazardous Waste Transporter Database
MINES ---- Mines Site Location Listing
MWMP ---- Medical Waste Management Program Listing
NPDES ---- NPDES Permits Listing
PROC ---- Certified Processors Database
HAZMAT ---- Hazardous Material Facilities
UIC ---- UIC Listing
UIC GEO ---- UIC GEO (GEOTRACKER)
WASTEWATER PITS ---- Oil Wastewater Pits Listing
WDS ---- Waste Discharge System
WIP ---- Well Investigation Program Case List
MILITARY PRIV SITES ---- MILITARY PRIV SITES (GEOTRACKER)
PROJECT ---- PROJECT (GEOTRACKER)
WDR ---- Waste Discharge Requirements Listing
CERS ---- CERS
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)
MINES MRDS ---- Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

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STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 07/29/2020 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JASCO CHEM CORP	***1710 VILLA ST***	***E 1/2 - 1 (0.880 mi.)***	***0***	***31***
Cerclis ID:: 901126				
EPA Id: CAD009103318				

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/15/2020 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DCI MANAGEMENT GROUP	***2290 EL CAMINO REAL***	***NE 0 - 1/8 (0.054 mi.)***	***D25***	***66***
EPA ID:: CAR000063586				
TAYLOR RENTALS	2246 W EL CAMINO REA	ENE 0 - 1/8 (0.102 mi.)	E33	76
EPA ID:: CAD983672197				

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there are 6 RESPONSE sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SYMTRON #2	***111 ORTEGA AVENUE***	***NNE 1/4 - 1/2 (0.473 mi.)***	***O65***	***150***
Database: RESPONSE, Date of Government Version: 07/27/2020				
Status: No Further Action				
Facility Id: 43360130				
SYMTRON CORP MOUNTAI	***2235 MORA DR***	***NNE 1/4 - 1/2 (0.476 mi.)***	***P66***	***154***
Database: RESPONSE, Date of Government Version: 07/27/2020				

Status: No Further Action
Facility Id: 43360124

PLESSEY #2	***2251, 2257, 2283 AND***	***NNE 1/4 - 1/2 (0.485 mi.)***	***P70***	***167***

Database: RESPONSE, Date of Government Version: 07/27/2020
Status: No Further Action
Facility Id: 43360131

DTSC FORMER PLESSEY	***2274 MORA DR***	***NNE 1/2 - 1 (0.502 mi.)***	***R75***	***193***

Database: RESPONSE, Date of Government Version: 07/27/2020
Status: Certified / Operation & Maintenance
Facility Id: 43360069

PLESSEY #3	***2256 MORA DRIVE***	***NNE 1/2 - 1 (0.504 mi.)***	***P76***	***250***

Database: RESPONSE, Date of Government Version: 07/27/2020
Status: No Further Action
Facility Id: 43360135

TRW/VIDAR	***77 ORTEGA AVENUE***	***NNE 1/2 - 1 (0.512 mi.)***	***O77***	***253***

Database: RESPONSE, Date of Government Version: 07/27/2020
Status: Certified O&M - Land Use Restrictions Only
Facility Id: 43360128

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/27/2020 has revealed that there are 12 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ALTOS HS	***201 ALMOND AVE***	***SSW 1/2 - 1 (0.759 mi.)***	***82***	***301***

Facility Id: 60002914
Status: Active

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER PLATINUM CLEA	***2290 WEST EL CAMINO***	***NE 0 - 1/8 (0.054 mi.)***	***D19***	***55***

Facility Id: 60002117
Status: Certified

SYMTRON #2	***111 ORTEGA AVENUE***	***NNE 1/4 - 1/2 (0.473 mi.)***	***O65***	***150***

Facility Id: 43360130
Status: No Further Action

SYMTRON CORP MOUNTAI	***2235 MORA DR***	***NNE 1/4 - 1/2 (0.476 mi.)***	***P66***	***154***

Facility Id: 43360124

Status: No Further Action

PLESSEY #2	***2251, 2257, 2283 AND***	***NNE 1/4 - 1/2 (0.485 mi.)***	***P70***	***167***
Facility Id: 43360131				
Status: No Further Action				
DTSC FORMER PLESSEY	***2274 MORA DR***	***NNE 1/2 - 1 (0.502 mi.)***	***R75***	***193***
Facility Id: 43360069				
Status: Certified / Operation & Maintenance				
PLESSEY #3	***2256 MORA DRIVE***	***NNE 1/2 - 1 (0.504 mi.)***	***P76***	***250***
Facility Id: 43360135				
Status: No Further Action				
TRW/VIDAR	***77 ORTEGA AVENUE***	***NNE 1/2 - 1 (0.512 mi.)***	***O77***	***253***
Facility Id: 43360128				
Status: Certified O&M - Land Use Restrictions Only				
MORA DRIVE	***2221-2291 MORA DRIVE***	***NNE 1/2 - 1 (0.519 mi.)***	***P78***	***261***
Facility Id: 60002502				
Status: Active				
PROPOSED SAN ANTONIO	***435 SAN ANTONIO ROAD***	***NNW 1/2 - 1 (0.616 mi.)***	***79***	***282***
Facility Id: 60002949				
Status: Active				
MVSA	***225 SAN ANTONIO ROAD***	***NNW 1/2 - 1 (0.683 mi.)***	***81***	***299***
Facility Id: 60002855				
Status: Active				
JASCO CHEMICAL CORP.	***1710 VILLA ST***	***E 1/2 - 1 (0.887 mi.)***	***S83***	***317***
Facility Id: 43280119				
Status: Refer: RWQCB				

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 8 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALTER'S FLOORS	***5084 EL CAMINO REAL***	***E 0 - 1/8 (0.099 mi.)***	***E31***	***72***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014				
Database: LUST, Date of Government Version: 06/08/2020				
Status: Completed - Case Closed				
Facility Status: Case Closed				
Date Closed: 04/12/1996				
Global Id: T0608501552				
SCVWD ID: 06S2W20G01F				
date9: 4/12/1996				

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIGAS	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L59***	***127***
Database: LUST REG 2, Date of Government Version: 09/30/2004				

Facility Status: Case Closed
date9: 9/17/1997

TARGET T0322 ***555 SHOWERS DR*** ***NNW 1/4 - 1/2 (0.327 mi.)*** ***L60*** ***129***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 06/08/2020
Status: Completed - Case Closed
Date Closed: 09/17/1997
Global Id: T0608500515
SCVWD ID: 06S2W20C02F

LOS ALTOS GARDEN SUP ***4730 EL CAMINO REAL*** ***NW 1/4 - 1/2 (0.382 mi.)*** ***M61*** ***138***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 43-2112
Facility Status: Case Closed
date9: 4/29/1996

LOS ALTOS GARDEN SUP ***4730 EL CAMINO REAL*** ***NW 1/4 - 1/2 (0.382 mi.)*** ***M62*** ***140***
Database: LUST, Date of Government Version: 06/08/2020
Status: Completed - Case Closed
Global Id: T0608501940

UNOCAL #4918 ***895 N. SAN ANTONIO R*** ***WNW 1/4 - 1/2 (0.461 mi.)*** ***N64*** ***142***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 06/08/2020
Status: Completed - Case Closed
Facility Status: Pollution Characterization
Date Closed: 03/11/2013
Global Id: T0608500150
SCVWD ID: 06S2W20E01F

QUALITY TUNE-UP #1 ***2580 EL CAMINO REAL*** ***NW 1/4 - 1/2 (0.481 mi.)*** ***Q67*** ***162***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
date9: 9/30/1996

QUALITY TUNE-UP #1 ***2580 EL CAMINO REAL*** ***NW 1/4 - 1/2 (0.481 mi.)*** ***Q68*** ***164***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 06/08/2020
Status: Completed - Case Closed
Date Closed: 09/30/1996
Global Id: T0608501080
SCVWD ID: 06S2W20D01F

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 3 CPS-SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ONE HOUR CLEANERS	***580 RENGSTORFF AVE N***	***ENE 1/8 - 1/4 (0.237 mi.)***	***56***	***123***

Database: SLIC REG 2, Date of Government Version: 09/30/2004
Database: CPS-SLIC, Date of Government Version: 06/08/2020

Facility Status: Completed - Case Closed
Facility Id: SLT2O111117
Global Id: SLT2O111117

IRM COST SHARING SIT ***2520 CALIFORNIA STRE*** ***N 1/4 - 1/2 (0.497 mi.)*** ***71*** ***169***
Database: SLIC REG 2, Date of Government Version: 09/30/2004
Database: CPS-SLIC, Date of Government Version: 06/08/2020
Facility Status: Open - Verification Monitoring
Facility Id: SL18311731
Global Id: SL18311731

PLESSEY INC. NPDES ***2294 MORA DR*** ***NNE 1/4 - 1/2 (0.499 mi.)*** ***O72*** ***171***
Database: CPS-SLIC, Date of Government Version: 06/08/2020
Facility Status: Completed - Case Closed
Global Id: SL0608508217

HIST LUST: A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

A review of the HIST LUST list, as provided by EDR, and dated 03/29/2005 has revealed that there are 4 HIST LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALTER'S FLOORS SCVWD ID: 06S2W20G01	***5084 EL CAMINO REAL***	***E 0 - 1/8 (0.099 mi.)***	***E31***	***72***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIGAS SCVWD ID: 06S2W20C02	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L59***	***127***
UNOCAL #4918 SCVWD ID: 06S2W20E01	***895 N. SAN ANTONIO R***	***WNW 1/4 - 1/2 (0.461 mi.)***	***N64***	***142***
QUALITY TUNE-UP #1 SCVWD ID: 06S2W20D01	***2580 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.481 mi.)***	***Q67***	***162***

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 07/27/2020 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER PLATINUM CLEA Status: Certified Facility Id: 60002117	***2290 WEST EL CAMINO***	***NE 0 - 1/8 (0.054 mi.)***	***D19***	***55***

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 2 HIST Cal-Sites sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PLESSEY MICRO SCIENC	***2274 MORA DR***	***NNE 1/2 - 1 (0.502 mi.)***	***R74***	***172***
JASCO CHEMICAL CO	1710 VILLA STREET	E 1/2 - 1 (0.887 mi.)	S84	323

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 07/20/2020 has revealed that there are 2 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SUTTER BAY MEDICAL F	370 DISTEL CL	SSE 0 - 1/8 (0.035 mi.)	B16	48

Lower Elevation	Address	Direction / Distance	Map ID	Page
BOSTON PROPERTIES, L	***2440 EL CAMINO REAL***	***NNW 1/8 - 1/4 (0.196 mi.)***	***I48***	***107***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOLLAR RENT A CAR	***4294 EL CAMINO REAL***	***ESE 1/8 - 1/4 (0.226 mi.)***	***H53***	***114***
Status: A				
Tank Status: A				
Comp Number: 36672				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAYLOR RENTAL	***2246 W EL CAMINO REA***	***ENE 0 - 1/8 (0.102 mi.)***	***E32***	***74***
Comp Number: 4662				
JOHN PEAR	***410 ORTEGA AVE***	***N 1/8 - 1/4 (0.192 mi.)***	***G44***	***99***

EXECUTIVE SUMMARY

Comp Number: 48011

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAYLOR RENTAL	***2246 W EL CAMINO REA***	***ENE 0 - 1/8 (0.102 mi.)***	***E32***	***74***
B & H EQUIPMENT CO Facility Id: 00000004662	2246 W EL CAMINO REA	ENE 0 - 1/8 (0.102 mi.)	E35	79
JOHN PEAR Facility Id: 00000048011	410 ORTEGA AVE	N 1/8 - 1/4 (0.192 mi.)	G43	98

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOLLAR RENT A CAR Facility Id: 43012037 Status: A	***4294 EL CAMINO REAL***	***ESE 1/8 - 1/4 (0.226 mi.)***	***H53***	***114***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAYLOR RENTAL Facility Id: 43004443 Status: A	***2246 W EL CAMINO REA***	***ENE 0 - 1/8 (0.102 mi.)***	***E32***	***74***
JOHN PEAR Facility Id: 43011926 Status: I	***410 ORTEGA AVE***	***N 1/8 - 1/4 (0.192 mi.)***	***G44***	***99***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/15/2020 has revealed that there are 14 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SUTTER BAY MEDICAL F	370 DISTEL CIR	SE 0 - 1/8 (0.043 mi.)	B17	50

EXECUTIVE SUMMARY

EPA ID:: CAL000093164				
728 PANCHITA LLC EPA ID:: CAC003018628	728 PANCHITA WAY	SSW 0 - 1/8 (0.118 mi.)	F36	80
MIKE RYAN EPA ID:: CAC002980951	722 PANCHITA WAY	SSW 1/8 - 1/4 (0.134 mi.)	F39	87
NATUROPATHIC OPTIONS EPA ID:: CAL000441379	5150 EL CAMINO REAL	ESE 1/8 - 1/4 (0.195 mi.)	H45	100
MARTIN DAVIDSSON EPA ID:: CAC002965123	646 PANCHITA WAY	SSW 1/8 - 1/4 (0.230 mi.)	J54	118
MARTIN DAVIDSSON EPA ID:: CAC002982432	646 PANCHITA WAY	SSW 1/8 - 1/4 (0.230 mi.)	J55	120

Lower Elevation	Address	Direction / Distance	Map ID	Page
SKYLINE HEIGHTS LLC EPA ID:: CAC003034547	4970 EL CAMINO REAL	NNW 0 - 1/8 (0.047 mi.)	C18	53
PERFORMANCE BICYCLE EPA ID:: CAL000322954	2124 W EL CAMINO REA	E 0 - 1/8 (0.118 mi.)	E37	82
INNOVUSION, INC. EPA ID:: CAC003016057	4920 EL CAMINO REAL,	WNW 0 - 1/8 (0.123 mi.)	38	85
LATHAM SQUARE APARTM EPA ID:: CAL000280916	2250 LATHAM ST	NE 1/8 - 1/4 (0.157 mi.)	40	90
HEATH, RICHARD EPA ID:: CAC002999920	2280 LAYTHM STREET #	NNE 1/8 - 1/4 (0.168 mi.)	41	92
BXP WEST EL CAMINO L EPA ID:: CAL000370939	2440 W EL CAMINO REA	NNW 1/8 - 1/4 (0.196 mi.)	I46	102
CANDIDA MALFERRARI EPA ID:: CAC002966813	400 ORTEGA AVE	N 1/8 - 1/4 (0.216 mi.)	G52	112
JUHYONG YI DDS PRIME EPA ID:: CAL000333242	4846 EL CAMINO REAL	NW 1/8 - 1/4 (0.242 mi.)	K58	125

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 07/29/2020 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JASCO CHEM CORP EPA ID:: CAD009103318	***1710 VILLA ST***	***E 1/2 - 1 (0.880 mi.)***	***0***	***31***

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there are 2 CA BOND EXP. PLAN sites within approximately 1 mile of the target property.

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
PLESSEY MICRO SCIENC	2274 MORA DRIVE	NNE 1/2 - 1 (0.502 mi.)	R73	172
JASCO CHEMICAL CORPO	***1710 VILLA STREET***	***E 1/2 - 1 (0.887 mi.)***	***S85***	***325***

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 06/22/2020 has revealed that there are 5 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALTER'S FLOORS	***5084 EL CAMINO REAL***	***E 0 - 1/8 (0.099 mi.)***	***E31***	***72***
Cleanup Status: COMPLETED - CASE CLOSED				

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIGAS	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L59***	***127***
Cleanup Status: COMPLETED - CASE CLOSED				
LOS ALTOS GARDEN SUP	***4730 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.382 mi.)***	***M61***	***138***
Cleanup Status: COMPLETED - CASE CLOSED				
UNOCAL #4918	***895 N. SAN ANTONIO R***	***WNW 1/4 - 1/2 (0.461 mi.)***	***N64***	***142***
Cleanup Status: COMPLETED - CASE CLOSED				
QUALITY TUNE-UP #1	***2580 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.481 mi.)***	***Q67***	***162***
Cleanup Status: COMPLETED - CASE CLOSED				

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 17 CUPA Listings sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALO ALTO MEDICAL FO	370 DISTEL CL	SSE 0 - 1/8 (0.035 mi.)	B15	48
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
QSECURE	333 DISTEL CL	SE 0 - 1/8 (0.070 mi.)	B29	71
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
DOLLAR RENT A CAR	***4294 EL CAMINO REAL***	***ESE 1/8 - 1/4 (0.226 mi.)***	***H53***	***114***
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				

Lower Elevation	Address	Direction / Distance	Map ID	Page
R2 TECHNOLOGY INC	325 DISTEL CL	ESE 0 - 1/8 (0.013 mi.)	A14	48
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
PURE CLEANERS	2290 EL CAMINO REAL	NE 0 - 1/8 (0.054 mi.)	D20	64
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
PLATINUM CLEANERS	2290 W EL CAMINO REA	NE 0 - 1/8 (0.054 mi.)	D21	64
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
DELIA'S CLEANERS	2290 W EL CAMINO REA	NE 0 - 1/8 (0.054 mi.)	D23	65
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
AVANTE	5050 EL CAMINO REAL	E 0 - 1/8 (0.054 mi.)	D26	69
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
FOOTHILL CHIROPRACTI	5050 EL CAMINO REAL	E 0 - 1/8 (0.054 mi.)	D27	69
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
SPINAL & SPORTS CARE	2200 EL CAMINO REAL	ENE 0 - 1/8 (0.084 mi.)	E30	71
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
UNITED RENTALS NORTH	2246 W EL CAMINO REA	ENE 0 - 1/8 (0.102 mi.)	E34	79
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
JACK IN THE BOX #042	***4896 EL CAMINO REAL***	***NW 1/8 - 1/4 (0.191 mi.)***	***42***	***95***
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
BP WEST EL CAMINO LL	***2440 W EL CAMINO REA***	***NNW 1/8 - 1/4 (0.196 mi.)***	***I47***	***105***
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
ALPINE ANIMAL HOSPIT	***2460 W EL CAMINO REA***	***NW 1/8 - 1/4 (0.202 mi.)***	***I49***	***110***
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
ALPINE ANIMAL HOSPIT	2460 W EL CAMINO REA	NW 1/8 - 1/4 (0.202 mi.)	I50	111
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
ALPINE ANIMAL HOSPIT	2460 EL CAMINO REAL	NW 1/8 - 1/4 (0.202 mi.)	I51	111
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
PRIME DENTAL CARE	4846 EL CAMINO REAL	NW 1/8 - 1/4 (0.242 mi.)	K57	125
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there are 3 DRYCLEANERS sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DELIA'S CLEANERS INC	2290 W EL CAMINO REA	NE 0 - 1/8 (0.054 mi.)	D22	65
Database: DRYCLEANERS, Date of Government Version: 06/04/2020				
EPA Id: CAR000063586				
PURE CLEANERS	***2290-A EL CAMINO REA***	***N 0 - 1/8 (0.063 mi.)***	***C28***	***70***
Database: DRYCLEANERS, Date of Government Version: 06/04/2020				
EPA Id: CAL000287343				
ONE HOUR CLEANERS	***580 RENGSTORFF AVE N***	***ENE 1/8 - 1/4 (0.237 mi.)***	***56***	***123***
Database: DRYCLEANERS, Date of Government Version: 06/04/2020				
EPA Id: CAD981632219				

EXECUTIVE SUMMARY

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 6 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALTER'S FLOORS Reg Id: 43-1594	***5084 EL CAMINO REAL***	***E 0 - 1/8 (0.099 mi.)***	***E31***	***72***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TARGET T0322 Reg Id: 43-0468	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L60***	***129***
LOS ALTOS GARDEN SUP Reg Id: 43-2112	***4730 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.382 mi.)***	***M61***	***138***
UNOCAL Reg Id: 43-0082	895 SAN ANTONIO	WNW 1/4 - 1/2 (0.461 mi.)	N63	141
QUALITY TUNE-UP #1 Reg Id: 43-1088	***2580 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.481 mi.)***	***Q67***	***162***
SYMTRON CORP. Reg Id: 43360124	22352245 MORA DR	NNE 1/4 - 1/2 (0.484 mi.)	R69	166

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 08/21/2020 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELL SERVICE STATIO	***110 N RENGSTORFF***	***NE 1/2 - 1 (0.653 mi.)***	***80***	***284***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist

EXECUTIVE SUMMARY

Cleaner site within approximately 0.125 miles of the target property.

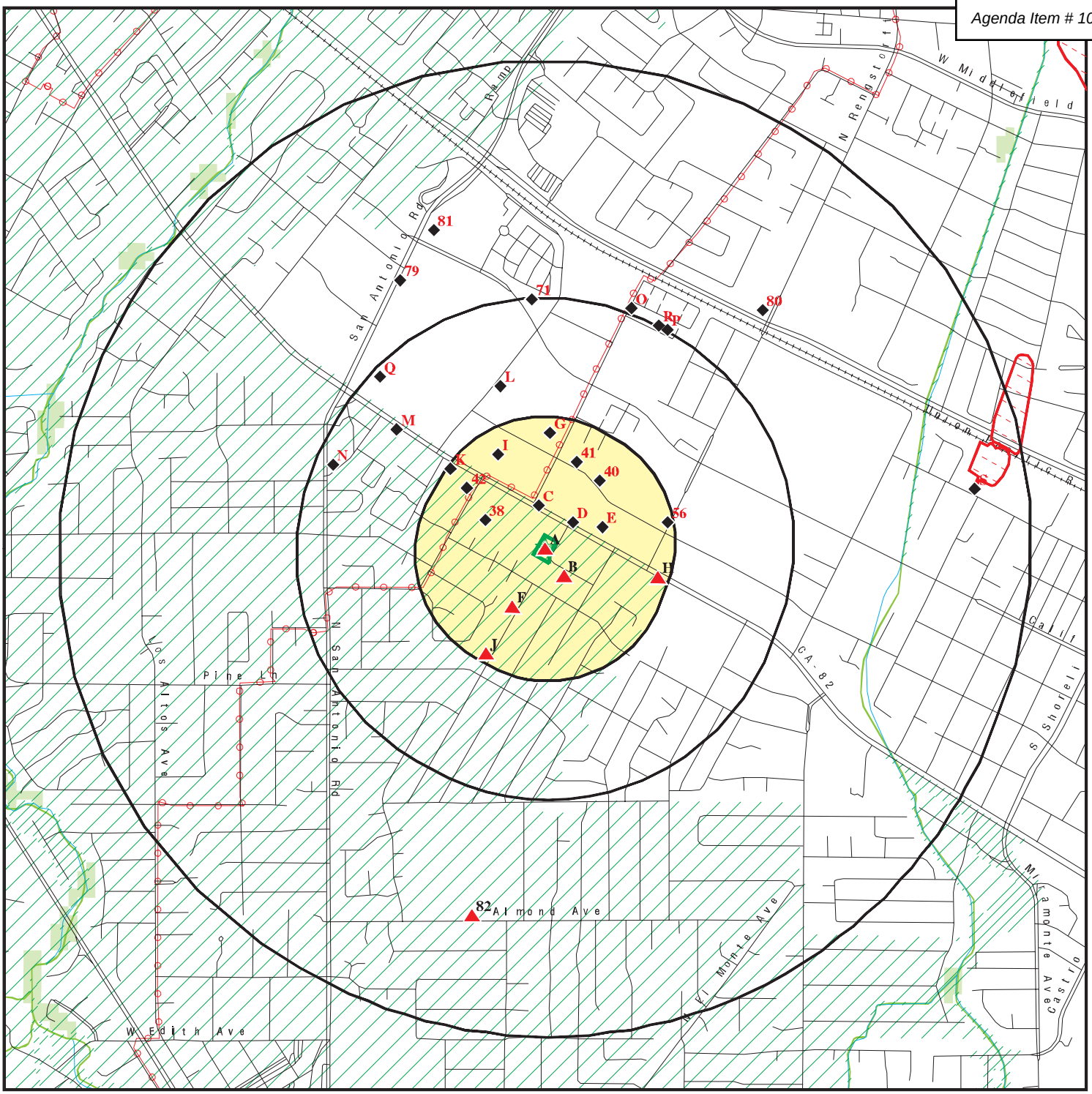
Lower Elevation	Address	Direction / Distance	Map ID	Page
DCI MANAGEMENT GROUP	2290 W EL CAMINO REA	NE 0 - 1/8 (0.054 mi.)	D24	66

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
BEST BUY #0685	CERS HAZ WASTE

OVERVIEW MAP - 6253537.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Distel Circle Property	CLIENT: Ninyo & Moore
ADDRESS: 330 Distel Circle	CONTACT: Randy Wheeler
Los Altos CA 94022	INQUIRY #: 6253537.2s
LAT/LONG: 37.396371 / 122.105871	DATE: November 04, 2020 12:58 pm

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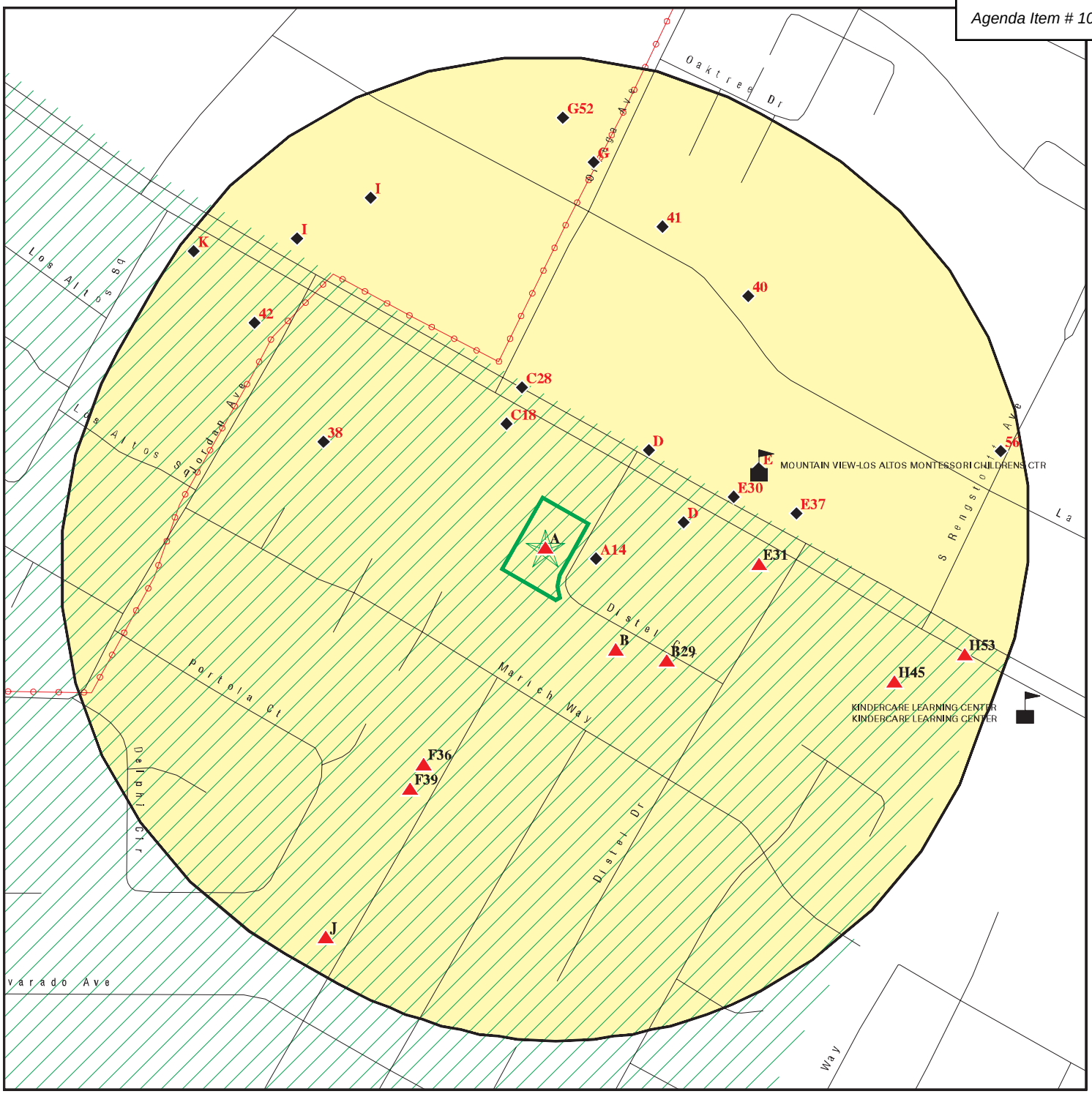
DETAIL MAP - 6253537.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Distel Circle Property	CLIENT: Ninyo & Moore
ADDRESS: 330 Distel Circle Los Altos CA 94022	CONTACT: Randy Wheeler
LAT/LONG: 37.396371 / 122.105871	INQUIRY #: 6253537.2s DATE: November 04, 2020 1:01 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		2	0	NR	NR	NR	2
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	3	3	NR	6
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		1	0	3	8	NR	12
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	0	7	NR	NR	8

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	1	2	NR	NR	3
HIST LUST	0.500		1	0	3	NR	NR	4
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		1	0	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	2	NR	2
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		1	1	NR	NR	NR	2
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	2	NR	NR	NR	3
HIST UST	0.250		2	1	NR	NR	NR	3
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		1	2	NR	NR	NR	3
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		5	9	NR	NR	NR	14
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	1	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	2	NR	2
Cortese	0.500		1	0	4	NR	NR	5
CUPA Listings	0.250		10	7	NR	NR	NR	17

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		2	1	NR	NR	NR	3
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	7	NR	NR	NR	NR	NR	7
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	5	NR	NR	6
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP	1	NR	NR	NR	NR	NR	1
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP	2	NR	NR	NR	NR	NR	2
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
HWTS	TP	9	NR	NR	NR	NR	NR	9
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		1	NR	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		20	31	24	27	18	0	120

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number EPA ID Number

A1 Target Property | **US ARMY CORP OF ENGINEERS**
330 DISTEL CIR
LOS ALTOS, CA 94022 | **HAZNET** **S112966161**
HWTS **N/A**

Site 1 of 14 in cluster A

Actual: 86 ft.

HAZNET:

Name:	US ARMY CORP OF ENGINEERS
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
Contact:	GERALD EINCENT
Telephone:	9165577452
Mailing Name:	Not reported
Mailing Address:	1325 J ST
Year:	2007
Gepaid:	CAC002624102
TSD EPA ID:	CAT000646117
CA Waste Code:	-
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.025
Year:	2007
Gepaid:	CAC002624102
TSD EPA ID:	CAT000646117
CA Waste Code:	352 - Other organic solids
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.075

Additional Info:

Year:	2007
Gen EPA ID:	CAC002624102
Shipment Date:	20071221
Creation Date:	3/8/2008 18:30:20
Receipt Date:	20071226
Manifest ID:	001111696JJK
Trans EPA ID:	CAR000177527
Trans Name:	PHILIP WEST INDUSTRIAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

US ARMY CORP OF ENGINEERS (Continued) **S112966161**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071221
Creation Date:	3/8/2008 18:30:20
Receipt Date:	20071226
Manifest ID:	001111691JJK
Trans EPA ID:	CAR000177527
Trans Name:	PHILIP WEST INDUSTRIAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	US ARMY CORP OF ENGINEERS
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
EPA ID:	CAC002624102
Inactive Date:	05/19/2008
Create Date:	11/20/2007
Last Act Date:	06/11/2008
Mailing Name:	Not reported
Mailing Address:	1325 J ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SACRAMENTO, CA 958142922
Owner Name:	US ARMY
Owner Address:	1325 J ST
Owner Address 2:	Not reported
Owner City,State,Zip:	SACRAMENTO, CA 958142922
Contact Name:	GERALD EINCENT
Contact Address:	1325 J ST
Contact Address 2:	Not reported
City,State,Zip:	SACRAMENTO, CA 958142922

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A2	**US ARMY CORP OF ENGINEERS**	**HAZNET**	**S112958129**
Target	**330 DISTEL CIR**	**HWTS**	**N/A**
Property	**LOS ALTOS, CA 94022**		

Site 2 of 14 in cluster A

Actual:
86 ft.

HAZNET:

Name:	US ARMY CORP OF ENGINEERS
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
Contact:	GERALD EINCENT
Telephone:	9165577452
Mailing Name:	Not reported
Mailing Address:	1325 J ST
Year:	2007
Gepaid:	CAC002611256
TSD EPA ID:	CAT000646117
CA Waste Code:	352 - Other organic solids
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.4
Year:	2007
Gepaid:	CAC002611256
TSD EPA ID:	CAT000646117
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	4.029
Year:	2007
Gepaid:	CAC002611256
TSD EPA ID:	CAT000646117
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.209

Additional Info:

Year:	2007
Gen EPA ID:	CAC002611256
Shipment Date:	20070524
Creation Date:	10/18/2007 18:30:07
Receipt Date:	20070525
Manifest ID:	000464656JJK
Trans EPA ID:	ILD984835785
Trans Name:	WASTE MANAGEMENT NATIONAL SERVICE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported

US ARMY CORP OF ENGINEERS (Continued) **S112958129**

Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.209
Waste Quantity:	55
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20070524
Creation Date:	10/18/2007 18:30:07
Receipt Date:	20070525
Manifest ID:	000464656JJK
Trans EPA ID:	ILD984835785
Trans Name:	WASTE MANAGEMENT NATIONAL SERVICE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.4
Waste Quantity:	800
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20070524
Creation Date:	10/18/2007 18:30:07
Receipt Date:	20070525
Manifest ID:	000464656JJK
Trans EPA ID:	ILD984835785
Trans Name:	WASTE MANAGEMENT NATIONAL SERVICE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	3.179
Waste Quantity:	935
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported

US ARMY CORP OF ENGINEERS (Continued) **S112958129**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20070524
Creation Date:	10/18/2007 18:30:07
Receipt Date:	20070525
Manifest ID:	000464656JJK
Trans EPA ID:	ILD984835785
Trans Name:	WASTE MANAGEMENT NATIONAL SERVICE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.85
Waste Quantity:	250
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	US ARMY CORP OF ENGINEERS
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
EPA ID:	CAC002611256
Inactive Date:	06/06/2007
Create Date:	12/07/2006
Last Act Date:	06/21/2007
Mailing Name:	Not reported
Mailing Address:	1325 J ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SACRAMENTO, CA 958142922
Owner Name:	US ARMY
Owner Address:	1325 J ST
Owner Address 2:	Not reported
Owner City,State,Zip:	SACRAMENTO, CA 958142922
Contact Name:	GERALD EINCENT
Contact Address:	1325 J ST
Contact Address 2:	Not reported
City,State,Zip:	SACRAMENTO, CA 958142922

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

A3 **MIDPENINSULA REGIONAL OPEN SPACE DISTRICT** **CIWQS** **S121655643**
Target Property **330 DISTEL CIRCLE** **N/A**
WOODSIDE, CA 94022

Site 3 of 14 in cluster A

Actual: 86 ft.

CIWQS:

Name:	MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
Address:	330 DISTEL CIRCLE
City,State,Zip:	WOODSIDE, CA 94022
Agency:	Midpeninsula Regional Open Space District
Agency Address:	330 Distel Cir, Los Altos, CA 94022
Place/Project Type:	Construction - Other: Open Space Public Access Staging Area
SIC/NAICS:	Not reported
Region:	2
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	2 41C358981
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	06/30/2010
Termination Date:	08/05/2010
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	37.399552
Longitude:	-122.294993

A4 **POND 07 AND 08** **FINDS** **1023261679**
Target Property **330 DISTEL CIRCLE** **N/A**
LOS ALTOS, CA 94022

Site 4 of 14 in cluster A

Actual: 86 ft.

FINDS:
Registry ID: 110065510593

Click Here:

Environmental Interest/Information System:
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

A5 **1X MIDPENISULA REGIONAL OPEN SPACE DIST.** **HAZNET** **S112839095**
Target **330 DISTEL CIRCLE** **HWTS** **N/A**
Property **LOS ALTOS, CA 94022**

Site 5 of 14 in cluster A

Actual:
86 ft.

HAZNET:

Name:	1X MIDPENISULA REGIONAL OPEN SPACE DIST.
Address:	330 DISTEL CIRCLE
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940220000
Contact:	BUCKY MACE/REAL PROPERTY MANG.
Telephone:	4159495500
Mailing Name:	Not reported
Mailing Address:	--
Year:	2009
Gepaid:	CAC000703192
TSD EPA ID:	CAD028409019
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.09
Year:	2009
Gepaid:	CAC000703192
TSD EPA ID:	NVD982358483
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	-
Tons:	0.1668
Year:	2009
Gepaid:	CAC000703192
TSD EPA ID:	NVD982358483
CA Waste Code:	352 - Other organic solids
Disposal Method:	-
Tons:	0.075
Year:	2009
Gepaid:	CAC000703192
TSD EPA ID:	NVD982358483
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.095
Year:	1992
Gepaid:	CAC000703192
TSD EPA ID:	IDD073114654
CA Waste Code:	261 - Polychlorinated biphenyls and material containing PCBs
Disposal Method:	D80 - Disposal, Land Fill
Tons:	0.5

Additional Info:

Year:	2009
Gen EPA ID:	CAC000703192
Shipment Date:	20091029
Creation Date:	2/3/2010 18:30:16

1X MIDPENISULA REGIONAL OPEN SPACE DIST. (Continued) **S112839095**

Receipt Date:	20091202
Manifest ID:	004449512JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD982358483
Trans Name:	CLEARWATER ENVIRONMENTAL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.095
Waste Quantity:	25
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20091029
Creation Date:	2/3/2010 18:30:22
Receipt Date:	20091125
Manifest ID:	004449513JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	CAR000172478
Trans 2 Name:	ENVIRONMENTAL LOGISTICS INC
TSDF EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.09
Waste Quantity:	25
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20091029
Creation Date:	2/3/2010 18:30:16
Receipt Date:	20091202
Manifest ID:	004449512JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD982358483
Trans Name:	CLEARWATER ENVIRONMENTAL

1X MIDPENISULA REGIONAL OPEN SPACE DIST. (Continued) **S112839095**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20091029
Creation Date:	2/3/2010 18:30:16
Receipt Date:	20091202
Manifest ID:	004449512JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD982358483
Trans Name:	CLEARWATER ENVIRONMENTAL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.1668
Waste Quantity:	40
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	1X MIDPENISULA REGIONAL OPEN SPACE DIST.
Address:	330 DISTEL CIRCLE
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940220000
EPA ID:	CAC000703192
Inactive Date:	10/25/2000
Create Date:	01/08/1992
Last Act Date:	10/25/2000
Mailing Name:	Not reported
Mailing Address:	--
Mailing Address 2:	Not reported
Mailing City,State,Zip:	MT. VIEW, CA 940400000
Owner Name:	MIDPENISULA REG. OPEN SPA. DIS
Owner Address:	--
Owner Address 2:	Not reported
Owner City,State,Zip:	--, 99 --
Contact Name:	BUCKY MACE/REAL PROPERTY MANG.
Contact Address:	--

1X MIDPENISULA REGIONAL OPEN SPACE DIST. (Continued) **S112839095**

Contact Address 2: Not reported
City,State,Zip: --, 99 --

A6 **MIDPENISULA REGIONAL OPEN SPACE DISTRICT** **HAZNET** **S112982650**
Target **330 DISTEL CIR** **HWTS** **N/A**
Property **LOS ALTOS, CA 94022**

Site 6 of 14 in cluster A

Actual:
86 ft.

HAZNET:
Name: MIDPENISULA REGIONAL OPEN SPACE DISTRICT
Address: 330 DISTEL CIR
Address 2: Not reported
City,State,Zip: LOS ALTOS, CA 940221404
Contact: GINA COONY
Telephone: 6506911200
Mailing Name: Not reported
Mailing Address: 330 DISTEL CIR

Year: 2011
Gepaid: CAC002661612
TSD EPA ID: CAD981382732
CA Waste Code: 151 - Asbestos containing waste
Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 628

Year: 2011
Gepaid: CAC002661612
TSD EPA ID: CAD028409019
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 1.25

Year: 2011
Gepaid: CAC002661612
TSD EPA ID: AZ0000337360
CA Waste Code: 261 - Polychlorinated biphenyls and material containing PCBs
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.53006

Year: 2011
Gepaid: CAC002661612
TSD EPA ID: AZ0000337360
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: -
Tons: 0.005

Additional Info:
Year: 2011
Gen EPA ID: CAC002661612

Shipment Date: 20110712
Creation Date: 9/1/2011 18:31:47

MIDPENISULA REGIONAL OPEN SPACE DISTRICT (Continued) **S112982650**

Receipt Date:	20110712
Manifest ID:	007269056JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981382732
Trans Name:	ALTAMONT LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	24
Waste Quantity:	60
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20110630
Creation Date:	8/26/2011 18:30:51
Receipt Date:	20110705
Manifest ID:	007269084JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981382732
Trans Name:	ALTAMONT LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	12
Waste Quantity:	30
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20110622
Creation Date:	8/26/2011 18:30:36
Receipt Date:	20110622
Manifest ID:	007269099JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981382732

MIDPENISULA REGIONAL OPEN SPACE DISTRICT (Continued) **S112982650**

Trans Name:	ALTAMONT LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	12
Waste Quantity:	30
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110614
Creation Date:	12/15/2011 18:30:22
Receipt Date:	20110712
Manifest ID:	008828004JJK
Trans EPA ID:	CAR000147025
Trans Name:	FUTURE ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	NJD080631369
Trans 2 Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
TSDF EPA ID:	AZ0000337360
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D009
Meth Code:	- Not reported
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110614
Creation Date:	12/15/2011 18:30:22
Receipt Date:	20110712
Manifest ID:	008828003JJK
Trans EPA ID:	CAR000147025
Trans Name:	FUTURE ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	NJD080631369
Trans 2 Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
TSDF EPA ID:	AZ0000337360
Trans Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	261 - Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.53006

MIDPENISULA REGIONAL OPEN SPACE DISTRICT (Continued) **S112982650**

Waste Quantity:	481
Quantity Unit:	K
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110614
Creation Date:	8/26/2011 18:30:36
Receipt Date:	20110621
Manifest ID:	008828002JJK
Trans EPA ID:	CAR000147025
Trans Name:	FUTURE ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAD983608258
Trans 2 Name:	OCEAN BLUE ENVIRONMENTAL
TSDF EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.8
Waste Quantity:	1600
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110614
Creation Date:	8/26/2011 18:30:36
Receipt Date:	20110621
Manifest ID:	008828002JJK
Trans EPA ID:	CAR000147025
Trans Name:	FUTURE ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	CAD983608258
Trans 2 Name:	OCEAN BLUE ENVIRONMENTAL
TSDF EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.45
Waste Quantity:	900
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

MIDPENISULA REGIONAL OPEN SPACE DISTRICT (Continued) **S112982650**

Shipment Date:	20110523
Creation Date:	7/14/2011 18:30:27
Receipt Date:	20110524
Manifest ID:	007269065JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981382732
Trans Name:	ALTAMONT LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	12
Waste Quantity:	30
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20110511
Creation Date:	7/14/2011 18:30:12
Receipt Date:	20110511
Manifest ID:	007275526JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981382732
Trans Name:	ALTAMONT LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	24
Waste Quantity:	60
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20110510
Creation Date:	7/14/2011 18:30:12
Receipt Date:	20110510
Manifest ID:	007269076JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	Not reported

MIDPENISULA REGIONAL OPEN SPACE DISTRICT (Continued) **S112982650**

Trans 2 Name:	Not reported
TSDF EPA ID:	CAD981382732
Trans Name:	ALTAMONT LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	24
Waste Quantity:	60
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	MIDPENISULA REGIONAL OPEN SPACE DISTRICT
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
EPA ID:	CAC002661612
Inactive Date:	07/10/2011
Create Date:	01/10/2011
Last Act Date:	01/10/2011
Mailing Name:	Not reported
Mailing Address:	330 DISTEL CIR
Mailing Address 2:	Not reported
Mailing City,State,Zip:	LOS ALTOS, CA 940221404
Owner Name:	MIDPENISULA REG OPEN SPACE DIST
Owner Address:	330 DISTEL CIR
Owner Address 2:	Not reported
Owner City,State,Zip:	LOS ALTOS, CA 940221404
Contact Name:	GINA COONY
Contact Address:	330 DISTEL CIR
Contact Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404

A7 **ALMADN AIR FORCE STATION** **HAZNET** **S112974609**
Target **330 DISTEL CIR** **HWTS** **N/A**
Property **LOS ALTOS, CA 94022**

Site 7 of 14 in cluster A

Actual:
86 ft.

HAZNET:

Name:	ALMADN AIR FORCE STATION
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 94022
Contact:	GERALD VINCENT
Telephone:	9165577407
Mailing Name:	Not reported
Mailing Address:	1325 J ST
Year:	2008

ALMADN AIR FORCE STATION (Continued) **S112974609**

Gepaid:	CAC002637235
TSD EPA ID:	CAT000646117
CA Waste Code:	261 - Polychlorinated biphenyls and material containing PCBs
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	45.08061

Additional Info:

Year:	2008
Gen EPA ID:	CAC002637235
Shipment Date:	20081215
Creation Date:	2/20/2009 18:30:31
Receipt Date:	20081216
Manifest ID:	001507295JJK
Trans EPA ID:	CAR000181560
Trans Name:	REMEDIAL TRANSPORTATION SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	261 - Not reported
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	15.02687
Waste Quantity:	13636
Quantity Unit:	K
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20081212
Creation Date:	2/17/2009 18:30:19
Receipt Date:	20081215
Manifest ID:	001507297JJK
Trans EPA ID:	CAR000181560
Trans Name:	REMEDIAL TRANSPORTATION SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	261 - Not reported
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	15.02687
Waste Quantity:	13636
Quantity Unit:	K
Additional Code 1:	Not reported

ALMADN AIR FORCE STATION (Continued) **S112974609**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20081212
Creation Date:	2/17/2009 18:30:19
Receipt Date:	20081215
Manifest ID:	001507296JJK
Trans EPA ID:	CAR000181560
Trans Name:	REMEDIAL TRANSPORTATION SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	CHEMICAL WASTE MANAGEMENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	261 - Not reported
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	15.02687
Waste Quantity:	13636
Quantity Unit:	K
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	ALMADN AIR FORCE STATION
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAC002637235
Inactive Date:	06/02/2009
Create Date:	12/03/2008
Last Act Date:	07/15/2009
Mailing Name:	US ARMY CORP OF ENGINEERS
Mailing Address:	1325 J ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SACRAMENTO, CA 95814
Owner Name:	US ARMY CORP OF ENGINEERS
Owner Address:	1325 J ST
Owner Address 2:	Not reported
Owner City,State,Zip:	SACRAMENTO, CA 95814
Contact Name:	GERALD VINCENT
Contact Address:	1325 J ST
Contact Address 2:	Not reported
City,State,Zip:	SACRAMENTO, CA 95814

A8 **US ARMY CORPS OF ENGINEERS** **HWTS** **S124597180**
Target **330 DISTEL CIR** **N/A**
Property **LOS ALTOS, CA 94022**

Site 8 of 14 in cluster A

Actual: **86 ft.**

HWTS:

Name:	US ARMY CORPS OF ENGINEERS
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
EPA ID:	CAC002630669
Inactive Date:	11/20/2008
Create Date:	05/23/2008
Last Act Date:	12/16/2008
Mailing Name:	Not reported
Mailing Address:	1325 J ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SACRAMENTO, CA 958142928
Owner Name:	US ARMY CORPS OF ENGINEERS
Owner Address:	330 DISTEL CIR
Owner Address 2:	Not reported
Owner City,State,Zip:	LOS ALTOS, CA 940021404
Contact Name:	GERALD VINCENT
Contact Address:	330 DISTEL CIR
Contact Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940021404

A9 **MICHAEL J BANKOSH** **PEST LIC** **S117651022**
Target **330 DISTEL CIR** **N/A**
Property **LOS ALTOS, CA 94022**

Site 9 of 14 in cluster A

Actual: **86 ft.**

PEST LIC:

Name:	MICHAEL J BANKOSH
Address:	330 DISTEL CIR
City,State,Zip:	LOS ALTOS, CA 94022
Facility Type:	QAC
Categories:	C
License No:	94729
Issued or Renewed Date:	01/22/2019
Expiration Date:	12/31/2020
Name:	JONATHAN B SIFUENTES-WINTER
Address:	330 DISTEL CIR
City,State,Zip:	LOS ALTOS, CA 94022
Facility Type:	QAC
Categories:	ABCDEFJ
License No:	125228
Issued or Renewed Date:	01/24/2020
Expiration Date:	12/31/2021
Name:	THOMAS P REYES
Address:	330 DISTEL CR
City,State,Zip:	LOS ALTOS, CA 94122
Facility Type:	QAC
Categories:	ABCD
License No:	127868
Issued or Renewed Date:	01/01/2020

MICHAEL J BANKOSH (Continued) **S117651022**

Expiration Date: 12/31/2021

A10 **MIDPENINSULA REGIONAL OPEN SPACE DISTRICT** **HWTS** **S124618111**
Target **330 DISTEL CIR** **N/A**
Property **LOS ALTOS, CA 94022**

Site 10 of 14 in cluster A

Actual:
86 ft.

HWTS:

Name:	MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
EPA ID:	CAC002725584
Inactive Date:	07/04/2013
Create Date:	04/04/2013
Last Act Date:	07/05/2013
Mailing Name:	FORMER ALMADEN AIR FORCE STATION
Mailing Address:	MOUNT UMUNHUM
Mailing Address 2:	Not reported
Mailing City,State,Zip:	LOS GATOS, CA 95032
Owner Name:	MIDPENINSULA REGIONAL OPEN SPACE DI
Owner Address:	330 DISTEL CIR
Owner Address 2:	Not reported
Owner City,State,Zip:	LOS ALTOS, CA 92044
Contact Name:	REGINA COONY
Contact Address:	330 DISTEL CIR
Contact Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404

A11 **US ARMY CORP OF ENGINEERS** **HAZNET** **S112973931**
Target **330 DISTEL CIR** **HWTS** **N/A**
Property **LOS ALTOS, CA 94022**

Site 11 of 14 in cluster A

Actual:
86 ft.

HAZNET:

Name:	US ARMY CORP OF ENGINEERS
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
Contact:	GERALD EINCENT
Telephone:	9165577452
Mailing Name:	Not reported
Mailing Address:	1325 J ST
Year:	2008
Gepaid:	CAC002636173
TSD EPA ID:	NVD982358483
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	6.255

Additional Info:

Year:	2008

US ARMY CORP OF ENGINEERS (Continued) **S112973931**

Gen EPA ID:	CAC002636173
Shipment Date:	20080514
Creation Date:	8/8/2008 18:30:44
Receipt Date:	20080610
Manifest ID:	002995898JJK
Trans EPA ID:	CAL000317320
Trans Name:	UNI WASTE
Trans 2 EPA ID:	CAL000317320
Trans 2 Name:	UNI WASTE
TSDF EPA ID:	NVD982358483
Trans Name:	CLEARWATER ENVIRONMENTAL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	6.255
Waste Quantity:	1500
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	US ARMY CORP OF ENGINEERS
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940221404
EPA ID:	CAC002636173
Inactive Date:	04/27/2009
Create Date:	10/28/2008
Last Act Date:	05/18/2009
Mailing Name:	Not reported
Mailing Address:	1325 J ST
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SACRAMENTO, CA 958142922
Owner Name:	US ARMY
Owner Address:	1325 J ST
Owner Address 2:	Not reported
Owner City,State,Zip:	SACRAMENTO, CA 958142922
Contact Name:	GERALD EINCENT
Contact Address:	1325 J ST
Contact Address 2:	Not reported
City,State,Zip:	SACRAMENTO, CA 958142922

A12 **POND 07 AND 08** **CIWQS** **S121665109**
Target **330 DISTEL CIRCLE** **N/A**
Property **LOS ALTOS, CA**

Site 12 of 14 in cluster A

Actual: **86 ft.**

CIWQS:

Name:	POND 07 AND 08
Address:	330 DISTEL CIRCLE
City,State,Zip:	LOS ALTOS, CA
Agency:	Mid Peninsula Regional Open Space District
Agency Address:	330 Distel Circle, Los Altos, CA 94022
Place/Project Type:	Other
SIC/NAICS:	Not reported
Region:	2
Program:	CERREST
Regulatory Measure Status:	Historical
Regulatory Measure Type:	401 Certification
Order Number:	Not reported
WDID:	Not reported
NPDES Number:	Not reported
Adoption Date:	Not reported
Effective Date:	05/22/2012
Termination Date:	05/22/2017
Expiration/Review Date:	05/22/2017
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

A13 **MIDPENISULA REGIONAL OPEN SPACE DIST.** **HAZNET** **S112950602**
Target **330 DISTEL CIR** **HWTS** **N/A**
Property **LOS ALTOS, CA 94022**

Site 13 of 14 in cluster A

Actual: **86 ft.**

HAZNET:

Name:	MIDPENISULA REGIONAL OPEN SPACE DIST.
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940220000
Contact:	KIRK LENGINGTON
Telephone:	6506911200
Mailing Name:	Not reported
Mailing Address:	330 DISTEL CIR
Year:	2006
Gepaid:	CAC002599053
TSD EPA ID:	CAD982444481
CA Waste Code:	352 - Other organic solids
Disposal Method:	R01 - Recycler
Tons:	0.2

Additional Info:

MIDPENISULA REGIONAL OPEN SPACE DIST. (Continued) **S112950602**

Year:	2006
Gen EPA ID:	CAC002599053
Shipment Date:	20060105
Creation Date:	10/27/2006 18:30:13
Receipt Date:	20060112
Manifest ID:	23777425
Trans EPA ID:	CAD982492399
Trans Name:	ALL CHEMICAL DISPOSAL INC
Trans 2 EPA ID:	CAR000129304
Trans 2 Name:	FILTER RECYCLING SVS
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	CAD982444481
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	MIDPENISULA REGIONAL OPEN SPACE DIST.
Address:	330 DISTEL CIR
Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940220000
EPA ID:	CAC002599053
Inactive Date:	07/04/2006
Create Date:	01/04/2006
Last Act Date:	01/04/2006
Mailing Name:	Not reported
Mailing Address:	330 DISTEL CIR
Mailing Address 2:	Not reported
Mailing City,State,Zip:	LOS ALTOS, CA 940220000
Owner Name:	MIDPENISULA REG. OPEN SPA. DIS
Owner Address:	330 DISTEL CIR
Owner Address 2:	Not reported
Owner City,State,Zip:	LOS ALTOS, CA 940220000
Contact Name:	KIRK LENGINGTON
Contact Address:	330 DISTEL CIR
Contact Address 2:	Not reported
City,State,Zip:	LOS ALTOS, CA 940220000

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
NPL / **Region East** / **1/2-1** / **4647 ft.**	**JASCO CHEM CORP** **1710 VILLA ST** **MOUNTAIN VIEW, CA 94043**	**NPL** **SEMS** **RCRA-SQG** **US ENG CONTROLS** **US INST CONTROLS** **ROD** **PRP**	**1000175646** **CAD009103318**

NPL:

Name:	JASCO CHEMICAL CORP.
Address:	1710 VILLA ST
City,State,Zip:	MOUNTAIN VIEW, CA 94041
EPA ID:	CAD009103318
EPA Region:	9
Federal:	N
Final Date:	1989-10-04 00:00:00
Site ID:	901126
Latitude:	37.398800000000001
Site Score:	35.359999999999999
Longitude:	-122.0882

Category:

EPA ID:	CAD009103318
NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-> 10 And <= 25 Feet
Category Value:	23

EPA ID:	CAD009103318
NPL Status:	Currently on the Final NPL
Category Description:	Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value:	10

Site:

EPA ID:	CAD009103318
Site ID:	0901126
Site Status:	F
Federal Site:	N
EPA Region:	09
Date Proposed:	06/24/88
Date Deleted:	Not reported
Date Finalized:	10/04/89

Substance:

EPA ID:	CAD009103318
NPL Status:	Currently on the Final NPL
Substance ID:	Not reported
Substance:	Not reported
CAS #:	Not reported
Pathway:	Not reported
Scoring:	Not reported

EPA ID:	CAD009103318
NPL Status:	Currently on the Final NPL
Substance ID:	U051
Substance:	CREOSOTE
CAS #:	8001-58-9
Pathway:	NO PATHWAY INDICATED
Scoring:	1

JASCO CHEM CORP (Continued) **1000175646**

EPA ID: CAD009103318
NPL Status: Currently on the Final NPL
Substance ID: U080
Substance: METHYLENE CHLORIDE
CAS #: 75-09-2
Pathway: GROUND WATER PATHWAY
Scoring: 2

EPA ID: CAD009103318
NPL Status: Currently on the Final NPL
Substance ID: U220
Substance: TOLUENE
CAS #: 108-88-3
Pathway: NO PATHWAY INDICATED
Scoring: 1

EPA ID: CAD009103318
NPL Status: Currently on the Final NPL
Substance ID: U226
Substance: TRICHLOROETHANE, 1,1,1-
CAS #: 71-55-6
Pathway: NO PATHWAY INDICATED
Scoring: 1

EPA ID: CAD009103318
NPL Status: Currently on the Final NPL
Substance ID: U242
Substance: PENTACHLOROPHENOL (PCP)
CAS #: 87-86-5
Pathway: GROUND WATER PATHWAY
Scoring: 3

EPA ID: CAD009103318
NPL Status: Currently on the Final NPL
Substance ID: U242
Substance: PENTACHLOROPHENOL (PCP)
CAS #: 87-86-5
Pathway: SURFACE WATER PATHWAY
Scoring: 3

Summary Details:

Conditions at proposal June 24, 1988): Jasco Chemical Corp. has formulated chemical products on a 2.05-acre site in Mountain View, Santa Clara County, California, since 1976. The site is bordered on the northeast by the Central Expressway and the Southern Pacific Railroad, and on the remaining sides by residential neighborhoods. In January 1983, a citi en complained to the California Regional Water Quality Control Board CRWQCB) that the facility was dumping solvents at therear of the site on a daily basis. CRWQCB requested Jasco to install a monitoring well at the site to determine if ground water was contaminated. Both ground water and soil are contaminated at the site, according to analyses conducted byconsultants to Jasco. Methylene chloride concentrations are as high as 142,000 parts per million in ground water, and soil is highly contaminated with pentachlorophenol to depths of 20 feet. Contamination is believed to have resulted from anyof the following sources: an underground tank farm, two dry wells used for disposal of storm water run-off from the roof and paved portion of the site, and a drain that discharges surface run-off at the rear of the site. The company is

JASCO CHEM CORP (Continued) **1000175646**

working with CRWQCB to determine the extent of the contamination and to prevent further migration of the contaminants. In addition, the City of Mountain View closed nearby Municipal Well 17 in 1987, until the lateral and vertical extent of the pollution has been defined. About 333,000 people obtain drinking water from wells within 3 miles of the site. Status October 4, 1989): Jasco is pumping and treating ground water to remove contamination. In July 1988, Municipal Well 17was returned to service. In November 1988, Jasco excavated 550 cubic feet of contaminated soil and transported it to a ha ardous waste facility regulated under Subtitle C of the Resource Conservation and Recovery Act.

Site Status:
EPA ID: CAD009103318
NPL Status: Final
Proposed Date: 06/24/1988
Final Date: 10/04/1989
Deleted Date: Not reported

Narratives:
EPA ID: CAD009103318
NPL Name: JASCO CHEMICAL CORP.

SEMS:
Site ID: 0901126
EPA ID: CAD009103318
Name: JASCO CHEMICAL CORP.
Address: 1710 VILLA ST
Address 2: Not reported
City,State,Zip: MOUNTAIN VIEW, CA 94041
Cong District: 14,18
FIPS Code: 06085
Latitude: +37.398800
Longitude: -122.088200
FF: N
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:
Region: 09
Site ID: 0901126
EPA ID: CAD009103318
Site Name: JASCO CHEMICAL CORP.
NPL: F
FF: N
OU: 00
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: H
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901126

JASCO CHEM CORP (Continued) **1000175646**

EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	1
Start Date:	2006-12-12 05:00:00
Finish Date:	9/28/2007 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	TA
Action Name:	TECH ASSIST
SEQ:	1
Start Date:	2011-03-03 05:00:00
Finish Date:	3/3/2011 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	NP
Action Name:	PROPOSED
SEQ:	1
Start Date:	1988-06-24 04:00:00
Finish Date:	6/24/1988 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	1
Start Date:	1988-04-20 04:00:00
Finish Date:	7/1/1988 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

JASCO CHEM CORP (Continued) **1000175646**

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	NF
Action Name:	NPL FINL
SEQ:	1
Start Date:	1989-10-04 04:00:00
Finish Date:	10/4/1989 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	2
Start Date:	1991-04-11 04:00:00
Finish Date:	4/11/1991 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	1
Start Date:	1990-09-19 04:00:00
Finish Date:	9/19/1990 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	01
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1991-03-01 05:00:00
Finish Date:	5/22/1992 4:00:00 AM

JASCO CHEM CORP (Continued) **1000175646**

Qual:	E
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1986-10-01 04:00:00
Finish Date:	10/1/1986 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	2
Start Date:	2012-09-28 05:00:00
Finish Date:	9/28/2012 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	01
Action Code:	RO
Action Name:	ROD
SEQ:	1
Start Date:	1992-09-30 04:00:00
Finish Date:	9/30/1992 4:00:00 AM
Qual:	R
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA

JASCO CHEM CORP (Continued) **1000175646**

SEQ: 1
Start Date: 1986-12-01 05:00:00
Finish Date: 12/1/1986 5:00:00 AM
Qual: L
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901126
EPA ID: CAD009103318
Site Name: JASCO CHEMICAL CORP.
NPL: F
FF: N
OU: 00
Action Code: CM
Action Name: PCOR
SEQ: 1
Start Date: 2002-09-20 04:00:00
Finish Date: 9/20/2002 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901126
EPA ID: CAD009103318
Site Name: JASCO CHEMICAL CORP.
NPL: F
FF: N
OU: 00
Action Code: HR
Action Name: HAZRANK
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901126
EPA ID: CAD009103318
Site Name: JASCO CHEMICAL CORP.
NPL: F
FF: N
OU: 00
Action Code: CQ
Action Name: CLSOUT R
SEQ: 1
Start Date: 2018-09-30 05:00:00
Finish Date: 3/31/2019 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901126
EPA ID: CAD009103318
Site Name: JASCO CHEMICAL CORP.
NPL: F
FF: N

JASCO CHEM CORP (Continued) **1000175646**

OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	2
Start Date:	2020-05-14 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	2
Start Date:	2020-05-11 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	MA
Action Name:	ST COOP
SEQ:	1
Start Date:	1989-09-15 04:00:00
Finish Date:	9/15/1989 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	01
Action Code:	TS
Action Name:	TRTSTUDY
SEQ:	1
Start Date:	1994-06-15 04:00:00
Finish Date:	2/1/1998 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901126
EPA ID:	CAD009103318

JASCO CHEM CORP (Continued) **1000175646**

Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	01
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	1
Start Date:	1988-12-21 05:00:00
Finish Date:	9/30/1992 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	01
Action Code:	BE
Action Name:	PRP RD
SEQ:	1
Start Date:	1992-12-16 05:00:00
Finish Date:	7/31/1996 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901126
EPA ID:	CAD009103318
Site Name:	JASCO CHEMICAL CORP.
NPL:	F
FF:	N
OU:	01
Action Code:	BF
Action Name:	PRP RA
SEQ:	1
Start Date:	1996-07-31 04:00:00
Finish Date:	9/9/2002 4:00:00 AM
Qual:	FR
Current Action Lead:	EPA Ovrsght

RCRA-SQG:

Date Form Received by Agency:	1996-09-01 00:00:00.0
Handler Name:	JASCO CHEM CORP
Handler Address:	1710 VILLA ST
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94043
EPA ID:	CAD009103318
Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09

JASCO CHEM CORP (Continued) **1000175646**

Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	2
Mailing Address:	DRAWER J
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 94043
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No

JASCO CHEM CORP (Continued) **1000175646**

Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:23:33.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name:	JASCO CHEM CORP
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1980-08-18 00:00:00.0
Handler Name:	JASCO CHEM CORP
Federal Waste Generator Description:	Large Quantity Generator

JASCO CHEM CORP (Continued) **1000175646**

State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 32551
NAICS Description: PAINT AND COATING MANUFACTURING

NAICS Code: 325998
NAICS Description: ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

SIte:
Name: JASCO CHEMICAL CORP.
Address: 1710 VILLA ST
Address 2: Not reported
City,State,Zip: MOUNTAIN VIEW, CA 94041
Event Code: Not reported
Action Taken Date: 09/26/2012
EPA ID: CAD009103318
Site ID: 0901126
Action Name: GOVT ESD
Action ID: 2
Operable Unit: 01
Action Completion Date: 03/31/2012
Contaminated Media: Groundwater
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Media:
EPA ID: CAD009103318
Contaminated Media: Groundwater
Site ID: 0901126
Action ID: 1
Action Completion Date: 09/30/1992
Operable Unit: 01
Action Name: GOVT ROD for PRP Remedy
Action Taken Date: 09/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

JASCO CHEM CORP (Continued) **1000175646**

EPA ID:	CAD009103318
Contaminated Media:	Soil
Site ID:	0901126
Action ID:	1
Action Completion Date:	09/30/1992
Operable Unit:	01
Action Name:	GOVT ROD for PRP Remedy
Action Taken Date:	09/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CAD009103318
Contaminated Media:	Soil
Site ID:	0901126
Action ID:	1
Action Completion Date:	09/30/1992
Operable Unit:	01
Action Name:	GOVT ROD for PRP Remedy
Action Taken Date:	09/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CAD009103318
Contaminated Media:	Soil
Site ID:	0901126
Action ID:	1
Action Completion Date:	09/30/1992
Operable Unit:	01
Action Name:	GOVT ROD for PRP Remedy
Action Taken Date:	09/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CAD009103318
Contaminated Media:	Soil
Site ID:	0901126
Action ID:	1
Action Completion Date:	09/30/1992
Operable Unit:	01
Action Name:	GOVT ROD for PRP Remedy
Action Taken Date:	09/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CAD009103318
Contaminated Media:	Groundwater
Site ID:	0901126
Action ID:	1
Action Completion Date:	09/13/2002

JASCO CHEM CORP (Continued) **1000175646**

Operable Unit:	01
Action Name:	GOVT ESD
Action Taken Date:	09/13/2002
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
EPA ID:	CAD009103318
Contaminated Media:	Soil
Site ID:	0901126
Action ID:	1
Action Completion Date:	09/13/2002
Operable Unit:	01
Action Name:	GOVT ESD
Action Taken Date:	09/13/2002
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
EPA ID:	CAD009103318
Contaminated Media:	Groundwater
Site ID:	0901126
Action ID:	2
Action Completion Date:	03/31/2012
Operable Unit:	01
Action Name:	GOVT ESD
Action Taken Date:	09/26/2012
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
EPA ID:	CAD009103318
Contaminated Media:	Groundwater
Site ID:	0901126
Action ID:	1
Action Completion Date:	09/30/1992
Operable Unit:	01
Action Name:	GOVT ROD for PRP Remedy
Action Taken Date:	09/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
EPA ID:	CAD009103318
Contaminated Media:	Groundwater
Site ID:	0901126
Action ID:	1
Action Completion Date:	09/13/2002
Operable Unit:	01
Action Name:	GOVT ESD
Action Taken Date:	09/13/2002
Event Code:	Not reported
Contact Name:	Not reported

JASCO CHEM CORP (Continued) **1000175646**

Contact Telephone: Not reported
Event: Not reported

EPA ID: CAD009103318
Contaminated Media: Groundwater
Site ID: 0901126
Action ID: 1
Action Completion Date: 09/30/1992
Operable Unit: 01
Action Name: GOVT ROD for PRP Remedy
Action Taken Date: 09/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CAD009103318
Contaminated Media: Groundwater
Site ID: 0901126
Action ID: 1
Action Completion Date: 09/13/2002
Operable Unit: 01
Action Name: GOVT ESD
Action Taken Date: 09/13/2002
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CAD009103318
Contaminated Media: Groundwater
Site ID: 0901126
Action ID: 1
Action Completion Date: 09/30/1992
Operable Unit: 01
Action Name: GOVT ROD for PRP Remedy
Action Taken Date: 09/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CAD009103318
Contaminated Media: Groundwater
Site ID: 0901126
Action ID: 1
Action Completion Date: 09/30/1992
Operable Unit: 01
Action Name: GOVT ROD for PRP Remedy
Action Taken Date: 09/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CAD009103318
Contaminated Media: Groundwater

JASCO CHEM CORP (Continued) **1000175646**

Site ID: 0901126
Action ID: 1
Action Completion Date: 09/30/1992
Operable Unit: 01
Action Name: GOVT ROD for PRP Remedy
Action Taken Date: 09/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

US INST CONTROLS:
Name: JASCO CHEMICAL CORP.
Address: 1710 VILLA ST
Address 2: Not reported
City,State,Zip: MOUNTAIN VIEW, CA 94041
EPA ID: CAD009103318
Site ID: 0901126
Action Name: GOVT ROD for PRP Remedy
Action ID: 1
Operable Unit: 01
Action Completion Date: 09/30/1992
Actual Date: 09/30/1992
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: JASCO CHEMICAL CORP.
Address: 1710 VILLA ST
Address 2: Not reported
City,State,Zip: MOUNTAIN VIEW, CA 94041
EPA ID: CAD009103318
Site ID: 0901126
Action Name: GOVT ESD
Action ID: 1
Operable Unit: 01
Action Completion Date: 09/13/2002
Actual Date: 09/13/2002
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: JASCO CHEMICAL CORP.
Address: 1710 VILLA ST
Address 2: Not reported
City,State,Zip: MOUNTAIN VIEW, CA 94041
EPA ID: CAD009103318
Site ID: 0901126
Action Name: GOVT ROD for PRP Remedy
Action ID: 1
Operable Unit: 01
Action Completion Date: 09/30/1992

JASCO CHEM CORP (Continued) **1000175646**

Actual Date:	09/30/1992
Contaminated Media:	Soil
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

ROD:

Name:	JASCO CHEMICAL CORP.
Address:	1710 VILLA ST
City,State,Zip:	MOUNTAIN VIEW, CA 94041
EPA ID:	CAD009103318
RG:	9
Site ID:	901126
Action:	GOVT ESD
Operable Unit Number:	OVERALL SITE
SEQ ID:	1
Action Completion:	2002-09-13 00:00:00
NPL Status:	Final
Non NPL Status:	Not reported

Name:	JASCO CHEMICAL CORP.
Address:	1710 VILLA ST
City,State,Zip:	MOUNTAIN VIEW, CA 94041
EPA ID:	CAD009103318
RG:	9
Site ID:	901126
Action:	GOVT ESD
Operable Unit Number:	OVERALL SITE
SEQ ID:	2
Action Completion:	2012-09-26 00:00:00
NPL Status:	Final
Non NPL Status:	Not reported

Name:	JASCO CHEMICAL CORP.
Address:	1710 VILLA ST
City,State,Zip:	MOUNTAIN VIEW, CA 94041
EPA ID:	CAD009103318
RG:	9
Site ID:	901126
Action:	GOVT ROD for PRP Remedy
Operable Unit Number:	OVERALL SITE
SEQ ID:	1
Action Completion:	1992-09-30 00:00:00
NPL Status:	Final
Non NPL Status:	Not reported

PRP:

PRP Name:	CAROL JEAN ANTHONY
	CAROL JEAN ANTHONY
	CAROL JEAN ANTHONY
	HARRY M. ANTHONY
	HARRY M. ANTHONY
	HARRY M. ANTHONY
	JASCO CHEMICAL
	JASCO CHEMICAL

JASCO CHEM CORP (Continued) **1000175646**

JASCO CHEMICAL
JASCO CHEMICAL

A14 **R2 TECHNOLOGY INC** **CUPA Listings** **S121471702**
ESE **325 DISTEL CL** **N/A**
< 1/8 **LOS ALTOS, CA 94022**
0.013 mi.
71 ft. **Site 14 of 14 in cluster A**

Relative: **Lower**
Actual: **85 ft.**

CUPA SANTA CLARA:

Name:	R2 TECHNOLOGY INC
Address:	325 DISTEL CL
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Latitude:	37.396276
Longitude:	-122.10535
Record ID:	PR0364070
Facility ID:	FA0250841

B15 **PALO ALTO MEDICAL FOUNDATION** **CUPA Listings** **S112346406**
SSE **370 DISTEL CL** **N/A**
< 1/8 **LOS ALTOS, CA 94022**
0.035 mi.
187 ft. **Site 1 of 4 in cluster B**

Relative: **Higher**
Actual: **88 ft.**

CUPA SANTA CLARA:

Name:	PALO ALTO MEDICAL FOUNDATION
Address:	370 DISTEL CL
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	2240
Program Description:	GENERATES < 10 GAL/YR
Latitude:	37.395561
Longitude:	-122.105061
Record ID:	PR0382742
Facility ID:	FA0201579

B16 **SUTTER BAY MEDICAL FOUNDATION** **CERS HAZ WASTE** **S123536968**
SSE **370 DISTEL CL** **N/A**
< 1/8 **LOS ALTOS, CA 94022**
0.035 mi.
187 ft. **Site 2 of 4 in cluster B**

Relative: **Higher**
Actual: **88 ft.**

CERS HAZ WASTE:

Name:	SUTTER BAY MEDICAL FOUNDATION
Address:	370 DISTEL CL
City,State,Zip:	LOS ALTOS, CA 94022
Site ID:	141389
CERS ID:	10352287
CERS Description:	Hazardous Waste Generator

Evaluation:

Eval General Type:	Compliance Evaluation Inspection

SUTTER BAY MEDICAL FOUNDATION (Continued) **S123536968**

Eval Date:	01-16-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Facility is a medical clinic that has the following departments: radiology, family medicine, internal medicine, pediatrics, OBGYN, and a phlebotomy lab. Inspection included walk-though of all departments and soiled utility rooms where wastes are accumulated. Facility generate mostly methanol (thin prep), ethyl chloride, hand sanitizers, expired formalin, and occasionally other expired chemicals. Facility mostly uses pre-saturated wipes for disinfecting and practices tight inventory control to decrease hazardous waste. Facility was previously consolidating waste with those at a larger campus as noted in a previous inspection but self-corrected this issue and applied for an EPA ID prior to this inspection. To date, no shipments have been made under the new number CAL000093164. Employees are trained and all containers are inspected regularly. Emergency information is posted, spill kits are adequate, and fire extinguishers are annually serviced. Observed several 1 [Truncated]
Eval Division:	Santa Clara County Environmental Health
Eval Program:	HW
Eval Source:	CERS

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Santa Clara County Environmental Health
Entity Title:	Not reported
Affiliation Address:	1555 Berger Drive, Suite 300
Affiliation City:	San Jose
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95112-2716
Affiliation Phone:	(408) 918-3400

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2350 W. El Camino Real Suite 152
Affiliation City:	Mountain View
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94040
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Sheri Klapper
Entity Title:	Safety Specialist
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Palo Alto Medical Foundation
Entity Title:	Not reported
Affiliation Address:	370 DISTEL CL

SUTTER BAY MEDICAL FOUNDATION (Continued) **S123536968**

Affiliation City:	LOS ALTOS
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94022
Affiliation Phone:	(650) 321-4121
Affiliation Type Desc:	Parent Corporation
Entity Name:	Palo Alto Medical Foundation
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Sheri Klapper
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Sheri Klapper
Entity Title:	Not reported
Affiliation Address:	2350 West El Camino Real
Affiliation City:	Mountain View
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94040
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	Sutter Bay Medical Foundation
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(650) 321-4121

B17 **SUTTER BAY MEDICAL FOUNDATION/P.A.M.F** **RCRA NonGen / NLR** **1024790845**
SE **370 DISTEL CIR** **CAL000093164**
< 1/8 **LOS ALTOS, CA 94022**
0.043 mi.
227 ft. **Site 3 of 4 in cluster B**

Relative: **Higher**
Actual: **88 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	1994-07-26 00:00:00.0
Handler Name:	SUTTER BAY MEDICAL FOUNDATION/P.A.M.F
Handler Address:	370 DISTEL CIR
Handler City,State,Zip:	LOS ALTOS, CA 94022-0000

SUTTER BAY MEDICAL FOUNDATION/P.A.M.F (Continued) **1024790845**

EPA ID:	CAL000093164
Contact Name:	DIANA ECHOLS
Contact Address:	2350 W EL CAMINO REAL
Contact City,State,Zip:	MOUNTAIN VIEW, CA 94040
Contact Telephone:	650-934-3577
Contact Fax:	650-934-3588
Contact Email:	FACILITIES2@PAMF.ORG
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2350 W EL CAMINO REAL
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner Name:	PALO ALTO MEDICAL FOUNDATION
Owner Type:	Other
Operator Name:	DIANA ECHOLS
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No

SUTTER BAY MEDICAL FOUNDATION/P.A.M.F (Continued) **1024790845**

TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:42:18.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	PALO ALTO MEDICAL FOUNDATION
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2350 W EL CAMINO REAL
Owner/Operator City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner/Operator Telephone:	650-934-3577
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	DIANA ECHOLS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2350 W EL CAMINO REAL
Owner/Operator City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner/Operator Telephone:	650-934-3577
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1994-07-26 00:00:00.0
Handler Name:	SUTTER BAY MEDICAL FOUNDATION/P.A.M.F
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No

SUTTER BAY MEDICAL FOUNDATION/P.A.M.F (Continued) **1024790845**

Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 62211
NAICS Description: GENERAL MEDICAL AND SURGICAL HOSPITALS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C18 **SKYLINE HEIGHTS LLC** **RCRA NonGen / NLR** **1025854319**
NNW **4970 EL CAMINO REAL** **CAC003034547**
< 1/8 **LOS ALTOS, CA 94022**
0.047 mi.
246 ft. **Site 1 of 2 in cluster C**

Relative: **Lower**
Actual: **82 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2019-09-18 00:00:00.0
Handler Name:	SKYLINE HEIGHTS LLC
Handler Address:	4970 EL CAMINO REAL
Handler City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAC003034547
Contact Name:	SKYLINE HEIGHTS LLC
Contact Address:	4970 EL CAMINO REAL
Contact City,State,Zip:	LOS ALTOS, CA 94022
Contact Telephone:	650-917-8600
Contact Fax:	Not reported
Contact Email:	CATHY.BARFIELD@ATIRESTORATION.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	4970 EL CAMINO REAL
Mailing City,State,Zip:	LOS ALTOS, CA 94022
Owner Name:	SKYLINE HEIGHTS LLC
Owner Type:	Other
Operator Name:	SKYLINE HEIGHTS LLC
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No

SKYLINE HEIGHTS LLC (Continued) **1025854319**

Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-09-27 16:23:17.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SKYLINE HEIGHTS LLC
Legal Status:	Other
Date Became Current:	Not reported

SKYLINE HEIGHTS LLC (Continued) **1025854319**

Date Ended Current:	Not reported
Owner/Operator Address:	4970 EL CAMINO REAL
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	650-917-8600
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	SKYLINE HEIGHTS LLC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4970 EL CAMINO REAL
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	650-917-8600
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2019-09-18 00:00:00.0
Handler Name:	SKYLINE HEIGHTS LLC
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

D19 **FORMER PLATINUM CLEANERS** **ENVIROSTOR** **S113068127**
NE **2290 WEST EL CAMINO REAL** **VCP** **N/A**
< 1/8 **MOUNTAIN VIEW, CA 94040**
0.054 mi.
284 ft. **Site 1 of 9 in cluster D**

Relative: **Lower**
Actual: **83 ft.**

ENVIROSTOR:

Name:	FORMER PLATINUM CLEANERS
Address:	2290 WEST EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	60002117

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Status:	Certified
Status Date:	02/23/2018
Site Code:	202021
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	1.55
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Jayantha Randeni
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Assembly:	24
Senate:	13
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.39749
Longitude:	-122.1047
APN:	148-36-17, 14836017
Past Use:	DRY CLEANING
Potential COC:	Tetrachloroethylene (PCE
Confirmed COC:	Tetrachloroethylene (PCE
Potential Description:	IA, SOIL, SV
Alias Name:	El Camino Village, LLC
Alias Type:	Alternate Name
Alias Name:	148-36-17
Alias Type:	APN
Alias Name:	14836017
Alias Type:	APN
Alias Name:	202021
Alias Type:	Project Code (Site Code)
Alias Name:	60002117
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Pilot/Treatability Study Report
Completed Date:	12/18/2014
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Workplan
Completed Date:	05/29/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	07/02/2015
Comments:	The soil gas sampling included in the Additional Site Characterization Workplan was repeated due to leakage in the sampling equipment that occurred during the first sampling event.
Completed Area Name:	PROJECT WIDE

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 09/04/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 03/04/2016
Comments: Soil vapor extraction is identified in the Removal Action Workplan as the selected remedy for the Site to address tetrachloroethene and trichloroethene in soil vapor at the site and on an adjacent property.
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 01/26/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 01/26/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 03/02/2017
Comments: The soil vapor extraction system operated continuously on the site from April 2016 through October 2016. There was a 47-day shutdown for rebound assessment that followed and the system was briefly operated in December 2016 and January 2017. DTSC approved decommissioning of the soil vapor extraction system in a March 9, 2017 letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 01/15/2015
Comments: The Second Vapor-Extraction Pilot-Study Evaluation report presents the results of a soil vapor extraction pilot study that was conducted using one multi-phase extraction well for 8 days and 2 extraction wells for 7 days. This study was completed prior to DTSC becoming involved at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 01/11/2018
Comments: The soil vapor extraction system operated from April 2016 to January 2017 and sampling showed that the removal action goal for PCE in soil gas for residential development at the Site has been achieved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Completed Date: 05/17/2017
Comments: The Soil Management Plan provides procedures for managing potentially contaminated soil excavated for the subterranean parking garage of the proposed development project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/10/2017
Comments: The report summarizes soil gas remediation activities at the Site since the soil vapor extraction (SVE) system was initially started in April 2016. A total of 16.7 pounds of tetrachloroethylene (PCE) was removed by the SVE system and soil gas concentrations beneath the Site are below the removal goal of 3,900 micrograms per cubic meter established for residential development.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/17/2017
Comments: The Plan summarizes the results of soil sampling conducted at the Site to profile for disposal and/or reuse the soil that will be generated as part of the excavation required for the proposed subterranean parking garage.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 10/31/2017
Comments: Excavation was completed for the subterranean parking garage that is part of the development occurring on the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 06/04/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 12/12/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 03/02/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/06/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/28/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 02/23/2018
Comments: DTSC certified that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal action is necessary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/26/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 10/02/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 09/24/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 12/15/2014
Comments: The Phase I Environmental Site Assessment was conducted to identify recognized environmental conditions at the Site. The findings and conclusions of the Report were based on the results of a reconnaissance-level site visit and review of available and pertinent background information. This assessment was completed prior to DTSC becoming involved at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/15/2014
Comments: The Additional Phase II Environmental Assessment report presents the results of subsurface soil-gas, soil, and groundwater sampling that was performed to evaluate the lateral and vertical extent of impact from PCE and other volatile organic compounds. These investigations were completed prior to DTSC becoming involved at the Site.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:
Name: FORMER PLATINUM CLEANERS
Address: 2290 WEST EL CAMINO REAL
City,State,Zip: MOUNTAIN VIEW, CA 94040
Facility ID: 60002117
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 1.55
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Jayantha Randeni
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Site Code: 202021
Assembly: 24
Senate: 13
Special Programs Code: Not reported
Status: Certified
Status Date: 02/23/2018
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 37.39749 / -122.1047
APN: 148-36-17, 14836017
Past Use: DRY CLEANING
Potential COC: 30022
Confirmed COC: 30022
Potential Description: IA, SOIL, SV
Alias Name: El Camino Village, LLC
Alias Type: Alternate Name
Alias Name: 148-36-17
Alias Type: APN
Alias Name: 14836017
Alias Type: APN
Alias Name: 202021
Alias Type: Project Code (Site Code)
Alias Name: 60002117
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 12/18/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 05/29/2015

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 07/02/2015
Comments: The soil gas sampling included in the Additional Site Characterization Workplan was repeated due to leakage in the sampling equipment that occurred during the first sampling event.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 09/04/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 03/04/2016
Comments: Soil vapor extraction is identified in the Removal Action Workplan as the selected remedy for the Site to address tetrachloroethene and trichloroethene in soil vapor at the site and on an adjacent property.
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 01/26/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 01/26/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 03/02/2017
Comments: The soil vapor extraction system operated continuously on the site from April 2016 through October 2016. There was a 47-day shutdown for rebound assessment that followed and the system was briefly operated in December 2016 and January 2017. DTSC approved decommissioning of the soil vapor extraction system in a March 9, 2017 letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 01/15/2015
Comments: The Second Vapor-Extraction Pilot-Study Evaluation report presents the results of a soil vapor extraction pilot study that was conducted using one multi-phase extraction well for 8 days and 2 extraction wells for 7 days. This study was completed prior to DTSC becoming involved at the Site.

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Completion Report
Completed Date:	01/11/2018
Comments:	The soil vapor extraction system operated from April 2016 to January 2017 and sampling showed that the removal action goal for PCE in soil gas for residential development at the Site has been achieved.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	05/17/2017
Comments:	The Soil Management Plan provides procedures for managing potentially contaminated soil excavated for the subterranean parking garage of the proposed development project.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	03/10/2017
Comments:	The report summarizes soil gas remediation activities at the Site since the soil vapor extraction (SVE) system was initially started in April 2016. A total of 16.7 pounds of tetrachloroethylene (PCE) was removed by the SVE system and soil gas concentrations beneath the Site are below the removal goal of 3,900 micrograms per cubic meter established for residential development.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	04/17/2017
Comments:	The Plan summarizes the results of soil sampling conducted at the Site to profile for disposal and/or reuse the soil that will be generated as part of the excavation required for the proposed subterranean parking garage.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	10/31/2017
Comments:	Excavation was completed for the subterranean parking garage that is part of the development occurring on the Site.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Pre-HARP Form
Completed Date:	06/04/2015
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Standard Voluntary Agreement
Completed Date:	12/12/2014
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Completed Document Type: CEQA - Notice of Exemption
Completed Date: 03/02/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/06/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/28/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 02/23/2018
Comments: DTSC certified that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal action is necessary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/26/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 10/02/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 09/24/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 12/15/2014
Comments: The Phase I Environmental Site Assessment was conducted to identify recognized environmental conditions at the Site. The findings and conclusions of the Report were based on the results of a reconnaissance-level site visit and review of available and pertinent background information. This assessment was completed prior to DTSC becoming involved at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/15/2014

FORMER PLATINUM CLEANERS (Continued) **S113068127**

Comments: The Additional Phase II Environmental Assessment report presents the results of subsurface soil-gas, soil, and groundwater sampling that was performed to evaluate the lateral and vertical extent of impact from PCE and other volatile organic compounds. These investigations were completed prior to DTSC becoming involved at the Site.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

D20 **PURE CLEANERS** **CUPA Listings** **S121473049**
NE **2290 EL CAMINO REAL A** **N/A**
< 1/8 **MOUNTAIN VIEW, CA 94040**
0.054 mi.
284 ft. **Site 2 of 9 in cluster D**

Relative: CUPA SANTA CLARA:
Lower
Name: PURE CLEANERS
Actual: Address: 2290 EL CAMINO REAL A
83 ft. City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.397169
Longitude: -122.104612
Record ID: PR0376201
Facility ID: FA0257325

D21 **PLATINUM CLEANERS** **CUPA Listings** **S121474423**
NE **2290 W EL CAMINO REAL 1** **N/A**
< 1/8 **MOUNTAIN VIEW, CA 94040**
0.054 mi.
284 ft. **Site 3 of 9 in cluster D**

Relative: CUPA SANTA CLARA:
Lower
Name: PLATINUM CLEANERS
Actual: Address: 2290 W EL CAMINO REAL 1
83 ft. City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.3971983
Longitude: -122.1049506
Record ID: PR0395671
Facility ID: FA0268107

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number

D22
NE
< 1/8
0.054 mi.
284 ft.

DELIA'S CLEANERS INC
2290 W EL CAMINO REAL STE 1
MOUNTAIN VIEW, CA 94040

Site 4 of 9 in cluster D

DRYCLEANERS **S105808042**
N/A

Relative:
Lower

Actual:
83 ft.

DRYCLEANERS:

Name:	DELIA'S CLEANERS INC
Address:	2290 W EL CAMINO REAL STE 1
City,State,Zip:	MOUNTAIN VIEW, CA 940401632
EPA Id:	CAR000063586
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	04/27/2000
Facility Active:	No
Inactive Date:	09/21/2004
Facility Addr2:	Not reported
Owner Name:	DCI MGMT GROUP
Owner Address:	1190 S BASCOM AVE #108
Owner Address 2:	Not reported
Owner Telephone:	4082485415
Contact Name:	DEBORAH SANDS, REGIONAL MGR
Contact Address:	1190 S BASCOM AVE #108
Contact Address 2:	Not reported
Contact Telephone:	4082485415
Mailing Name:	Not reported
Mailing Address 1:	1190 S BASCOM AVE #108
Mailing Address 2:	Not reported
Mailing City:	SAN JOSE
Mailing State:	CA
Mailing Zip:	951280000
Owner Fax:	Not reported
Region Code:	2

D23
NE
< 1/8
0.054 mi.
284 ft.

DELIA'S CLEANERS
2290 W EL CAMINO REAL
MOUNTAIN VIEW, CA 94040

Site 5 of 9 in cluster D

CUPA Listings **S121468982**
N/A

Relative:
Lower

Actual:
83 ft.

CUPA SANTA CLARA:

Name:	DELIA'S CLEANERS
Address:	2290 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Latitude:	37.397169
Longitude:	-122.104612
Record ID:	PR0313838
Facility ID:	FA0203804

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

D24
NE
< 1/8
0.054 mi.
284 ft.

DCI MANAGEMENT GROUP LTD
2290 W EL CAMINO REAL
MOUNTAIN VIEW, CA 94040

Site 6 of 9 in cluster D

EDR Hist Cleaner **1018893776**
N/A

Relative:
Lower

Actual:
83 ft.

EDR Hist Cleaner

Year:	Name:	Type:
1989	OAKS HYGENA CLEANERS	Garment Pressing And Cleaners' Agents
1990	OAKS HYGENA CLEANERS	Garment Pressing And Cleaners' Agents
1991	OAKS HYGENA CLEANERS	Garment Pressing And Cleaners' Agents
1992	OAKS HYGENA CLEANERS	Garment Pressing And Cleaners' Agents
1993	OAKS HYGENA CLEANERS	Garment Pressing And Cleaners' Agents
1994	OAKS HYGENA CLEANERS	Garment Pressing And Cleaners' Agents
1999	D C I MANAGEMENT GROUP LTD	Drycleaning Plants, Except Rugs
2000	DCI MANAGEMENT GROUP LTD	Drycleaning Plants, Except Rugs
2001	DCI MANAGEMENT GROUP LTD	Drycleaning Plants, Except Rugs
2002	DCI MANAGEMENT GROUP LTD	Drycleaning Plants, Except Rugs
2003	DCI MANAGEMENT GROUP LTD	Drycleaning Plants, Except Rugs
2004	DCI MANAGEMENT GROUP (ARIZONA)	Drycleaning Plants, Except Rugs
2005	DCI MANAGEMENT GROUP LTD	Drycleaning Plants, Except Rugs
2006	DCI MANAGEMENT GROUP LTD	Drycleaning Plants, Except Rugs
2007	DCI MANAGEMENT GROUP LTD	Drycleaning Plants, Except Rugs

---

D25
NE
< 1/8
0.054 mi.
284 ft.

DCI MANAGEMENT GROUP NO 77
2290 EL CAMINO REAL NO 1
MOUNTAIN VIEW, CA 94040

Site 7 of 9 in cluster D

RCRA-SQG **1001959756**
FINDS **CAR000063586**
ECHO

Relative:
Lower

Actual:
83 ft.

RCRA-SQG:

Date Form Received by Agency:	1999-12-22 00:00:00.0
Handler Name:	DCI MANAGEMENT GROUP NO 77
Handler Address:	2290 EL CAMINO REAL NO 1
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAR000063586
Contact Name:	TONY BARAJAS
Contact Address:	550 S WINCHESTER BLVD STE 620
Contact City,State,Zip:	SAN JOSE, CA 95128
Contact Telephone:	408-248-5415
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	550 S WINCHESTER BLVD STE 620
Mailing City,State,Zip:	SAN JOSE, CA 95128
Owner Name:	DCI MANAGEMENT GROUP
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No

DCI MANAGEMENT GROUP NO 77 (Continued) **1001959756**

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-10-07 16:37:00.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

DCI MANAGEMENT GROUP NO 77 (Continued) **1001959756**

Hazardous Waste Summary:
Waste Code: D000
Waste Description: Not Defined

Waste Code: D039
Waste Description: TETRACHLOROETHYLENE

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	DCI MANAGEMENT GROUP
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	550 S WINCHESTER BLVD STE 620
Owner/Operator City,State,Zip:	SAN JOSE, CA 95128
Owner/Operator Telephone:	408-248-5415
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1999-12-22 00:00:00.0
Handler Name:	DCI MANAGEMENT GROUP NO 77
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002931659

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

DCI MANAGEMENT GROUP NO 77 (Continued) **1001959756**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001959756
Registry ID:	110002931659
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002931659
Name:	DCI MANAGEMENT GROUP NO 77
Address:	2290 EL CAMINO REAL NO 1
City,State,Zip:	MOUNTAIN VIEW, CA 94040

D26 **AVANTE** **CUPA Listings** **S121468573**
East **5050 EL CAMINO REAL 200** **N/A**
< 1/8 **LOS ALTOS, CA 94022**
0.054 mi.
285 ft. **Site 8 of 9 in cluster D**

Relative: **Lower**
Actual: **84 ft.**

CUPA SANTA CLARA:

Name:	AVANTE
Address:	5050 EL CAMINO REAL 200
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Latitude:	37.396601
Longitude:	-122.104375
Record ID:	PR0317615
Facility ID:	FA0201640

D27 **FOOTHILL CHIROPRACTIC GRP INC** **CUPA Listings** **S121471355**
East **5050 EL CAMINO REAL #200** **N/A**
< 1/8 **LOS ALTOS, CA 94022**
0.054 mi.
285 ft. **Site 9 of 9 in cluster D**

Relative: **Lower**
Actual: **84 ft.**

CUPA SANTA CLARA:

Name:	FOOTHILL CHIROPRACTIC GRP INC
Address:	5050 EL CAMINO REAL #200
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Latitude:	37.396601
Longitude:	-122.104375
Record ID:	PR0330875
Facility ID:	FA0230781

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
C28	**PURE CLEANERS**	**DRYCLEANERS**	**S106661672**
North	**2290-A EL CAMINO REAL**	**HWTS**	**N/A**
< 1/8	**MOUNTAIN VIEW, CA 94040**		
0.063 mi.			
335 ft.	**Site 2 of 2 in cluster C**		

Relative: **Lower**

Actual: **82 ft.**

DRYCLEANERS:

Name:	PURE CLEANERS
Address:	2290-A EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA Id:	CAL000287343
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	10/20/2004
Facility Active:	No
Inactive Date:	06/30/2005
Facility Addr2:	Not reported
Owner Name:	FLOWERGATE INC
Owner Address:	105 HILLTOP DR
Owner Address 2:	Not reported
Owner Telephone:	4084029732
Contact Name:	DUC NGUYEN
Contact Address:	2290-A EL CAMINO REAL
Contact Address 2:	Not reported
Contact Telephone:	6509643869
Mailing Name:	Not reported
Mailing Address 1:	2290-A EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing City:	MOUNTAIN VIEW
Mailing State:	CA
Mailing Zip:	94040
Owner Fax:	Not reported
Region Code:	2

HWTS:

Name:	PURE CLEANERS
Address:	2290-A EL CAMINO REAL
Address 2:	Not reported
City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAL000287343
Inactive Date:	06/30/2005
Create Date:	10/20/2004
Last Act Date:	04/11/2006
Mailing Name:	Not reported
Mailing Address:	2290-A EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner Name:	FLOWERGATE INC
Owner Address:	105 HILLTOP DR
Owner Address 2:	Not reported
Owner City,State,Zip:	LOS GATOS, CA 95032
Contact Name:	DUC NGUYEN
Contact Address:	2290-A EL CAMINO REAL
Contact Address 2:	Not reported
City,State,Zip:	MOUNTAIN VIEW, CA 94040

NAICS:

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

PURE CLEANERS (Continued) **S106661672**

EPA ID:	CAL000287343
Create Date:	2004-10-20 08:43:18.607
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
Issued EPA ID Date:	2004-10-20 08:43:18.57700
Inactive Date:	2005-06-30 10:01:00
Facility Name:	PURE CLEANERS
Facility Address:	2290-A EL CAMINO REAL
Facility Address 2:	Not reported
Facility City:	MOUNTAIN VIEW
Facility County:	Not reported
Facility State:	CA
Facility Zip:	94040

B29 **QSECURE** **CUPA Listings** **S121474784**
SE **333 DISTEL CL** **N/A**
< 1/8 **LOS ALTOS, CA 94022**
0.070 mi.
370 ft. **Site 4 of 4 in cluster B**

Relative: **Higher**
Actual: **88 ft.**

CUPA SANTA CLARA:

Name:	QSECURE
Address:	333 DISTEL CL
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	2240
Program Description:	GENERATES < 10 GAL/YR
Latitude:	37.3954426
Longitude:	-122.104621
Record ID:	PR0412425
Facility ID:	FA0272677

Name:	QSECURE
Address:	333 DISTEL CL
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	2502
Program Description:	HAZMAT STORAGE FACILITY-MINIMAL STORAGE SITE
Latitude:	37.3954426
Longitude:	-122.104621
Record ID:	PR0412428
Facility ID:	FA0272677

E30 **SPINAL & SPORTS CARE CENTER** **CUPA Listings** **S121468969**
ENE **2200 EL CAMINO REAL 8** **N/A**
< 1/8 **MOUNTAIN VIEW, CA 94040**
0.084 mi.
443 ft. **Site 1 of 7 in cluster E**

Relative: **Lower**
Actual: **83 ft.**

CUPA SANTA CLARA:

Name:	SPINAL & SPORTS CARE CENTER
Address:	2200 EL CAMINO REAL 8
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	SANTA CLARA
PE#:	2271

SPINAL & SPORTS CARE CENTER (Continued) **S121468969**

Program Description:	SILVER WASTE ONLY <100 KG/YR
Latitude:	37.396857
Longitude:	-122.103905
Record ID:	PR0317588
Facility ID:	FA0203759

E31 **WALTER'S FLOORS** **LUST** **S103472901**
East **5084 EL CAMINO REAL** **HIST LUST** **N/A**
< 1/8 **LOS ALTOS, CA 94022** **Cortese**
0.099 mi. **HIST CORTESE**
525 ft. **Site 2 of 7 in cluster E**

Relative:
Higher

Actual:
86 ft.

LUST:

Name:	WALTER'S FLOORS
Address:	5084 EL CAMINO REAL
City,State,Zip:	LOS ALTOS, CA 94022
Lead Agency:	SANTA CLARA COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501552
Global Id:	T0608501552
Latitude:	37.4055
Longitude:	-122.1181
Status:	Completed - Case Closed
Status Date:	04/12/1996
Case Worker:	UST
RB Case Number:	Not reported
Local Agency:	SANTA CLARA COUNTY LOP
File Location:	All Files are on GeoTracker or in the Local Agency Database
Local Case Number:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0608501552
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501552
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

LUST:

Global Id:	T0608501552
Action Type:	Other
Date:	12/14/1992
Action:	Leak Reported

WALTER'S FLOORS (Continued) **S103472901**

Global Id: T0608501552
Action Type: ENFORCEMENT
Date: 04/12/1996
Action: Closure/No Further Action Letter

Global Id: T0608501552
Action Type: RESPONSE
Date: 04/12/1996
Action: Other Report / Document

LUST:
Global Id: T0608501552
Status: Open - Case Begin Date
Status Date: 12/14/1992

Global Id: T0608501552
Status: Completed - Case Closed
Status Date: 04/12/1996

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S2W20G01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Name: WALTER'S FLOORS
Address: 5084 EL CAMINO REAL
City,State,Zip: LOS ALTOS, CA
Region: SANTA CLARA
SCVWD ID: 06S2W20G01F
Date Closed: 04/12/1996
EDR Link ID: 06S2W20G01F

HIST LUST SANTA CLARA:
Name: Walter's Floors
Address: 5084 El Camino Real
City: Los Altos
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S2W20G01
Oversite Agency: SCVWD
Date Listed: 1993-01-01 00:00:00

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

WALTER'S FLOORS (Continued) **S103472901**

Closed Date: 1996-04-12 00:00:00

CORTESE:

Name:	WALTER'S FLOORS
Address:	5084 EL CAMINO REAL
City,State,Zip:	LOS ALTOS, CA 94022
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0608501552
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	WALTER'S FLOORS
edr_fadd1:	5084 EL CAMINO REAL
City,State,Zip:	LOS ALTOS, CA
Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1594

E32 **TAYLOR RENTAL** **SWEEPS UST** **1000847336**
ENE **2246 W EL CAMINO REAL** **HIST UST** **N/A**
< 1/8 **MOUNTAIN VIEW, CA 94040** **CA FID UST**
0.102 mi.
536 ft. **Site 3 of 7 in cluster E**

Relative: **Lower**
Actual: **82 ft.**

SWEEPS UST:

Name:	TAYLOR RENTAL
Address:	2246 W EL CAMINO REAL
City:	MOUNTAIN VIEW
Status:	Not reported
Comp Number:	4662
Number:	Not reported
Board Of Equalization:	44-025980
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-005-004662-000001
Tank Status:	Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

TAYLOR RENTAL (Continued) **1000847336**

Capacity: 1000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: 3

Name: TAYLOR RENTAL
Address: 2246 W EL CAMINO REAL
City: MOUNTAIN VIEW
Status: Not reported
Comp Number: 4662
Number: Not reported
Board Of Equalization: 44-025980
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-005-004662-000002
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

Name: TAYLOR RENTAL
Address: 2246 W EL CAMINO REAL
City: MOUNTAIN VIEW
Status: Not reported
Comp Number: 4662
Number: Not reported
Board Of Equalization: 44-025980
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-005-004662-000003
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

HIST UST:
Name: B AND H EQUIPMENT CO
Address: 2246 W EL CAMINO REAL
City,State,Zip: MOUNTAIN VIEW, CA 94040
File Number: 0002CF75
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CF75.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported

TAYLOR RENTAL (Continued) **1000847336**

Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	43004443
Regulated By:	UTNKA
Regulated ID:	00004662
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4159629794
Mail To:	Not reported
Mailing Address:	2246 W EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing City,St,Zip:	MOUNTAIN VIEW 94040
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

E33 **TAYLOR RENTALS** **RCRA-SQG** **1000857773**
ENE **2246 W EL CAMINO REAL** **CAD983672197**
< 1/8 **MOUNTAIN VIEW, CA 94040**
0.102 mi.
536 ft. **Site 4 of 7 in cluster E**

Relative: **Lower**

Actual: **82 ft.**

RCRA-SQG:

Date Form Received by Agency:	1993-07-29 00:00:00.0
Handler Name:	TAYLOR RENTALS
Handler Address:	2246 W EL CAMINO REAL
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAD983672197
Contact Name:	RON HARMON
Contact Address:	2246 W EL CAMINO REAL
Contact City,State,Zip:	MOUNTAIN VIEW, CA 94040
Contact Telephone:	415-968-8301
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09

TAYLOR RENTALS (Continued) **1000857773**

Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	W EL CAMINO REAL
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner Name:	TAYLOR RENTAL
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No

TAYLOR RENTALS (Continued) **1000857773**

Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2000-09-15 17:30:50.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TAYLOR RENTAL
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P O BOX 8000
Owner/Operator City,State,Zip:	NEW BRITAIN, CT 06050
Owner/Operator Telephone:	203-225-5111
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1993-07-29 00:00:00.0
Handler Name:	TAYLOR RENTALS
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

E34 **UNITED RENTALS NORTHWEST INC** **CUPA Listings** **S121468975**
ENE **2246 W EL CAMINO REAL** **N/A**
< 1/8 **MOUNTAIN VIEW, CA 94040**
0.102 mi.
536 ft. **Site 5 of 7 in cluster E**

Relative: CUPA SANTA CLARA:
Lower

Actual: Name: UNITED RENTALS NORTHWEST INC
82 ft. Address: 2246 W EL CAMINO REAL
City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.397016
Longitude: -122.104264
Record ID: PR0315438
Facility ID: FA0203784

E35 **B & H EQUIPMENT CO** **HIST UST** **U001594302**
ENE **2246 W EL CAMINO REAL** **N/A**
< 1/8 **MOUNTAIN VIEW, CA 94040**
0.102 mi.
536 ft. **Site 6 of 7 in cluster E**

Relative: HIST UST:
Lower

Actual: Name: B & H EQUIPMENT CO
82 ft. Address: 2246 W EL CAMINO REAL
City,State,Zip: MOUNTAIN VIEW, CA 94040
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000004662
Facility Type: Gas Station
Other Type: RENTAL YARD
Contact Name: KENNETH CHEGWIN
Telephone: 4159629794
Owner Name: CAMDEN RENTALS INC
Owner Address: 2246 W EL CAMINO REAL
Owner City,St,Zip: MOUNTAIN VIEW, CA 94040
Total Tanks: 0003

Tank Num: 001
Container Num: 9994-01
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 9995-01
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 003

B & H EQUIPMENT CO (Continued) **U001594302**

Container Num:	9995-02
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	None

F36 **728 PANCHITA LLC** **RCRA NonGen / NLR** **1025839030**
SSW **728 PANCHITA WAY** **CAC003018628**
< 1/8 **LOS ALTOS, CA 94022**
0.118 mi.
622 ft. **Site 1 of 2 in cluster F**

Relative: **Higher**
Actual: **95 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2019-06-07 00:00:00.0
Handler Name:	728 PANCHITA LLC
Handler Address:	728 PANCHITA WAY
Handler City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAC003018628
Contact Name:	728 PANCHITA LLC
Contact Address:	1276 LINCOLN AVE
Contact City,State,Zip:	SAN JOSE, CA 95125
Contact Telephone:	650-941-3223
Contact Fax:	Not reported
Contact Email:	BROOKE@BSBBUILDER.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1276 LINCOLN AVE
Mailing City,State,Zip:	SAN JOSE, CA 95125
Owner Name:	728 PANCHITA LLC
Owner Type:	Other
Operator Name:	728 PANCHITA LLC
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported

728 PANCHITA LLC (Continued) **1025839030**

Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-06-27 14:19:38.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	728 PANCHITA LLC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1276 LINCOLN AVE
Owner/Operator City,State,Zip:	SAN JOSE, CA 95125
Owner/Operator Telephone:	650-941-3223
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	728 PANCHITA LLC
Legal Status:	Other

728 PANCHITA LLC (Continued) **1025839030**

Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1276 LINCOLN AVE
Owner/Operator City,State,Zip:	SAN JOSE, CA 95125
Owner/Operator Telephone:	650-941-3223
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2019-06-07 00:00:00.0
Handler Name:	728 PANCHITA LLC
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

E37 **PERFORMANCE BICYCLE SHOP #77** **RCRA NonGen / NLR** **1024817874**
East **2124 W EL CAMINO REAL** **CAL000322954**
< 1/8 **MOUNTAIN VIEW, CA 94040**
0.118 mi.
623 ft. **Site 7 of 7 in cluster E**

Relative: **Lower**

Actual: **83 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2007-08-01 00:00:00.0
Handler Name:	PERFORMANCE BICYCLE SHOP #77
Handler Address:	2124 W EL CAMINO REAL
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040-1612
EPA ID:	CAL000322954
Contact Name:	MARY TANNER
Contact Address:	ONE PERFORMANCE WAY
Contact City,State,Zip:	CHAPEL HILL, NC 27517
Contact Telephone:	919-913-3626
Contact Fax:	919-942-4596
Contact Email:	TAXINFO@PERFORMANCEINC.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified

PERFORMANCE BICYCLE SHOP #77 (Continued) **1024817874**

Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	ONE PERFORMANCE WAY
Mailing City,State,Zip:	CHAPEL HILL, NC 27514-0000
Owner Name:	BITECH INC
Owner Type:	Other
Operator Name:	MARY TANNER
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No

PERFORMANCE BICYCLE SHOP #77 (Continued) **1024817874**

Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:29:32.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BITECH INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	ONE PERFORMANCE WAY
Owner/Operator City,State,Zip:	CHAPEL HILL, NC 27514-0000
Owner/Operator Telephone:	919-913-3626
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MARY TANNER
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	ONE PERFORMANCE WAY
Owner/Operator City,State,Zip:	CHAPEL HILL, NC 27517
Owner/Operator Telephone:	919-913-3626
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2007-08-01 00:00:00.0
Handler Name:	PERFORMANCE BICYCLE SHOP #77
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	45111
NAICS Description:	SPORTING GOODS STORES

PERFORMANCE BICYCLE SHOP #77 (Continued) **1024817874**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

38
WNW
< 1/8
0.123 mi.
651 ft.

INNOVUSION, INC.
4920 EL CAMINO REAL, STE 100
LOS ALTOS, CA 94022

RCRA NonGen / NLR **1025836469**
CAC003016057

Relative:
Lower

Actual:
85 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2019-05-21 00:00:00.0
Handler Name:	INNOVUSION, INC.
Handler Address:	4920 EL CAMINO REAL, STE 100
Handler City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAC003016057
Contact Name:	LISA TIAN
Contact Address:	4920 EL CAMINO REAL, STE 100
Contact City,State,Zip:	LOS ALTOS, CA 94022
Contact Telephone:	408-687-8853
Contact Fax:	Not reported
Contact Email:	LISA.TIAN@INNOVUSION.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	171 MAIN ST., NO.123
Mailing City,State,Zip:	LOS ALTOS, CA 94022
Owner Name:	JUNWEI BAO
Owner Type:	Other
Operator Name:	LISA TIAN
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported

INNOVUSION, INC. (Continued) **1025836469**

Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-06-27 11:35:32.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	LISA TIAN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4920 EL CAMINO REAL, STE 100
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	408-687-8853
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JUNWEI BAO
Legal Status:	Other

INNOVUSION, INC. (Continued) **1025836469**

Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4920 EL CAMINO REAL, STE 100
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	650-963-9573
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2019-05-21 00:00:00.0
Handler Name:	INNOVUSION, INC.
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

F39 **MIKE RYAN** **RCRA NonGen / NLR** **1024761094**
SSW **722 PANCHITA WAY** **CAC002980951**
1/8-1/4 **LOS ALTOS, CA 94022**
0.134 mi.
706 ft. **Site 2 of 2 in cluster F**

Relative:
Higher

Actual:
97 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2018-09-19 00:00:00.0
Handler Name:	MIKE RYAN
Handler Address:	722 PANCHITA WAY
Handler City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAC002980951
Contact Name:	MIKE RYAN
Contact Address:	722 PANCHITA WAY
Contact City,State,Zip:	LOS ALTOS, CA 94022
Contact Telephone:	818-425-4736
Contact Fax:	Not reported
Contact Email:	ZCONSSI@AOL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified

MIKE RYAN (Continued) **1024761094**

Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	722 PANCHITA WAY
Mailing City,State,Zip:	LOS ALTOS, CA 94022
Owner Name:	MIKE RYAN
Owner Type:	Other
Operator Name:	MIKE RYAN
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No

MIKE RYAN (Continued) **1024761094**

Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-10-01 18:38:27.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MIKE RYAN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	722 PANCHITA WAY
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	818-425-4736
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MIKE RYAN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	722 PANCHITA WAY
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	818-425-4736
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2018-09-19 00:00:00.0
Handler Name:	MIKE RYAN
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

MIKE RYAN (Continued) **1024761094**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

40
NE
1/8-1/4
0.157 mi.
831 ft.

LATHAM SQUARE APARTMENTS
2250 LATHAM ST
MOUNTAIN VIEW, CA 94040

RCRA NonGen / NLR **1024808660**
CAL000280916

Relative:
Lower

Actual:
74 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2004-04-09 00:00:00.0
Handler Name:	LATHAM SQUARE APARTMENTS
Handler Address:	2250 LATHAM ST
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAL000280916
Contact Name:	RAMON ARREOLA
Contact Address:	333 W MAUDE AVE STE 218
Contact City,State,Zip:	SUNNYVALE, CA 94085
Contact Telephone:	650-967-0101
Contact Fax:	000-000-0000
Contact Email:	MARLENE@S101MANAGEMENT.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	333 W MAUDE AVE STE 218
Mailing City,State,Zip:	SUNNYVALE, CA 94085-0000
Owner Name:	LATHAM SQUARE GROUP LIMITED
Owner Type:	Other
Operator Name:	RAMON ARREOLA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported

LATHAM SQUARE APARTMENTS (Continued) **1024808660**

Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:25:37.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	LATHAM SQUARE GROUP LIMITED
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	333 W MAUDE AVE STE 218
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94085-0000
Owner/Operator Telephone:	408-730-9981
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	RAMON ARREOLA
Legal Status:	Other

LATHAM SQUARE APARTMENTS (Continued) **1024808660**

Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	333 W MAUDE AVE STE 218
Owner/Operator City,State,Zip:	SUNNYVALE, CA 94085
Owner/Operator Telephone:	650-967-0101
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2004-04-09 00:00:00.0
Handler Name:	LATHAM SQUARE APARTMENTS
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	53111
NAICS Description:	LESSORS OF RESIDENTIAL BUILDINGS AND DWELLINGS

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

41
NNE
1/8-1/4
0.168 mi.
886 ft.

HEATH, RICHARD **RCRA NonGen / NLR** **1024779962**
2280 LAYTHM STREET #9 **CAC002999920**
MOUNTAIN VIEW, CA 94040

Relative:
Lower

Actual:
75 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2019-02-06 00:00:00.0
Handler Name:	HEATH, RICHARD
Handler Address:	2280 LAYTHM STREET #9
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAC002999920
Contact Name:	HEATH, RICHARD
Contact Address:	2280 LAYTHM STREET #9
Contact City,State,Zip:	MOUNTAIN VIEW, CA 94040
Contact Telephone:	650-207-4310
Contact Fax:	510-651-7702
Contact Email:	MICKIEL@PWSEI.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified

HEATH, RICHARD (Continued) **1024779962**

Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2280 LAYTHM STREET #9
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner Name:	HEATH, RICHARD
Owner Type:	Other
Operator Name:	HEATH, RICHARD
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No

HEATH, RICHARD (Continued) **1024779962**

Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-02-22 19:41:10.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	HEATH, RICHARD
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2280 LAYTHM STREET #9
Owner/Operator City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner/Operator Telephone:	650-207-4310
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	HEATH, RICHARD
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2280 LAYTHM STREET #9
Owner/Operator City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner/Operator Telephone:	650-207-4310
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2019-02-06 00:00:00.0
Handler Name:	HEATH, RICHARD
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

HEATH, RICHARD (Continued) **1024779962**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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42 **JACK IN THE BOX #0421** **CUPA Listings** **S120984140**
NW **4896 EL CAMINO REAL** **CERS** **N/A**
1/8-1/4 **LOS ALTOS, CA 94022**
0.191 mi.
1007 ft.

Relative:
Lower

Actual:
82 ft.

CUPA SANTA CLARA:
Name: JACK IN THE BOX #0421
Address: 4896 EL CAMINO REAL
City,State,Zip: LOS ALTOS, CA 94022
Region: SANTA CLARA
PE#: Not reported
Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: 37.39822
Longitude: -122.10886
Record ID: PR0427344
Facility ID: FA0285028

CERS:
Name: JACK IN THE BOX #0421
Address: 4896 EL CAMINO REAL
City,State,Zip: LOS ALTOS, CA 94022
Site ID: 416141
CERS ID: 10720996
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 416141
Site Name: Jack in the Box #0421
Violation Date: 7/6/2018
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Annual training logs for emergency response and hazards associated with reportable chemicals were not available for inspection. Forward copies of annual training logs for all employees on-site to HMCD office for review.
Violation Division: Santa Clara County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 416141
Site Name: Jack in the Box #0421
Violation Date: 7/6/2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all

JACK IN THE BOX #0421 (Continued) **S120984140**

	required content.
Violation Notes:	Site map does not appear to show correct layout of the facility. When asked, employees on-site could not locate the carbon dioxide using the map. After calling a manager for assistance, the cylinder was located in a storage closet that is only accesible through an external door at the back ot the shop. Revise map to show correct layout and access to this cylinder and resubmit.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	416141
Site Name:	Jack in the Box #0421
Violation Date:	7/6/2018
Citation:	HSC 6.95 25505.1 - California Health and Safety Code, Chapter 6.95, Section(s) 25505.1
Violation Description:	Failure to provide a copy of the business plan to the owner or the owner's agent within five working days after receiving a request for a copy from the owner or the owner's agent.
Violation Notes:	Facility employees could not provide verification that facility has notified the property owner in writing of their compliance with the Hazardous Materials Business Plan.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-06-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Facility last submitted their hazardous materials business plan via CERS ID 10720996 on 1/24/2018. Facility has 53 gallons of cryogenic carbon dioxide that is reportable.
Eval Division:	Santa Clara County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Coordinates:

Site ID:	416141
Facility Name:	Jack in the Box #0421
Env Int Type Code:	HMBP
Program ID:	10720996
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	37.398220
Longitude:	-122.108860

Affiliation:

Affiliation Type Desc:	Document Preparer
Entity Name:	Steve Skanderson, Stantec
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported

JACK IN THE BOX #0421 (Continued) **S120984140**

Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Shang Chun Hsia
Entity Title:	Operator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	JIB Restaurant Group, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(408) 568-6910
Affiliation Type Desc:	Environmental Contact
Entity Name:	Philip Hsia
Entity Title:	Not reported
Affiliation Address:	19922 Scotland Dr.
Affiliation City:	Saratoga
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95070
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	JIB Restaurant Group, Inc.
Entity Title:	Not reported
Affiliation Address:	986 Woodside Rd
Affiliation City:	Redwood City
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94061
Affiliation Phone:	(408) 568-6910
Affiliation Type Desc:	CUPA District
Entity Name:	Santa Clara County Environmental Health
Entity Title:	Not reported
Affiliation Address:	1555 Berger Drive, Suite 300
Affiliation City:	San Jose
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95112-2716
Affiliation Phone:	(408) 918-3400
Affiliation Type Desc:	Parent Corporation
Entity Name:	Hsia Companies
Entity Title:	Not reported
Affiliation Address:	Not reported

JACK IN THE BOX #0421 (Continued) **S120984140**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	986 Woodside Rd
Affiliation City:	Redwood City
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94061
Affiliation Phone:	Not reported

G43 **JOHN PEAR** **HIST UST** **U001594320**
North **410 ORTEGA AVE** **N/A**
1/8-1/4 **MOUNTAIN VIEW, CA 94040**
0.192 mi.
1015 ft. **Site 1 of 3 in cluster G**

Relative: **Lower**
Actual: **75 ft.**

HIST UST:

Name:	JOHN PEAR
Address:	410 ORTEGA AVE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000048011
Facility Type:	Other
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	4159483019
Owner Name:	JOHN PEAR
Owner Address:	410 ORTEGA AVE.
Owner City,St,Zip:	MOUNTAIN VIEW, CA 94040
Total Tanks:	0002
Tank Num:	001
Container Num:	1
Year Installed:	1950
Tank Capacity:	00000250
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	2
Year Installed:	1950
Tank Capacity:	00000250
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
G44	**JOHN PEAR**	**SWEEPS UST**	**S101623001**
North	**410 ORTEGA AVE**	**CA FID UST**	**N/A**
1/8-1/4	**MOUNTAIN VIEW, CA 94040**		
0.192 mi.			
1015 ft.	**Site 2 of 3 in cluster G**		

Relative:
Lower

Actual:
75 ft.

SWEEPS UST:

Name:	JOHN PEAR
Address:	410 ORTEGA AVE
City:	MOUNTAIN VIEW
Status:	Not reported
Comp Number:	48011
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-005-048011-000001
Tank Status:	Not reported
Capacity:	250
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	LEADED
Number Of Tanks:	2

Name:	JOHN PEAR
Address:	410 ORTEGA AVE
City:	MOUNTAIN VIEW
Status:	Not reported
Comp Number:	48011
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-005-048011-000002
Tank Status:	Not reported
Capacity:	250
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	LEADED
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	43011926
Regulated By:	UTNKI
Regulated ID:	00048011
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	410 ORTEGA AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	MOUNTAIN VIEW 94040
Contact:	Not reported

JOHN PEAR (Continued) **S101623001**

Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

H45 **NATUROPATHIC OPTIONS** **RCRA NonGen / NLR** **1024872731**
ESE **5150 EL CAMINO REAL B14** **CAL000441379**
1/8-1/4 **LOS ALTOS, CA 94022**
0.195 mi.
1029 ft. **Site 1 of 2 in cluster H**

Relative: **Higher**
Actual: **88 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2018-11-30 00:00:00.0
Handler Name:	NATUROPATHIC OPTIONS
Handler Address:	5150 EL CAMINO REAL B14
Handler City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAL000441379
Contact Name:	SUZANN WANG
Contact Address:	5150 EL CAMINO REAL B14
Contact City,State,Zip:	LOS ALTOS, CA 94022
Contact Telephone:	650-327-2053
Contact Fax:	650-331-7250
Contact Email:	OFFICE@NATUROPATHICOPTIONS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	5150 EL CAMINO REAL B14
Mailing City,State,Zip:	LOS ALTOS, CA 94022
Owner Name:	SUZANN WANG
Owner Type:	Other
Operator Name:	SUZANN WANG
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---

NATUROPATHIC OPTIONS (Continued) **1024872731**

Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-12-20 13:53:08.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SUZANN WANG
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	5150 EL CAMINO REAL B14
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	650-327-2053
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SUZANN WANG
Legal Status:	Other
Date Became Current:	Not reported

NATUROPATHIC OPTIONS (Continued) **1024872731**

Date Ended Current:	Not reported
Owner/Operator Address:	5150 EL CAMINO REAL B14
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	650-327-2053
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2018-11-30 00:00:00.0
Handler Name:	NATUROPATHIC OPTIONS
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	621493
NAICS Description:	FREESTANDING AMBULATORY SURGICAL AND EMERGENCY CENTERS

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

I46 **BXP WEST EL CAMINO LP** **RCRA NonGen / NLR** **1024832648**
NNW **2440 W EL CAMINO REAL** **CAL000370939**
1/8-1/4 **MOUNTAIN VIEW, CA 94040**
0.196 mi.
1034 ft. **Site 1 of 6 in cluster I**

Relative:
Lower

Actual:
77 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2012-01-19 00:00:00.0
Handler Name:	BXP WEST EL CAMINO LP
Handler Address:	2440 W EL CAMINO REAL
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAL000370939
Contact Name:	DANIEL MURTAGH
Contact Address:	FOUR EMBARCADERO CENTER
Contact City,State,Zip:	SAN FRANCISCO, CA 94111
Contact Telephone:	415-772-0635
Contact Fax:	Not reported
Contact Email:	DMURTAGH@BOSTONPROPERTIES.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

BXP WEST EL CAMINO LP (Continued) **1024832648**

Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	4 EMBARCADERO CTR LOBBY LEVEL,STE 1
Mailing City,State,Zip:	SAN FRANCISCO, CA 94111-0000
Owner Name:	BOSTON PROPERTIES, LTD
Owner Type:	Other
Operator Name:	DANIEL MURTAGH
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No

BXP WEST EL CAMINO LP (Continued) **1024832648**

Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-06 17:00:07.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BOSTON PROPERTIES, LTD
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4 EMBARCADERO CTR LOBBY LEVEL,STE 1
Owner/Operator City,State,Zip:	SAN FRANCISCO, CA 94111-0000
Owner/Operator Telephone:	415-772-0636
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	DANIEL MURTAGH
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	FOUR EMBARCADERO CENTER
Owner/Operator City,State,Zip:	SAN FRANCISCO, CA 94111
Owner/Operator Telephone:	415-772-0635
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2012-01-19 00:00:00.0
Handler Name:	BXP WEST EL CAMINO LP
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	71131
NAICS Description:	PROMOTERS OF PERFORMING ARTS, SPORTS, AND SIMILAR EVENTS WITH FACILITIES

BXP WEST EL CAMINO LP (Continued) **1024832648**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

I47 **BP WEST EL CAMINO LLC, C/O BOS** **CUPA Listings** **S112872600**
NNW **2440 W EL CAMINO REAL** **EMI** **N/A**
1/8-1/4 **MOUNTAIN VIEW, CA 94040** **CERS**
0.196 mi.
1034 ft. **Site 2 of 6 in cluster I**

Relative:
Lower

Actual:
77 ft.

CUPA SANTA CLARA:

Name:	BOSTON PROPERTIES, L.P.
Address:	2440 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	SANTA CLARA
PE#:	2201
Program Description:	GENERATES WASTE OIL ONLY
Latitude:	37.3992849
Longitude:	-122.107799
Record ID:	PR0416517
Facility ID:	FA0275617

EMI:

Name:	BP WEST EL CAMINO LLC, C/O BOS
Address:	2440 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Year:	2011
County Code:	43
Air Basin:	SF
Facility ID:	21037
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.001
NOX - Oxides of Nitrogen Tons/Yr:	0.005
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	BP WEST EL CAMINO LLC, C/O BOS
Address:	2440 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Year:	2012
County Code:	43
Air Basin:	SF
Facility ID:	21037
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD

BP WEST EL CAMINO LLC, C/O BOS (Continued) **S112872600**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.001
NOX - Oxides of Nitrogen Tons/Yr:	0.005
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	BP WEST EL CAMINO LLC, C/O BOS
Address:	2440 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Year:	2013
County Code:	43
Air Basin:	SF
Facility ID:	21037
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.001
NOX - Oxides of Nitrogen Tons/Yr:	0.006
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	BP WEST EL CAMINO LLC, C/O BOSTON PROPERTIES
Address:	2440 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Year:	2014
County Code:	43
Air Basin:	SF
Facility ID:	21037
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.00041377
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.0012495
NOX - Oxides of Nitrogen Tons/Yr:	0.005747434
SOX - Oxides of Sulphur Tons/Yr:	2.664e-006
Particulate Matter Tons/Yr:	0.000427849
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.000410735

Name:	BP WEST EL CAMINO LLC, C/O BOSTON PROPERTIES
Address:	2440 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Year:	2015
County Code:	43
Air Basin:	SF
Facility ID:	21037

BP WEST EL CAMINO LLC, C/O BOS (Continued) **S112872600**

Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.000401948
Reactive Organic Gases Tons/Yr:	0.000391333
Carbon Monoxide Emissions Tons/Yr:	0.0012138
NOX - Oxides of Nitrogen Tons/Yr:	0.005583223
SOX - Oxides of Sulphur Tons/Yr:	2.588e-006
Particulate Matter Tons/Yr:	7.9736e-005
Part. Matter 10 Micrometers and Smllr Tons/Yr:	7.6547e-005

Name:	BP WEST EL CAMINO LLC, C/O BOSTON PROPERTIES
Address:	2440 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Year:	2016
County Code:	43
Air Basin:	SF
Facility ID:	21037
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.000401948
Reactive Organic Gases Tons/Yr:	0.000353111318
Carbon Monoxide Emissions Tons/Yr:	0.0012138
NOX - Oxides of Nitrogen Tons/Yr:	0.005583223
SOX - Oxides of Sulphur Tons/Yr:	2.588e-006
Particulate Matter Tons/Yr:	7.9736e-005
Part. Matter 10 Micrometers and Smllr Tons/Yr:	7.6547e-005

CERS:

Name:	BP WEST EL CAMINO LLC, C/O BOSTON PROPERTIES
Address:	2440 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Site ID:	455399
CERS ID:	110058362338
CERS Description:	US EPA Air Emission Inventory System (EIS)

I48 **BOSTON PROPERTIES, L.P.** **CERS HAZ WASTE** **S121742719**
NNW **2440 EL CAMINO REAL WEST** **CERS** **N/A**
1/8-1/4 **MOUNTAIN VIEW, CA 94040**
0.196 mi.
1034 ft. **Site 3 of 6 in cluster I**

Relative:
Lower

Actual:
77 ft.

CERS HAZ WASTE:

Name:	BOSTON PROPERTIES, L.P.
Address:	2440 EL CAMINO REAL WEST
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Site ID:	13150
CERS ID:	10350277
CERS Description:	Hazardous Waste Generator

CERS:

Name:	BOSTON PROPERTIES, L.P.

BOSTON PROPERTIES, L.P. (Continued) **S121742719**

Address: 2440 EL CAMINO REAL WEST
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 13150
CERS ID: 10350277
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-03-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No Violations
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-15-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No Violations.
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-11-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Legal Owner
Entity Name: Boston Properties, L.P.
Entity Title: Not reported
Affiliation Address: 453 Ravendale Drive, Suite D
Affiliation City: Mountain View
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 94043
Affiliation Phone: (650) 930-9468

Affiliation Type Desc: Property Owner
Entity Name: Boston Properties, L. P
Entity Title: Not reported
Affiliation Address: 453 Ravendale Drive, Suite D
Affiliation City: Mountain View
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 94043
Affiliation Phone: (650) 930-9468

Affiliation Type Desc: CUPA District
Entity Name: Santa Clara County Environmental Health

BOSTON PROPERTIES, L.P. (Continued) **S121742719**

Entity Title:	Not reported
Affiliation Address:	1555 Berger Drive, Suite 300
Affiliation City:	San Jose
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95112-2716
Affiliation Phone:	(408) 918-3400
Affiliation Type Desc:	Identification Signer
Entity Name:	Gregory Kontur
Entity Title:	Chief Engineer
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Greg Kontur
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Teresa Longchamp
Entity Title:	Not reported
Affiliation Address:	453 Ravendale Drive, Suite D
Affiliation City:	Mountain View
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94043
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	Boston Properties
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(650) 930-9444
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	453 Ravendale Drive, Suite D
Affiliation City:	Mountain View
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94043
Affiliation Phone:	Not reported

BOSTON PROPERTIES, L.P. (Continued) **S121742719**

Affiliation Type Desc:	Parent Corporation
Entity Name:	Boston Properties, L.P.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

I49 **ALPINE ANIMAL HOSPITAL** **CUPA Listings** **S121473785**
NW **2460 W EL CAMINO REAL** **HWTS** **N/A**
1/8-1/4 **MOUNTAIN VIEW, CA 94040**
0.202 mi.
1067 ft. **Site 4 of 6 in cluster I**

Relative:
Lower

Actual:
79 ft.

CUPA SANTA CLARA:

Name:	ALPINE ANIMAL HOSPITAL
Address:	2460 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	SANTA CLARA
PE#:	2271
Program Description:	SILVER WASTE ONLY <100 KG/YR
Latitude:	37.399016
Longitude:	-122.108829
Record ID:	PR0381696
Facility ID:	FA0260431

HWTS:

Name:	ALPINE ANIMAL HOSPITAL
Address:	2460 W EL CAMINO REAL
Address 2:	Not reported
City,State,Zip:	MOUNTAIN VIEW, CA 940400000
EPA ID:	CAL000305636
Inactive Date:	06/30/2008
Create Date:	04/17/2006
Last Act Date:	04/23/2009
Mailing Name:	Not reported
Mailing Address:	2460 W EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 940401421
Owner Name:	ANIMUS INC DBA ALPINE ANIMAL HOSPIT
Owner Address:	2460 W EL CAMINO REAL
Owner Address 2:	Not reported
Owner City,State,Zip:	MOUNTAIN VIEW, CA 940401421
Contact Name:	RITU GHUMMAN
Contact Address:	2053 SANDALWOOD CT
Contact Address 2:	Not reported
City,State,Zip:	PALO ALTO, CA 94303

NAICS:

EPA ID:	CAL000305636
Create Date:	2006-04-17 14:31:47.277
NAICS Code:	54194
NAICS Description:	Veterinary Services
Issued EPA ID Date:	2006-04-17 14:31:47.21300
Inactive Date:	2008-06-30 00:00:00

ALPINE ANIMAL HOSPITAL (Continued) **S121473785**

Facility Name:	ALPINE ANIMAL HOSPITAL
Facility Address:	2460 W EL CAMINO REAL
Facility Address 2:	Not reported
Facility City:	MOUNTAIN VIEW
Facility County:	Not reported
Facility State:	CA
Facility Zip:	940400000

I50 **ALPINE ANIMAL HOSPITAL** **CUPA Listings** **S121468997**
NW **2460 W EL CAMINO REAL** **N/A**
1/8-1/4 **MOUNTAIN VIEW, CA 94040**
0.202 mi.
1067 ft. **Site 5 of 6 in cluster I**

Relative: **Lower**
Actual: **79 ft.**

CUPA SANTA CLARA:

Name:	ALPINE ANIMAL HOSPITAL
Address:	2460 W EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	SANTA CLARA
PE#:	2271
Program Description:	SILVER WASTE ONLY <100 KG/YR
Latitude:	37.399016
Longitude:	-122.108829
Record ID:	PR0317945
Facility ID:	FA0203858

I51 **ALPINE ANIMAL HOSPITAL** **CUPA Listings** **S112345282**
NW **2460 EL CAMINO REAL** **N/A**
1/8-1/4 **MOUNTAIN VIEW, CA 94040**
0.202 mi.
1067 ft. **Site 6 of 6 in cluster I**

Relative: **Lower**
Actual: **79 ft.**

CUPA SANTA CLARA:

Name:	ALPINE ANIMAL HOSPITAL
Address:	2460 EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	SANTA CLARA
PE#:	2240
Program Description:	GENERATES < 10 GAL/YR
Latitude:	37.399016
Longitude:	-122.108829
Record ID:	PR0383860
Facility ID:	FA0261737

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

G52 **CANDIDA MALFERRARI** **RCRA NonGen / NLR** **1024747041**
North **400 ORTEGA AVE** **CAC002966813**
1/8-1/4 **MOUNTAIN VIEW, CA 94040**
0.216 mi.
1139 ft. **Site 3 of 3 in cluster G**

Relative: **Lower**
Actual: **74 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2018-06-15 00:00:00.0
Handler Name:	CANDIDA MALFERRARI
Handler Address:	400 ORTEGA AVE
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAC002966813
Contact Name:	CANDIDA MALFERRARI
Contact Address:	400 ORTEGA AVE
Contact City,State,Zip:	MOUNTAIN VIEW, CA 94040
Contact Telephone:	650-996-3982
Contact Fax:	Not reported
Contact Email:	CYNTHIAV@PWSEI.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	400 ORTEGA AVE
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner Name:	CANDIDA MALFERRARI
Owner Type:	Other
Operator Name:	CANDIDA MALFERRARI
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

CANDIDA MALFERRARI (Continued) **1024747041**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-08-31 17:13:26.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CANDIDA MALFERRARI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	400 ORTEGA AVE
Owner/Operator City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner/Operator Telephone:	650-996-3982
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	CANDIDA MALFERRARI
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	400 ORTEGA AVE
Owner/Operator City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner/Operator Telephone:	650-996-3982
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

CANDIDA MALFERRARI (Continued) **1024747041**

Historic Generators:

Receive Date:	2018-06-15 00:00:00.0
Handler Name:	CANDIDA MALFERRARI
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

H53 **DOLLAR RENT A CAR** **SWEEPS UST** **S101594618**
ESE **4294 EL CAMINO REAL** **CA FID UST** **N/A**
1/8-1/4 **LOS ALTOS, CA 94022** **CUPA Listings**
0.226 mi. **CERS**
1192 ft. **Site 2 of 2 in cluster H**

Relative: Higher

Actual: 86 ft.

SWEEPS UST:

Name:	DOLLAR RENT A CAR
Address:	4294 EL CAMINO REAL
City:	LOS ALTOS
Status:	Active
Comp Number:	36672
Number:	9
Board Of Equalization:	44-025761
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	43-000-036672-000001
Tank Status:	A
Capacity:	8000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	1

CA FID UST:

Facility ID:	43012037
Regulated By:	UTNKA

DOLLAR RENT A CAR (Continued) **S101594618**

Regulated ID: 00036672
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4159418890
Mail To: Not reported
Mailing Address: 4294 EL CAMINO REAL
Mailing Address 2: Not reported
Mailing City,St,Zip: LOS ALTOS 94022
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CUPA SANTA CLARA:
Name: CALIFORNIA CRYOBANK
Address: 4294 EL CAMINO REAL
City,State,Zip: LOS ALTOS, CA 94022
Region: SANTA CLARA
PE#: Not reported
Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: 37.395492
Longitude: -122.101552
Record ID: PR0411518
Facility ID: FA0272112

CERS:
Name: CALIFORNIA CRYOBANK
Address: 4294 EL CAMINO REAL
City,State,Zip: LOS ALTOS, CA 94022
Site ID: 375142
CERS ID: 10589464
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 375142
Site Name: CALIFORNIA CRYOBANK
Violation Date: 8/14/2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 09/13/2018. Add the following items to your site map: the North arrow; your emergency response equipment, emergency shut-offs (electrical, water, gas, etc.).
Violation Division: Santa Clara County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 375142
Site Name: CALIFORNIA CRYOBANK
Violation Date: 8/14/2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material

DOLLAR RENT A CAR (Continued) **S101594618**

inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 09/13/2018. Your chemical inventory is incomplete. Please make the following amendments: Change the chemical and common name from 'nitrogen' to 'liquid nitrogen'; change the physical state from 'gas' to 'liquid'; add the appropriate Federal Hazard Categories in accordance with your chemical Safety Data Sheet (e.g. 'gas under pressure', 'simple asphyxiant'); change the storage container from 'steel drum' to 'above ground tank'; change the storage pressure from 'ambient' to 'above ambient'; change the storage temperature from 'ambient' to 'cryogenic'.
Violation Division: Santa Clara County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-14-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: A physical walk through and paperwork hazardous materials business plan (HMBP) inspection was performed on this date. Ashley Ryder was present during the inspection. The following observations were noted: Electronic submittal was submitted on FrontCounter on 10/5/2017 and was approved by our agency. The following HMBP reportable chemical was verified: Liquid Nitrogen - 6 x 61 gallon dewars Operator stated that they own the property but she would verify. If the business doesn't own the property, then use the property owner notification letter template provided to create and send the letter to your property owner. Keep a copy of this letter in your compliance folder. Emergency Response training is performed and documented annually. A copy of the HMBP was available for use. The following emergency response equipment was available for use: Emergency eyewash, fire extinguishers, first aid kit, oxygen deficiency alarm, and safety gloves. Permit fees [Truncated]
Eval Division: Santa Clara County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Nick Gulbrandsen
Entity Title: Not reported
Affiliation Address: 4294 EL CAMINO REAL
Affiliation City: LOS ALTOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94022
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Santa Clara County Environmental Health
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: San Jose
Affiliation State: CA

DOLLAR RENT A CAR (Continued) **S101594618**

Affiliation Country:	Not reported
Affiliation Zip:	95112-2716
Affiliation Phone:	(408) 918-3400
Affiliation Type Desc:	Operator
Entity Name:	Nicholas Gulbrandsen
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(650) 324-1900
Affiliation Type Desc:	Parent Corporation
Entity Name:	CALIFORNIA CRYOBANK
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Erica Malik
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Erica Malik
Entity Title:	MANAGER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	CALIFORNIA CRYOBANK LLC
Entity Title:	Not reported
Affiliation Address:	11915 LA GRANGE
Affiliation City:	LOS ANGELES
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	90025
Affiliation Phone:	(866) 927-9622
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported

DOLLAR RENT A CAR (Continued) **S101594618**

Affiliation Address:	4294 EL CAMINO REAL
Affiliation City:	LOS ALTOS
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94022
Affiliation Phone:	Not reported
Affiliation Type Desc:	Property Owner
Entity Name:	EL CAMINO SBE, LLC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	Not reported
Affiliation Phone:	(865) 927-9622

J54 **MARTIN DAVIDSSON** **RCRA NonGen / NLR** **1024745356**
SSW **646 PANCHITA WAY** **CAC002965123**
1/8-1/4 **LOS ALTOS, CA 94022**
0.230 mi.
1216 ft. **Site 1 of 2 in cluster J**

Relative: **Higher**

Actual: **106 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2018-06-06 00:00:00.0
Handler Name:	MARTIN DAVIDSSON
Handler Address:	646 PANCHITA WAY
Handler City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAC002965123
Contact Name:	MARTIN DAVIDSSON
Contact Address:	646 PANCHITA WAY
Contact City,State,Zip:	LOS ALTOS, CA 94022
Contact Telephone:	919-627-8463
Contact Fax:	Not reported
Contact Email:	CHRISTINA@EISENENVIRONMENTAL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	646 PANCHITA WAY
Mailing City,State,Zip:	LOS ALTOS, CA 94022
Owner Name:	MARTIN DAVIDSSON
Owner Type:	Other
Operator Name:	MARTIN DAVIDSSON
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No

MARTIN DAVIDSSON (Continued) **1024745356**

Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-08-31 17:12:13.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MARTIN DAVIDSSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported

MARTIN DAVIDSSON (Continued) **1024745356**

Owner/Operator Address:	646 PANCHITA WAY
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	919-627-8463
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MARTIN DAVIDSSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	646 PANCHITA WAY
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	919-627-8463
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2018-06-06 00:00:00.0
Handler Name:	MARTIN DAVIDSSON
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

J55 **MARTIN DAVIDSSON** **RCRA NonGen / NLR** **1024762570**
SSW **646 PANCHITA WAY** **CAC002982432**
1/8-1/4 **LOS ALTOS, CA 94022**
0.230 mi.
1216 ft. **Site 2 of 2 in cluster J**

Relative:
Higher

Actual:
106 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2018-09-27 00:00:00.0
Handler Name:	MARTIN DAVIDSSON
Handler Address:	646 PANCHITA WAY
Handler City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAC002982432

MARTIN DAVIDSSON (Continued) **1024762570**

Contact Name:	MARTIN DAVIDSSON
Contact Address:	646 PANCHITA WAY
Contact City,State,Zip:	LOS ALTOS, CA 94022
Contact Telephone:	919-272-8262
Contact Fax:	Not reported
Contact Email:	CHRISTINA@EISENENVIRONMENTAL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	646 PANCHITA WAY
Mailing City,State,Zip:	LOS ALTOS, CA 94022
Owner Name:	MARTIN DAVIDSSON
Owner Type:	Other
Operator Name:	MARTIN DAVIDSSON
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No

MARTIN DAVIDSSON (Continued) **1024762570**

Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-10-01 18:38:59.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MARTIN DAVIDSSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	646 PANCHITA WAY
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	919-272-8262
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MARTIN DAVIDSSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	646 PANCHITA WAY
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022
Owner/Operator Telephone:	919-272-8262
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2018-09-27 00:00:00.0
Handler Name:	MARTIN DAVIDSSON
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

MARTIN DAVIDSSON (Continued) **1024762570**

Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

56
ENE
1/8-1/4
0.237 mi.
1253 ft.

ONE HOUR CLEANERS
580 RENGSTORFF AVE N
MOUNTAIN VIEW, CA 94040

CPS-SLIC
DRYCLEANERS
CERS

S102339621
N/A

Relative:
Lower

Actual:
78 ft.

SLIC REG 2:
Region: 2
Facility ID: SLT2O111117
Facility Status: Leak being confirmed
Date Closed: Not reported
Local Case #: Not reported
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Confirmed: Not reported
Date Prelim Site Assmnt Workplan Submitted: Not reported
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

CPS-SLIC:
Name: ONE HOUR CLEANERS
Address: 580 RENGSTORFF AVE N
City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 02/24/2016
Global Id: SLT2O111117
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.41104
Longitude: -122.091752
Case Type: Cleanup Program Site
Case Worker: UUU
Local Agency: Not reported
RB Case Number: 43S0526
File Location: Regional Board

ONE HOUR CLEANERS (Continued) **S102339621**

Potential Media Affected: Not reported
Potential Contaminants of Concern: Not reported
Site History: No Further Action (Closure) Letter issued on 4/19/2000.

Click here to access the California GeoTracker records for this facility:

DRYCLEANERS:
Name: GREEN AND FRESH CLEANERS
Address: 580 N RENGSTORFF
City,State,Zip: MOUNTAIN VIEW, CA 940430000
EPA Id: CAD981632219
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211
SIC Description: Power Laundries, Family and Commercial
Create Date: 04/10/1987
Facility Active: Yes
Inactive Date: Not reported
Facility Addr2: Not reported
Owner Name: HYUN KIM
Owner Address: 580 N RENGSTORFF AVE #F
Owner Address 2: Not reported
Owner Telephone: 6509678899
Contact Name: HYUN KIM/OWNER
Contact Address: 580 N RENGSTORFF AVE #F
Contact Address 2: Not reported
Contact Telephone: 6509678899
Mailing Name: Not reported
Mailing Address 1: 580 N RENGSTORFF AVE #F
Mailing Address 2: Not reported
Mailing City: MOUNTAIN VIEW
Mailing State: CA
Mailing Zip: 940430000
Owner Fax: 0
Region Code: 2

CERS:
Name: ONE HOUR CLEANERS
Address: 580 RENGSTORFF AVE N
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 216879
CERS ID: SLT2O111117
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number

K57 **PRIME DENTAL CARE** **CUPA Listings** **S112346487**
NW **4846 EL CAMINO REAL #A** **N/A**
1/8-1/4 **LOS ALTOS, CA 94022**
0.242 mi.
1277 ft. **Site 1 of 2 in cluster K**

Relative: **Lower**

Actual: **80 ft.**

CUPA SANTA CLARA:

Name:	PRIME DENTAL CARE
Address:	4846 EL CAMINO REAL #A
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	2240
Program Description:	GENERATES < 10 GAL/YR
Latitude:	37.398703
Longitude:	-122.109132
Record ID:	PR0380974
Facility ID:	FA0259960

K58 **JUHYONG YI DDS PRIME DENTAL CARE** **RCRA NonGen / NLR** **1024820327**
NW **4846 EL CAMINO REAL STE A** **CAL000333242**
1/8-1/4 **LOS ALTOS, CA 94022**
0.242 mi.
1277 ft. **Site 2 of 2 in cluster K**

Relative: **Lower**

Actual: **80 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2008-06-03 00:00:00.0
Handler Name:	JUHYONG YI DDS PRIME DENTAL CARE
Handler Address:	4846 EL CAMINO REAL STE A
Handler City,State,Zip:	LOS ALTOS, CA 94022-1405
EPA ID:	CAL000333242
Contact Name:	JUHYONG YI (OWNER)
Contact Address:	4846 EL CAMINO REAL STE A
Contact City,State,Zip:	LOS ALTOS, CA 94022-1405
Contact Telephone:	650-964-2225
Contact Fax:	650-964-2056
Contact Email:	YIMPLANT@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	4846 EL CAMINO REAL STE A
Mailing City,State,Zip:	LOS ALTOS, CA 94022-1405
Owner Name:	JUHYONG YI DENTAL CORP
Owner Type:	Other
Operator Name:	JUHYONG YI (OWNER)
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No

JUHYONG YI DDS PRIME DENTAL CARE (Continued) **1024820327**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:30:22.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JUHYONG YI DENTAL CORP
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4846 EL CAMINO REAL STE A
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022-1405

JUHYONG YI DDS PRIME DENTAL CARE (Continued) **1024820327**

Owner/Operator Telephone:	650-964-2225
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	JUHYONG YI (OWNER)
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4846 EL CAMINO REAL STE A
Owner/Operator City,State,Zip:	LOS ALTOS, CA 94022-1405
Owner/Operator Telephone:	650-964-2225
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2008-06-03 00:00:00.0
Handler Name:	JUHYONG YI DDS PRIME DENTAL CARE
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	62121
NAICS Description:	OFFICES OF DENTISTS

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

L59 **DIGAS** **LUST** **S100937119**
NNW **555 SHOWERS DR** **HIST LUST** **N/A**
1/4-1/2 **MOUNTAIN VIEW, CA 94040** **Cortese**
0.327 mi. **CERS**
1725 ft. **Site 1 of 2 in cluster L**

Relative: **Lower**
Actual: **65 ft.**

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S2W20C02f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported

DIGAS (Continued) **S100937119**

Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 10/2/1986
Pollution Characterization Began: 6/7/1993
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: 12/1/1993
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Name: Digas
Address: 555 Showers Dr
City: Mountain View
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S2W20C02
Oversite Agency: SCVWD
Date Listed: 1987-01-01 00:00:00
Closed Date: 1997-09-17 00:00:00

CORTESE:
Name: DIGAS
Address: 555 SHOWERS DR
City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0608500515
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:
Name: DIGAS
Address: 555 SHOWERS DR
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 255904
CERS ID: T0608500515
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker

DIGAS (Continued) **S100937119**

Entity Name:	UST CASE WORKER - SANTA CLARA COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	1555 Berger Drive, Suite 300
Affiliation City:	SAN JOSE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	4089183400
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title:	Not reported
Affiliation Address:	1515 CLAY ST SUITE 1400
Affiliation City:	OAKLAND
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

L60 **TARGET T0322** **LUST** **S102428789**
NNW **555 SHOWERS DR** **CERS HAZ WASTE** **N/A**
1/4-1/2 **MOUNTAIN VIEW, CA 94040** **CUPA Listings**
0.327 mi. **HIST CORTESE**
1725 ft. **Site 2 of 2 in cluster L** **CERS**

Relative: **Lower**
Actual: **65 ft.**

LUST:

Name:	DIGAS
Address:	555 SHOWERS DR
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Lead Agency:	SANTA CLARA COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608500515
Global Id:	T0608500515
Latitude:	37.402073746
Longitude:	-122.10632086
Status:	Completed - Case Closed
Status Date:	09/17/1997
Case Worker:	UST
RB Case Number:	Not reported
Local Agency:	SANTA CLARA COUNTY LOP
File Location:	All Files are on GeoTracker or in the Local Agency Database
Local Case Number:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0608500515
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported
Global Id:	T0608500515

TARGET T0322 (Continued) **S102428789**

Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

LUST:

Global Id: T0608500515
Action Type: ENFORCEMENT
Date: 09/17/1997
Action: Closure/No Further Action Letter

Global Id: T0608500515
Action Type: RESPONSE
Date: 01/01/1985
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 01/01/1996
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 05/27/1995
Action: Other Report / Document

Global Id: T0608500515
Action Type: ENFORCEMENT
Date: 05/20/1992
Action: Notice of Violation - #40125

Global Id: T0608500515
Action Type: REMEDIATION
Date: 12/01/1993
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608500515
Action Type: Other
Date: 10/02/1986
Action: Leak Reported

Global Id: T0608500515
Action Type: RESPONSE
Date: 01/01/1997
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 02/16/1996
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 06/07/1993

TARGET T0322 (Continued) **S102428789**

Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 11/07/1986
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 01/01/1997
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 01/01/1993
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 01/01/1997
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 03/06/2003
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 11/11/1987
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 01/01/1993
Action: Other Report / Document

Global Id: T0608500515
Action Type: RESPONSE
Date: 10/02/1986
Action: Other Report / Document

LUST:
Global Id: T0608500515
Status: Open - Case Begin Date
Status Date: 10/02/1986

Global Id: T0608500515
Status: Open - Site Assessment
Status Date: 10/02/1986

Global Id: T0608500515
Status: Open - Site Assessment
Status Date: 06/07/1993

Global Id: T0608500515
Status: Open - Remediation

TARGET T0322 (Continued) **S102428789**

Status Date: 12/01/1993

Global Id: T0608500515
Status: Completed - Case Closed
Status Date: 09/17/1997

LUST SANTA CLARA:
Name: DIGAS
Address: 555 SHOWERS DR
City,State,Zip: MOUNTAIN VIEW, CA
Region: SANTA CLARA
SCVWD ID: 06S2W20C02F
Date Closed: 09/17/1997
EDR Link ID: 06S2W20C02F

CERS HAZ WASTE:
Name: TARGET T0322
Address: 555 SHOWERS DR
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 159712
CERS ID: 10077565
CERS Description: Hazardous Waste Generator

CUPA SANTA CLARA:
Name: WHEEL WORKS #8218
Address: 555 SHOWERS DR
City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: SANTA CLARA
PE#: 2206
Program Description: GENERATES 5 TO <25 TONS/YR
Latitude: 37.401557
Longitude: -122.107525
Record ID: PR0313903
Facility ID: FA0204164

Name: TARGET T0322
Address: 555 SHOWERS DR
City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: SANTA CLARA
PE#: 2206
Program Description: GENERATES 5 TO <25 TONS/YR
Latitude: 37.401557
Longitude: -122.107525
Record ID: PR0381804
Facility ID: FA0260487

HIST CORTESE:
edr_fname: DIGAS COMPANY
edr_fadd1: 555 SHOWERS
City,State,Zip: MOUNTAIN VIEW, CA
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0468

TARGET T0322 (Continued) **S102428789**

CERS:
Name: TARGET T0322
Address: 555 SHOWERS DR
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 159712
CERS ID: 10077565
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 159712
Site Name: TARGET T0322
Violation Date: 6/20/2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 11/14/2018. Update Site Map to include locations of chemicals that match up with the inventory.
Violation Division: Mountain View Fire Department
Violation Program: HMRRP
Violation Source: CERS

Site ID: 159712
Site Name: TARGET T0322
Violation Date: 6/2/2017
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 09/19/2017. Location: Add cleaning chemicals to submital
Violation Division: Mountain View Fire Department
Violation Program: HMRRP
Violation Source: CERS

Site ID: 159712
Site Name: TARGET T0322
Violation Date: 6/2/2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 07/12/2017. Location: Provide training documentation
Violation Division: Mountain View Fire Department
Violation Program: HMRRP
Violation Source: CERS

Site ID: 159712
Site Name: TARGET T0322
Violation Date: 5/6/2015
Citation: HSC 6.95 25508.1(a)-(e) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(e)
Violation Description: Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable

TARGET T0322 (Continued) **S102428789**

quantities. A change of business address, business ownership, or business name.
Violation Notes: Returned to compliance on 06/09/2016.
Violation Division: Mountain View Fire Department
Violation Program: HMRRP
Violation Source: CERS

Site ID: 159712
Site Name: TARGET T0322
Violation Date: 6/20/2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 11/14/2018. Update inventory to include maintenance chemicals, cleaning chemicals and kitchen chemicals.
Violation Division: Mountain View Fire Department
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-13-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-24-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No Violations
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-28-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct a routine hazardous waste inspection. Facility is a retail store that generates hazardous waste in the form of non-saleable (damaged, returned, off-spec of otherwise discarded) merchandise. Hazardous waste is stored in an area of the warehouse designated ESIM (environmentally sensitive item management) with the following observed at time of inspection: -State-regulated toxics (STOU): 11 x small plastic tote bins -Flammable, aerosols, toxic (FL): 3 x small plastic toe bins -Hazardous waste oxidizers (O): 1 x small plastic tote bin -Corrosive bases (CB): 1 x small plastic tote bin -Corrosive acids (CA): 1 x small plastic tote bin -Universal Waste (Batteries): 1 x small plastic tote bin Non-saleable merchandise is collected from storefront and is placed in a sort bin(s) in the ESIM area. Each day staff utilizes a "smart sort" system (scanner linked to

TARGET T0322 (Continued) **S102428789**

an external database) to sort hazardous waste by hazard classification. Additionally, all waste [Truncated]
Eval Division: Santa Clara County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-09-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: All Violations Corrected
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-20-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-12-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-03-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-06-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 09-19-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department

TARGET T0322 (Continued) **S102428789**

Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-14-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-26-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-02-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-16-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-15-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No Violations
Eval Division: Mountain View Fire Department
Eval Program: HMRRP
Eval Source: CERS

Coordinates:
Site ID: 159712
Facility Name: TARGET T0322
Env Int Type Code: HWG
Program ID: 10077565
Coord Name: Not reported
Ref Point Type Desc: Unknown
Latitude: 37.401180
Longitude: -122.106415

TARGET T0322 (Continued) **S102428789**

Affiliation:

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	PO Box 111
Affiliation City:	Minneapolis
Affiliation State:	MN
Affiliation Country:	Not reported
Affiliation Zip:	55440
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	Target Corporation
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(800) 587-2228

Affiliation Type Desc:	Identification Signer
Entity Name:	Steve Musser
Entity Title:	Sr. Compliance Director
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Target Corporation
Entity Title:	Not reported
Affiliation Address:	PO Box 111
Affiliation City:	Minneapolis
Affiliation State:	MN
Affiliation Country:	United States
Affiliation Zip:	55440
Affiliation Phone:	(800) 587-2228

Affiliation Type Desc:	CUPA District
Entity Name:	Santa Clara County Environmental Health
Entity Title:	Not reported
Affiliation Address:	1555 Berger Drive, Suite 300
Affiliation City:	San Jose
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95112-2716
Affiliation Phone:	(408) 918-3400

Affiliation Type Desc:	Document Preparer
Entity Name:	Nathan White
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported

TARGET T0322 (Continued) **S102428789**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	Target Corporate Office Headquarters
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Environmental Compliance
Entity Title:	Not reported
Affiliation Address:	PO Box 111
Affiliation City:	Minneapolis
Affiliation State:	MN
Affiliation Country:	Not reported
Affiliation Zip:	55440
Affiliation Phone:	Not reported

M61 **LOS ALTOS GARDEN SUPPLY** **LUST** **S102432747**
NW **4730 EL CAMINO REAL** **Cortese** **N/A**
1/4-1/2 **LOS ALTOS, CA 94022** **HIST CORTESE**
0.382 mi. **CERS**
2018 ft. **Site 1 of 2 in cluster M**

Relative: **Lower**

Actual: **77 ft.**

LUST REG 2:

Region:	2
Facility Id:	43-2112
Facility Status:	Case Closed
Case Number:	43-2112
How Discovered:	Tank Closure
Leak Cause:	UNK
Leak Source:	UNK
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

CORTESE:

Name:	LOS ALTOS GARDEN SUPPLY
Address:	4730 EL CAMINO REAL
City,State,Zip:	LOS ALTOS, CA 94022
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0608501940
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED

LOS ALTOS GARDEN SUPPLY (Continued) **S102432747**

Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	LOS ALTOS GARDEN SUPPLY
edr_fadd1:	4730 EL CAMINO REAL
City,State,Zip:	LOS ALTOS, CA 94022
Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-2112

CERS:

Name:	LOS ALTOS GARDEN SUPPLY
Address:	4730 EL CAMINO REAL
City,State,Zip:	LOS ALTOS, CA 94022
Site ID:	205367
CERS ID:	T0608501940
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	UST CASE WORKER - SANTA CLARA COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	1555 Berger Drive, Suite 300
Affiliation City:	SAN JOSE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	4089183400

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title:	Not reported
Affiliation Address:	1515 CLAY ST SUITE 1400
Affiliation City:	OAKLAND
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

M62 **LOS ALTOS GARDEN SUPPLY** **LUST** **U001594147**
NW **4730 EL CAMINO REAL** **HIST UST** **N/A**
1/4-1/2 **LOS ALTOS, CA 94022**
0.382 mi.
2018 ft. **Site 2 of 2 in cluster M**

Relative:
Lower

Actual:
77 ft.

LUST:

Name:	LOS ALTOS GARDEN SUPPLY
Address:	4730 EL CAMINO REAL
City,State,Zip:	LOS ALTOS, CA 94022
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501940
Global Id:	T0608501940
Latitude:	37.3997877
Longitude:	-122.1110666
Status:	Completed - Case Closed
Status Date:	04/29/1996
Case Worker:	UUU
RB Case Number:	43-2112
Local Agency:	SANTA CLARA COUNTY LOP
File Location:	Not reported
Local Case Number:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0608501940
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501940
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

LUST:

Global Id:	T0608501940
Action Type:	Other
Date:	11/13/1995
Action:	Leak Discovery

Global Id:	T0608501940
Action Type:	ENFORCEMENT
Date:	04/29/1996
Action:	Closure/No Further Action Letter - #43-2112

Global Id:	T0608501940
Action Type:	Other

LOS ALTOS GARDEN SUPPLY (Continued) **U001594147**

Date: 11/13/1995
Action: Leak Stopped

Global Id: T0608501940
Action Type: Other
Date: 12/04/1995
Action: Leak Reported

LUST:
Global Id: T0608501940
Status: Open - Case Begin Date
Status Date: 11/13/1995

Global Id: T0608501940
Status: Completed - Case Closed
Status Date: 04/29/1996

HIST UST:
Name: LOS ALTOS SUPPLY
Address: 4730 EL CAMINO REAL
City,State,Zip: LOS ALTOS, CA 94022
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000014086
Facility Type: Other
Other Type: GARDEN CTR
Contact Name: Not reported
Telephone: 4159486470
Owner Name: LOS ALTOS SUPPLY
Owner Address: 4730 EL CAMINO REAL
Owner City,St,Zip: LOS ALTOS, CA 94022
Total Tanks: 0001

Tank Num: 001
Container Num: 12345
Year Installed: 1983
Tank Capacity: 00003000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual, None

N63 **UNOCAL** **HIST CORTESE** **S105708738**
WNW **895 SAN ANTONIO** **N/A**
1/4-1/2 **LOS ALTOS, CA 94202**
0.461 mi.
2436 ft. **Site 1 of 2 in cluster N**

Relative: **Lower**
Actual: **85 ft.**

HIST CORTESE:
edr_fname: UNOCAL
edr_fadd1: 895 SAN ANTONIO
City,State,Zip: LOS ALTOS, CA 94202
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA

UNOCAL (Continued) **S105708738**

Reg Id: 43-0082

N64 **UNOCAL #4918** **LUST** **S103880863**
WNW **895 N. SAN ANTONIO ROAD** **HIST LUST** **N/A**
1/4-1/2 **LOS ALTOS, CA 94022** **Cortese**
0.461 mi. **CERS**
2436 ft. **Site 2 of 2 in cluster N**

Relative: Lower
Actual: 85 ft.

LUST:

Name:	UNOCAL #4918
Address:	895 N. SAN ANTONIO ROAD
City,State,Zip:	LOS ALTOS, CA 94022
Lead Agency:	SANTA CLARA COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608500150
Global Id:	T0608500150
Latitude:	37.398852018
Longitude:	-122.11391687
Status:	Completed - Case Closed
Status Date:	03/11/2013
Case Worker:	Not reported
RB Case Number:	21-067
Local Agency:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Local Case Number:	06S2W20E01f
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel, MTBE / TBA / Other Fuel Oxygenates, Gasoline
Site History:	The Site is a former Unocal-branded service station, which was located at the northeast corner at the intersection of North San Antonio Road and Sherwood Avenue in Los Altos, California. Original (first generation) Site features included a station building, two 10,000-gallon gasoline underground storage tanks (USTs) located near the northwest corner of the Site, and two product dispenser islands. In 1985, the two 10,000-gallon gasoline USTs (second generation) were installed in the southwest corner of the Site. The station building, USTs (second generation), and dispenser islands were removed in 1992, and the Site remains a vacant lot except for a consists primarily of commercial and residential properties. Soil vapor extraction with air sparge were used to remediate the site.

LUST:

Global Id:	T0608500150
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0608500150
Action Type:	RESPONSE
Date:	11/01/2007
Action:	Well Installation Report

Global Id:	T0608500150
Action Type:	RESPONSE

UNOCAL #4918 (Continued) **S103880863**

Date: 06/02/1995
Action: Other Workplan

Global Id: T0608500150
Action Type: RESPONSE
Date: 01/21/1999
Action: Correspondence

Global Id: T0608500150
Action Type: RESPONSE
Date: 02/26/2009
Action: Other Report / Document

Global Id: T0608500150
Action Type: RESPONSE
Date: 09/10/1993
Action: Other Report / Document

Global Id: T0608500150
Action Type: RESPONSE
Date: 05/18/1998
Action: Interim Remedial Action Report

Global Id: T0608500150
Action Type: RESPONSE
Date: 03/07/2013
Action: Well Destruction Report

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/09/1992
Action: Unauthorized Release Form

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/31/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608500150
Action Type: RESPONSE
Date: 10/31/2010
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 01/31/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608500150
Action Type: RESPONSE
Date: 04/29/2011
Action: Other Report / Document

Global Id: T0608500150
Action Type: RESPONSE
Date: 01/31/2012
Action: Soil and Water Investigation Workplan

UNOCAL #4918 (Continued) **S103880863**

Global Id: T0608500150
Action Type: RESPONSE
Date: 09/13/2004
Action: Well Destruction Workplan

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/08/2011
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 10/30/2009
Action: Remedial Progress Report

Global Id: T0608500150
Action Type: RESPONSE
Date: 04/11/1995
Action: Other Workplan

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/05/2007
Action: Soil Vapor Intrusion Investigation Workplan

Global Id: T0608500150
Action Type: RESPONSE
Date: 10/01/1998
Action: Other Report / Document

Global Id: T0608500150
Action Type: RESPONSE
Date: 06/26/1998
Action: Soil Vapor Intrusion Investigation Workplan

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/12/2011
Action: Other Report / Document

Global Id: T0608500150
Action Type: RESPONSE
Date: 06/20/1994
Action: Other Workplan

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/17/1992
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608500150
Action Type: RESPONSE
Date: 02/09/1993
Action: Other Workplan

Global Id: T0608500150
Action Type: RESPONSE

UNOCAL #4918 (Continued) **S103880863**

Date:	11/02/2012
Action:	Correspondence
Global Id:	T0608500150
Action Type:	RESPONSE
Date:	06/22/2012
Action:	Soil and Water Investigation Report
Global Id:	T0608500150
Action Type:	RESPONSE
Date:	02/06/1995
Action:	CAP/RAP - Feasibility Study Report
Global Id:	T0608500150
Action Type:	RESPONSE
Date:	10/01/1998
Action:	CAP/RAP - Other Report
Global Id:	T0608500150
Action Type:	RESPONSE
Date:	12/14/2011
Action:	Correspondence
Global Id:	T0608500150
Action Type:	RESPONSE
Date:	11/02/1994
Action:	Other Workplan
Global Id:	T0608500150
Action Type:	RESPONSE
Date:	04/05/1994
Action:	Other Workplan
Global Id:	T0608500150
Action Type:	ENFORCEMENT
Date:	08/25/2010
Action:	Staff Letter
Global Id:	T0608500150
Action Type:	ENFORCEMENT
Date:	07/27/2011
Action:	Staff Letter
Global Id:	T0608500150
Action Type:	Other
Date:	06/25/1992
Action:	Leak Discovery
Global Id:	T0608500150
Action Type:	ENFORCEMENT
Date:	02/25/1993
Action:	Notice of Responsibility - #40127
Global Id:	T0608500150
Action Type:	ENFORCEMENT
Date:	05/31/1995
Action:	Staff Letter - #30094

UNOCAL #4918 (Continued) **S103880863**

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 12/14/2011
Action: Staff Letter

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 02/06/2012
Action: Staff Letter

Global Id: T0608500150
Action Type: RESPONSE
Date: 01/31/2012
Action: Soil and Water Investigation Workplan

Global Id: T0608500150
Action Type: RESPONSE
Date: 06/22/2012
Action: Site Assessment Report

Global Id: T0608500150
Action Type: REMEDIATION
Date: 07/01/1992
Action: Excavation

Global Id: T0608500150
Action Type: REMEDIATION
Date: 09/05/2001
Action: Soil Vapor Extraction (SVE)

Global Id: T0608500150
Action Type: Other
Date: 06/25/1992
Action: Leak Stopped

Global Id: T0608500150
Action Type: RESPONSE
Date: 09/21/2012
Action: Fact Sheets - Public Participation

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 09/05/2012
Action: Notification - Public Notice of Case Closure

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 03/11/2013
Action: Closure/No Further Action Letter

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 08/03/2012
Action: Staff Letter

Global Id: T0608500150
Action Type: RESPONSE

UNOCAL #4918 (Continued) **S103880863**

Date: 07/11/1996
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 03/07/2013
Action: Well Destruction Report

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 03/18/2009
Action: Staff Letter

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 11/02/2012
Action: Staff Letter

Global Id: T0608500150
Action Type: Other
Date: 07/09/1992
Action: Leak Reported

Global Id: T0608500150
Action Type: RESPONSE
Date: 10/15/1997
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 10/15/1996
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 04/15/1996
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 01/15/1996
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 01/15/1997
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 10/15/1995
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 08/12/2009
Action: Staff Letter

UNOCAL #4918 (Continued) **S103880863**

Global Id: T0608500150
Action Type: ENFORCEMENT
Date: 11/12/2010
Action: Staff Letter

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 01/31/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/31/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608500150
Action Type: RESPONSE
Date: 04/15/1997
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 01/15/1998
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/15/1995
Action: Monitoring Report - Quarterly

Global Id: T0608500150
Action Type: RESPONSE
Date: 07/15/1997
Action: Monitoring Report - Quarterly

LUST:
Global Id: T0608500150
Status: Open - Case Begin Date
Status Date: 06/25/1992

Global Id: T0608500150
Status: Open - Site Assessment
Status Date: 08/17/1992

Global Id: T0608500150
Status: Open - Site Assessment
Status Date: 08/20/1992

Global Id: T0608500150
Status: Open - Remediation
Status Date: 12/06/2001

UNOCAL #4918 (Continued) **S103880863**

Global Id: T0608500150
Status: Open - Verification Monitoring
Status Date: 11/20/2008

Global Id: T0608500150
Status: Open - Eligible for Closure
Status Date: 11/02/2012

Global Id: T0608500150
Status: Completed - Case Closed
Status Date: 03/11/2013

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Pollution Characterization
Case Number: 06S2W20E01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 8/17/1992
Pollution Characterization Began: 8/20/1992
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Name: UNOCAL #4918
Address: 895 N SAN ANTONIO RD
City,State,Zip: LOS ALTOS, CA
Region: SANTA CLARA
SCVWD ID: 06S2W20E01F
Date Closed: 03/11/2013
EDR Link ID: 06S2W20E01F

HIST LUST SANTA CLARA:
Name: Unocal #4918
Address: 895 N San Antonio Rd
City: Los Altos
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S2W20E01
Oversite Agency: SCCDEH
Date Listed: 1992-12-14 00:00:00
Closed Date: Not reported

CORTESE:
Name: UNOCAL #4918
Address: 895 N. SAN ANTONIO ROAD
City,State,Zip: LOS ALTOS, CA 94022
Region: CORTESE

UNOCAL #4918 (Continued) **S103880863**

Envirostor Id:	Not reported
Global ID:	T0608500150
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

CERS:

Name:	UNOCAL #4918
Address:	895 N. SAN ANTONIO ROAD
City,State,Zip:	LOS ALTOS, CA 94022
Site ID:	219214
CERS ID:	T0608500150
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title:	Not reported
Affiliation Address:	1515 CLAY ST SUITE 1400
Affiliation City:	OAKLAND
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

O65 **SYMTRON #2** **RESPONSE** **S103623014**
NNE **111 ORTEGA AVENUE** **ENVIROSTOR** **N/A**
1/4-1/2 **MOUNTAIN VIEW, CA 94040** **CERS**
0.473 mi.
2500 ft. **Site 1 of 3 in cluster O**

Relative:
Lower

Actual:
54 ft.

RESPONSE:

Name:	SYMTRON #2
Address:	111 ORTEGA AVENUE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	43360130
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0.2
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program

SYMTRON #2 (Continued) **S103623014**

Project Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Site Code:	201137
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	24
Senate:	13
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	06/29/2001
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	37.40310
Longitude:	-122.1026
APN:	147-54-009, 148-33-009
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC :	Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description:	OTH
Alias Name:	ELEXSYS
Alias Type:	Alternate Name
Alias Name:	SANMINA
Alias Type:	Alternate Name
Alias Name:	147-54-009
Alias Type:	APN
Alias Name:	148-33-009
Alias Type:	APN
Alias Name:	CAD000819821
Alias Type:	EPA Identification Number
Alias Name:	110033618903
Alias Type:	EPA (FRS #)
Alias Name:	201137
Alias Type:	Project Code (Site Code)
Alias Name:	43360130
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	08/19/1998
Comments:	Issued I or SE Order to Sanmina Corporation.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	06/29/2001
Comments:	Completed RIFS. The results did not indicate a contamination source on the property.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	09/27/2012
Comments:	Presents results of soil samples collected from this site, and soil and soil gas results from adjacent sites. This work not conducted under DTSC oversight.

SYMTRON #2 (Continued) **S103623014**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Name:	SYMTRON #2
Address:	111 ORTEGA AVENUE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	43360130
Status:	No Further Action
Status Date:	06/29/2001
Site Code:	201137
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	0.2
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Assembly:	24
Senate:	13
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.40310
Longitude:	-122.1026
APN:	147-54-009, 148-33-009
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description:	OTH
Alias Name:	ELEXSYS
Alias Type:	Alternate Name
Alias Name:	SANMINA
Alias Type:	Alternate Name
Alias Name:	147-54-009
Alias Type:	APN
Alias Name:	148-33-009
Alias Type:	APN
Alias Name:	CAD000819821
Alias Type:	EPA Identification Number
Alias Name:	110033618903
Alias Type:	EPA (FRS #)
Alias Name:	201137
Alias Type:	Project Code (Site Code)
Alias Name:	43360130
Alias Type:	Envirostor ID Number

SYMTRON #2 (Continued) **S103623014**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	08/19/1998
Comments:	Issued I or SE Order to Sanmina Corporation.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	06/29/2001
Comments:	Completed RIFS. The results did not indicate a contamination source on the property.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	09/27/2012
Comments:	Presents results of soil samples collected from this site, and soil and soil gas results from adjacent sites. This work not conducted under DTSC oversight.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

CERS:

Name:	SYMTRON #2
Address:	111 ORTEGA AVENUE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Site ID:	343694
CERS ID:	43360130
CERS Description:	State Response

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	MARK PIROS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

P66 **SYMTRON CORP MOUNTAIN VIEW DIV** **RCRA-SQG** **1000420286**
NNE **2235 MORA DR** **RESPONSE** **CAD000819821**
1/4-1/2 **MOUNTAIN VIEW, CA 94040** **ENVIROSTOR**
0.476 mi. **FINDS**
2515 ft. **Site 1 of 4 in cluster P** **ECHO**
CERS

Relative:
Lower

Actual:
57 ft.

RCRA-SQG:

Date Form Received by Agency:	1996-09-01 00:00:00.0
Handler Name:	SYMTRON CORP MOUNTAIN VIEW DIV
Handler Address:	2235 MORA DR
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAD000819821
Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	2
Mailing Address:	2415 E CHARLSTON RD
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 94043
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline

SYMTRON CORP MOUNTAIN VIEW DIV (Continued) **1000420286**

Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:22:27.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SYMTRON CORP
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

SYMTRON CORP MOUNTAIN VIEW DIV (Continued) **1000420286**

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name:	SYMTRON CORP MOUNTAIN VIEW DIV
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1980-08-27 00:00:00.0
Handler Name:	SYMTRON CORP MOUNTAIN VIEW DIV
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1992-03-31 00:00:00.0
Handler Name:	SYMTRON CORPORATION
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	334412
NAICS Description:	BARE PRINTED CIRCUIT BOARD MANUFACTURING

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

RESPONSE:

Name:	SYMTRON CORP.
Address:	2235-2245 MORA DR.
City,State,Zip:	MOUNTAIN VIEW, CA 94040

SYMTRON CORP MOUNTAIN VIEW DIV (Continued) **1000420286**

Facility ID:	43360124
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0.59
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Site Code:	200315
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	24
Senate:	13
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	06/29/2001
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	37.40244
Longitude:	-122.1008
APN:	147-54-016, 147-54-017, 147-54-018, 147-54-019, 148-33-017
Past Use:	MANUFACTURING - OTHER
Potential COC :	Lead Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC:	Lead Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description:	OTH
Alias Name:	ELEXSYS INTERNATIONAL
Alias Type:	Alternate Name
Alias Name:	SANMINA CORPORATION
Alias Type:	Alternate Name
Alias Name:	SYMTRON CORP.
Alias Type:	Alternate Name
Alias Name:	147-54-016
Alias Type:	APN
Alias Name:	147-54-017
Alias Type:	APN
Alias Name:	147-54-018
Alias Type:	APN
Alias Name:	147-54-019
Alias Type:	APN
Alias Name:	148-33-017
Alias Type:	APN
Alias Name:	CAD000819821
Alias Type:	EPA Identification Number
Alias Name:	110033618912
Alias Type:	EPA (FRS #)
Alias Name:	200315
Alias Type:	Project Code (Site Code)
Alias Name:	43360124
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	12/02/2011
Comments:	Close cost recovery account.

SYMTRON CORP MOUNTAIN VIEW DIV (Continued) **1000420286**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/29/2001
Comments: Completed RIFS. The results did not indicate a groundwater contamination source on the property.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/10/1995
Comments: Completed RA. Approximately 1.5 cubic yards of soil was excavated and disposed off-site. The building was steam cleaned. In addition, 3 cubic yards of ground concrete was disposed off-site as part of the removal of the concrete sump and clarifer.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 11/13/1992
Comments: Approved PEA. Shallow soil samples showed copper as high as 7,900 ppm and lead as high as 2,000 ppm. Other metal contaminants were also found in soil along with tetrachloroethylene as high as 940 ppm, and 1,1,1-TCA as high as 440 ppm. Although Symtron is located in an area known to have have groundwater problems, no groundwater investigation was conducted.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/24/1991
Comments: Completed Site Screening. Copper,lead and volatile organics have been detected in the soil. Site referred to DTSC by Mountain View Fire Department. 2227 Mora Drive address housed Symtron's hazardous materials storage area where acids, bases, oxidizers, & flammable liquids, as well as copper animated plates, were kept. 2235 Mora housed offices, photo darkroom, wet and dry quality control labs, and process operations. 2245 Mora operations included copper etching and black oxide operations & clean rooms used for Symtron's dry process. Symtron operated an onsite waste water treatment plant. Treated waste water and effluent went directly to the Mountain View sewer via an inground sump which served as a final clarifier. Closure sampling was conducted in March 1991 and included soil concrete chip, and wipe samples. Copper was detected as high as 7,900 ppm and 1,600 ppm in soil and concrete chip samples respectively. Lead was detected as high as 1,000 ppm in soil. Volatile organic compounds (VOCs) all tested below 1 ppm.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/27/2012
Comments: Presents results of soil samples collected from this site, and soil and soil gas results from adjacent sites. This work not conducted under DTSC oversight.

Completed Area Name: PROJECT WIDE

SYMTRON CORP MOUNTAIN VIEW DIV (Continued) **1000420286**

Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 01/16/1997
Comments: Issued IS&E Order to Elexsys International which was later acquired by Sanmina Corporation requiring site investigation and if appropriate, site remediation.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Name: SYMTRON CORP.
Address: 2235-2245 MORA DR.
City,State,Zip: MOUNTAIN VIEW, CA 94040
Facility ID: 43360124
Status: No Further Action
Status Date: 06/29/2001
Site Code: 200315
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.59
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Assembly: 24
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.40244
Longitude: -122.1008
APN: 147-54-016, 147-54-017, 147-54-018, 147-54-019, 148-33-017
Past Use: MANUFACTURING - OTHER
Potential COC: Lead Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC: Lead Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description: OTH
Alias Name: ELEXSYS INTERNATIONAL
Alias Type: Alternate Name
Alias Name: SANMINA CORPORATION
Alias Type: Alternate Name
Alias Name: SYMTRON CORP.
Alias Type: Alternate Name
Alias Name: 147-54-016
Alias Type: APN
Alias Name: 147-54-017
Alias Type: APN

SYMTRON CORP MOUNTAIN VIEW DIV (Continued) **1000420286**

Alias Name: 147-54-018
Alias Type: APN
Alias Name: 147-54-019
Alias Type: APN
Alias Name: 148-33-017
Alias Type: APN
Alias Name: CAD000819821
Alias Type: EPA Identification Number
Alias Name: 110033618912
Alias Type: EPA (FRS #)
Alias Name: 200315
Alias Type: Project Code (Site Code)
Alias Name: 43360124
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 12/02/2011
Comments: Close cost recovery account.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/29/2001
Comments: Completed RIFS. The results did not indicate a groundwater contamination source on the property.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/10/1995
Comments: Completed RA. Approximately 1.5 cubic yards of soil was excavated and disposed off-site. The building was steam cleaned. In addition, 3 cubic yards of ground concrete was disposed off-site as part of the removal of the concrete sump and clarifer.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 11/13/1992
Comments: Approved PEA. Shallow soil samples showed copper as high as 7,900 ppm and lead as high as 2,000 ppm. Other metal contaminants were also found in soil along with tetrachloroethylene as high as 940 ppm, and 1,1,1-TCA as high as 440 ppm. Although Symtron is located in an area known to have have groundwater problems, no groundwater investigation was conducted.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/24/1991
Comments: Completed Site Screening. Copper,lead and volatile organics have been detected in the soil. Site referred to DTSC by Mountain View Fire Department. 2227 Mora Drive address housed Symtron's hazardous materials storage area where acids, bases, oxidizers, & flammable liquids, as well as copper animated plates, were kept. 2235 Mora

SYMTRON CORP MOUNTAIN VIEW DIV (Continued) **1000420286**

housed offices, photo darkroom, wet and dry quality control labs, and process operations. 2245 Mora operations included copper etching and black oxide operations & clean rooms used for Symtron's dry process. Symtron operated an onsite waste water treatment plant. Treated waste water and effluent went directly to the Mountain View sewer via an inground sump which served as a final clarifier. Closure sampling was conducted in March 1991 and included soil concrete chip, and wipe samples. Copper was detected as high as 7,900 ppm and 1,600 ppm in soil and concrete chip samples respectively. Lead was detected as high as 1,000 ppm in soil. Volatile organic compounds (VOCs) all tested below 1 ppm.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/27/2012
Comments: Presents results of soil samples collected from this site, and soil and soil gas results from adjacent sites. This work not conducted under DTSC oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 01/16/1997
Comments: Issued IS&E Order to Elexsys International which was later acquired by Sanmina Corporation requiring site investigation and if appropriate, site remediation.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

FINDS:
Registry ID: 110002146375

Click Here:

Environmental Interest/Information System:
California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.
RCRAInfo is a national information system that supports the Resource

SYMTRON CORP MOUNTAIN VIEW DIV (Continued) **1000420286**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000420286
Registry ID:	110002146375
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002146375
Name:	SYMTRON CORP
Address:	2235 MORA DR.
City,State,Zip:	MOUNTAIN VIEW, CA 94040

CERS:

Name:	SYMTRON CORP.
Address:	2235-2245 MORA DR.
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Site ID:	343695
CERS ID:	43360124
CERS Description:	State Response

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	MARK PIROS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Q67 **QUALITY TUNE-UP #1** **LUST** **S104396947**
NW **2580 EL CAMINO REAL** **HIST LUST** **N/A**
1/4-1/2 **MOUNTAIN VIEW, CA 94040** **Cortese**
0.481 mi. **HIST CORTESE**
2538 ft. **Site 1 of 2 in cluster Q**

Relative: **Lower**

Actual: **71 ft.**

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S2W20D01f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	5/16/1986
Pollution Characterization Began:	3/9/1988
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported

QUALITY TUNE-UP #1 (Continued) **S104396947**

Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:

Name:	Quality Tune-Up #1
Address:	2580 El Camino Real
City:	Mountain View
Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S2W20D01
Oversite Agency:	SCVWD
Date Listed:	1987-01-01 00:00:00
Closed Date:	1996-09-30 00:00:00

CORTESE:

Name:	QUALITY TUNE-UP #1
Address:	2580 EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0608501080
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	QUALITY TUNE UP
edr_fadd1:	2580 EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1088

Map ID
Direction
Distance
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

Q68
NW
1/4-1/2
0.481 mi.
2538 ft.

QUALITY TUNE-UP #1
2580 EL CAMINO REAL
MOUNTAIN VIEW, CA 94040

Site 2 of 2 in cluster Q

LUST **S105035627**
CERS **N/A**

Relative:
Lower

Actual:
71 ft.

LUST:

Name:	QUALITY TUNE-UP #1
Address:	2580 EL CAMINO REAL
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Lead Agency:	SANTA CLARA COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501080
Global Id:	T0608501080
Latitude:	37.401221451
Longitude:	-122.11230755
Status:	Completed - Case Closed
Status Date:	09/30/1996
Case Worker:	UST
RB Case Number:	Not reported
Local Agency:	SANTA CLARA COUNTY LOP
File Location:	All Files are on GeoTracker or in the Local Agency Database
Local Case Number:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0608501080
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501080
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

LUST:

Global Id:	T0608501080
Action Type:	ENFORCEMENT
Date:	10/26/1987
Action:	Notice of Responsibility - #40126

Global Id:	T0608501080
Action Type:	ENFORCEMENT
Date:	05/21/1996
Action:	Staff Letter - #30089

Global Id:	T0608501080
Action Type:	ENFORCEMENT

QUALITY TUNE-UP #1 (Continued) **S105035627**

Date: 08/31/1995
Action: Staff Letter - #30081

Global Id: T0608501080
Action Type: REMEDIATION
Date: 12/12/1988
Action: Excavation

Global Id: T0608501080
Action Type: RESPONSE
Date: 07/15/1996
Action: Remedial Progress Report

Global Id: T0608501080
Action Type: RESPONSE
Date: 10/15/1995
Action: Monitoring Report - Quarterly

Global Id: T0608501080
Action Type: RESPONSE
Date: 01/15/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501080
Action Type: RESPONSE
Date: 04/15/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501080
Action Type: Other
Date: 05/29/1986
Action: Leak Reported

Global Id: T0608501080
Action Type: ENFORCEMENT
Date: 09/30/1996
Action: Closure/No Further Action Letter

Global Id: T0608501080
Action Type: RESPONSE
Date: 09/30/1996
Action: Other Report / Document

LUST:
Global Id: T0608501080
Status: Open - Case Begin Date
Status Date: 05/16/1986

Global Id: T0608501080
Status: Open - Site Assessment
Status Date: 05/16/1986

Global Id: T0608501080
Status: Open - Site Assessment
Status Date: 03/09/1988

Global Id: T0608501080

QUALITY TUNE-UP #1 (Continued) **S105035627**

Status: Completed - Case Closed
Status Date: 09/30/1996

LUST SANTA CLARA:
Name: QUALITY TUNE-UP #1
Address: 2580 EL CAMINO REAL
City,State,Zip: MOUNTAIN VIEW, CA
Region: SANTA CLARA
SCVWD ID: 06S2W20D01F
Date Closed: 09/30/1996
EDR Link ID: 06S2W20D01F

CERS:
Name: QUALITY TUNE-UP #1
Address: 2580 EL CAMINO REAL
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 239058
CERS ID: T0608501080
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: UST CASE WORKER - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089183400

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

R69 **SYMTRON CORP.** **HIST CORTESE** **S105025102**
NNE **22352245 MORA DR** **N/A**
1/4-1/2 **MOUNTAIN VIEW, CA 94040**
0.484 mi.
2557 ft. **Site 1 of 4 in cluster R**

Relative:
Lower

Actual:
54 ft.

HIST CORTESE:
edr_fname: SYMTRON CORP.
edr_fadd1: 22352245 MORA DR
City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: CORTESE
Facility County Code: 43
Reg By: CALSI
Reg Id: 43360124

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
P70	**PLESSEY #2**	**RESPONSE**	**S103883832**
NNE	**2251, 2257, 2283 AND 2287 MORA DRIVE**	**ENVIROSTOR**	**N/A**
1/4-1/2	**MOUNTAIN VIEW, CA 94040**	**CERS**	
0.485 mi.			
2562 ft.	**Site 2 of 4 in cluster P**		

Relative: **Lower**

Actual: **55 ft.**

RESPONSE:

Name:	PLESSEY #2
Address:	2251, 2257, 2283 AND 2287 MORA DRIVE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	43360131
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0.43
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Site Code:	201102
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	24
Senate:	13
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	05/15/2002
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	37.40301
Longitude:	-122.1023
APN:	147-54-010, 147-54-011, 147-54-012, 147-54-014, 147-54-015
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC :	Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description:	OTH
Alias Name:	PLESSEY #2
Alias Type:	Alternate Name
Alias Name:	147-54-010
Alias Type:	APN
Alias Name:	147-54-011
Alias Type:	APN
Alias Name:	147-54-012
Alias Type:	APN
Alias Name:	147-54-014
Alias Type:	APN
Alias Name:	147-54-015
Alias Type:	APN
Alias Name:	110033611615
Alias Type:	EPA (FRS #)
Alias Name:	201102
Alias Type:	Project Code (Site Code)
Alias Name:	43360131
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	10/09/2001

PLESSEY #2 (Continued) **S103883832**

Comments: Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Name: PLESSEY #2
Address: 2251, 2257, 2283 AND 2287 MORA DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Facility ID: 43360131
Status: No Further Action
Status Date: 05/15/2002
Site Code: 201102
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.43
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Assembly: 24
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.40301
Longitude: -122.1023
APN: 147-54-010, 147-54-011, 147-54-012, 147-54-014, 147-54-015
Past Use: MANUFACTURING - ELECTRONIC
Potential COC: Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC: Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description: OTH
Alias Name: PLESSEY #2
Alias Type: Alternate Name
Alias Name: 147-54-010
Alias Type: APN
Alias Name: 147-54-011
Alias Type: APN
Alias Name: 147-54-012
Alias Type: APN
Alias Name: 147-54-014
Alias Type: APN
Alias Name: 147-54-015
Alias Type: APN
Alias Name: 110033611615

PLESSEY #2 (Continued) **S103883832**

Alias Type: EPA (FRS #)
Alias Name: 201102
Alias Type: Project Code (Site Code)
Alias Name: 43360131
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 10/09/2001
Comments: Completed PEA. Phase 2 Remedial Investigation Report submitted. Soil and grab groundwater samples taken along the main sewer line. The results did not indicate a contamination source on the property.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS:
Name: PLESSEY #2
Address: 2251, 2257, 2283 AND 2287 MORA DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 341535
CERS ID: 43360131
CERS Description: State Response

Affiliation:
Affiliation Type Desc: Supervisor
Entity Name: MARK PIROS
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

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71 **IRM COST SHARING SITE** **CPS-SLIC** **S102284312**
North **2520 CALIFORNIA STREET** **EMI** **N/A**
1/4-1/2 **MOUNTAIN VIEW, CA 94043** **CERS**
0.497 mi.
2623 ft.

Relative:
Lower

Actual:
54 ft.

SLIC REG 2:
Region: 2
Facility ID: SL18311731
Facility Status: Post remedial action monitoring
Date Closed: Not reported
Local Case #: Not reported
How Discovered: RPR

IRM COST SHARING SITE (Continued) **S102284312**

Leak Cause: Not reported
Leak Source: Not reported
Date Confirmed: Not reported
Date Prelim Site Assmnt Workplan Submitted: Not reported
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

CPS-SLIC:

Name:	IRM COST SHARING SITE
Address:	2520 CALIFORNIA STREET
City,State,Zip:	MOUNTAIN VIEW, CA 94043
Region:	STATE
Facility Status:	**Open - Verification Monitoring**
Status Date:	07/01/2002
Global Id:	SL18311731
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.40413325
Longitude:	-122.10661317
Case Type:	Cleanup Program Site
Case Worker:	MD
Local Agency:	Not reported
RB Case Number:	43S0426
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil Vapor
Potential Contaminants of Concern:	Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Site History:	This site is a small shopping center. A dry cleaner formerly occupied one of the tenant spaces. There was a release of tetrachloroethene (PCE), a solvent used in dry cleaning, to soil and groundwater. Only low levels of PCE were found in soil. Elevated levels of PCE were found in groundwater and a groundwater extraction and treatment system was installed and operated to cleanup groundwater. The extraction and treatment system was shut down when it was no longer significantly reducing PCE levels in groundwater.

Click here to access the California GeoTracker records for this facility:

EMI:

Name:	CALIFORNIA CLEANERS
Address:	2520 CALIFORNIA STREET
City,State,Zip:	MOUNTAIN VIEW, CA
Year:	1987
County Code:	43
Air Basin:	SF
Facility ID:	971
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

IRM COST SHARING SITE (Continued) **S102284312**

NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

CERS:
Name: IRM COST SHARING SITE
Address: 2520 CALIFORNIA STREET
City,State,Zip: MOUNTAIN VIEW, CA 94043
Site ID: 212490
CERS ID: SL18311731
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: MADJID DELKASH - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

O72 **PLESSEY INC. NPDES** **CPS-SLIC** **S106916856**
NNE **2294 MORA DR** **CERS** **N/A**
1/4-1/2 **MOUNTAIN VIEW, CA 94040**
0.499 mi.
2637 ft. **Site 2 of 3 in cluster O**

Relative: **Lower**
Actual: **53 ft.**

CPS-SLIC:
Name: PLESSEY INC. [NPDES]
Address: 2294 MORA DR
City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 11/03/2009
Global Id: SL0608508217
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.403348
Longitude: -122.102418
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: 43s1033
File Location: Not reported
Potential Media Affected: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: * Solvents
Site History: No Water Board oversight of cleanup at this site. This case is included in Geotracker because the site is covered by the Water Board s NPDES general permits for discharges from pump and treat systems to surface waters (one each for fuels- and VOC-impacted sites). This can happen for two reasons: (i) the site is overseen by another agency (e.g., USEPA or DTSC) and needs coverage under one of the NPDES general permits or (ii) construction dewatering in an area of groundwater contamination necessitates NPDES general permit coverage.

PLESSEY INC. NPDES (Continued) **S106916856**

Including this case in Geotracker helps staff to receive and review required NPDES reports. The Water Board issued a Notice of Termination for this facility on November 3, 2009.

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	PLESSEY INC. [NPDES]
Address:	2294 MORA DR
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Site ID:	252720
CERS ID:	SL0608508217
CERS Description:	Cleanup Program Site

R73 **PLESSEY MICRO SCIENCES** **CA BOND EXP. PLAN** **S100833251**
NNE **2274 MORA DRIVE** **N/A**
1/2-1 **MOUNTAIN VIEW, CA 94040**
0.502 mi.
2652 ft. **Site 2 of 4 in cluster R**

Relative:
Lower

Actual:
54 ft.

CA BOND EXP. PLAN:

Reponsible Party:	RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN
Project Revenue Source Company:	Plessey, Inc.
Project Revenue Source Addr:	325 Westchester Avenue
Project Revenue Source City,St,Zip:	White Plains, NY 10604
Project Revenue Source Desc:	DHS has issued a remedial action order and Plessey has stipulated to comply with this order. DHS has budgeted $50,000 for oversight and monitoring of cleanup efforts. DHS will recover 100 percent of direct costs plus staff costs and overhead relatedto the project. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.
Site Description:	From about the mid-1960s to 1981, Plessey manufactured electronic components. Chemical processes used included plating and etching. Wastewater was drained to underground storage tanks where material or waste was neutralized and stored prior to disposal.
Hazardous Waste Desc:	Wastes include perchloroethylene (PCE), trichloroethylene (TCE), chromic acid and xylene.
Threat To Public Health & Env:	Depth of the shallowest aquifer is about 32 feet. Ground water contamination and its potential impact on drinking water supplies is the primary concern.
Site Activity Status:	Plessey Micro Sciences, Inc., retained a contractor and completed a preliminary investigation in June, 1987. Result of the investigation indicated ground water contamination by perchloroethylene, trichloroethylene and methylene chloride. A Phase II RI report was submitted September, 1988. It appears that further investigation will be required before the FS and RAP can be Started.

R74 **PLESSEY MICRO SCIENCE INC** **SEMS-ARCHIVE** **1000386389**
NNE **2274 MORA DR** **HIST Cal-Sites** **CAD009440371**
1/2-1 **MOUNTAIN VIEW, CA 94040** **RCRA NonGen / NLR**
0.502 mi. **FINDS**
2652 ft. **Site 3 of 4 in cluster R** **ECHO**
WDS

Relative:
Lower

Actual:
54 ft.

SEMS Archive:

Site ID:	0901213
EPA ID:	CAD009440371
Name:	PLESSEY MICRO SCIENCE INC
Address:	2296 MORA DR

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Address 2: Not reported
City,State,Zip: MOUNTAIN VIEW, CA 94040
Cong District: 12
FIPS Code: 06085
FF: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region: 09
Site ID: 0901213
EPA ID: CAD009440371
Site Name: PLESSEY MICRO SCIENCE INC
NPL: N
FF: N
OU: 00
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 1994-09-01 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 09
Site ID: 0901213
EPA ID: CAD009440371
Site Name: PLESSEY MICRO SCIENCE INC
NPL: N
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1980-08-01 04:00:00
Finish Date: 1980-08-01 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901213
EPA ID: CAD009440371
Site Name: PLESSEY MICRO SCIENCE INC
NPL: N
FF: N
OU: 00
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: Not reported
Finish Date: 1990-03-01 05:00:00
Qual: N
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901213
EPA ID: CAD009440371
Site Name: PLESSEY MICRO SCIENCE INC

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

NPL: N
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: Not reported
Finish Date: 1988-07-01 04:00:00
Qual: H
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901213
EPA ID: CAD009440371
Site Name: PLESSEY MICRO SCIENCE INC
NPL: N
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 2
Start Date: 1986-01-01 05:00:00
Finish Date: 1986-10-01 04:00:00
Qual: L
Current Action Lead: St Perf

Calsite:
Name: PLESSEY MICRO SCIENCE
Address: 2274 MORA DRIVE
City: MOUNTAIN VIEW
Region: BERKELEY
Facility ID: 43360069
Facility Type: RP
Type: RESPONSIBLE PARTY
Branch: NC
Branch Name: NORTH COAST
File Name: Not reported
State Senate District: 01011984
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name: ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL
NPL: Not Listed
SIC Code: 36
SIC Name: MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Access: Controlled
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
Staff Member Responsible for Site: RSUNGA
Supervisor Responsible for Site: Not reported
Region Water Control Board: SF
Region Water Control Board Name: SAN FRANCISCO BAY
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Lat/Long Description:	Not reported
State Assembly District Code:	22
State Senate District Code:	13
Facility ID:	43360069
Activity:	DISC
Activity Name:	DISCOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12011981
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01201987
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	RAO
Proposed Budget:	0
AWP Completion Date:	Not reported

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Revised Due Date:	Not reported
Comments Date:	09301987
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	TANK
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08111989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	A 200 GALLON TANK WAS REMOVED ALONG WITH THE SURROUNDING SOIL.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10301989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	PILOT
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10301989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11301990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Facility ID:	43360069
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05241991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06071991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	TANKS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10251991
Est Person-Yrs to complete:	0

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	250
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	FIVE CONCRETE UNDERGROUND TANKS WERE REMOVED.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05101992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	DES
Activity Name:	DESIGN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	PLAN
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	GWSV1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06241993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	SOIL VAPOR EXTRACTION/TREATMENT & GROUNDWATER EXTRACTION/TREATMENT.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RA
Activity Name:	REMOVAL ACTION

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

AWP Code:	GWT6
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11161993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	CLEANUP OF VOCS IN GROUNDWATER IN WELL T6.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	O&M
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08101994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	07012005
Revised Due Date:	11302006
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	M
Request to Delete Activity:	Not reported
Activity Status:	AWP

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	DES
Activity Name:	DESIGN
AWP Code:	HORIZ
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09121996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	PLNAM
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04151997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02072000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	600
Liquids Treated (Gals):	600
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	600 CUBIC YARDS OF CONTAMINATED SOIL WITH PCE WAS EXCAVATED, AERATEDAND REDISPOSITED. CLEANUP GOAL WAS RESIDENTIAL STANDARDS.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	SVEGW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10242002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	NBGW
Proposed Budget:	0

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10242002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	DES
Activity Name:	DESIGN
AWP Code:	SBGW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10131999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	DES
Activity Name:	DESIGN
AWP Code:	NBGW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01122000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	#3
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10242002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	43360069
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	OM
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05142004
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Unknown Type:	0
Alternate Address:	2274-2296 MORA DRIVE
Alternate City,St,Zip:	MOUNTAIN VIEW, CA 94040
Alternate Address:	2274 MORA DRIVE
Alternate City,St,Zip:	MOUNTAIN VIEW, CA 94040
Background Info:	Plessey Micro Sciences began electronic component manufacturing operations at the site in the mid-1960s. Four underground storage tanks were initially installed to collect contaminated rinse water. The collection system was used for xylene reclamation and acid neutralization. In January 1981, Plessey ceased operations and vacated the Site.
Comments Date:	10191995
Comments:	Approved Design. The remedial enhancement design for expanding
Comments Date:	10191995
Comments:	the soil and groundwater remediation system was approved. The
Comments Date:	10191995
Comments:	UV/peroxide unit of the groundwater remediation system was
Comments Date:	10191995
Comments:	replaced with an air stripper.
Comments Date:	10242002
Comments:	Completed Remedial Action. Ten dual-phase (vapor and
Comments Date:	10242002
Comments:	groundwater) extraction wells behind the onsite buildings, and
Comments Date:	10242002
Comments:	four extraction wells downgradient at the northern boundary of
Comments Date:	10242002
Comments:	the adjacent TRW/Vidar Site (77 Ortega Drive) were installed.
Comments Date:	10242002
Comments:	The new extraction wells were connected to the existing
Comments Date:	10242002
Comments:	treatment system at the Site.
Comments Date:	10251991
Comments:	Completed RA. Five concrete underground tanks (A,B,C,D and F)
Comments Date:	10251991
Comments:	were removed from a location behind the commercial buildings
Comments Date:	10251991
Comments:	located at 2274-2296 Mora Drive. Tank E was removed in August
Comments Date:	10251991
Comments:	1989. The excavated pits were backfilled with clean fill
Comments Date:	10251991
Comments:	approximately 455 cubic yards of soil were removed, aerated and
Comments Date:	10251991
Comments:	disposed offsite. A soil vapor extraction system was installed
Comments Date:	10251991
Comments:	to remediate the remaining volatile organic compounds in soil in
Comments Date:	10251991
Comments:	other site areas. Initiated August 17, 1991 and completed
Comments Date:	10251991
Comments:	October 25, 1991.
Comments Date:	10301989
Comments:	Completed RA. Pilot testing of an ultra-violet(UV)/peroxidation
Comments Date:	10301989
Comments:	system designed to treat groundwater.
Comments Date:	11161993
Comments:	Completed RA. Interim cleanup in well T6 by extraction and
Comments Date:	11161993
Comments:	treatment of dense non-aqueous phase liquid (DNAPL) of

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Comments Date:	11161993
Comments:	trichloroethylene. The system included three treatment units
Comments Date:	11161993
Comments:	designed for full scale remediation. The units were constructed
Comments Date:	11161993
Comments:	inside the building at 2296 Mora Drive. The units included a
Comments Date:	11161993
Comments:	volatile organic compound and water separator unit, a hydrogen
Comments Date:	11161993
Comments:	peroxide /ultra violet light unit, and a liquid carbon
Comments Date:	11161993
Comments:	absorption unit. Treated water is discharged to the sanitary
Comments Date:	11161993
Comments:	sewer under permit from the City of Mountain View or to the
Comments Date:	11161993
Comments:	storm drain under a permit from the Regional Water Quality
Comments Date:	11161993
Comments:	Control Board.
Comments Date:	12011982
Comments:	Issued Notice of Violation (NOV) requiring clean-up plan.
Comments Date:	12011985
Comments:	Completed PA. In January 1982, samples were collected from
Comments Date:	12011985
Comments:	standing water in two of the tanks and the results detected
Comments Date:	12011985
Comments:	perchloroethylene (PCE), chromium, and xylene. Investigations
Comments Date:	12011985
Comments:	were conducted to delineate the lateral extent of the soil and
Comments Date:	12011985
Comments:	groundwater contamination originating from releases at the
Comments Date:	12011985
Comments:	tanks. Trichloroethylene (TCE), PCE, dichlorethylene (DCE),
Comments Date:	12011985
Comments:	benzene, toluene, xylene and ethylbenzene were detected in the
Comments Date:	12011985
Comments:	groundwater. These chemicals and chromium were also detected in
Comments Date:	12011985
Comments:	the soils near the tanks.
Comments Date:	01122000
Comments:	Approved Design. The remedial enhancement plan to address full
Comments Date:	01122000
Comments:	plume containment and/or groundwater remediation was approved.
Comments Date:	01122000
Comments:	Four wells will be installed further downgradient at the
Comments Date:	01122000
Comments:	northern boundary of the TRW/Vidar site. The extraction wells
Comments Date:	01122000
Comments:	will be connected to the existing treatment system.
Comments Date:	02072000
Comments:	Completed RA. 600 cubic yards of soil was excavated, aerated
Comments Date:	02072000
Comments:	and redeposited.
Comments Date:	05101992
Comments:	Approved RAP. Soil cleanup by soil vapor extraction and
Comments Date:	05101992
Comments:	groundwater cleanup by ultra-violet peroxidation
Comments Date:	05142004

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Comments:	Signed O&M Agreement.
Comments Date:	06071991
Comments:	Completed RIFS.
Comments Date:	06241993
Comments:	Completed RA. Soil vapor extraction/treatment and groundwater
Comments Date:	06241993
Comments:	extraction/treatment system constructed within building (2296
Comments Date:	06241993
Comments:	Mora Drive). Three goundwater extraction wells, and 61 soil
Comments Date:	06241993
Comments:	vapor extraction and air inlet wells were installed. Soil vapor
Comments Date:	06241993
Comments:	was extracted at a rate of 150 to 200 cubic feet per minute.
Comments Date:	06241993
Comments:	The soil vapor was treated using carbon absorption. Groundwater
Comments Date:	06241993
Comments:	was extracted at 40 gallons per minute and treated using
Comments Date:	06241993
Comments:	UV/peroxide.
Comments Date:	08101994
Comments:	Signed O&M Agreement.
Comments Date:	08111989
Comments:	Completed RA. A 200-gallon underground tank (Tank E) was
Comments Date:	08111989
Comments:	removed. Soil surrounding the tank was contaminated with TCE
Comments Date:	08111989
Comments:	and PCE. Contaminated soil was excavated and aerated.
Comments Date:	08111989
Comments:	Excavated pit was backfilled with clean fill.
Comments Date:	09121996
Comments:	Approved Design.
Comments Date:	09301987
Comments:	Issued RAO.
Comments Date:	10131999
Comments:	Approved Design. The source control remedial enhancement design
Comments Date:	10131999
Comments:	to address soil and groundwater contamination near the source
Comments Date:	10131999
Comments:	areas was approved. Ten dual-phase vertical extraction wells
Comments Date:	10131999
Comments:	will be installed within the Site near the former underground
Comments Date:	10131999
Comments:	tank locations. The extraction wells will be connected to the
Comments Date:	10131999
Comments:	existing treatment system.
ID Name:	CALSTARS CODE
ID Value:	200080
ID Name:	BEP DATABASE PCODE
ID Value:	P21047
ID Name:	EPA IDENTIFICATION NUMBER
ID Value:	CAD009440371
Alternate Name:	PLESSEY MICRO SCIENCE
Alternate Name:	Not reported
Special Programs Code:	C104
Special Programs Name:	CERCLA 104

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

RCRA NonGen / NLR:

Date Form Received by Agency:	1980-08-18 00:00:00.0
Handler Name:	PLESSEY MICRO SCIENCE INC
Handler Address:	2274 MORA DR
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAD009440371
Contact Name:	ENVIRONMENTAL MANAGER
Contact Address:	2274 MORA DR
Contact City,State,Zip:	MOUNTAIN VIEW, CA 94040
Contact Telephone:	415-968-7215
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Other
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	CA
State District:	2
Mailing Address:	2274 MORA DRIVE
Mailing City,State,Zip:	MOUNTAIN VIEW, CA 94040
Owner Name:	PLESSEY INCORPORATED
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:23:19.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	PLESSEY INCORPORATED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1980-08-18 00:00:00.0
Handler Name:	PLESSEY MICRO SCIENCE INC

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number EPA ID Number

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

Federal Waste Generator Description:	Not a generator, verified
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	333319
NAICS Description:	OTHER COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

NAICS Code:	334413
NAICS Description:	SEMICONDUCTOR AND RELATED DEVICE MANUFACTURING

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

FINDS:

Registry ID: 110002636470

Click Here:

Environmental Interest/Information System:

California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000386389
Registry ID:	110002636470
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002636470
Name:	PLESSEY MICRO SCIENCE
Address:	2274 MORA DR
City,State,Zip:	MOUNTAIN VIEW, CA 94040

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

WDS:

Name:	2294 MORA DR. PLESSEY
Address:	2274-2296 MORA Dr
City:	MOUNTAIN VIEW
Facility ID:	San Francisco Bay 438379001
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAG912003 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	2
Facility Telephone:	4158991600
Facility Contact:	Susan Gahry (PES)
Agency Name:	MARCONI PLC
Agency Address:	5900 Landerbrook DR. Ste. 300
Agency City,St,Zip:	Cleveland 44124
Agency Contact:	Cliff Petriella
Agency Telephone:	4404603727
Agency Type:	Private
SIC Code:	3573
SIC Code 2:	Not reported
Primary Waste Type:	Hazardous/Influent or Solid Wastes that contain toxic, corrosive, ignitable or reactive substances and must be managed according to applicable DOHS standards.
Primary Waste:	CNWTRS
Waste Type2:	Not reported
Waste2:	Contaminated Ground Water
Primary Waste Type:	Hazardous/Influent or Solid Wastes that contain toxic, corrosive, ignitable or reactive substances and must be managed according to applicable DOHS standards.
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.
Complexity:	Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

R75
NNE
1/2-1
0.502 mi.
2652 ft.

Relative: Lower

Actual: 54 ft.

DTSC FORMER PLESSEY MICROSCIENCE SITE
2274 MORA DR
MOUNTAIN VIEW, CA 94040

Site 4 of 4 in cluster R

RESPONSE **S103981838**
ENVIROSTOR **N/A**
Cortese
HAZNET
HIST CORTESE
HWTS

RESPONSE:

Name:	PLESSEY MICRO SCIENCE
Address:	2274 MORA DRIVE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	43360069
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0.58
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Henry Wong
Supervisor:	John Karachewski
Division Branch:	Cleanup Berkeley
Site Code:	200080
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	24
Senate:	13
Special Program Status:	Not reported
Status:	Certified / Operation & Maintenance
Status Date:	06/28/2007
Restricted Use:	NO
Funding:	Orphan Funds
Latitude:	37.40324
Longitude:	-122.1014
APN:	147-54-026, 147-54-027, 147-54-028, 147-54-029, 147-54-030, 14833022, 14833023, 14833024, 14833025, 14833026
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC :	Benzene Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride Chloroform Chromium VI 1,2-Dichloroethylene (cis Ethylbenzene Toluene Xylenes
Confirmed COC:	Benzene Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride Chloroform Chromium VI 1,2-Dichloroethylene (cis Ethylbenzene Toluene Xylenes
Potential Description:	OTH
Alias Name:	147-54-026
Alias Type:	APN
Alias Name:	147-54-027
Alias Type:	APN
Alias Name:	147-54-028
Alias Type:	APN
Alias Name:	147-54-029
Alias Type:	APN
Alias Name:	147-54-030
Alias Type:	APN
Alias Name:	14833022
Alias Type:	APN
Alias Name:	14833023
Alias Type:	APN
Alias Name:	14833024
Alias Type:	APN
Alias Name:	14833025

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Alias Type: APN
Alias Name: 14833026
Alias Type: APN
Alias Name: CAD009440371
Alias Type: EPA Identification Number
Alias Name: 110002636470
Alias Type: EPA (FRS #)
Alias Name: P21047
Alias Type: PCode
Alias Name: 200080
Alias Type: Project Code (Site Code)
Alias Name: 200080
Alias Type: Project Code (Site Code)
Alias Name: 43360069
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 05/16/2011
Comments: contract for continued GW monitoring

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 06/10/2010
Comments: CFA Approved for $120,000

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 06/30/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 05/18/2011
Comments: adds supplemental GW monitoring

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/09/2012
Comments: 30-day notice sent to property owner w/attached access agreement to be signed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 10/11/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 10/22/2012

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 09/25/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 12/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 12/31/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 02/24/2012
Comments: Amendment to add DHC analysis

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 03/20/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Access Agreement
Completed Date: 01/10/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 06/12/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 06/25/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 03/13/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/11/2016
Comments: Stop work order for contract which expired on July 31, 2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 12/30/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 01/29/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 11/23/2016
Comments: Contract 16-T4229 covers preparation of a remedial implementation workplan, conducting fieldwork, preparation of a completion report, and submittal of a letter report following each of the four groundwater monitoring events.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 06/19/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Imminent and/or Subst. Endangerment Determination
Completed Date: 06/25/2015
Comments: Imminent and Substantial Endangerment Determination for the former Plessey parcels.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 01/30/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 12/05/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/18/2015
Comments: A new DTSC Project Manager is assigned.

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 02/04/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 03/16/2015
Comments: The HARP is for site visits in 2015.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 04/13/2016
Comments: CANCELLATION OF CONTRACT No.: 14-T3967

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Responsible Agency Review
Completed Date: 12/08/2016
Comments: The project consists of DTSC approval of the Remedial Action Plan Amendment for Plessey Micro Science prior to residential development. The proposed cleanup actions include soil excavation, groundwater injection, and institutional controls. DTSC prepared a Statement of Findings concluding that the project will not result in significant and unavoidable effects to the environment; therefore, DTSC approved the Notice of Determination. DTSC filed the approved Notice of Determination with the California Office of Planning and Research on 12/8/16.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 12/24/2015
Comments: Contract 14-T3927 A-1 with SGI, Term 2/1/15 through 7/31/16

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 06/30/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Post HARP Form
Completed Date: 03/07/2017
Comments: Post-HARP for site visit on 3/6/17

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/09/2017
Comments: Excavation at the proposed public park area within the Plessey Micro Science site is now complete and based on the data, no restrictions on soil handling will be required in the proposed public park.

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 11/29/2016
Comments: Work Order 001 for Contract 16-T4229 authorizes ERRG to prepare a remedial implementation workplan, conduct fieldwork, prepare a completion report, and submit a letter report following each of the four groundwater monitoring events.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/12/2017
Comments: DTSC understands that that the waste generated during the cleanup activities are not considered a listed waste (either non-specific source or specific source) at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/23/2017
Comments: Once the excavation work is complete, all known contaminated soils will have been removed. Therefore, because there will be no known soil contamination remaining onsite, DTSC will not require a Site Management Plan to establish protocols for construction activities and long-term maintenance at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 03/06/2017
Comments: Signed by supervisor and branch chief prior to field visit. The HARP is effective from 3/6/17 through 3/5/18.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/08/2017
Comments: Since a cleanup to a residential land use standard at Plessey Micro Science, including a portion of the proposed public park area, is more conservative than a recreational land use standard, the site will also be suitable to be developed as a public park.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 02/08/2018
Comments: The RFF's term is from 2/1/18 through 12/31/2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 02/28/2018
Comments: The term of Contract 17-T4411 is from 3/1/18 through 12/31/2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 06/19/2018
Comments: DTSC issued the Stop Work Order for Contract 16-T4229 because (a) all works under this contract were completed and (b) the contract will expire on June 30, 2018.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 03/06/2018
Comments: DTSC issued a Work Order for ERRG to conduct tasks as described in Contract 17-T4411.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 07/11/2019
Comments: The Work Order Amendment specifies the following changes: Deletion of Task 4 Post Injection Groundwater Monitoring Event 4 as described in Work Order 001 issued on March 6, 2018. Addition of the new Tasks 5 and 6. Authorization for Contractor to access and use the funding from the contingency line item of $10,965.47 as specified in the Work Order 001 issued on March 6, 2018.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2015
Comments: Based on the results of the December 2014 monitoring event, the following actions are recommended: 1. Continue groundwater monitoring at a reduced schedule (e.g., semiannually) to monitor VOC concentrations over time; 2. Conduct additional in situ injections (3DMe or an alternative) in those areas where total VOC concentrations are greater than 500 μg/L; and 3. Following removal of the buildings (2274 2294 Mora Drive), proceed with VOC source area investigation and delineation in soil beneath the site and conduct excavation and removal, followed by additional treatment (3DMe or an alternative).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 02/04/2015
Comments: March 2015 GW monitoring

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 08/25/2017
Comments: The Work Notice was mailed to addresses on the project mailing list informing groundwater monitoring activity at off-site wells located on and adjacent to Towne Circle and on Ortega Avenue in the City of Mountain View.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 05/05/2015
Comments: Shallow soil sampling will be conducted upon demolition of buildings at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan Amendment
Completed Date: 12/08/2016
Comments: Cleanup actions as proposed in the Remedial Action Plan Amendment include excavation of an estimated 1,800 cubic yards of soil contaminated with metals and VOCs at depths up to 12 feet below ground surface for off-site disposal at permitted facilities, injection of chemical to enhance reductive dechlorination in groundwater at targeted areas, and establishment of a land use covenant to restrict groundwater usage and to require vapor intrusion mitigation systems for new buildings if necessary based on future data. Field activities are anticipated to be completed in four weeks.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 07/29/2016
Comments: This investigation was conducted to collect shallow soil samples for laboratory analysis to delineate the extent of VOCs and metals, including hexavalent chromium, in shallow soil in preparation for site redevelopment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/15/2015
Comments: Based on the results of the March 2015 monitoring event, the following actions are recommended: 1. Continue groundwater monitoring at a reduced schedule (e.g., semiannually) to monitor VOC concentrations over time, 2. Conduct additional in-situ injections (3DMe or an alternative) in those areas where total VOC concentrations are greater than 500 μg/L, and 3. Following removal of the buildings (2274 2294 Mora Drive), proceed with VOC source area investigation and delineation in soil beneath the site and conduct excavation and removal, followed by additional treatment (3DMe or an alternative).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 10/28/2016
Comments: Public Notice for Plessey Draft Remedial Action Plan Amendment

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 10/28/2016
Comments: Community Update for Draft Remedial Action Plan Amendment

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 12/20/2016
Comments: The Remedial Implementation Workplan describes the field activities for excavation of contaminated soil and in-situ groundwater treatment injections at the former Plessey Micro System site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/16/2016
Comments: DTSC published a display advertisement on the December 16, 2016 Mountain View Voice (page 3) announcing the approval of the Remedial Action Plan Amendment for cleanup activities at the Plessey Micro Science site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 01/30/2017
Comments: DTSC issued a Work Notice informing the public that the following cleanup activities will begin on 1/30/17 at the site: Excavation on the Plessey Site of an estimated 1,800 cubic yards of soil contaminated with metals and volatile organic compounds at varying depths to 12 feet below ground surface for off-site disposal at permitted facilities, Injection of Hydrogen Release Compound, a food grade substance, to enhance reductive dechlorination in groundwater at targeted areas both on the Plessey Site and along Towne Circle, and Establishment of a land use covenant to restrict groundwater usage and to require vapor intrusion mitigation systems for new buildings if necessary based on future data.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 01/12/2017
Comments: DTSC has completed the review of the "Health and Safety Plan, Excavation and In‐Site Groundwater Treatment" for the Plessey Micro Science site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/31/2017
Comments: The Vapor Intrusion Mitigation Plan describes the design and installation of a sub-slab passive venting system coupled with a vapor barrier/gas membrane system beneath every new building within the Mora-Ortega Parcel encompassing approximately 5.15 acres.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 08/29/2017
Comments: ERRG conducted groundwater monitoring at off-site wells.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/14/2017

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Comments: ERRG conducted a groundwater monitoring event in August 2017 at 17 groundwater monitoring wells adjacent to the Plessey Micro Science site. This is the first sampling event following in-situ injections at the Plessey site in April and May 2017.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/22/2019
Comments: The Groundwater Monitoring Summary documents the analytical results for groundwater samples collected in October 2018 in 14 groundwater monitoring wells at and adjacent to the Plessey Micro Science project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 05/22/2018
Comments: The Completion Report summarizes the following remediation activities conducted at the site: 1. Excavation and off-site disposal of soil contaminated with hexavalent chromium, cobalt, nickel, and volatile organic compounds (VOCs); and 2. In-situ treatment of VOC-contaminated groundwater to reduce chemical concentrations. These activities were performed pursuant to the January 2017 DTSC-approved "Remedial Implementation Workplan".

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 04/20/2018
Comments: The Work Plan proposes soil gas sampling at an approximately 5.2‐acre residential development area located east of the Mora Drive and Ortega Avenue intersection in Mountain View, California. DTSC is overseeing environmental investigation and cleanup of a 1.0‐acre parcel, identified as the Plessey Micro Science site, within the 5.2‐acre residential development area. Since the Work Plan proposes several soil gas sampling locations within the Plessey Micro Science site, DTSC commented on the Work Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 08/09/2018
Comments: The Work Plan proposes installation of five groundwater monitoring wells at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/18/2018
Comments: The Work Plan proposes groundwater sampling at nine locations, four of which (i.e., EGW-1, EGW-2, EGW-3, and EGW-4) are located within the Plessey Micro Science site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 05/23/2018
Comments: The report presents soil gas sampling results at 40 temporary soil gas wells, 20 wells installed at 5 feet below ground surface (bgs) and 20 wells installed at 10 feet bgs, at the 5.2-acre residential development area. Four nested wells (i.e., SV-3, SV-5, SV-8, and SV-9) are located within the Plessey Micro Science site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/03/2018
Comments: The Groundwater Sampling Report documents groundwater investigation conducted on 5/8/18 at nine temporary borings within the approximately 5.2-acre Mora Drive project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/17/2018
Comments: The Soil Vapor Sampling Summary Report presents soil gas sampling results from five temporary soil vapor monitoring wells within the approximate boundaries of excavations PL-A, PL-B, PL-E, PL-I and PL-J. These wells were installed to a depth of 10 feet below ground surface.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/03/2019
Comments: The Groundwater Monitoring Summary presents the analytical results for the March 2019 groundwater monitoring event.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/08/2020
Comments: The Groundwater Monitoring Summary documents the analytical results for groundwater samples collected in October 2019 in 14 groundwater monitoring wells at and adjacent to the Plessey Micro Science project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/01/2020
Comments: The Report presents analytical results for groundwater samples from monitoring wells R -3, R-4, S-16R, S -17R, B-4, D-14R, and T-4 during the January 9, 2020 sampling event.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 05/14/2004
Comments: Signed O&M Agreement. Supercedes 8/10/94 O&M Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 08/10/1994
Comments: Signed O&M Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 11/30/1990
Comments: Issued Negative Declaration for RAP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 09/18/1987
Comments: DTSC issued RAO to Plessey Incorporated.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 12/01/1981
Comments: DTSC's Abandoned Site Program discovered site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 08/24/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/12/2000
Comments: Approved Design. The remedial enhancement plan to address full plume containment and/or groundwater remediation was approved. Four wells will be installed further downgradient at the northern boundary of the TRW/Vidar site. The extraction wells will be connected to the existing treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 10/13/1999
Comments: Approved Remedial Design for source control remedial enhancement to address soil and groundwater contamination near the source areas. Ten dual-phase vertical extraction wells will be installed within the Site near the former underground tank locations. The extraction wells will be connected to the existing treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/24/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 10/24/2002
Comments: Completed Remedial Action. Ten dual-phase (vapor and groundwater) extraction wells behind the onsite buildings, and four extraction wells downgradient at the northern boundary of the adjacent TRW/Vidar Site (77 Ortega Drive) were installed. The new extraction wells were connected to the existing treatment system at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 02/07/2000
Comments: Completed RA. Soil vapor extraction (SVE) and air inlet wells were abandoned. 600 cubic yards of soil was excavated in the former SVE area, aerated and redeposited.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Manual
Completed Date: 04/15/1997
Comments: Amended Operation and Maintenance Plan for air stripper

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 09/12/1996
Comments: Approved design for horizontal extraction wells to enhance the existing remedial system. The design was not implemented due to access issues.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/16/1993
Comments: Completed RA. Grondwater extraction at Well T-6 by the existing remedial system was stopped due to detection of dense non-aqueous phase liquid (DNAPL) of trichloroethylene. The DNAPL was pumped and collected in a baker tank and treated onsite.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 06/24/1993
Comments: Completed RA. Soil vapor extraction/treatment and groundwater extraction/treatment system constructed with three goundwater extraction wells, and 34 soil vapor extraction and 25 air inlet wells were installed. Soil vapor was was treated using carbon absorption. Groundwater was treated using ultra violet ligh/hydrogen peroxide. The units were constructed inside the building at 2296 Mora Drive and include a volatile organic compound and water separator unit, a UV/peroxide unit, and a liquid carbon absorption unit. Treated water is discharged to the sanitary sewer under permit from the City of Mountain View or to the storm drain under a permit from the Regional Water Quality Control Board.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Manual

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 06/30/1992
Comments: Completed Operation and Maintenance Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 06/30/1992
Comments: Completed Remedial Design for SVE system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 05/05/1992
Comments: Approved RAP. Soil cleanup by soil vapor extraction/treatment with activated carbon, and groundwater extraction/ treament by ultra-violet peroxidation which was constructed during the pilot study.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 10/25/1991
Comments: Completed RA. Five concrete underground tanks (A,B,C,D and F) were removed from a location behind the commercial buildings located at 2274-2296 Mora Drive. Tank E was removed in August 1989. The excavated pits were backfilled with clean fill approximately 455 cubic yards of soil were removed, aerated and disposed offsite. A soil vapor extraction system was installed to remediate the remaining volatile organic compounds in soil in other site areas. Initiated August 17, 1991 and completed October 25, 1991.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/07/1991
Comments: Completed RIFS.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 10/30/1989
Comments: Pilot testing of an ultra-violet(UV)/peroxidation system designed to treat groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 10/30/1989
Comments: Approved Pubilc Participation Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 08/11/1989
Comments: Completed RA. A 200-gallon underground tank (Tank E) was removed. Soil surrounding the tank was contaminated with TCE and PCE. Contaminated soil was excavated and aerated. Excavated pit was

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

backfilled with clean fill.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 01/20/1987
Comments: Completed Site Screening

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 12/01/1985
Comments: Completed PA. In January 1982, samples were collected from standing water in two of the tanks and the results detected perchloroethylene (PCE), chromium, and xylene. Investigations were conducted to delineate the lateral extent of the soil and groundwater contamination originating from releases at the tanks. Trichloroethylene (TCE), PCE, dichlorethylene (DCE), benzene, toluene, xylene and ethylbenzene were detected in the groundwater. These chemicals and chromium were also detected in the soils near the tanks.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 06/08/2005
Comments: Remedial Design for SVE enhancement. Horizontal wells constructed in source area and connected to the existing SVE and treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 08/15/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 05/03/2005
Comments: Approved soil investigation report which recommended HRC injection pilot study and horizontal well installation for SVE enhancement

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/20/2004
Comments: Workplan for Soil Investigation and HRC Pilot Study

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 01/27/2005
Comments: Second Half 2004 Progress and Operation, Monitoring and Maintenance Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

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Completed Document Type: Operations and Maintenance Report
Completed Date: 08/02/2005
Comments: First Half 2005 Progress and Operation, Monitoring and Maintenance Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 10/19/1995
Comments: Approved Remedial Design for expanding the soil and groundwater remedial system. The UV/Peroxide unit of the groundwater remediation system was replaced with an air stripper.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 07/01/1993
Comments: Soil and Groundwater Investigation-Garibaldi/2280 Mora Drive property

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 09/04/1997
Comments: Risk-Based Soil Goals for Site Remediation Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 06/21/1991
Comments: Pre-Remediation Exposure Assessment Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 06/16/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/15/1990
Comments: Fact sheet announces the public comment period on proposed interim site cleanup activities.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/01/1989
Comments: Fact sheet summarizes site investigation conducted to date.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Financial Assurance Documentation
Completed Date: 08/11/2006
Comments: Approved revised cost of Letter of Credit for operation and maintenance

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 02/22/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 10/03/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 03/11/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 03/03/2009
Comments: Completed activity.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 09/19/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Workplan
Completed Date: 02/05/2008
Comments: WP approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 07/31/2008
Comments: Completed fieldwork for first 5-year review

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 03/03/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 01/31/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 08/18/1998
Comments: Fenton's pilot study in A-zone aquifer

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/22/1999
Comments: Pottasium permanganate pilot study in A-zone aquifer

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/31/2006
Comments: HRC Injection conducted between 9/21/05 and 10/7/05

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/22/2007
Comments: 2nd HRC injection conducted between 9/21/06 and 10/7/06

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/29/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 04/07/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/29/2009
Comments: report approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 03/01/2000
Comments: Fact Sheet/Work Notice issued for groundwater cleanup and TRW site redevelopment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 06/01/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 03/01/1992
Comments: Fact sheet for RAP 30-day comment period.

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Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 01/15/1987
Comments: Fact Sheet for Site update.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Financial Assurance Documentation
Completed Date: 08/27/2009
Comments: Plessey's representative, counsel and consultant met with DTSC and presented their financial status. Plessey is running out of cash and wants DTSC to take over the remaining work using the money in the Letter of Credit at $3.61M

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 11/07/2014
Comments: Report recommended amending the RAP so that just injections to gw are used to remediate the site, also to include soil remediation and soil goals. VOC concentrations in gw continue to decrease, but additional treatment is necessary to expedite the cleanup.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 08/31/2010
Comments: GW monitoring plan approved. Work to begin this Sept.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/10/2010
Comments: Cost estimate is acceptable as is.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/02/2010
Comments: Periodic Report of Compliance for the City of Mountain View for water discharge to the sewer.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 09/20/2010
Comments: Per Steve, GW monitoring went smoothly.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 03/04/2011
Comments: 3 wells could not be accessed due to extraction system still being in place, and one rusted seal

Completed Area Name: PROJECT WIDE

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/27/2011
Comments: Recent GW monitoring results indicate that reductive dechlorination may still be occurring in the previously injected HRC area. Additional GW monitoring is recommended and supplemental HRC injections may be considered in the future.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/25/2012
Comments: VOC concentrations in the majority of wells (A & B zones) exceeds the goals of the site cleanup. Concentrations in the area of previous groundwater treatment appear to have decreased or remain stable. Additional in situ groundwater treatment is recommended.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan
Completed Date: 04/23/2003
Comments: O&M Plan amended

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 02/10/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/06/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 09/22/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 04/13/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 12/15/2011

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Comments: Removal complete. Site walk-thru w/property owner Jan. 2012.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/04/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 09/26/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 03/01/2012
Comments: System removed, DTSC received a credit for recycled and sold items, rental space restored to pre-system installation condition.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 04/09/2012
Comments: 6 DHC samples to be collected

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/29/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 12/06/2012
Comments: Addendum is to conduct soil gas sampling

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 05/13/2013
Comments: Injections completed 5/10

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/03/2014
Comments: Reductive dechlorination has increased in the injection area and conditions for improved reductive dechlorination exists. Quarterly monitoring will continue and data evaluated for the need for additional injections in the future.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice

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Completed Date: 11/19/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 10/30/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/16/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/25/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/04/2013
Comments: PCE concentrations in soil gas on the Plessey property are above residential screening levels.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 06/06/2013
Comments: GW monitoring to occur 6/17-20

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 06/24/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/06/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 12/13/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2014
Comments: VOC concentrations in groundwater are continuing to decrease after

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

injections conducted last year.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 09/05/2013
Comments: GW monitoring event begins 9/16

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 09/23/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 11/26/2013
Comments: GW monitoring 12/9

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 03/24/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 03/04/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/26/2014
Comments: VOC concentrations in gw appear to be decreasing after in situ treatment. Continued monitoring is recommended with re-evaluation for further injections in near future.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 07/09/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 06/10/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2014
Comments: VOC concentrations in gw appear to be stable or decreasing after in

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

situ treatment. Continued monitoring is recommended with re-evaluation for further injections in near future.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 01/30/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 01/30/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/15/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 11/14/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 12/09/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 06/28/2007
Comments: Remedial Action certified with O&M

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 07/23/2004
Comments: Operation and Maintenance Agreement Amended to address remedial enhancements.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 04/07/2011
Comments: Proposed amendment for time extension and additional tasks

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 12/29/2009
Comments: CFA Approve by budgets and accounting

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 01/20/2010
Comments: COntract for operation of groundwater remedy

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 01/26/2010
Comments: Work Order #1 issued to operate existing groundwater remedy.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/14/2008
Comments: DTSC annual oversight cost estimate to PRPs per HSC 25269.5.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/24/2010
Comments: Letter to BAAQMD renewing permit to operate and changing contact information.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/28/2010
Comments: Periodic Report of Compliance for the City of Mountain View for water discharge to the sewer.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/28/2010
Comments: Water Production Statement - the prior meter reading (July 1, FQ1-501) was 2266 cu ft (100 multiplier) and last reading was 5589. (No flow to storm drain, or FQI-500). So, 5589-2266 x 100 = 332,100 to convert to acre feet, divide by 43560 = 7.63 acre feet X $520/acre feet = $3966.85

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 06/30/2010
Comments: Work order to continue operation & maintenance of GW remedy.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2021
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Certification
Schedule Due Date: 09/30/2020
Schedule Revised Date: 03/17/2021

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

ENVIROSTOR:

Name:	PLESSEY MICRO SCIENCE
Address:	2274 MORA DRIVE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	43360069
Status:	Certified / Operation & Maintenance
Status Date:	06/28/2007
Site Code:	200080
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	0.58
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Henry Wong
Supervisor:	John Karachewski
Division Branch:	Cleanup Berkeley
Assembly:	24
Senate:	13
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Orphan Funds
Latitude:	37.40324
Longitude:	-122.1014
APN:	147-54-026, 147-54-027, 147-54-028, 147-54-029, 147-54-030, 14833022, 14833023, 14833024, 14833025, 14833026
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC:	Benzene Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride Chloroform Chromium VI 1,2-Dichloroethylene (cis Ethylbenzene Toluene Xylenes
Confirmed COC:	Benzene Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride Chloroform Chromium VI 1,2-Dichloroethylene (cis Ethylbenzene Toluene Xylenes
Potential Description:	OTH
Alias Name:	147-54-026
Alias Type:	APN
Alias Name:	147-54-027
Alias Type:	APN
Alias Name:	147-54-028
Alias Type:	APN
Alias Name:	147-54-029
Alias Type:	APN
Alias Name:	147-54-030
Alias Type:	APN
Alias Name:	14833022
Alias Type:	APN
Alias Name:	14833023
Alias Type:	APN
Alias Name:	14833024
Alias Type:	APN
Alias Name:	14833025
Alias Type:	APN
Alias Name:	14833026
Alias Type:	APN
Alias Name:	CAD009440371
Alias Type:	EPA Identification Number

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Alias Name: 110002636470
Alias Type: EPA (FRS #)
Alias Name: P21047
Alias Type: PCode
Alias Name: 200080
Alias Type: Project Code (Site Code)
Alias Name: 200080
Alias Type: Project Code (Site Code)
Alias Name: 43360069
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 05/16/2011
Comments: contract for continued GW monitoring

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 06/10/2010
Comments: CFA Approved for $120,000

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 06/30/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 05/18/2011
Comments: adds supplemental GW monitoring

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/09/2012
Comments: 30-day notice sent to property owner w/attached access agreement to be signed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 10/11/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 10/22/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 09/25/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 12/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 12/31/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 02/24/2012
Comments: Amendment to add DHC analysis

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 03/20/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Access Agreement
Completed Date: 01/10/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 06/12/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 06/25/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 03/13/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/11/2016
Comments: Stop work order for contract which expired on July 31, 2016.

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 12/30/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 01/29/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 11/23/2016
Comments: Contract 16-T4229 covers preparation of a remedial implementation workplan, conducting fieldwork, preparation of a completion report, and submittal of a letter report following each of the four groundwater monitoring events.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 06/19/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Imminent and/or Subst. Endangerment Determination
Completed Date: 06/25/2015
Comments: Imminent and Substantial Endangerment Determination for the former Plessey parcels.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 01/30/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 12/05/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/18/2015
Comments: A new DTSC Project Manager is assigned.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 02/04/2015
Comments: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 03/16/2015
Comments: The HARP is for site visits in 2015.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 04/13/2016
Comments: CANCELLATION OF CONTRACT No.: 14-T3967

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Responsible Agency Review
Completed Date: 12/08/2016
Comments: The project consists of DTSC approval of the Remedial Action Plan Amendment for Plessey Micro Science prior to residential development. The proposed cleanup actions include soil excavation, groundwater injection, and institutional controls. DTSC prepared a Statement of Findings concluding that the project will not result in significant and unavoidable effects to the environment; therefore, DTSC approved the Notice of Determination. DTSC filed the approved Notice of Determination with the California Office of Planning and Research on 12/8/16.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 12/24/2015
Comments: Contract 14-T3927 A-1 with SGI, Term 2/1/15 through 7/31/16

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 06/30/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Post HARP Form
Completed Date: 03/07/2017
Comments: Post-HARP for site visit on 3/6/17

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/09/2017
Comments: Excavation at the proposed public park area within the Plessey Micro Science site is now complete and based on the data, no restrictions on soil handling will be required in the proposed public park.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 11/29/2016
Comments: Work Order 001 for Contract 16-T4229 authorizes ERRG to prepare a

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

remedial implementation workplan, conduct fieldwork, prepare a completion report, and submit a letter report following each of the four groundwater monitoring events.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/12/2017
Comments: DTSC understands that that the waste generated during the cleanup activities are not considered a listed waste (either non-specific source or specific source) at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/23/2017
Comments: Once the excavation work is complete, all known contaminated soils will have been removed. Therefore, because there will be no known soil contamination remaining onsite, DTSC will not require a Site Management Plan to establish protocols for construction activities and long-term maintenance at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 03/06/2017
Comments: Signed by supervisor and branch chief prior to field visit. The HARP is effective from 3/6/17 through 3/5/18.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/08/2017
Comments: Since a cleanup to a residential land use standard at Plessey Micro Science, including a portion of the proposed public park area, is more conservative than a recreational land use standard, the site will also be suitable to be developed as a public park.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 02/08/2018
Comments: The RFF's term is from 2/1/18 through 12/31/2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 02/28/2018
Comments: The term of Contract 17-T4411 is from 3/1/18 through 12/31/2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 06/19/2018
Comments: DTSC issued the Stop Work Order for Contract 16-T4229 because (a) all works under this contract were completed and (b) the contract will expire on June 30, 2018.

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 03/06/2018
Comments: DTSC issued a Work Order for ERRG to conduct tasks as described in Contract 17-T4411.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 07/11/2019
Comments: The Work Order Amendment specifies the following changes: Deletion of Task 4 Post Injection Groundwater Monitoring Event 4 as described in Work Order 001 issued on March 6, 2018. Addition of the new Tasks 5 and 6. Authorization for Contractor to access and use the funding from the contingency line item of $10,965.47 as specified in the Work Order 001 issued on March 6, 2018.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2015
Comments: Based on the results of the December 2014 monitoring event, the following actions are recommended: 1. Continue groundwater monitoring at a reduced schedule (e.g., semiannually) to monitor VOC concentrations over time; 2. Conduct additional in situ injections (3DMe or an alternative) in those areas where total VOC concentrations are greater than 500 μg/L; and 3. Following removal of the buildings (2274 2294 Mora Drive), proceed with VOC source area investigation and delineation in soil beneath the site and conduct excavation and removal, followed by additional treatment (3DMe or an alternative).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 02/04/2015
Comments: March 2015 GW monitoring

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 08/25/2017
Comments: The Work Notice was mailed to addresses on the project mailing list informing groundwater monitoring activity at off-site wells located on and adjacent to Towne Circle and on Ortega Avenue in the City of Mountain View.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 05/05/2015
Comments: Shallow soil sampling will be conducted upon demolition of buildings at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Document Type: Remedial Action Plan Amendment
Completed Date: 12/08/2016
Comments: Cleanup actions as proposed in the Remedial Action Plan Amendment include excavation of an estimated 1,800 cubic yards of soil contaminated with metals and VOCs at depths up to 12 feet below ground surface for off-site disposal at permitted facilities, injection of chemical to enhance reductive dechlorination in groundwater at targeted areas, and establishment of a land use covenant to restrict groundwater usage and to require vapor intrusion mitigation systems for new buildings if necessary based on future data. Field activities are anticipated to be completed in four weeks.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 07/29/2016
Comments: This investigation was conducted to collect shallow soil samples for laboratory analysis to delineate the extent of VOCs and metals, including hexavalent chromium, in shallow soil in preparation for site redevelopment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/15/2015
Comments: Based on the results of the March 2015 monitoring event, the following actions are recommended: 1. Continue groundwater monitoring at a reduced schedule (e.g., semiannually) to monitor VOC concentrations over time, 2. Conduct additional in-situ injections (3DMe or an alternative) in those areas where total VOC concentrations are greater than 500 μg/L, and 3. Following removal of the buildings (2274 2294 Mora Drive), proceed with VOC source area investigation and delineation in soil beneath the site and conduct excavation and removal, followed by additional treatment (3DMe or an alternative).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 10/28/2016
Comments: Public Notice for Plessey Draft Remedial Action Plan Amendment

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 10/28/2016
Comments: Community Update for Draft Remedial Action Plan Amendment

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 12/20/2016
Comments: The Remedial Implementation Workplan describes the field activities for excavation of contaminated soil and in-situ groundwater treatment injections at the former Plessey Micro System site.

Completed Area Name: PROJECT WIDE

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/16/2016
Comments: DTSC published a display advertisement on the December 16, 2016 Mountain View Voice (page 3) announcing the approval of the Remedial Action Plan Amendment for cleanup activities at the Plessey Micro Science site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 01/30/2017
Comments: DTSC issued a Work Notice informing the public that the following cleanup activities will begin on 1/30/17 at the site: Excavation on the Plessey Site of an estimated 1,800 cubic yards of soil contaminated with metals and volatile organic compounds at varying depths to 12 feet below ground surface for off-site disposal at permitted facilities, Injection of Hydrogen Release Compound, a food grade substance, to enhance reductive dechlorination in groundwater at targeted areas both on the Plessey Site and along Towne Circle, and Establishment of a land use covenant to restrict groundwater usage and to require vapor intrusion mitigation systems for new buildings if necessary based on future data.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 01/12/2017
Comments: DTSC has completed the review of the "Health and Safety Plan, Excavation and In‐Site Groundwater Treatment" for the Plessey Micro Science site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/31/2017
Comments: The Vapor Intrusion Mitigation Plan describes the design and installation of a sub-slab passive venting system coupled with a vapor barrier/gas membrane system beneath every new building within the Mora-Ortega Parcel encompassing approximately 5.15 acres.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 08/29/2017
Comments: ERRG conducted groundwater monitoring at off-site wells.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/14/2017
Comments: ERRG conducted a groundwater monitoring event in August 2017 at 17 groundwater monitoring wells adjacent to the Plessey Micro Science site. This is the first sampling event following in-situ injections at the Plessey site in April and May 2017.

Completed Area Name: PROJECT WIDE

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/22/2019
Comments: The Groundwater Monitoring Summary documents the analytical results for groundwater samples collected in October 2018 in 14 groundwater monitoring wells at and adjacent to the Plessey Micro Science project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 05/22/2018
Comments: The Completion Report summarizes the following remediation activities conducted at the site: 1. Excavation and off-site disposal of soil contaminated with hexavalent chromium, cobalt, nickel, and volatile organic compounds (VOCs); and 2. In-situ treatment of VOC-contaminated groundwater to reduce chemical concentrations. These activities were performed pursuant to the January 2017 DTSC-approved "Remedial Implementation Workplan".

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 04/20/2018
Comments: The Work Plan proposes soil gas sampling at an approximately 5.2‐acre residential development area located east of the Mora Drive and Ortega Avenue intersection in Mountain View, California. DTSC is overseeing environmental investigation and cleanup of a 1.0‐acre parcel, identified as the Plessey Micro Science site, within the 5.2‐acre residential development area. Since the Work Plan proposes several soil gas sampling locations within the Plessey Micro Science site, DTSC commented on the Work Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 08/09/2018
Comments: The Work Plan proposes installation of five groundwater monitoring wells at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/18/2018
Comments: The Work Plan proposes groundwater sampling at nine locations, four of which (i.e., EGW-1, EGW-2, EGW-3, and EGW-4) are located within the Plessey Micro Science site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 05/23/2018
Comments: The report presents soil gas sampling results at 40 temporary soil gas wells, 20 wells installed at 5 feet below ground surface (bgs) and 20 wells installed at 10 feet bgs, at the 5.2-acre residential development area. Four nested wells (i.e., SV-3, SV-5, SV-8, and SV-9) are located within the Plessey Micro Science site.

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/03/2018
Comments: The Groundwater Sampling Report documents groundwater investigation conducted on 5/8/18 at nine temporary borings within the approximately 5.2-acre Mora Drive project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/17/2018
Comments: The Soil Vapor Sampling Summary Report presents soil gas sampling results from five temporary soil vapor monitoring wells within the approximate boundaries of excavations PL-A, PL-B, PL-E, PL-I and PL-J. These wells were installed to a depth of 10 feet below ground surface.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/03/2019
Comments: The Groundwater Monitoring Summary presents the analytical results for the March 2019 groundwater monitoring event.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/08/2020
Comments: The Groundwater Monitoring Summary documents the analytical results for groundwater samples collected in October 2019 in 14 groundwater monitoring wells at and adjacent to the Plessey Micro Science project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/01/2020
Comments: The Report presents analytical results for groundwater samples from monitoring wells R -3, R-4, S-16R, S -17R, B-4, D-14R, and T-4 during the January 9, 2020 sampling event.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 05/14/2004
Comments: Signed O&M Agreement. Supercedes 8/10/94 O&M Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 08/10/1994
Comments: Signed O&M Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 11/30/1990
Comments: Issued Negative Declaration for RAP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 09/18/1987
Comments: DTSC issued RAO to Plessey Incorporated.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 12/01/1981
Comments: DTSC's Abandoned Site Program discovered site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 08/24/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/12/2000
Comments: Approved Design. The remedial enhancement plan to address full plume containment and/or groundwater remediation was approved. Four wells will be installed further downgradient at the northern boundary of the TRW/Vidar site. The extraction wells will be connected to the existing treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 10/13/1999
Comments: Approved Remedial Design for source control remedial enhancement to address soil and groundwater contamination near the source areas. Ten dual-phase vertical extraction wells will be installed within the Site near the former underground tank locations. The extraction wells will be connected to the existing treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/24/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/24/2002
Comments: Completed Remedial Action. Ten dual-phase (vapor and groundwater) extraction wells behind the onsite buildings, and four extraction wells downgradient at the northern boundary of the adjacent TRW/Vidar Site (77 Ortega Drive) were installed. The new extraction wells were connected to the existing treatment system at the Site.

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Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 02/07/2000
Comments: Completed RA. Soil vapor extraction (SVE) and air inlet wells were abandoned. 600 cubic yards of soil was excavated in the former SVE area, aerated and redeposited.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Manual
Completed Date: 04/15/1997
Comments: Amended Operation and Maintenance Plan for air stripper

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 09/12/1996
Comments: Approved design for horizontal extraction wells to enhance the existing remedial system. The design was not implemented due to access issues.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/16/1993
Comments: Completed RA. Grondwater extraction at Well T-6 by the existing remedial system was stopped due to detection of dense non-aqueous phase liquid (DNAPL) of trichloroethylene. The DNAPL was pumped and collected in a baker tank and treated onsite.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 06/24/1993
Comments: Completed RA. Soil vapor extraction/treatment and groundwater extraction/treatment system constructed with three goundwater extraction wells, and 34 soil vapor extraction and 25 air inlet wells were installed. Soil vapor was was treated using carbon absorption. Groundwater was treated using ultra violet ligh/hydrogen peroxide. The units were constructed inside the building at 2296 Mora Drive and include a volatile organic compound and water separator unit, a UV/peroxide unit, and a liquid carbon absorption unit. Treated water is discharged to the sanitary sewer under permit from the City of Mountain View or to the storm drain under a permit from the Regional Water Quality Control Board.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Manual
Completed Date: 06/30/1992
Comments: Completed Operation and Maintenance Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 06/30/1992

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Comments: Completed Remedial Design for SVE system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 05/05/1992
Comments: Approved RAP. Soil cleanup by soil vapor extraction/treatment with activated carbon, and groundwater extraction/ treament by ultra-violet peroxidation which was constructed during the pilot study.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 10/25/1991
Comments: Completed RA. Five concrete underground tanks (A,B,C,D and F) were removed from a location behind the commercial buildings located at 2274-2296 Mora Drive. Tank E was removed in August 1989. The excavated pits were backfilled with clean fill approximately 455 cubic yards of soil were removed, aerated and disposed offsite. A soil vapor extraction system was installed to remediate the remaining volatile organic compounds in soil in other site areas. Initiated August 17, 1991 and completed October 25, 1991.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/07/1991
Comments: Completed RIFS.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 10/30/1989
Comments: Pilot testing of an ultra-violet(UV)/peroxidation system designed to treat groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 10/30/1989
Comments: Approved Pubilc Participation Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 08/11/1989
Comments: Completed RA. A 200-gallon underground tank (Tank E) was removed. Soil surrounding the tank was contaminated with TCE and PCE. Contaminated soil was excavated and aerated. Excavated pit was backfilled with clean fill.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 01/20/1987
Comments: Completed Site Screening

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 12/01/1985
Comments: Completed PA. In January 1982, samples were collected from standing water in two of the tanks and the results detected perchloroethylene (PCE), chromium, and xylene. Investigations were conducted to delineate the lateral extent of the soil and groundwater contamination originating from releases at the tanks. Trichloroethylene (TCE), PCE, dichlorethylene (DCE), benzene, toluene, xylene and ethylbenzene were detected in the groundwater. These chemicals and chromium were also detected in the soils near the tanks.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 06/08/2005
Comments: Remedial Design for SVE enhancement. Horizontal wells constructed in source area and connected to the existing SVE and treatment system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 08/15/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 05/03/2005
Comments: Approved soil investigation report which recommended HRC injection pilot study and horizontal well installation for SVE enhancement

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/20/2004
Comments: Workplan for Soil Investigation and HRC Pilot Study

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 01/27/2005
Comments: Second Half 2004 Progress and Operation, Monitoring and Maintenance Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 08/02/2005
Comments: First Half 2005 Progress and Operation, Monitoring and Maintenance Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Date: 10/19/1995
Comments: Approved Remedial Design for expanding the soil and groundwater remedial system. The UV/Peroxide unit of the groundwater remediation system was replaced with an air stripper.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 07/01/1993
Comments: Soil and Groundwater Investigation-Garibaldi/2280 Mora Drive property

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 09/04/1997
Comments: Risk-Based Soil Goals for Site Remediation Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 06/21/1991
Comments: Pre-Remediation Exposure Assessment Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 06/16/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/15/1990
Comments: Fact sheet announces the public comment period on proposed interim site cleanup activities.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/01/1989
Comments: Fact sheet summarizes site investigation conducted to date.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Financial Assurance Documentation
Completed Date: 08/11/2006
Comments: Approved revised cost of Letter of Credit for operation and maintenance

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 02/22/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Document Type: Operations and Maintenance Report
Completed Date: 10/03/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 03/11/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 03/03/2009
Comments: Completed activity.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 09/19/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Workplan
Completed Date: 02/05/2008
Comments: WP approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 07/31/2008
Comments: Completed fieldwork for first 5-year review

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 03/03/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 01/31/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 08/18/1998
Comments: Fenton’s pilot study in A-zone aquifer

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/22/1999
Comments: Pottasium permanganate pilot study in A-zone aquifer

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/31/2006
Comments: HRC Injection conducted between 9/21/05 and 10/7/05

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/22/2007
Comments: 2nd HRC injection conducted between 9/21/06 and 10/7/06

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/29/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 04/07/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/29/2009
Comments: report approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 03/01/2000
Comments: Fact Sheet/Work Notice issued for groundwater cleanup and TRW site redevelopment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 06/01/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 03/01/1992
Comments: Fact sheet for RAP 30-day comment period.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 01/15/1987
Comments: Fact Sheet for Site update.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Document Type: Financial Assurance Documentation
Completed Date: 08/27/2009
Comments: Plessey's representative, counsel and consultant met with DTSC and presented their financial status. Plessey is running out of cash and wants DTSC to take over the remaining work using the money in the Letter of Credit at $3.61M

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 11/07/2014
Comments: Report recommended amending the RAP so that just injections to gw are used to remediate the site, also to include soil remediation and soil goals. VOC concentrations in gw continue to decrease, but additional treatment is necessary to expedite the cleanup.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 08/31/2010
Comments: GW monitoring plan approved. Work to begin this Sept.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/10/2010
Comments: Cost estimate is acceptable as is.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/02/2010
Comments: Periodic Report of Compliance for the City of Mountain View for water discharge to the sewer.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 09/20/2010
Comments: Per Steve, GW monitoring went smoothly.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 03/04/2011
Comments: 3 wells could not be accessed due to extraction system still being in place, and one rusted seal

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/27/2011
Comments: Recent GW monitoring results indicate that reductive dechlorination may still be occurring in the previously injected HRC area. Additional GW monitoring is recommended and supplemental HRC injections may be considered in the future.

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/25/2012
Comments: VOC concentrations in the majority of wells (A & B zones) exceeds the goals of the site cleanup. Concentrations in the area of previous groundwater treatment appear to have decreased or remain stable. Additional in situ groundwater treatment is recommended.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan
Completed Date: 04/23/2003
Comments: O&M Plan amended

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 02/10/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/06/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 09/22/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 04/13/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 12/15/2011
Comments: Removal complete. Site walk-thru w/property owner Jan. 2012.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/04/2011
Comments: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 09/26/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 03/01/2012
Comments: System removed, DTSC received a credit for recycled and sold items, rental space restored to pre-system installation condition.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 04/09/2012
Comments: 6 DHC samples to be collected

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/29/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 12/06/2012
Comments: Addendum is to conduct soil gas sampling

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 05/13/2013
Comments: Injections completed 5/10

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/03/2014
Comments: Reductive dechlorination has increased in the injection area and conditions for improved reductive dechlorination exists. Quarterly monitoring will continue and data evaluated for the need for additional injections in the future.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 11/19/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 10/30/2013
Comments: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/16/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/25/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/04/2013
Comments: PCE concentrations in soil gas on the Plessey property are above residential screening levels.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 06/06/2013
Comments: GW monitoring to occur 6/17-20

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 06/24/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/06/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 12/13/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2014
Comments: VOC concentrations in groundwater are continuing to decrease after injections conducted last year.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 09/05/2013
Comments: GW monitoring event begins 9/16

Completed Area Name: PROJECT WIDE

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 09/23/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 11/26/2013
Comments: GW monitoring 12/9

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 03/24/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 03/04/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/26/2014
Comments: VOC concentrations in gw appear to be decreasing after in situ treatment. Continued monitoring is recommended with re-evaluation for further injections in near future.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 07/09/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 06/10/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2014
Comments: VOC concentrations in gw appear to be stable or decreasing after in situ treatment. Continued monitoring is recommended with re-evaluation for further injections in near future.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 01/30/2013
Comments: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 01/30/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/15/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 11/14/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 12/09/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 06/28/2007
Comments: Remedial Action certified with O&M

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 07/23/2004
Comments: Operation and Maintenance Agreement Amended to address remedial enhancements.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 04/07/2011
Comments: Proposed amendment for time extension and additional tasks

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 12/29/2009
Comments: CFA Approve by budgets and accounting

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 01/20/2010
Comments: COntract for operation of groundwater remedy

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 01/26/2010
Comments: Work Order #1 issued to operate existing groundwater remedy.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/14/2008
Comments: DTSC annual oversight cost estimate to PRPs per HSC 25269.5.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/24/2010
Comments: Letter to BAAQMD renewing permit to operate and changing contact information.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/28/2010
Comments: Periodic Report of Compliance for the City of Mountain View for water discharge to the sewer.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/28/2010
Comments: Water Production Statement - the prior meter reading (July 1, FQ1-501) was 2266 cu ft (100 multiplier) and last reading was 5589. (No flow to storm drain, or FQI-500). So, 5589-2266 x 100 = 332,100 to convert to acre feet, divide by 43560 = 7.63 acre feet X $520/acre feet = $3966.85

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 06/30/2010
Comments: Work order to continue operation & maintenance of GW remedy.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2021
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Certification
Schedule Due Date: 09/30/2020
Schedule Revised Date: 03/17/2021

CORTESE:
Name: PLESSEY MICRO SCIENCE
Address: 2274 MORA DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Region: CORTESE
Envirostor Id: 43360069
Global ID: Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Site/Facility Type:	STATE RESPONSE
Cleanup Status:	CERTIFIED / OPERATION & MAINTENANCE
Status Date:	06/28/2007
Site Code:	200080, 200080
Latitude:	37.403242
Longitude:	-122.10148
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	envirostor
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Haz Waste & Substances Sites

HAZNET:

Name:	DTSC FORMER PLESSEY MICROSCIENCE SITE
Address:	2274 MORA DR
Address 2:	Not reported
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Contact:	NINA BACEY
Telephone:	5105402480
Mailing Name:	Not reported
Mailing Address:	700 HEINZ AVE
Year:	2017
Gepaid:	CAL000383486
TSD EPA ID:	MOD981123391
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.34
Year:	2017
Gepaid:	CAL000383486
TSD EPA ID:	CAD982444481
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.209
Year:	2017
Gepaid:	CAL000383486
TSD EPA ID:	CAD982444481
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.3
Year:	2015
Gepaid:	CAL000383486
TSD EPA ID:	NVT330010000
CA Waste Code:	135 - Unspecified aqueous solution

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.378
Year:	2014
Gepaid:	CAL000383486
TSD EPA ID:	NVT330010000
CA Waste Code:	132 - Aqueous solution with metals (< restricted levels and (Alkaline solution (pH >= 12.5) with metals))
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.5838
Year:	2014
Gepaid:	CAL000383486
TSD EPA ID:	NVT330010000
CA Waste Code:	132 - Aqueous solution with metals (< restricted levels and (Alkaline solution (pH >= 12.5) with metals))
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.6255
Year:	2013
Gepaid:	CAL000383486
TSD EPA ID:	NVT330010000
CA Waste Code:	135 - Unspecified aqueous solution
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.21

Additional Info:

Year:	2014
Gen EPA ID:	CAL000383486
Shipment Date:	20140827
Creation Date:	2/13/2015 22:15:12
Receipt Date:	20140912
Manifest ID:	013125925JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	CAD981412356
Trans 2 Name:	PACIFIC TRANS ENVIRON SERV
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	132 - Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals
RCRA Code:	D043
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.6255
Waste Quantity:	150
Quantity Unit:	G
Additional Code 1:	D018
Additional Code 2:	Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140416
Creation Date:	9/22/2014 22:15:16
Receipt Date:	20140501
Manifest ID:	012157816JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	CAD981412356
Trans 2 Name:	PACIFIC TRANS
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	132 - Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals
RCRA Code:	D043
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	D018
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140319
Creation Date:	8/17/2014 22:15:17
Receipt Date:	20140402
Manifest ID:	012157701JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	CAD981412356
Trans 2 Name:	PACIFIC TRANS ENVIRONMENTAL SERV
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	132 - Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals
RCRA Code:	D043
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.4587
Waste Quantity:	110
Quantity Unit:	G
Additional Code 1:	D018
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Additional Info:

Year:	2017
Gen EPA ID:	CAL000383486
Shipment Date:	20170306
Creation Date:	5/17/2018 18:31:11
Receipt Date:	20170317
Manifest ID:	016465011JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.209
Waste Quantity:	55
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170306
Creation Date:	5/12/2018 18:32:04
Receipt Date:	20170405
Manifest ID:	016465012JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	HAZMAT INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.153
Waste Quantity:	45
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170306
Creation Date:	5/12/2018 18:32:04
Receipt Date:	20170405

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Manifest ID:	016465012JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	HAZMAT INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.187
Waste Quantity:	55
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20170306
Creation Date:	5/17/2018 18:31:11
Receipt Date:	20170317
Manifest ID:	016465011JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.3
Waste Quantity:	600
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000383486

Shipment Date:	20150513
Creation Date:	11/6/2015 22:15:39
Receipt Date:	20150529
Manifest ID:	014447015JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Trans 2 EPA ID:	CAD981412356
Trans 2 Name:	PACIFIC TRAN ENV SER
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	D043
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.21
Waste Quantity:	50
Quantity Unit:	G
Additional Code 1:	D018
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150204
Creation Date:	7/16/2015 22:15:08
Receipt Date:	20150227
Manifest ID:	013482526JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	CAD981412356
Trans 2 Name:	PACIFIC TRANS
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	D043
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.168
Waste Quantity:	40
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2013
Gen EPA ID:	CAL000383486
Shipment Date:	20131120
Creation Date:	5/14/2014 22:15:08
Receipt Date:	20131216
Manifest ID:	011134912JJK
Trans EPA ID:	CAR000217513
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	CAD981412356
Trans 2 Name:	PACIFIC TRANS ENVIRON SERV
TSDF EPA ID:	NVT330010000

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	D043
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.21
Waste Quantity:	50
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HIST CORTESE:

edr_fname:	PLESSEY MICRO SCIENCE
edr_fadd1:	2274 MORA
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Region:	CORTESE
Facility County Code:	43
Reg By:	CALSI
Reg Id:	43360069

HWTS:

Name:	DTSC FORMER PLESSEY MICROSCIENCE SITE
Address:	2274 MORA DR
Address 2:	Not reported
City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAL000383486
Inactive Date:	Not reported
Create Date:	03/13/2013
Last Act Date:	03/13/2013
Mailing Name:	NINA BACEY
Mailing Address:	700 HEINZ AVE
Mailing Address 2:	Not reported
Mailing City,State,Zip:	BERKELEY, CA 94710
Owner Name:	DEPARTMENT OF TOXIC SUBSTANCES CONT
Owner Address:	700 HEINZ AVE
Owner Address 2:	Not reported
Owner City,State,Zip:	BERKELEY, CA 94710
Contact Name:	NINA BACEY
Contact Address:	700 HEINZ AVE
Contact Address 2:	Not reported
City,State,Zip:	BERKELEY, CA 94710

NAICS:

EPA ID:	CAL000383486
Create Date:	2013-03-13 13:32:09.520
NAICS Code:	9241
NAICS Description:	Administration of Environmental Quality Programs
Issued EPA ID Date:	2013-03-13 13:32:09.47300
Inactive Date:	Not reported
Facility Name:	DTSC FORMER PLESSEY MICROSCIENCE SITE
Facility Address:	2274 MORA DR
Facility Address 2:	Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

DTSC FORMER PLESSEY MICROSCIENCE SITE (Continued) **S103981838**

Facility City:	MOUNTAIN VIEW
Facility County:	Not reported
Facility State:	CA
Facility Zip:	94040

P76 **PLESSEY #3** **RESPONSE** **S102804169**
NNE **2256 MORA DRIVE** **ENVIROSTOR** **N/A**
1/2-1 **MOUNTAIN VIEW, CA 94040** **CERS**
0.504 mi.
2659 ft. **Site 3 of 4 in cluster P**

Relative:
Lower

Actual:
54 ft.

RESPONSE:

Name:	PLESSEY #3
Address:	2256 MORA DRIVE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	43360135
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0.17
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Site Code:	201358
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	24
Senate:	13
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	10/05/2001
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	37.40309
Longitude:	-122.1012
APN:	147-54-024, 147-54-025, 148-33-021
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC :	Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description:	OTH
Alias Name:	PLESSEY #3
Alias Type:	Alternate Name
Alias Name:	147-54-024
Alias Type:	APN
Alias Name:	147-54-025
Alias Type:	APN
Alias Name:	148-33-021
Alias Type:	APN
Alias Name:	110033611624
Alias Type:	EPA (FRS #)
Alias Name:	201358
Alias Type:	Project Code (Site Code)
Alias Name:	43360135
Alias Type:	Envirostor ID Number

Completed Info:

PLESSEY #3 (Continued) **S102804169**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 11/28/2000
Comments: Issued I&SE Order.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 10/15/2001
Comments: Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Name: PLESSEY #3
Address: 2256 MORA DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Facility ID: 43360135
Status: No Further Action
Status Date: 10/05/2001
Site Code: 201358
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.17
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Assembly: 24
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.40309
Longitude: -122.1012
APN: 147-54-024, 147-54-025, 148-33-021
Past Use: MANUFACTURING - ELECTRONIC
Potential COC: Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC: Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description: OTH
Alias Name: PLESSEY #3
Alias Type: Alternate Name

PLESSEY #3 (Continued) **S102804169**

Alias Name: 147-54-024
Alias Type: APN
Alias Name: 147-54-025
Alias Type: APN
Alias Name: 148-33-021
Alias Type: APN
Alias Name: 110033611624
Alias Type: EPA (FRS #)
Alias Name: 201358
Alias Type: Project Code (Site Code)
Alias Name: 43360135
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 11/28/2000
Comments: Issued I&SE Order.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 10/15/2001
Comments: Completed PEA. Cleanup of this site will be addressed as part of the Plessey Micro Science site cleanup. Contaminated groundwater will be extracted from 2 onsite wells and treated with an air stripper and carbon adsorption constructed at the PMS site.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS:
Name: PLESSEY #3
Address: 2256 MORA DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 341536
CERS ID: 43360135
CERS Description: State Response

Affiliation:
Affiliation Type Desc: Supervisor
Entity Name: MARK PIROS
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
O77	**TRW/VIDAR**	**RESPONSE**	**S100946989**
NNE	**77 ORTEGA AVENUE**	**ENVIROSTOR**	**N/A**
1/2-1	**MOUNTAIN VIEW, CA 94040**	**DEED**	
0.512 mi.		**CERS**	
2702 ft.	**Site 3 of 3 in cluster O**		

Relative:
Lower

Actual:
53 ft.

RESPONSE:

Name:	TRW/VIDAR
Address:	77 ORTEGA AVENUE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	43360128
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	9
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Henry Wong
Supervisor:	John Karachewski
Division Branch:	Cleanup Berkeley
Site Code:	200080
Site Mgmt. Req.:	GW, OIL, EXT
Assembly:	24
Senate:	13
Special Program Status:	Prospective Purchaser Program
Status:	Certified O&M - Land Use Restrictions Only
Status Date:	09/28/2010
Restricted Use:	YES
Funding:	Responsible Party
Latitude:	37.40398
Longitude:	-122.1016
APN:	147-54-031, 147-54-037, 147-54-038, 147-54-039, 14835001, 14835002, 14835003, 14835004, 14835005, 14835006, 14835007, 14835008, 14835009, 14835010, 14835011, 14835012, 14835013, 14835014, 14835015, 14835016, 14835017, 14835018, 14835019, 14835020, 14835021, 14835022, 14835023, 14835024, 14835025, 14835026, 14835027, 14835028, 14835029, 14835030, 14835031, 14835032, 14835033, 14835034, 14835035, 14835037, 14835038, 14835039, 14835040, 14835041, 14835042, 14835043, 14835044, 14835045, 14835046, 14835047, 14835048, 14835049, 14835050, 14835051, 14835052, 14835053, 14835054, 14835055, 14835056, 14835057, 14835058, 14835059, 14835060
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC :	Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride 1,1-Dichloroethylene 1,2-Dichloroethylene (cis Xylenes
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride 1,1-Dichloroethylene 1,2-Dichloroethylene (cis Xylenes
Potential Description:	OTH
Alias Name:	TRW/VIDAR
Alias Type:	Alternate Name
Alias Name:	147-54-031
Alias Type:	APN
Alias Name:	147-54-037
Alias Type:	APN
Alias Name:	147-54-038
Alias Type:	APN
Alias Name:	147-54-039
Alias Type:	APN
Alias Name:	14835001
Alias Type:	APN

TRW/VIDAR (Continued) **S100946989**

Alias Name:	14835002
Alias Type:	APN
Alias Name:	14835003
Alias Type:	APN
Alias Name:	14835004
Alias Type:	APN
Alias Name:	14835005
Alias Type:	APN
Alias Name:	14835006
Alias Type:	APN
Alias Name:	14835007
Alias Type:	APN
Alias Name:	14835008
Alias Type:	APN
Alias Name:	14835009
Alias Type:	APN
Alias Name:	14835010
Alias Type:	APN
Alias Name:	14835011
Alias Type:	APN
Alias Name:	14835012
Alias Type:	APN
Alias Name:	14835013
Alias Type:	APN
Alias Name:	14835014
Alias Type:	APN
Alias Name:	14835015
Alias Type:	APN
Alias Name:	14835016
Alias Type:	APN
Alias Name:	14835017
Alias Type:	APN
Alias Name:	14835018
Alias Type:	APN
Alias Name:	14835019
Alias Type:	APN
Alias Name:	14835020
Alias Type:	APN
Alias Name:	14835021
Alias Type:	APN
Alias Name:	14835022
Alias Type:	APN
Alias Name:	14835023
Alias Type:	APN
Alias Name:	14835024
Alias Type:	APN
Alias Name:	14835025
Alias Type:	APN
Alias Name:	14835026
Alias Type:	APN
Alias Name:	14835027
Alias Type:	APN
Alias Name:	14835028
Alias Type:	APN
Alias Name:	14835029
Alias Type:	APN
Alias Name:	14835030

TRW/VIDAR (Continued) **S100946989**

Alias Type:	APN
Alias Name:	14835031
Alias Type:	APN
Alias Name:	14835032
Alias Type:	APN
Alias Name:	14835033
Alias Type:	APN
Alias Name:	14835034
Alias Type:	APN
Alias Name:	14835035
Alias Type:	APN
Alias Name:	14835037
Alias Type:	APN
Alias Name:	14835038
Alias Type:	APN
Alias Name:	14835039
Alias Type:	APN
Alias Name:	14835040
Alias Type:	APN
Alias Name:	14835041
Alias Type:	APN
Alias Name:	14835042
Alias Type:	APN
Alias Name:	14835043
Alias Type:	APN
Alias Name:	14835044
Alias Type:	APN
Alias Name:	14835045
Alias Type:	APN
Alias Name:	14835046
Alias Type:	APN
Alias Name:	14835047
Alias Type:	APN
Alias Name:	14835048
Alias Type:	APN
Alias Name:	14835049
Alias Type:	APN
Alias Name:	14835050
Alias Type:	APN
Alias Name:	14835051
Alias Type:	APN
Alias Name:	14835052
Alias Type:	APN
Alias Name:	14835053
Alias Type:	APN
Alias Name:	14835054
Alias Type:	APN
Alias Name:	14835055
Alias Type:	APN
Alias Name:	14835056
Alias Type:	APN
Alias Name:	14835057
Alias Type:	APN
Alias Name:	14835058
Alias Type:	APN
Alias Name:	14835059
Alias Type:	APN

TRW/VIDAR (Continued) **S100946989**

Alias Name: 14835060
Alias Type: APN
Alias Name: 110033609753
Alias Type: EPA (FRS #)
Alias Name: 200246
Alias Type: Site Code - Historical
Alias Name: 200080
Alias Type: Project Code (Site Code)
Alias Name: 43360128
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 03/25/1998
Comments: Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 03/17/1997
Comments: Signed VCA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Consultation
Completed Date: 01/16/1998
Comments: Completed VCA Consultation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Prospective Purchaser Agreement
Completed Date: 02/10/2000
Comments: Signed PPA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 07/10/2001
Comments: Recorded Deed Restriction.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 11/01/2000
Comments: Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported

TRW/VIDAR (Continued) **S100946989**

Schedule Revised Date: Not reported

ENVIROSTOR:

Name:	TRW/VIDAR
Address:	77 ORTEGA AVENUE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	43360128
Status:	Certified O&M - Land Use Restrictions Only
Status Date:	09/28/2010
Site Code:	200080
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	9
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Henry Wong
Supervisor:	John Karachewski
Division Branch:	Cleanup Berkeley
Assembly:	24
Senate:	13
Special Program:	Prospective Purchaser Program
Restricted Use:	YES
Site Mgmt Req:	GW, OIL, EXT
Funding:	Responsible Party
Latitude:	37.40398
Longitude:	-122.1016
APN:	147-54-031, 147-54-037, 147-54-038, 147-54-039, 14835001, 14835002, 14835003, 14835004, 14835005, 14835006, 14835007, 14835008, 14835009, 14835010, 14835011, 14835012, 14835013, 14835014, 14835015, 14835016, 14835017, 14835018, 14835019, 14835020, 14835021, 14835022, 14835023, 14835024, 14835025, 14835026, 14835027, 14835028, 14835029, 14835030, 14835031, 14835032, 14835033, 14835034, 14835035, 14835037, 14835038, 14835039, 14835040, 14835041, 14835042, 14835043, 14835044, 14835045, 14835046, 14835047, 14835048, 14835049, 14835050, 14835051, 14835052, 14835053, 14835054, 14835055, 14835056, 14835057, 14835058, 14835059, 14835060
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride 1,1-Dichloroethylene 1,2-Dichloroethylene (cis Xylenes
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride 1,1-Dichloroethylene 1,2-Dichloroethylene (cis Xylenes
Potential Description:	OTH
Alias Name:	TRW/VIDAR
Alias Type:	Alternate Name
Alias Name:	147-54-031
Alias Type:	APN
Alias Name:	147-54-037
Alias Type:	APN
Alias Name:	147-54-038
Alias Type:	APN
Alias Name:	147-54-039
Alias Type:	APN
Alias Name:	14835001
Alias Type:	APN
Alias Name:	14835002
Alias Type:	APN

TRW/VIDAR (Continued) **S100946989**

Alias Name:	14835003
Alias Type:	APN
Alias Name:	14835004
Alias Type:	APN
Alias Name:	14835005
Alias Type:	APN
Alias Name:	14835006
Alias Type:	APN
Alias Name:	14835007
Alias Type:	APN
Alias Name:	14835008
Alias Type:	APN
Alias Name:	14835009
Alias Type:	APN
Alias Name:	14835010
Alias Type:	APN
Alias Name:	14835011
Alias Type:	APN
Alias Name:	14835012
Alias Type:	APN
Alias Name:	14835013
Alias Type:	APN
Alias Name:	14835014
Alias Type:	APN
Alias Name:	14835015
Alias Type:	APN
Alias Name:	14835016
Alias Type:	APN
Alias Name:	14835017
Alias Type:	APN
Alias Name:	14835018
Alias Type:	APN
Alias Name:	14835019
Alias Type:	APN
Alias Name:	14835020
Alias Type:	APN
Alias Name:	14835021
Alias Type:	APN
Alias Name:	14835022
Alias Type:	APN
Alias Name:	14835023
Alias Type:	APN
Alias Name:	14835024
Alias Type:	APN
Alias Name:	14835025
Alias Type:	APN
Alias Name:	14835026
Alias Type:	APN
Alias Name:	14835027
Alias Type:	APN
Alias Name:	14835028
Alias Type:	APN
Alias Name:	14835029
Alias Type:	APN
Alias Name:	14835030
Alias Type:	APN
Alias Name:	14835031

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

TRW/VIDAR (Continued) **S100946989**

Alias Type:	APN
Alias Name:	14835032
Alias Type:	APN
Alias Name:	14835033
Alias Type:	APN
Alias Name:	14835034
Alias Type:	APN
Alias Name:	14835035
Alias Type:	APN
Alias Name:	14835037
Alias Type:	APN
Alias Name:	14835038
Alias Type:	APN
Alias Name:	14835039
Alias Type:	APN
Alias Name:	14835040
Alias Type:	APN
Alias Name:	14835041
Alias Type:	APN
Alias Name:	14835042
Alias Type:	APN
Alias Name:	14835043
Alias Type:	APN
Alias Name:	14835044
Alias Type:	APN
Alias Name:	14835045
Alias Type:	APN
Alias Name:	14835046
Alias Type:	APN
Alias Name:	14835047
Alias Type:	APN
Alias Name:	14835048
Alias Type:	APN
Alias Name:	14835049
Alias Type:	APN
Alias Name:	14835050
Alias Type:	APN
Alias Name:	14835051
Alias Type:	APN
Alias Name:	14835052
Alias Type:	APN
Alias Name:	14835053
Alias Type:	APN
Alias Name:	14835054
Alias Type:	APN
Alias Name:	14835055
Alias Type:	APN
Alias Name:	14835056
Alias Type:	APN
Alias Name:	14835057
Alias Type:	APN
Alias Name:	14835058
Alias Type:	APN
Alias Name:	14835059
Alias Type:	APN
Alias Name:	14835060
Alias Type:	APN

TRW/VIDAR (Continued) **S100946989**

Alias Name: 110033609753
Alias Type: EPA (FRS #)
Alias Name: 200246
Alias Type: Site Code - Historical
Alias Name: 200080
Alias Type: Project Code (Site Code)
Alias Name: 43360128
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 03/25/1998
Comments: Issued IS&E Order to TRW, Inc, TRW Foundation and Plessey, Inc., VCA terminated

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 03/17/1997
Comments: Signed VCA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Consultation
Completed Date: 01/16/1998
Comments: Completed VCA Consultation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Prospective Purchaser Agreement
Completed Date: 02/10/2000
Comments: Signed PPA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 07/10/2001
Comments: Recorded Deed Restriction.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 11/01/2000
Comments: Soil sampling results indicate that soil residential standards were met and no groundwater contamination source on the property.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

TRW/VIDAR (Continued) **S100946989**

DEED:
Name: TRW/VIDAR
Address: 77 ORTEGA AVENUE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Envirostor ID: 43360128
Area: PROJECT WIDE
Sub Area: Not reported
Site Type: STATE RESPONSE
Status: CERTIFIED O&M - LAND USE RESTRICTIONS ONLY
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): Not reported
File Name: Envirostor Land Use Restrictions

CERS:
Name: TRW/VIDAR
Address: 77 ORTEGA AVENUE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Site ID: 344067
CERS ID: 43360128
CERS Description: State Response

Affiliation:
Affiliation Type Desc: Lead Project Manager
Entity Name: HENRY WONG
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: BERKELEY
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Supervisor
Entity Name: JANET NAITO
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

P78 **MORA DRIVE** **ENVIROSTOR** **S120714345**
NNE **2221-2291 MORA DRIVE** **VCP** **N/A**
1/2-1 **MOUNTAIN VIEW, CA 94040** **DEED**
0.519 mi.
2742 ft. **Site 4 of 4 in cluster P**

Relative:
Lower

Actual:
54 ft.

ENVIROSTOR:
Name: MORA DRIVE
Address: 2221-2291 MORA DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Facility ID: 60002502
Status: Active
Status Date: 04/27/2017

MORA DRIVE (Continued) **S120714345**

Site Code:	202139
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	4
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Henry Wong
Supervisor:	John Karachewski
Division Branch:	Cleanup Berkeley
Assembly:	, 24
Senate:	, 13
Special Program:	Voluntary Cleanup Program
Restricted Use:	YES
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.40279
Longitude:	-122.1020
APN:	14833009, 14833010, 14833013, 14833014, 14833015, 14833016, 14833017, 14833018, 14833019
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE
Potential Description:	SV
Alias Name:	14833009
Alias Type:	APN
Alias Name:	14833010
Alias Type:	APN
Alias Name:	14833013
Alias Type:	APN
Alias Name:	14833014
Alias Type:	APN
Alias Name:	14833015
Alias Type:	APN
Alias Name:	14833016
Alias Type:	APN
Alias Name:	14833017
Alias Type:	APN
Alias Name:	14833018
Alias Type:	APN
Alias Name:	14833019
Alias Type:	APN
Alias Name:	202139
Alias Type:	Project Code (Site Code)
Alias Name:	60002502
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Standard Voluntary Agreement
Completed Date:	05/19/2017
Comments:	The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.
Completed Area Name:	PROJECT WIDE

MORA DRIVE (Continued) **S120714345**

Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 06/19/2018
Comments: DTSC and Lennar executed the Voluntary Cleanup Agreement, Docket No. HSA-FY17/18-136, for overseeing activities performed at the project site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 08/02/2019
Comments: DTSC executed and recorded the Land Use Covenant and Agreement, Environmental Restrictions (LUC), Santa Clara County Series Number 24246045, for the Mora Drive project, also known as the Estancia residential development, comprising of approximately 4.53 acres. In general, the LUC prohibits Building any structures intended for human occupancy without an engineered vapor intrusion mitigation system approved by DTSC; Construction of any groundwater well without prior DTSC written approval; Extraction, utilization, or consumption of groundwater without prior DTSC written approval; Conducting activity that may alter, interfere with, or otherwise affect the integrity or effectiveness of, or the access to, the groundwater monitoring wells without prior DTSC written approval; Conducting activity that may alter, interfere with, or otherwise affect the integrity or effectiveness of, or the access to, any vapor intrusion mitigation systems as it pertains to each building on the property without prior DTSC written approval; and Conducting any sub-slab construction work or modification of vapor barriers and sub-slab venting systems associated with vapor intrusion mitigation systems installed at the property without prior DTSC written approval.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Responsible Agency Review
Completed Date: 06/28/2019
Comments: DTSC approved a Removal Action Workplan (RAW) for the site on June 8, 2019. The RAW requires (a) installation of vapor intrusion mitigation systems (VIMS) beneath all new building foundations and (b) execution of a land use covenant to restrict extraction of groundwater or installation of wells without DTSC s approval and construction of any building without installation of the DTSC-approved VIMS. In accordance with CEQA, DTSC approved the Notice of Determination in support of DTSC s discretionary decision on the RAW.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 09/24/2019
Comments: DTSC issued the Removal Action Certification for Building 1 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 1 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for Building 1 consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

MORA DRIVE (Continued) **S120714345**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 08/02/2019
Comments: DTSC executed an Operation and Maintenance Agreement with Lennar for (a) implementation of the DTSC-approved Vapor Intrusion Mitigation Plan dated 6/28/19, (b) operation and maintenance of the installed vapor intrusion mitigation system as specified in the DTSC-approved Operation and Maintenance Plan dated 6/28/19, and (c) reimbursement of DTSC oversight costs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/03/2019
Comments: On May 14, 2019, DTSC started the 30‐day public comment period requesting comments on the draft RAW. During the public comment period DTSC received comments via emails and a comment letter. DTSC prepared the Responsiveness Summary responding to public comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/22/2019
Comments: The cost estimate projects hours to be incurred (by staff classification) for planned oversight activities in fiscal year 2019/2020, which starts July 1, 2019 and ends June 30, 2020, and identifies the personnel labor rates.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 06/23/2020
Comments: The HARP is for site visit on 6/23/2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/13/2019
Comments: DTSC issued the Removal Action Certification for Buildings 3, 4, and 6 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting systems (SSVS) at Buildings 3, 4, and 6 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan (O&M Plan), (c) had converted the passive SSVS to active sub-slab depressurization systems for Buildings 3, 4, and 6 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan, and (d) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 01/07/2020
Comments: DTSC issued the Removal Action Certification for Building 9 attesting that Lennar (a) had implemented the removal action by installing a

MORA DRIVE (Continued) **S120714345**

passive sub-slab venting system at Building 9 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject building consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 04/30/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 10/15/2019
Comments: DTSC issued the Removal Action Certification for Building 5 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system (SSVS) at Building 5 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for Building 5 consistent with the Operation and Maintenance Plan (O&M Plan), (c) had converted the passive SSVS to active sub-slab depressurization system for Building 5 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan, and (d) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 01/16/2020
Comments: DTSC issued the Removal Action Certification for Buildings 10, 17, and 18 attesting that Lennar (a) had implemented the removal action by installing passive sub-slab venting systems at Buildings 10, 17, and 18 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 01/16/2020
Comments: DTSC issued the Removal Action Certification for Buildings 16 and 22 attesting that Lennar (a) had implemented the removal action by installing passive sub-slab venting systems at Buildings 16 and 22 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

MORA DRIVE (Continued) **S120714345**

Completed Document Type: Certification
Completed Date: 02/27/2020
Comments: DTSC issued the Removal Action Certification for Building 11 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 11 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject building consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 12/17/2019
Comments: DTSC issued the Removal Action Certification for Buildings 2, 7, 24, and 25 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system (SSVS) at Buildings 2, 7, 24, and 25 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan (O&M Plan), (c) had converted the passive SSVS to active sub-slab depressurization system for Buildings 2, 7, 24, and 25 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan, and (d) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/03/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/21/2019
Comments: DTSC issued the Removal Action Certification for Buildings 19, 20, and 21 attesting that Lennar (a) had implemented the removal action by installing passive sub-slab venting systems at Buildings 19, 20, and 21 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 04/27/2017
Comments: Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan

MORA DRIVE (Continued) **S120714345**

Completed Date: 05/19/2017
Comments: The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement Termination Notification
Completed Date: 09/19/2017
Comments: The Voluntary Cleanup Agreement s (VCA) scope of work specifies that DTSC review and provide comments on the Site Management Plan. Since DTSC completed the Site Management Plan review process, the VCA s scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 07/03/2019
Comments: Lennar had prepared the Vapor Intrusion Mitigation Plan (VIMP) dated May 28, 2017 and DTSC approved such plan on May 31, 2017. The 2019 VIMP updates certain design elements and supersedes the 2017 VIMP. The VIMP describes the design and installation of a vapor intrusion mitigation system beneath every new building within the 5.2-acre Mora Drive project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 06/28/2019
Comments: DTSC approved a Removal Action Workplan (RAW) for the site on June 8, 2019. The RAW requires (a) installation of vapor intrusion mitigation systems (VIMS) beneath all new building foundations and (b) execution of a land use covenant to restrict extraction of groundwater or installing of wells without DTSC s approval and construction of any building without installation of the DTSC-approved VIMS. In accordance with CEQA, DTSC approved the Notice of Determination in support of DTSC s discretionary decision on the RAW.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 05/10/2019
Comments: DTSC mailed the Community Update on 5/10/2019 to approximately 550 addresses on the project’s mailing list announcing the 30-day public comment period for the Removal Action Workplan to begin on 5/14/2019.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 05/13/2019
Comments: DTSC published a Public Notice on the 5/13/2019 printed version of the Mercury News announcing that the 30-day public comment period for the Removal Action Workplan will begin on 5/14/2019.

MORA DRIVE (Continued) **S120714345**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan
Completed Date: 07/03/2019
Comments: The Operation and Maintenance Plan outlines the inspection, maintenance, and monitoring program for maintaining the proper function of the vapor intrusion mitigation systems for buildings within the 4.5-acre residential area currently owned by Lennar.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 09/24/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 1 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for Building 1 consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Phase I Environmental Site Assessment, September 17, 2012

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Preliminary Data Gap Evaluation, September 27, 2012

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Indoor Air Investigation Report, Towne Court Property, September 17, 2013

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Phase I Environmental Site Assessment, October 24, 2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Phase II Subsurface Investigation Report and Proposed Remedial Plan, September 1, 2015

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Groundwater Wells Destruction Reports, October 16, 2015

MORA DRIVE (Continued) **S120714345**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Groundwater and Soil Vapor Wells Destruction Reports, November 5, 2015
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Post Demolition Soil Gas Investigation Report and Recommendations for Future Soil Excavation Activities, October 13, 2016

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Soil Gas Sampling, April 27, 2017

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: June 2017 Soil Excavation Summary, Site status Update and Anticipated Future Activities, September 12, 2017

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/27/2020
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 11 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 05/06/2019
Comments: The Community Profile provides the public with a description of the Site and the community in which it is located, and helps DTSC determine potential community interest in the cleanup, and recommends future public participation activities for the cleanup. In addition, the Community Profile also describes community demographics and land uses in areas surrounding the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/15/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system (SSVS) at Building 5 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and

MORA DRIVE (Continued) **S120714345**

sub-slab gas sampling events for Building 5 consistent with the Operation and Maintenance Plan (O&M Plan), and (c) had converted the passive SSVS to active sub-slab depressurization system for Building 5 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/13/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing passive sub-slab venting systems (SSVS) at Buildings 3, 4, and 6 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan (O&M Plan), and (c) had converted the passive SSVS to active sub-slab depressurization systems for Buildings 3, 4, and 6 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/21/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting systems at Buildings 19, 20, and 21 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 09/19/2019
Comments: Previously, Lennar had prepared two Vapor Intrusion Mitigation Plan (VIMP) versions dated May 28, 2017 and June 28, 2019; and DTSC approved these plans on May 31, 2017 and July 3, 2019, respectively. The September 18, 2019 VIMP updates certain design elements and supersedes the earlier VIMP versions. The VIMP describes the design and installation of a vapor intrusion mitigation system beneath every new building within the 5.2-acre Mora Drive project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan Amendment
Completed Date: 09/19/2019
Comments: Previously, Lennar had prepared the Operation and Maintenance Plan (O&M Plan) dated June 28, 2019; and DTSC approved such plan on July 3, 2019. The September 18, 2019 O&M Plan updates certain design elements and supersedes the previous O&M Plan. The O&M Plan outlines the inspection, maintenance, and monitoring program for maintaining the proper function of the vapor intrusion mitigation systems for buildings within the 4.5-acre residential area currently owned by Lennar.

MORA DRIVE (Continued) **S120714345**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 12/17/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing passive sub-slab venting system (SSVS) at Buildings 2, 7, 24, and 25 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan (O&M Plan), and (c) had converted the passive SSVS to active sub-slab depressurization system for Buildings 2, 7, 24, and 25 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/07/2020
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 9 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject building consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/16/2020
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Buildings 10, 17, and 18 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/16/2020
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Buildings 16 and 22 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2024
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Removal Action Completion Report
Schedule Due Date: 07/02/2020
Schedule Revised Date: Not reported

MORA DRIVE (Continued) **S120714345**

VCP:

Name:	MORA DRIVE
Address:	2221-2291 MORA DRIVE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	60002502
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Henry Wong
Supervisor:	John Karachewski
Division Branch:	Cleanup Berkeley
Site Code:	202139
Assembly:	, 24
Senate:	, 13
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	04/27/2017
Restricted Use:	YES
Funding:	Responsible Party
Lat/Long:	37.40279 / -122.1020
APN:	14833009, 14833010, 14833013, 14833014, 14833015, 14833016, 14833017, 14833018, 14833019
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC:	30022, 30027
Confirmed COC:	30022,30027
Potential Description:	SV
Alias Name:	14833009
Alias Type:	APN
Alias Name:	14833010
Alias Type:	APN
Alias Name:	14833013
Alias Type:	APN
Alias Name:	14833014
Alias Type:	APN
Alias Name:	14833015
Alias Type:	APN
Alias Name:	14833016
Alias Type:	APN
Alias Name:	14833017
Alias Type:	APN
Alias Name:	14833018
Alias Type:	APN
Alias Name:	14833019
Alias Type:	APN
Alias Name:	202139
Alias Type:	Project Code (Site Code)
Alias Name:	60002502
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

MORA DRIVE (Continued) **S120714345**

Completed Document Type: Standard Voluntary Agreement
Completed Date: 05/19/2017
Comments: The Voluntary Cleanup Agreement establishes DTSC's role and the project proponent's responsibility in the oversight activity identified in the scope of work, which includes the review of a site management plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 06/19/2018
Comments: DTSC and Lennar executed the Voluntary Cleanup Agreement, Docket No. HSA-FY17/18-136, for overseeing activities performed at the project site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 08/02/2019
Comments: DTSC executed and recorded the Land Use Covenant and Agreement, Environmental Restrictions (LUC), Santa Clara County Series Number 24246045, for the Mora Drive project, also known as the Estancia residential development, comprising of approximately 4.53 acres. In general, the LUC prohibits Building any structures intended for human occupancy without an engineered vapor intrusion mitigation system approved by DTSC; Construction of any groundwater well without prior DTSC written approval; Extraction, utilization, or consumption of groundwater without prior DTSC written approval; Conducting activity that may alter, interfere with, or otherwise affect the integrity or effectiveness of, or the access to, the groundwater monitoring wells without prior DTSC written approval; Conducting activity that may alter, interfere with, or otherwise affect the integrity or effectiveness of, or the access to, any vapor intrusion mitigation systems as it pertains to each building on the property without prior DTSC written approval; and Conducting any sub-slab construction work or modification of vapor barriers and sub-slab venting systems associated with vapor intrusion mitigation systems installed at the property without prior DTSC written approval.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Responsible Agency Review
Completed Date: 06/28/2019
Comments: DTSC approved a Removal Action Workplan (RAW) for the site on June 8, 2019. The RAW requires (a) installation of vapor intrusion mitigation systems (VIMS) beneath all new building foundations and (b) execution of a land use covenant to restrict extraction of groundwater or installation of wells without DTSC s approval and construction of any building without installation of the DTSC-approved VIMS. In accordance with CEQA, DTSC approved the Notice of Determination in support of DTSC s discretionary decision on the RAW.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 09/24/2019
Comments: DTSC issued the Removal Action Certification for Building 1 attesting

MORA DRIVE (Continued) **S120714345**

that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 1 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for Building 1 consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 08/02/2019
Comments: DTSC executed an Operation and Maintenance Agreement with Lennar for (a) implementation of the DTSC-approved Vapor Intrusion Mitigation Plan dated 6/28/19, (b) operation and maintenance of the installed vapor intrusion mitigation system as specified in the DTSC-approved Operation and Maintenance Plan dated 6/28/19, and (c) reimbursement of DTSC oversight costs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/03/2019
Comments: On May 14, 2019, DTSC started the 30‐day public comment period requesting comments on the draft RAW. During the public comment period DTSC received comments via emails and a comment letter. DTSC prepared the Responsiveness Summary responding to public comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/22/2019
Comments: The cost estimate projects hours to be incurred (by staff classification) for planned oversight activities in fiscal year 2019/2020, which starts July 1, 2019 and ends June 30, 2020, and identifies the personnel labor rates.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 06/23/2020
Comments: The HARP is for site visit on 6/23/2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/13/2019
Comments: DTSC issued the Removal Action Certification for Buildings 3, 4, and 6 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting systems (SSVS) at Buildings 3, 4, and 6 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan (O&M Plan), (c) had converted the passive SSVS to active sub-slab depressurization systems for Buildings 3, 4, and 6 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan, and (d) had

MORA DRIVE (Continued) **S120714345**

implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 01/07/2020
Comments: DTSC issued the Removal Action Certification for Building 9 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 9 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject building consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 04/30/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 10/15/2019
Comments: DTSC issued the Removal Action Certification for Building 5 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system (SSVS) at Building 5 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for Building 5 consistent with the Operation and Maintenance Plan (O&M Plan), (c) had converted the passive SSVS to active sub-slab depressurization system for Building 5 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan, and (d) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 01/16/2020
Comments: DTSC issued the Removal Action Certification for Buildings 10, 17, and 18 attesting that Lennar (a) had implemented the removal action by installing passive sub-slab venting systems at Buildings 10, 17, and 18 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 01/16/2020
Comments: DTSC issued the Removal Action Certification for Buildings 16 and 22 attesting that Lennar (a) had implemented the removal action by installing passive sub-slab venting systems at Buildings 16 and 22 in

MORA DRIVE (Continued) **S120714345**

accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 02/27/2020
Comments: DTSC issued the Removal Action Certification for Building 11 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 11 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject building consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 12/17/2019
Comments: DTSC issued the Removal Action Certification for Buildings 2, 7, 24, and 25 attesting that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system (SSVS) at Buildings 2, 7, 24, and 25 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan (O&M Plan), (c) had converted the passive SSVS to active sub-slab depressurization system for Buildings 2, 7, 24, and 25 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan, and (d) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/03/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/21/2019
Comments: DTSC issued the Removal Action Certification for Buildings 19, 20, and 21 attesting that Lennar (a) had implemented the removal action by installing passive sub-slab venting systems at Buildings 19, 20, and 21 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan, and (c) had implemented the required institutional control remedy for the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

MORA DRIVE (Continued) **S120714345**

Completed Document Type: Application
Completed Date: 04/27/2017
Comments: Application for a Voluntary Cleanup Agreement requesting DTSC to provide review and approval of a Site Management Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 05/19/2017
Comments: The Site Management Plan (SMP) establishes general protocols for handling soil, soil vapor, and groundwater during utility line removal, soil excavation, and future construction at the Mora Drive site. The SMP includes the Health and Safety Plan as Appendix A and a separate SMP for the future city park as Appendix B.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement Termination Notification
Completed Date: 09/19/2017
Comments: The Voluntary Cleanup Agreement s (VCA) scope of work specifies that DTSC review and provide comments on the Site Management Plan. Since DTSC completed the Site Management Plan review process, the VCA s scope of work is fulfilled. DTSC notified Lennar that the VCA will be terminated on October 19, 2017.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 07/03/2019
Comments: Lennar had prepared the Vapor Intrusion Mitigation Plan (VIMP) dated May 28, 2017 and DTSC approved such plan on May 31, 2017. The 2019 VIMP updates certain design elements and supersedes the 2017 VIMP. The VIMP describes the design and installation of a vapor intrusion mitigation system beneath every new building within the 5.2-acre Mora Drive project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 06/28/2019
Comments: DTSC approved a Removal Action Workplan (RAW) for the site on June 8, 2019. The RAW requires (a) installation of vapor intrusion mitigation systems (VIMS) beneath all new building foundations and (b) execution of a land use covenant to restrict extraction of groundwater or installing of wells without DTSC s approval and construction of any building without installation of the DTSC-approved VIMS. In accordance with CEQA, DTSC approved the Notice of Determination in support of DTSC s discretionary decision on the RAW.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 05/10/2019
Comments: DTSC mailed the Community Update on 5/10/2019 to approximately 550 addresses on the project's mailing list announcing the 30-day public comment period for the Removal Action Workplan to begin on 5/14/2019.

MORA DRIVE (Continued) **S120714345**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 05/13/2019
Comments: DTSC published a Public Notice on the 5/13/2019 printed version of the Mercury News announcing that the 30-day public comment period for the Removal Action Workplan will begin on 5/14/2019.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan
Completed Date: 07/03/2019
Comments: The Operation and Maintenance Plan outlines the inspection, maintenance, and monitoring program for maintaining the proper function of the vapor intrusion mitigation systems for buildings within the 4.5-acre residential area currently owned by Lennar.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 09/24/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 1 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for Building 1 consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Phase I Environmental Site Assessment, September 17, 2012

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Preliminary Data Gap Evaluation, September 27, 2012

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Indoor Air Investigation Report, Towne Court Property, September 17, 2013

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Phase I Environmental Site Assessment, October 24, 2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018

MORA DRIVE (Continued) **S120714345**

Comments: Phase II Subsurface Investigation Report and Proposed Remedial Plan, September 1, 2015

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Groundwater Wells Destruction Reports, October 16, 2015

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Groundwater and Soil Vapor Wells Destruction Reports, November 5, 2015
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Post Demolition Soil Gas Investigation Report and Recommendations for Future Soil Excavation Activities, October 13, 2016

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: Soil Gas Sampling, April 27, 2017

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/30/2018
Comments: June 2017 Soil Excavation Summary, Site status Update and Anticipated Future Activities, September 12, 2017

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/27/2020
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 11 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 05/06/2019
Comments: The Community Profile provides the public with a description of the Site and the community in which it is located, and helps DTSC determine potential community interest in the cleanup, and recommends future public participation activities for the cleanup. In addition, the Community Profile also describes community demographics and land uses in areas surrounding the Site.

MORA DRIVE (Continued) **S120714345**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/15/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system (SSVS) at Building 5 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for Building 5 consistent with the Operation and Maintenance Plan (O&M Plan), and (c) had converted the passive SSVS to active sub-slab depressurization system for Building 5 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/13/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing passive sub-slab venting systems (SSVS) at Buildings 3, 4, and 6 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan (O&M Plan), and (c) had converted the passive SSVS to active sub-slab depressurization systems for Buildings 3, 4, and 6 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/21/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting systems at Buildings 19, 20, and 21 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 09/19/2019
Comments: Previously, Lennar had prepared two Vapor Intrusion Mitigation Plan (VIMP) versions dated May 28, 2017 and June 28, 2019; and DTSC approved these plans on May 31, 2017 and July 3, 2019, respectively. The September 18, 2019 VIMP updates certain design elements and supersedes the earlier VIMP versions. The VIMP describes the design and installation of a vapor intrusion mitigation system beneath every new building within the 5.2-acre Mora Drive project area.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan Amendment
Completed Date: 09/19/2019
Comments: Previously, Lennar had prepared the Operation and Maintenance Plan

MORA DRIVE (Continued) **S120714345**

(O&M Plan) dated June 28, 2019; and DTSC approved such plan on July 3, 2019. The September 18, 2019 O&M Plan updates certain design elements and supersedes the previous O&M Plan. The O&M Plan outlines the inspection, maintenance, and monitoring program for maintaining the proper function of the vapor intrusion mitigation systems for buildings within the 4.5-acre residential area currently owned by Lennar.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 12/17/2019
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing passive sub-slab venting system (SSVS) at Buildings 2, 7, 24, and 25 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan, (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan (O&M Plan), and (c) had converted the passive SSVS to active sub-slab depressurization system for Buildings 2, 7, 24, and 25 pursuant to the Bay Area Air Quality Management District s Temporary Permit to Operate and O&M Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/07/2020
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Building 9 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject building consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/16/2020
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Buildings 10, 17, and 18 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/16/2020
Comments: DTSC concluded that Lennar (a) had implemented the removal action by installing a passive sub-slab venting system at Buildings 16 and 22 in accordance with the Removal Action Workplan and Vapor Intrusion Mitigation Plan and (b) had performed ambient air, indoor air, and sub-slab gas sampling events for the subject buildings consistent with the Operation and Maintenance Plan.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported

MORA DRIVE (Continued) **S120714345**

Future Document Type: 5 Year Review Reports
Future Due Date: 2024
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Removal Action Completion Report
Schedule Due Date: 07/02/2020
Schedule Revised Date: Not reported

DEED:
Name: MORA DRIVE
Address: 2221-2291 MORA DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Envirostor ID: 60002502
Area: PROJECT WIDE
Sub Area: Not reported
Site Type: VOLUNTARY CLEANUP
Status: ACTIVE
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): Not reported
File Name: Envirostor Land Use Restrictions

79
NNW
1/2-1
0.616 mi.
3253 ft.

PROPOSED SAN ANTONIO ELEMENTARY SCHOOL **ENVIROSTOR SCH** **S126143196 N/A**
435 SAN ANTONIO ROAD, 2535 CALIFORNIA STREET, 350, 506, 510-
MOUNTAIN VIEW, CA 94040

Relative:
Lower

Actual:
57 ft.

ENVIROSTOR:
Name: PROPOSED SAN ANTONIO ELEMENTARY SCHOOL
Address: 435 SAN ANTONIO ROAD, 2535 CALIFORNIA STREET, 350, 506, 510-520 SHOWERS DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Facility ID: 60002949
Status: Active
Status Date: 02/19/2020
Site Code: 204321
Site Type: School Investigation
Site Type Detailed: School
Acres: 11.7
NPL: NO
Regulatory Agencies: SANTA CLARA COUNTY
Lead Agency: SANTA CLARA COUNTY
Program Manager: Jose Luevano
Supervisor: Jose Salcedo
Division Branch: Northern California Schools & Santa Susana
Assembly: 24
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 37.40408
Longitude: -122.1117
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ORCHARD, RETAIL
Potential COC: Arsenic Chlordane DDD DDE DDT Endrin Lead Polychlorinated biphenyls

PROPOSED SAN ANTONIO ELEMENTARY SCHOOL (Continued) **S126143196**

(PCBs Polynuclear aromatic hydrocarbons (PAHs Toxaphene TPH-diesel TPH-MOTOR OIL Aldrin Dieldrin Endosulfan Heptachlor Heptachlor epoxide HCH (alpha HCH (beta HCH (gamma) Lindane HCH-technical Mirex

Confirmed COC: Not reported
Potential Description: SOIL
Alias Name: 204321
Alias Type: Project Code (Site Code)
Alias Name: 60002949
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 07/16/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement Application
Completed Date: 02/20/2020
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: PROPOSED SAN ANTONIO ELEMENTARY SCHOOL
Address: 435 SAN ANTONIO ROAD, 2535 CALIFORNIA STREET, 350, 506, 510-520 SHOWERS DRIVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
Facility ID: 60002949
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 11.7
National Priorities List: NO
Cleanup Oversight Agencies: SANTA CLARA COUNTY
Lead Agency: SANTA CLARA COUNTY
Lead Agency Description: SANTA CLARA COUNTY
Project Manager: Jose Luevano
Supervisor: Jose Salcedo
Division Branch: Northern California Schools & Santa Susana
Site Code: 204321
Assembly: 24
Senate: 13
Special Program Status: Not reported
Status: Active
Status Date: 02/19/2020
Restricted Use: NO

PROPOSED SAN ANTONIO ELEMENTARY SCHOOL (Continued) **S126143196**

Funding:	School District
Latitude:	37.40408
Longitude:	-122.1117
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ORCHARD, RETAIL
Potential COC:	Arsenic, Chlordane, DDD, DDE, DDT, Endrin, Lead, Polychlorinated biphenyls (PCBs, Polynuclear aromatic hydrocarbons (PAHs, Toxaphene, TPH-diesel, TPH-MOTOR OIL, Aldrin, Dieldrin, Endosulfan, Heptachlor, Heptachlor epoxide, HCH (alpha, HCH (beta, HCH (gamma) Lindane, HCH-technical, Mirex

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80
NE
1/2-1
0.653 mi.
3446 ft.

Relative:
Lower

Actual:
53 ft.

SHELL SERVICE STATION
110 N RENGSTORFF
MOUNTAIN VIEW, CA 94040

RCRA-SQG **1000288537**
LUST **CAD980675961**
HIST LUST
SWEEPS UST
HIST UST
CA FID UST
Cortese
CUPA Listings
HIST CORTESE
Notify 65
CERS

RCRA-SQG:

Date Form Received by Agency:	2001-08-15 00:00:00.0
Handler Name:	SHELL SERVICE STATION
Handler Address:	110 N RENGSTORFF
Handler City,State,Zip:	MOUNTAIN VIEW, CA 94040
EPA ID:	CAD980675961
Contact Name:	SONDRA BIENVENU
Contact Address:	P O BOX 2648
Contact City,State,Zip:	HOUTON, TX 77252-2648
Contact Telephone:	713-241-5036
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	P O BOX 2648
Mailing City,State,Zip:	HOUTON, TX 77252-2648
Owner Name:	EQUILON ENTERPRISES L L C
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No

SHELL SERVICE STATION (Continued) **1000288537**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-10-07 16:37:42.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	EQUILON ENTERPRISES L L C

SHELL SERVICE STATION (Continued) **1000288537**

Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P O BOX 2648
Owner/Operator City,State,Zip:	HOUTON, TX 77252-2648
Owner/Operator Telephone:	713-241-5036
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2001-08-15 00:00:00.0
Handler Name:	SHELL SERVICE STATION
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

LUST:

Name:	SHELL - 110 N RENGSTORFF
Address:	110 N. RENGSTORFF AVE.
City,State,Zip:	MOUNTAIN VIEW, CA 94043
Lead Agency:	SANTA CLARA COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501243
Global Id:	T0608501243
Latitude:	37.403680988
Longitude:	-122.09744
Status:	Completed - Case Closed
Status Date:	04/15/2015
Case Worker:	AC
RB Case Number:	19-049
Local Agency:	SANTA CLARA COUNTY LOP
File Location:	All Files are on GeoTracker or in the Local Agency Database
Local Case Number:	06S2W17R01f
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Benzene, Diesel, Gasoline, MTBE / TBA / Other Fuel Oxygenates, Toluene, Total Petroleum Hydrocarbons (TPH), Xylene
Site History:	The site is currently an active Shell-branded service station located

SHELL SERVICE STATION (Continued) **1000288537**

on the northwest corner at the intersection of North Rengstorff and Central Expressway. The station facilities consist of a small kiosk, a car wash, three fuel dispenser islands and four underground storage tanks (USTs). Remediation has been conducted since 1991 to address contamination associated with leaking USTs. Remediation activities included excavation of 1,800 cubic yards of soil, soil vapor extraction, and groundwater extraction. Case closure was previously issued by the County of Santa Clara DEH on April 11, 2005, and fifteen of the twenty existing monitoring wells were destroyed. Remaining wells were maintained by Shell as part of an ongoing groundwater assessment program. The case was re-opened in August 2006 and groundwater extraction resumed until June 2008.

LUST:
Global Id: T0608501243
Contact Type: Local Agency Caseworker
Contact Name: AARON COSTA
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: aaron.costa@cep.sccgov.org
Phone Number: 4089181954

Global Id: T0608501243
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 04/11/2005
Action: Closure/No Further Action Letter

Global Id: T0608501243
Action Type: RESPONSE
Date: 04/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608501243
Action Type: RESPONSE
Date: 04/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/28/2011
Action: Soil and Water Investigation Report

SHELL SERVICE STATION (Continued) **1000288537**

Global Id: T0608501243
Action Type: RESPONSE
Date: 06/11/1988
Action: Monitoring Report - Quarterly

Global Id: T0608501243
Action Type: RESPONSE
Date: 04/25/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/13/2008
Action: Monitoring Report - Quarterly

Global Id: T0608501243
Action Type: RESPONSE
Date: 03/14/1989
Action: Other Workplan

Global Id: T0608501243
Action Type: RESPONSE
Date: 08/03/1988
Action: Unauthorized Release Form

Global Id: T0608501243
Action Type: RESPONSE
Date: 07/31/1996
Action: Other Report / Document

Global Id: T0608501243
Action Type: RESPONSE
Date: 07/28/1988
Action: Other Report / Document

Global Id: T0608501243
Action Type: RESPONSE
Date: 01/01/1989
Action: Correspondence

Global Id: T0608501243
Action Type: RESPONSE
Date: 11/14/1991
Action: Other Report / Document

Global Id: T0608501243
Action Type: RESPONSE
Date: 11/20/2012
Action: Other Report / Document

Global Id: T0608501243
Action Type: RESPONSE
Date: 01/14/1983
Action: Soil and Water Investigation Report

Global Id: T0608501243
Action Type: RESPONSE

SHELL SERVICE STATION (Continued) **1000288537**

Date: 01/01/2006
Action: Correspondence

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/20/2006
Action: Monitoring Report - Quarterly

Global Id: T0608501243
Action Type: RESPONSE
Date: 08/02/2002
Action: Monitoring Report - Quarterly

Global Id: T0608501243
Action Type: Other
Date: 07/11/1988
Action: Leak Discovery

Global Id: T0608501243
Action Type: RESPONSE
Date: 09/12/2006
Action: Other Workplan

Global Id: T0608501243
Action Type: RESPONSE
Date: 05/02/2005
Action: Well Destruction Report

Global Id: T0608501243
Action Type: RESPONSE
Date: 01/18/2000
Action: NPDES / WDR Reports

Global Id: T0608501243
Action Type: RESPONSE
Date: 06/03/2005
Action: Other Report / Document

Global Id: T0608501243
Action Type: RESPONSE
Date: 11/20/1990
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608501243
Action Type: RESPONSE
Date: 01/28/1993
Action: Interim Remedial Action Report

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/18/1964
Action: Other Report / Document

Global Id: T0608501243
Action Type: RESPONSE
Date: 11/26/2013
Action: Other Report / Document

SHELL SERVICE STATION (Continued) **1000288537**

Global Id: T0608501243
Action Type: RESPONSE
Date: 09/28/1988
Action: Site Assessment Report

Global Id: T0608501243
Action Type: RESPONSE
Date: 06/15/2006
Action: Other Report / Document

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/31/2012
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0608501243
Action Type: RESPONSE
Date: 11/01/2013
Action: Other Report / Document - Regulator Responded

Global Id: T0608501243
Action Type: RESPONSE
Date: 02/14/2014
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0608501243
Action Type: RESPONSE
Date: 06/20/2014
Action: Request for Closure - Regulator Responded

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 03/25/1991
Action: Notice of Responsibility - #40116

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 05/02/1991
Action: Staff Letter - #19250

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 04/11/2005
Action: Closure/No Further Action Letter - #501140

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 08/31/1999
Action: Staff Letter - #30239

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 04/21/1997
Action: Staff Letter - #30232

Global Id: T0608501243
Action Type: ENFORCEMENT

SHELL SERVICE STATION (Continued) **1000288537**

Date: 06/03/2005
Action: Other Report

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/31/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608501243
Action Type: RESPONSE
Date: 04/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0608501243
Action Type: REMEDIATION
Date: 09/20/1991
Action: Excavation

Global Id: T0608501243
Action Type: REMEDIATION
Date: 09/20/1991
Action: Free Product Removal

Global Id: T0608501243
Action Type: REMEDIATION
Date: 09/20/1991
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608501243
Action Type: REMEDIATION
Date: 09/20/1991
Action: Soil Vapor Extraction (SVE)

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 11/21/2012
Action: Staff Letter

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 11/20/2012
Action: Notice of Responsibility

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 09/13/2013
Action: Staff Letter

Global Id: T0608501243
Action Type: Other
Date: 12/01/1982
Action: Leak Stopped

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 11/10/2010
Action: Staff Letter

SHELL SERVICE STATION (Continued) **1000288537**

Global Id: T0608501243
Action Type: RESPONSE
Date: 04/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 12/05/2013
Action: Staff Letter

Global Id: T0608501243
Action Type: Other
Date: 08/03/1988
Action: Leak Reported

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 07/29/2009
Action: Staff Letter

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 08/08/2014
Action: Staff Letter

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 02/19/2014
Action: Staff Letter

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/15/1999
Action: Monitoring Report - Quarterly

Global Id: T0608501243
Action Type: RESPONSE
Date: 04/28/1997
Action: Monitoring Report - Quarterly

Global Id: T0608501243
Action Type: RESPONSE
Date: 06/20/2014
Action: Site Assessment Report

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 11/06/2014
Action: Notification - Public Notice of Case Closure

Global Id: T0608501243
Action Type: ENFORCEMENT

SHELL SERVICE STATION (Continued) **1000288537**

Date: 04/15/2015
Action: Closure/No Further Action Letter

Global Id: T0608501243
Action Type: RESPONSE
Date: 10/31/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608501243
Action Type: ENFORCEMENT
Date: 01/07/2015
Action: Staff Letter

Global Id: T0608501243
Action Type: RESPONSE
Date: 04/10/2015
Action: Well Destruction Report

LUST:
Global Id: T0608501243
Status: Open - Case Begin Date
Status Date: 01/14/1983

Global Id: T0608501243
Status: Open - Site Assessment
Status Date: 01/14/1983

Global Id: T0608501243
Status: Open - Site Assessment
Status Date: 11/10/1988

Global Id: T0608501243
Status: Completed - Case Closed
Status Date: 04/11/2005

Global Id: T0608501243
Status: Open - Reopen Case
Status Date: 06/22/2006

Global Id: T0608501243
Status: Open - Site Assessment
Status Date: 10/06/2006

Global Id: T0608501243
Status: Open - Verification Monitoring
Status Date: 08/16/2012

Global Id: T0608501243
Status: Open - Eligible for Closure
Status Date: 08/19/2014

Global Id: T0608501243
Status: Completed - Case Closed
Status Date: 04/15/2015

SHELL SERVICE STATION (Continued) **1000288537**

LUST REG 2:
- Region: 2
- Facility Id: Not reported
- Facility Status: Pollution Characterization
- Case Number: 06S2W17R01f
- How Discovered: Not reported
- Leak Cause: Not reported
- Leak Source: Not reported
- Date Leak Confirmed: Not reported
- Oversight Program: LUST
- Prelim. Site Assesment Wokplan Submitted: Not reported
- Preliminary Site Assesment Began: 1/14/1983
- Pollution Characterization Began: 11/10/1988
- Pollution Remediation Plan Submitted: Not reported
- Date Remediation Action Underway: Not reported
- Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
- Name: SHELL
- Address: 110 RENGSTORFF AVE
- City,State,Zip: MOUNTAIN VIEW, CA
- Region: SANTA CLARA
- SCVWD ID: 06S2W17R01F
- Date Closed: Not reported
- EDR Link ID: 06S2W17R01F

HIST LUST SANTA CLARA:
- Name: Shell
- Address: 110 N Rengstorff Ave
- City: Mountain View
- Region: SANTA CLARA
- Region Code: 2
- SCVWD ID: 06S2W17R01
- Oversite Agency: SCVWD
- Date Listed: 1990-01-01 00:00:00
- Closed Date: Not reported

SWEEPS UST:
- Name: SHELL OIL COMPANY
- Address: 110 N RENGSTORFF AVE
- City: MOUNTAIN VIEW
- Status: Active
- Comp Number: 56732
- Number: 9
- Board Of Equalization: 44-000074
- Referral Date: 07-01-85
- Action Date: Not reported
- Created Date: 10-13-88
- Owner Tank Id: 1
- SWRCB Tank Id: 43-005-056732-000001
- Tank Status: A
- Capacity: 12000
- Active Date: 09-26-91
- Tank Use: M.V. FUEL
- STG: P

SHELL SERVICE STATION (Continued) **1000288537**

Content: REG UNLEADED
Number Of Tanks: 4

Name: SHELL OIL COMPANY
Address: 110 N RENGSTORFF AVE
City: MOUNTAIN VIEW
Status: Active
Comp Number: 56732
Number: 9
Board Of Equalization: 44-000074
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 10-13-88
Owner Tank Id: 2
SWRCB Tank Id: 43-005-056732-000002
Tank Status: A
Capacity: 12000
Active Date: 01-06-94
Tank Use: M.V. FUEL
STG: P
Content: SUPER UNLEAD
Number Of Tanks: Not reported

Name: SHELL OIL COMPANY
Address: 110 N RENGSTORFF AVE
City: MOUNTAIN VIEW
Status: Active
Comp Number: 56732
Number: 9
Board Of Equalization: 44-000074
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 10-13-88
Owner Tank Id: 3
SWRCB Tank Id: 43-005-056732-000003
Tank Status: A
Capacity: 12000
Active Date: 01-06-94
Tank Use: M.V. FUEL
STG: P
Content: SUPER UNLEAD
Number Of Tanks: Not reported

Name: SHELL OIL COMPANY
Address: 110 N RENGSTORFF AVE
City: MOUNTAIN VIEW
Status: Active
Comp Number: 56732
Number: 9
Board Of Equalization: 44-000074
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 10-13-88
Owner Tank Id: 4
SWRCB Tank Id: 43-005-056732-000004
Tank Status: A
Capacity: 12000

SHELL SERVICE STATION (Continued) **1000288537**

Active Date: 09-26-91
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

HIST UST:
Name: SHELL OIL COMPANY
Address: 110 N RENGSTORFF AVE
City,State,Zip: MOUNTAIN VIEW, CA 94040
File Number: 000208F5
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000208F5.pdf
Region: STATE
Facility ID: 00000056732
Facility Type: Gas Station
Other Type: Not reported
Contact Name: SHELL OIL COMPANY
Telephone: 4159648529
Owner Name: SHELL OIL COMPANY
Owner Address: P.O. BOX 4848
Owner City,St,Zip: ANAHEIM, CA 92803
Total Tanks: 0004

Tank Num: 001
Container Num: 1
Year Installed: 1983
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor, Groundwater Monitoring Well, 10

Tank Num: 002
Container Num: 2
Year Installed: 1983
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor, Groundwater Monitoring Well, 10

Tank Num: 003
Container Num: 3
Year Installed: 1983
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor, Groundwater Monitoring Well, 10

Tank Num: 004
Container Num: 4
Year Installed: 1983
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: 1/4

SHELL SERVICE STATION (Continued) **1000288537**

Leak Detection: Stock Inventor, Groundwater Monitoring Well, 10

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	43001282
Regulated By:	UTNKA
Regulated ID:	00056732
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4159648529
Mail To:	Not reported
Mailing Address:	110 N RENGSTORFF AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	MOUNTAIN VIEW 94040
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

CORTESE:

Name:	SHELL - 110 N RENGSTORFF
Address:	110 N. RENGSTORFF AVE.
City,State,Zip:	MOUNTAIN VIEW, CA 94043
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0608501243
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

CUPA SANTA CLARA:

Name:	RENGSTORFF SHELL #144
Address:	110 N RENGSTORFF AV
City,State,Zip:	MOUNTAIN VIEW, CA 94043
Region:	SANTA CLARA
PE#:	2240
Program Description:	GENERATES < 10 GAL/YR

SHELL SERVICE STATION (Continued) **1000288537**

Latitude: 37.403858
Longitude: -122.097149
Record ID: PR0381316
Facility ID: FA0260193

HIST CORTESE:
edr_fname: SHELL
edr_fadd1: 110 RENGSTORFF
City,State,Zip: MOUNTAIN VIEW, CA 94043
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1265

NOTIFY 65:
Name: SHELL STATION
Address: 110 RENGSTORFF
City,State,Zip: MOUNTAIN VIEW, CA 91351
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

CERS:
Name: SHELL - 110 N RENGSTORFF
Address: 110 N. RENGSTORFF AVE.
City,State,Zip: MOUNTAIN VIEW, CA 94043
Site ID: 233778
CERS ID: T0608501243
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: AARON COSTA - SANTA CLARA COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1555 Berger Drive, Suite 300
Affiliation City: SAN JOSE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 4089181954

Affiliation Type Desc: Regional Board Caseworker
Entity Name: Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 CLAY ST SUITE 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
81	**MVSA**	**ENVIROSTOR**	**S125242590**
NNW	**225 SAN ANTONIO ROAD, 2580 CALIFORNIA STREET, 201 SAN ANTONI**	**VCP**	**N/A**
1/2-1	**MOUNTAIN VIEW, CA 94040**		
0.683 mi.			
3605 ft.			

Relative: **Lower**

Actual: **51 ft.**

ENVIROSTOR:

Name:	MVSA
Address:	225 SAN ANTONIO ROAD, 2580 CALIFORNIA STREET, 201 SAN ANTONIO CIRCLE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	60002855
Status:	Active
Status Date:	07/02/2019
Site Code:	202267
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	8.33
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Jovanne Villamater
Supervisor:	Cheryl Prowell
Division Branch:	Cleanup Berkeley
Assembly:	24
Senate:	13
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	0
Longitude:	0
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	202267
Alias Type:	Project Code (Site Code)
Alias Name:	60002855
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Standard Voluntary Agreement
Completed Date:	09/13/2019
Comments:	Standard Voluntary Agreement signed by proponent on September 9, 2019, and DTSC on September 13, 2019.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

MVSA (Continued) **S125242590**

VCP:

Name:	MVSA
Address:	225 SAN ANTONIO ROAD, 2580 CALIFORNIA STREET, 201 SAN ANTONIO CIRCLE
City,State,Zip:	MOUNTAIN VIEW, CA 94040
Facility ID:	60002855
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	8.33
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Jovanne Villamater
Supervisor:	Cheryl Prowell
Division Branch:	Cleanup Berkeley
Site Code:	202267
Assembly:	24
Senate:	13
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	07/02/2019
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	0 / 0
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	202267
Alias Type:	Project Code (Site Code)
Alias Name:	60002855
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Standard Voluntary Agreement
Completed Date:	09/13/2019
Comments:	Standard Voluntary Agreement signed by proponent on September 9, 2019, and DTSC on September 13, 2019.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

82
SSW
1/2-1
0.759 mi.
4010 ft.

Relative:
Higher

Actual:
144 ft.

LOS ALTOS HS
201 ALMOND AVE
LOS ALTOS, CA 94022

RCRA-SQG **1000101636**
ENVIROSTOR **CAD981693864**
SCH
CERS HAZ WASTE
FINDS
ECHO
CUPA Listings
NPDES
CIWQS
CERS

RCRA-SQG:

Date Form Received by Agency:	1986-12-29 00:00:00.0
Handler Name:	LOS ALTOS HS
Handler Address:	201 ALMOND AVE
Handler City,State,Zip:	LOS ALTOS, CA 94022
EPA ID:	CAD981693864
Contact Name:	ENVIRONMENTAL MANAGER
Contact Address:	201 ALMOND AVE
Contact City,State,Zip:	LOS ALTOS, CA 94022
Contact Telephone:	415-940-4666
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Other
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	2
Mailing Address:	201 ALMOND AVE
Mailing City,State,Zip:	LOS ALTOS, CA 94022
Owner Name:	MT VIEW LOS ALTOS DIST
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported

LOS ALTOS HS (Continued) **1000101636**

Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:31:07.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MT VIEW LOS ALTOS DIST
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999

LOS ALTOS HS (Continued) **1000101636**

Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 1986-12-29 00:00:00.0
Handler Name: LOS ALTOS HS
Federal Waste Generator Description: Small Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 61111
NAICS Description: ELEMENTARY AND SECONDARY SCHOOLS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

ENVIROSTOR:
Name: LOS ALTOS HIGH SCHOOL EXPANSION
Address: 201 ALMOND AVENUE
City,State,Zip: LOS ALTOS, CA 94022
Facility ID: 60002914
Status: Active
Status Date: 12/06/2019
Site Code: 204320
Site Type: School Investigation
Site Type Detailed: School
Acres: 2
NPL: NO
Regulatory Agencies: SANTA CLARA COUNTY
Lead Agency: SANTA CLARA COUNTY
Program Manager: Letitia Shen
Supervisor: Jose Salcedo
Division Branch: Northern California Schools & Santa Susana
Assembly: 24
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not Applicable
Latitude: 37.38692
Longitude: -122.1092

LOS ALTOS HS (Continued) **1000101636**

APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS, UNDERGROUND STORAGE TANKS, SCHOOL - HIGH SCHOOL
Potential COC: Lead Naturally Occurring Asbestos (NOA TPH-diesel TPH-MOTOR OIL Dieldrin Polychlorinated biphenyls (PCBs
Confirmed COC: 30013-NO 30018-NO 30024-NO 3002502-NO 30207-NO 40002-NO
Potential Description: SOIL, SV
Alias Name: 204320
Alias Type: Project Code (Site Code)
Alias Name: 60002914
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 01/29/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 06/05/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement Application
Completed Date: 12/12/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/18/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 05/26/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 06/05/2020
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Preliminary Endangerment Assessment Report
Schedule Due Date: 10/13/2020
Schedule Revised Date: Not reported

LOS ALTOS HS (Continued) **1000101636**

SCH:

Name:	LOS ALTOS HIGH SCHOOL EXPANSION
Address:	201 ALMOND AVENUE
City,State,Zip:	LOS ALTOS, CA 94022
Facility ID:	60002914
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	2
National Priorities List:	NO
Cleanup Oversight Agencies:	SANTA CLARA COUNTY
Lead Agency:	SANTA CLARA COUNTY
Lead Agency Description:	SANTA CLARA COUNTY
Project Manager:	Letitia Shen
Supervisor:	Jose Salcedo
Division Branch:	Northern California Schools & Santa Susana
Site Code:	204320
Assembly:	24
Senate:	13
Special Program Status:	Not reported
Status:	Active
Status Date:	12/06/2019
Restricted Use:	NO
Funding:	Not Applicable
Latitude:	37.38692
Longitude:	-122.1092
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS, UNDERGROUND STORAGE TANKS, SCHOOL - HIGH SCHOOL
Potential COC:	Lead, Naturally Occurring Asbestos (NOA, TPH-diesel, TPH-MOTOR OIL, Dieldrin, Polychlorinated biphenyls (PCBs
Confirmed COC:	30013-NO, 30018-NO, 30024-NO, 3002502-NO, 30207-NO, 40002-NO
Potential Description:	SOIL, SV
Alias Name:	204320
Alias Type:	Project Code (Site Code)
Alias Name:	60002914
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	01/29/2020
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Pre-HARP Form
Completed Date:	06/05/2020
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement Application
Completed Date:	12/12/2019
Comments:	Not reported

LOS ALTOS HS (Continued) **1000101636**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/18/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 05/26/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 06/05/2020
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Preliminary Endangerment Assessment Report
Schedule Due Date: 10/13/2020
Schedule Revised Date: Not reported

CERS HAZ WASTE:
Name: LOS ALTOS HIGH SCHOOL
Address: 201 ALMOND AV
City,State,Zip: LOS ALTOS, CA 94022
Site ID: 45044
CERS ID: 10348729
CERS Description: Hazardous Waste Generator

FINDS:
Registry ID: 110002755395

Click Here:

Environmental Interest/Information System:
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

LOS ALTOS HS (Continued) **1000101636**

ECHO:

Envid:	1000101636
Registry ID:	110002755395
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002755395
Name:	LOS ALTOS HS
Address:	201 ALMOND AVE
City,State,Zip:	LOS ALTOS, CA 94022

CUPA SANTA CLARA:

Name:	LOS ALTOS HIGH SCHOOL
Address:	201 ALMOND AV
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	Not reported
Program Description:	HMBP FACILITY, 7-9 CHEMICALS
Latitude:	37.385149
Longitude:	-122.109318
Record ID:	PR0369494
Facility ID:	FA0201525

Name:	LOS ALTOS HIGH SCHOOL
Address:	201 ALMOND AV
City,State,Zip:	LOS ALTOS, CA 94022
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Latitude:	37.385149
Longitude:	-122.109318
Record ID:	PR0315349
Facility ID:	FA0201525

NPDES:

Name:	LOS ALTOS HIGH SCHOOL
Address:	201 ALMOND AVENUE
City,State,Zip:	LOS ALTOS, CA 94022
Facility Status:	Active
NPDES Number:	CAS000002
Region:	2
Agency Number:	0
Regulatory Measure ID:	513314
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	2 43C388232
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/30/2019
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	1299 Bryant Avenue
Discharge Name:	Mountain View Los Altos High School District
Discharge City:	Mountain View
Discharge State:	California
Discharge Zip:	94040
Status:	Not reported
Status Date:	Not reported

LOS ALTOS HS (Continued) **1000101636**

Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Name:	LOS ALTOS HIGH SCHOOL
Address:	201 ALMOND AVENUE
City,State,Zip:	LOS ALTOS, CA 94022
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	2 43C388232
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	09/30/2019
Operator Name:	Mountain View Los Altos High School District
Operator Address:	1299 Bryant Avenue
Operator City:	Mountain View
Operator State:	California
Operator Zip:	94040

CIWQS:

Name:	LOS ALTOS HIGH SCHOOL
Address:	201 ALMOND AVENUE
City,State,Zip:	LOS ALTOS, CA 94022
Agency:	Mountain View Los Altos High School District
Agency Address:	1299 Bryant Avenue, Mountain View, CA 94040
Place/Project Type:	Construction - Other: School
SIC/NAICS:	Not reported
Region:	2
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	2 43C388232
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	09/30/2019
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported

LOS ALTOS HS (Continued) **1000101636**

Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 37.38681
Longitude: -122.10877

CERS:
Name: LOS ALTOS HIGH SCHOOL
Address: 201 ALMOND AVENUE
City,State,Zip: LOS ALTOS, CA 94022
Site ID: 558020
CERS ID: 876115
CERS Description: Construction Storm Water

Affiliation:
Affiliation Type Desc: Owner/Operator
Entity Name: Mountain View Los Altos High School District
Entity Title: Operator
Affiliation Address: 1299 Bryant Avenue
Affiliation City: Mountain View
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94040
Affiliation Phone: Not reported

Name: LOS ALTOS HIGH SCHOOL
Address: 201 ALMOND AV
City,State,Zip: LOS ALTOS, CA 94022
Site ID: 45044
CERS ID: 10348729
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 45044
Site Name: LOS ALTOS HIGH SCHOOL
Violation Date: 5/16/2016
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 05/23/2016. Copies of receipts for pick up of used oil and antifreeze not provided at time of inspection.
Violation Division: Santa Clara County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 45044
Site Name: LOS ALTOS HIGH SCHOOL
Violation Date: 5/23/2019
Citation: HSC 6.5 25200.3.1 (c) - California Health and Safety Code, Chapter 6.5, Section(s) 25200.3.1 (c)
Violation Description: Failure to treat laboratory hazardous waste according to all of the following requirements: 1) treated in containers and follow published procedures, 2) at a location as close as practical, and within 10 days, 3) single batch quantity limit to be 5 gallons or 18 kg, 4) waste from a single procedure or from the same laboratory process, 5) performed by trained personnel, 6) training records are maintained for

LOS ALTOS HS (Continued) **1000101636**

3 years, 7) waste and residuals are managed according to applicable requirements, and 8) records are made available for inspection.

Violation Notes: Returned to compliance on 06/04/2019. Chemistry teacher stated that various acid and base materials were mixed to neutralize them. Neutralization of smaller quantities of acid wastes is held for longer than 10 days after generation, and is not conducted by a person with training records demonstrating that they have awareness of the process. ALL CONDITIONS BELOW MUST BE MET FOR TREATMENT OF WASTE (NEUTRALIZATION OF WASTES < pH OF 2 OR >12.5)
Violation Division: Santa Clara County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 45044
Site Name: LOS ALTOS HIGH SCHOOL
Violation Date: 5/16/2016
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Submitted inventory does not properly account for the correct chemical name of "oxidizer". Submittal notes chemical compound as bleach and at 600 gallons. Actual chemical storage is 60 liters of liquid Carbon dioxide. Also noted storage of 16 x 5 gallon containers of latex paint in pool maintenance room that are not disclosed on inventory. Please also amend reporting of LPG from cubic feet to gallons (purchased and stored as a liquid). Noted 63 gallons onsite.
Violation Division: Santa Clara County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 45044
Site Name: LOS ALTOS HIGH SCHOOL
Violation Date: 5/23/2019
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
Violation Notes: Returned to compliance on 06/04/2019. Robotics lab had various metal (aluminum) cuttings and turnings on the floor. Many aluminum alloys contain hazardous levels of metals. PLEASE ENSURE THAT METAL SCRAPS ARE SWEPT FROM THE FLOOR AND CONTAINERIZED FOR MANAGEMENT AS SCRAP METAL. Behind robotics, observed a containment structure which previously held drums of used oil in which the containment tray had residual used oil, and which was open to the environment and rain.
Violation Division: Santa Clara County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 45044
Site Name: LOS ALTOS HIGH SCHOOL
Violation Date: 5/23/2019
Citation: 22 CCR 12 66262.11 - California Code of Regulations, Title 22, Chapter

LOS ALTOS HS (Continued) **1000101636**

	12, Section(s) 66262.11
Violation Description:	Failure to determine if wastes generated are hazardous waste by using generator knowledge or applying testing method.
Violation Notes:	Returned to compliance on 06/04/2019. Site disposes of ethidium bromide gels and media in test tubes contaminated with ethidium bromide as medical waste. PLEASE DEMONSTRATE HOW THE ETHIDIUM BROMIDE MEDIA CONTAINS LESS THAN 0.4% ETHIDIUM BROMIDE BY WEIGHT OR BEGIN MANAGING AS HAZARDOUS WASTE. Site disposes of fetal pigs with preservative as medical (biohaz) waste. Please explain why the specimens either meet the definition of "biohazardous waste" (according to Health and Safety Code 117690) or how they are not hazardous waste and how excess solutions in the shipping bags is managed. IF NEITHER OF THE PREVIOUS CONDITIONS CAN BE MET, BEGIN MANAGING AS HAZARDOUS WASTE. Observed a 3 gallon blue poly carboy in the robotics lab containing a unknown liquid. IDENTIFY THE LIQUID AND MANAGE ACCORDINGLY.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/16/2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 07/25/2017. map submitted does not accurately reflect layout of campus. Building added in 2014 in which hazardous materials are stored was not reflected on map submitted in 2016 CERS submittal.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/16/2016
Citation:	40 CFR 1 265.35 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.35
Violation Description:	Failure to maintain aisle space to allow the unobstructed movement of personnel, fire protection, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the Department that aisle space is not needed for any of these purposes.
Violation Notes:	Returned to compliance on 05/23/2016. Eyewash and spill materials were not readily available due to storage of biohazardous bin and chemical cart in the science prep area.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/16/2016
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

LOS ALTOS HS (Continued) **1000101636**

Violation Description:	Haz Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 05/23/2016. Cal Code Regs, section 66268.7. LDR does not properly reflect the wastes shipped. LDR waste codes did not match waste codes on the manifests.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/16/2016
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 05/23/2016. Records of disposal of filters not provided at time of inspection.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/16/2016
Citation:	22 CCR 12 66262.40(c) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(c)
Violation Description:	Failure to determine if the waste generated is a hazardous waste and to maintain analysis results for three years.
Violation Notes:	Returned to compliance on 05/23/2016. 1x15 gallon steel drum marked 80W90 oil along fence in area adjacent to bike storage behind auto tech. Drum is full of unknown contents. Indicated that animal carcasses are being disposed of as biohazardous wastes. PLEASE EXPLAIN HOW THE CARCASSES ARE BIOHAZARDOUS, AND IF NOT, PLEASE MAKE WASTE DETERMINATION ON CARCASSES SINCE THEY ARE FORMALDEHYDE FIXED.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/23/2019
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 06/04/2019. 2 gal poly carboy marked "waste" and missing hazardous properties of waste (chemistry hood). 2 gal carboy of calcium chloride missing properties of waste on label (main science corridor).
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044

LOS ALTOS HS (Continued) **1000101636**

Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/16/2016
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 05/23/2016. Mixing cased and uncased filters in same drum, and mixing in oily debris (cardboard) with this waste. Also noted one 5 gallon bucket open with filters resting in it at auto tech.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/23/2019
Citation:	HSC 6.5 25200.3.1(b) - California Health and Safety Code, Chapter 6.5, Section(s) 25200.3.1(b)
Violation Description:	Failure of the owner or operator managing laboratory hazardous waste in a laboratory accumulation area to comply with the quantity limitations, management, training, or documentation requirements.
Violation Notes:	Returned to compliance on 06/04/2019. Observed 2 gal carboy of "waste with metals" with start date of 11/1/18, 2 gallon carboy of "waste" with start date of 4/28/09 in chemistry areas.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/16/2016
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 05/23/2016. Various beakers of waste in chemistry classroom hoods not marked with any information except contents. Various materials removed from service, stored in hood identified as waste storage area not marked. 2x15 gallon photo fix waste containers in dark room not marked with start dates. Container in hood of room 701 for lab wastes marked with old date of 8/20/13. Need to redate upon each subsequent reuse of container.
Violation Division:	Santa Clara County Environmental Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	45044
Site Name:	LOS ALTOS HIGH SCHOOL
Violation Date:	5/16/2016
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 05/23/2016. Noted bucket holding filters not

LOS ALTOS HS (Continued) **1000101636**

marked.
Violation Division: Santa Clara County Environmental Health
Violation Program: HW
Violation Source: CERS

Site ID: 45044
Site Name: LOS ALTOS HIGH SCHOOL
Violation Date: 5/23/2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Inventory reported does not include approximately 500 cubic feet of Carbon Dioxide (compressed gas, largest 200 cuft, 2 in sciences, 3 small in tractor shed), 80 gal liquid carbon dioxide (liquid, largest 80 gal, pool shed) Additionally, the used oil and coolant in the auto repair can be removed since this activity is no longer done. Line item for "bleach" can be removed, is duplicative of "sodium hypochlorite" entry.
Violation Division: Santa Clara County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 45044
Site Name: LOS ALTOS HIGH SCHOOL
Violation Date: 5/16/2016
Citation: 40 CFR 1 265.174 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.174
Violation Description: Failure to inspect hazardous waste storage areas at least weekly.
Violation Notes: Returned to compliance on 05/23/2016. inspections of storage areas at auto tech not being done with enough detail to prevent violations, s noted by oil in containment under drums and label on filter drum not being accessible for inspection.
Violation Division: Santa Clara County Environmental Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-16-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: CERS ID10348729 Last filing: 2/11/16 Inventory substantially matches inventory submitted except as noted above. Have below reportable thresholds of nitrogen, carbon dioxide (compressed gas), fertilizer, gas, diesel (at greater than consumer or lab sizes)
Eval Division: Santa Clara County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: CERS ID 10348729 submittals 4/15&18/2019, 7/117/18, 7/26/17 map reviewed and complete Emergency plan rejected due to use of old format

LOS ALTOS HS (Continued) **1000101636**

which does not address all required elements Training plan complete
Please provide a copy of your employee emergency response/evacuation
training log from 2018-2019 school year.

Eval Division: Santa Clara County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-23-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ID number CAD981693864, active as of date of inspection Inspection took place on 5/22, report delivered electronically on 5/23. Inspection was jointly conducted for compliance and as check for green business program eligibility. Areas of school inspected included: robotics lab (former auto repair), science common area (shared bio, biochem, chemistry), art, photography, food prep/cafeteria, grounds maintenance shed, theatre and pool room. -- auto repair ceased at this school, replaced by robotics lab. Art is acrylic and water color paint and drawing only; no ceramics or metal working; grounds maintenance equipment is now serviced offsite by third party. Observed various excess chemistries (both developer and "hypo cheaner") which instructor noted is not slated for use and should be disposed of. Also had two bottles (part A and B) or cyanotype solutions that were deemed to be non-usable (contains ammonium di-chromate at 1.25%/12,500 ppm; regulatory level for chrome is 5 [Truncated]

Eval Division: Santa Clara County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-16-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspection is both routine compliance inspection as well as follow up to green business review request. The following areas were visisted/inspected: auto tech, science, photography, art, theater, kitchen, tractor/grounds Noted box of materials in auto tech indicated as having been removed from shelf, needing to be sorted to determine if usable. STRONGLY RECOMMEND SORTING AND STORING AS SOON AS POSSIBLE. Noted various aerosol cans on grounds and in trashcans (removed, see below). STRONGLY RECOMMEND HAVING ONE BUCKET OR BOX DESIGNATED FOR AEROSOL CAN PLACEMENT BY STUDENTS, WITH TEACHER RESPONSIBLE FOR SORTING AND MANAGEMENT FROM THAT POINT FORWARD. DID DISCUSS MANAGEMENT OF AEROSOLS WITH AUTO AND ART TEACHERS-- MUST BE COMPLETELY EMPTY BEFORE RECYCLING OR PUNCTURING. IF NOT, MANAGE AS UNIVERSAL WASTE. Generator copies of manifests are being sent to the State by contractor, noted with check mark on service agreement sheet. OBSERVATION- NOTED ONLY SHIPMENT OF ACID AND [Truncated]

Eval Division: Santa Clara County Environmental Health
Eval Program: HW
Eval Source: CERS

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Santa Clara County Environmental Health
Entity Title: Not reported

LOS ALTOS HS (Continued) **1000101636**

Affiliation Address:	1555 Berger Drive, Suite 300
Affiliation City:	San Jose
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95112-2716
Affiliation Phone:	(408) 918-3400
Affiliation Type Desc:	Document Preparer
Entity Name:	Irene Aguilar
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Irene Aguilar
Entity Title:	Not reported
Affiliation Address:	1299 Bryant Avenue
Affiliation City:	Mountain View
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94040
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1299 BRYANT AV
Affiliation City:	MOUNTAIN VIEW
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94040
Affiliation Phone:	Not reported
Affiliation Type Desc:	Property Owner
Entity Name:	Mountain View Los Altos High School District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	United States
Affiliation Zip:	Not reported
Affiliation Phone:	(650) 940-4666
Affiliation Type Desc:	Identification Signer
Entity Name:	Irene Aguilar
Entity Title:	Associate Superintendent Business Services
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

LOS ALTOS HS (Continued) **1000101636**

Affiliation Type Desc:	Legal Owner
Entity Name:	Mountain View-Los Altos Union High School Dist.
Entity Title:	Not reported
Affiliation Address:	1299 Bryant Avenue
Affiliation City:	Mountain View
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94040
Affiliation Phone:	(650) 940-4666

Affiliation Type Desc:	Operator
Entity Name:	Irene Aguilar
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(650) 940-4666

Affiliation Type Desc:	Parent Corporation
Entity Name:	LOS ALTOS HIGH SCHOOL
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

S83 **JASCO CHEMICAL CORP.** **ENVIROSTOR** **U001594367**
East **1710 VILLA ST** **HIST UST** **N/A**
1/2-1 **MOUNTAIN VIEW, CA 94042** **ENF**
0.887 mi. **CIWQS**
4683 ft. **Site 1 of 3 in cluster S** **CERS**

Relative:
Lower

Actual:
68 ft.

ENVIROSTOR:

Name:	JASCO CHEMICAL CO
Address:	1710 VILLA STREET
City,State,Zip:	MOUNTAIN VIEW, CA 94041
Facility ID:	43280119
Status:	Refer: RWQCB
Status Date:	01/10/1990
Site Code:	Not reported
Site Type:	Federal Superfund
Site Type Detailed:	State Response or NPL
Acres:	2.05
NPL:	DELISTED
Regulatory Agencies:	US EPA
Lead Agency:	US EPA
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Berkeley
Assembly:	24
Senate:	13
Special Program:	Not reported
Restricted Use:	NO

JASCO CHEMICAL CORP. (Continued) **U001594367**

Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.39892
Longitude: -122.0890
APN: 154-02-001
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: JASCO CHEMICAL CORPORATION
Alias Type: Alternate Name
Alias Name: 154-02-001
Alias Type: APN
Alias Name: CAD009103318
Alias Type: EPA Identification Number
Alias Name: 110001197259
Alias Type: EPA (FRS #)
Alias Name: T0608592706
Alias Type: GeoTracker Global ID
Alias Name: P23081
Alias Type: PCode
Alias Name: 43280119
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: National Priority List Delisting Document
Completed Date: 12/27/2018
Comments: DTSC concurs with delisting site from NPL.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HIST UST:
Name: JASCO CHEMICAL CORP.
Address: 1710 VILLA ST
City,State,Zip: MOUNTAIN VIEW, CA 94042
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000008412
Facility Type: Other
Other Type: MANUFACTURER
Contact Name: JAY KANANI
Telephone: 4159686005
Owner Name: JASCO CHEMICAL CORP.
Owner Address: P. O. BOX J
Owner City,St,Zip: MOUNTAIN VIEW, CA 94042
Total Tanks: 0009

JASCO CHEMICAL CORP. (Continued) **U001594367**

Tank Num:	001
Container Num:	ONE
Year Installed:	1976
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

Tank Num:	002
Container Num:	TWO
Year Installed:	1976
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

Tank Num:	003
Container Num:	THREE
Year Installed:	1976
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

Tank Num:	004
Container Num:	FOUR
Year Installed:	1976
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

Tank Num:	005
Container Num:	FIVE
Year Installed:	1976
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

Tank Num:	006
Container Num:	SIX
Year Installed:	1976
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

Tank Num:	007
Container Num:	SEVEN
Year Installed:	1976

JASCO CHEMICAL CORP. (Continued) **U001594367**

Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

Tank Num:	008
Container Num:	EIGHT
Year Installed:	1976
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

Tank Num:	009
Container Num:	NINE
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Groundwater Monitoring Well

ENF:

Name:	1710 VILLA ST., JASCO CHEMICAL
Address:	1710 VILLA
City,State,Zip:	MOUNTAIN VIEW, CA 94041
Region:	2
Facility Id:	201774
Agency Name:	Jasco Chemical Corporation
Place Type:	Facility
Place Subtype:	Groundwater Cleanup Site
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	37.398002
Place Longitude:	-122.089466
SIC Code 1:	2851
SIC Desc 1:	Paints, Varnishes, Lacquers, Enamels, and Allied Products
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0648
Threat To Water Quality:	2
Complexity:	B
Pretreatment:	N - POTW does not have EPA approved pretreatment prog.
Facility Waste Type:	Not reported

JASCO CHEMICAL CORP. (Continued) **U001594367**

Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDNONMUNIPRCS
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	2 438210001
Reg Measure Id:	183046
Reg Measure Type:	Enrollee
Region:	2
Order #:	R2-2004-0055
Npdes# CA#:	CAG912003
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	1000
Status:	Historical
Status Date:	09/14/2005
Effective Date:	11/13/1997
Expiration/Review Date:	07/20/1999
Termination Date:	09/14/2005
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	62 - Treatment system to meet priority pollutant limit Category 1
Direction/Voice:	Passive
Enforcement Id(EID):	239361
Region:	2
Order / Resolution Number:	R2-2001-0075
Enforcement Action Type:	Admin Civil Liability
Effective Date:	10/15/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 2 438210001
Description:	Exceeded PCE limit of 5.0 ppb (at 29 ppb and 41 ppb).
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	10/31/2001
# Of Programs1:	1
Total Assessment Amount:	6000
Initial Assessed Amount:	0
Liability $ Amount:	6000
Project $ Amount:	0
Liability $ Paid:	6000
Project $ Completed:	0
Total $ Paid/Completed Amount:	6000

JASCO CHEMICAL CORP. (Continued) **U001594367**

CIWQS:

Name:	1710 VILLA ST., JASCO CHEMICAL
Address:	1710 VILLA
City,State,Zip:	MOUNTAIN VIEW, CA 94041
Agency:	Jasco Chemical Corporation
Agency Address:	Po Box 1180, Mountain View, CA 94042-1180
Place/Project Type:	Groundwater Cleanup Site
SIC/NAICS:	2851
Region:	2
Program:	NPDNONMUNIPRCS
Regulatory Measure Status:	Historical
Regulatory Measure Type:	Enrollee
Order Number:	R2-2004-0055
WDID:	2 438210001
NPDES Number:	CAG912003
Adoption Date:	Not reported
Effective Date:	11/13/1997
Termination Date:	09/14/2005
Expiration/Review Date:	07/20/1999
Design Flow:	0.0648
Major/Minor:	Minor
Complexity:	B
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	37.398002
Longitude:	-122.089466

CERS:

Name:	1710 VILLA ST., JASCO CHEMICAL
Address:	1710 VILLA
City,State,Zip:	MOUNTAIN VIEW, CA 94041
Site ID:	348264
CERS ID:	201774
CERS Description:	NPDES Wastewater and Stormwater

Violations:

Site ID:	348264
Site Name:	1710 Villa St., JASCO Chemical
Violation Date:	4/23/2001
Citation:	California Water Code
Violation Description:	Not reported
Violation Notes:	An effluent sample contained 41 ppb PCE exceeded 5.0 ppb limit in Order No. 99-051.
Violation Division:	Water Boards
Violation Program:	NPDNONMUNI
Violation Source:	CIWQS

Site ID:	348264
Site Name:	1710 Villa St., JASCO Chemical
Violation Date:	4/23/2001
Citation:	California Water Code
Violation Description:	Not reported
Violation Notes:	An effluent sample contained 29 ppb PCE exceeded 5.0 ppb limit in Order No. 99-051.
Violation Division:	Water Boards
Violation Program:	NPDNONMUNI

JASCO CHEMICAL CORP. (Continued) **U001594367**

Violation Source: CIWQS

Enforcement Action:
Site ID: 348264
Site Name: 1710 Villa St., JASCO Chemical
Site Address: 1710 VILLA
Site City: MOUNTAIN VIEW
Site Zip: 94041
Enf Action Date: 10-15-2001
Enf Action Type: Administrative Enforcement with Penality
Enf Action Description: Administrative Enforcement with Civil Liability (Penality)
Enf Action Notes: Not reported
Enf Action Division: Water Boards
Enf Action Program: UNSPEC
Enf Action Source: CIWQS

S84 **JASCO CHEMICAL CO** **HIST Cal-Sites** **1000175630**
East **1710 VILLA STREET** **N/A**
1/2-1 **MOUNTAIN VIEW, CA 94041**
0.887 mi.
4683 ft. **Site 2 of 3 in cluster S**

Relative: **Lower**

Actual: **68 ft.**

Calsite:
Name: JASCO CHEMICAL CO
Address: 1710 VILLA STREET
City: MOUNTAIN VIEW
Region: BERKELEY
Facility ID: 43280119
Facility Type: NPRP
Type: NPL SITE, RP-FUNDED
Branch: NC
Branch Name: NORTH COAST
File Name: Not reported
State Senate District: 01101990
Status: DOES NOT REQUIRE DTSC ACTION. REFERRED TO REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) LEAD
Status Name: PROPERTY/SITE REFERRED TO RWQCB
Lead Agency: ENVIRONMENTAL PROTECTION AGENCY
NPL: Listed
SIC Code: 28
SIC Name: MANU - CHEMICALS & ALLIED PRODUCTS
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: Not reported
Region Water Control Board Name: Not reported
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported
Lat/Long Description: Not reported
State Assembly District Code: 22
State Senate District Code: 13

JASCO CHEMICAL CO (Continued) **1000175630**

Facility ID:	Not reported
Activity:	Not reported
Activity Name:	Not reported
AWP Code:	Not reported
Proposed Budget:	Not reported
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	Not reported
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	Not reported
Definition of Status:	Not reported
Liquids Removed (Gals):	Not reported
Liquids Treated (Gals):	Not reported
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	Not reported
For Industrial Reuse:	Not reported
For Residential Reuse:	Not reported
Unknown Type:	Not reported
Alternate Address:	1710 VILLA STREET
Alternate City,St,Zip:	MOUNTAIN VIEW, CA 95246
Alternate Address:	1710 VILLA STREET
Alternate City,St,Zip:	MOUNTAIN VIEW, CA 94041
Background Info:	Not reported
Comments Date:	07251991
Comments:	Groundwater is contaminated with VOCs, phenols, and diesel
Comments Date:	07251991
Comments:	fuel. Soil contains VOCs and diesel fuel. Surface water is
Comments Date:	07251991
Comments:	contaminated with VOCs and PCP. People may face a health
Comments Date:	07251991
Comments:	threat if they inhale contaminated vapors or drink/touch
Comments Date:	07251991
Comments:	contaminated groundwater.
ID Name:	BEP DATABASE PCODE
ID Value:	P23081
ID Name:	EPA IDENTIFICATION NUMBER
ID Value:	CAD009103318
Alternate Name:	JASCO CHEMICAL CORPORATION
Alternate Name:	JASCO CHEMICAL CO
Alternate Name:	Not reported
Special Programs Code:	Not reported
Special Programs Name:	Not reported

S85 **JASCO CHEMICAL CORPORATION** **CA BOND EXP. PLAN** **S105960435**
East **1710 VILLA STREET** **EMI** **N/A**
1/2-1 **MOUNTAIN VIEW, CA 95246**
0.887 mi.
4683 ft. **Site 3 of 3 in cluster S**

Relative:
Lower

Actual:
68 ft.

CA BOND EXP. PLAN:

Reponsible Party:	NPL SITE CLEANUP WORKPLAN
Project Revenue Source Company:	Not reported
Project Revenue Source Addr:	Not reported
Project Revenue Source City,St,Zip:	Not reported
Project Revenue Source Desc:	This site has been proposed for listing on the NPL. It is expected that the RP will remediate this site with oversight by EPA. DHS will perform a limited role of oversight and monitoring of the remedial activities at this site. DHS has budgeted $50,000 for oversight and monitoring costs. DHS will recover 100 percent of direct costs plus staff costs and overhead related to the project.
Site Description:	The Jasco Chemical Corporation has formulated chemical products at this 2.05-acre site in Mountain View since 1976. The site is bordered on the northeast by the Central Expressway and Southern Pacific Railroad, and on the remaining sides by residential units. The facility handles and stores numerous chemicals onsite in underground tanks and 55 gallon drums.
Hazardous Waste Desc:	The contaminants detected in the soil and ground water onsite include trichloroethane (TCA), dichloroethane (DCA), dichloroethylene (DCE), phenol and methylene chloride (MCL).
Threat To Public Health & Env:	Within a 3-mile radius of the site there are approximately 199,000 people who depend on ground water as a source of drinking water. Contaminants have migrated at least 10 feet beyond the property boundary, as evidenced by the detection of DCA and TCA in an offsite well. Mountain View wells #17 and #10 are located within 1,500 feet and 3,100 feet of the site, respectively.
Site Activity Status:	Investigations at the site were initiated in 1984. Both soil and ground water contamination has been detected onsite. Discharges of surface runoff from the rear of the facility appear to be a major source of contaminants. Up to 11,000 parts per million (ppm) paint thinner was detected in soil samples taken near a runoff outfall. Jasco Chemical has been extracting contaminated ground water from one well since February, 1987.

EMI:

Name:	JASCO CHEMICAL CORPORATION
Address:	1710 VILLA STREET
City,State,Zip:	MOUNTAIN VIEW, CA 95246
Year:	1990
County Code:	43
Air Basin:	SF
Facility ID:	5477
Air District Name:	BA
SIC Code:	2869
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	JASCO CHEMICAL CORPORATION
Address:	1710 VILLA STREET

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

JASCO CHEMICAL CORPORATION (Continued) **S105960435**

City,State,Zip:	MOUNTAIN VIEW, CA 95246
Year:	1993
County Code:	43
Air Basin:	SF
Facility ID:	5477
Air District Name:	BA
SIC Code:	2869
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MOUNTAIN VIEW	S125742963	BEST BUY #0685	715 EL CAMINO REAL EAST	94040	CERS HAZ WASTE

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 87

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/15/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 30

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/24/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/24/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 87

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 78

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/15/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 02/01/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/03/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 78
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 74

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 10/30/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2019
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 05/20/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/06/2020
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/23/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 86

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 69

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/13/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/08/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/05/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/14/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 07/24/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/14/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 70

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/10/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 59

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 01/31/2021
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/04/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/24/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/27/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/21/2020
Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/21/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2020
Date Data Arrived at EDR: 05/21/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data
Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 77

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 86

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/27/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/08/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 65

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 74

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/14/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 08/19/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 14

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/04/2020
Date Data Arrived at EDR: 06/05/2020
Date Made Active in Reports: 08/17/2020
Number of Days to Update: 73

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/24/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/05/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 73

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/18/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 74

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/07/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/10/2020
Date Made Active in Reports: 10/29/2020
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/10/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 08/21/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 08/27/2020
Number of Days to Update: 6

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 08/20/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/06/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 10/13/2020
Date Data Arrived at EDR: 10/14/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 16

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/01/2020
Number of Days to Update: 13

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/17/2020
Date Data Arrived at EDR: 06/18/2020
Date Made Active in Reports: 09/02/2020
Number of Days to Update: 76

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/16/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 78

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/19/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 26

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/14/2020
Number of Days to Update: 76

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/21/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 71

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 01/31/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 69

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/10/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 80

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/13/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 78

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/12/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/25/2020
Date Data Arrived at EDR: 04/14/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 78

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/05/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 1

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 05/15/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 16

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 06/10/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/02/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/10/2020
Date Made Active in Reports: 08/24/2020
Number of Days to Update: 75

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/06/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 10/06/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/11/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/01/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/08/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 07/30/2020
Date Data Arrived at EDR: 07/31/2020
Date Made Active in Reports: 10/16/2020
Number of Days to Update: 77

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 09/16/2020
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/07/2020
Date Data Arrived at EDR: 07/08/2020
Date Made Active in Reports: 09/25/2020
Number of Days to Update: 79

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/04/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 77

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/11/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/06/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 81

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/10/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/10/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 77

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/23/2020
Date Data Arrived at EDR: 06/29/2020
Date Made Active in Reports: 09/15/2020
Number of Days to Update: 78

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/07/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 80

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 10/20/2020
Date Made Active in Reports: 11/02/2020
Number of Days to Update: 13

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/30/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/11/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/02/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

DISTEL CIRCLE PROPERTY
330 DISTEL CIRCLE
LOS ALTOS, CA 94022

TARGET PROPERTY COORDINATES

Latitude (North):	37.396371 - 37° 23' 46.94''
Longitude (West):	122.105871 - 122° 6' 21.14''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	579144.0
UTM Y (Meters):	4139015.5
Elevation:	86 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641106 MOUNTAIN VIEW, CA
Version Date:	2012
Northwest Map:	5640620 PALO ALTO, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

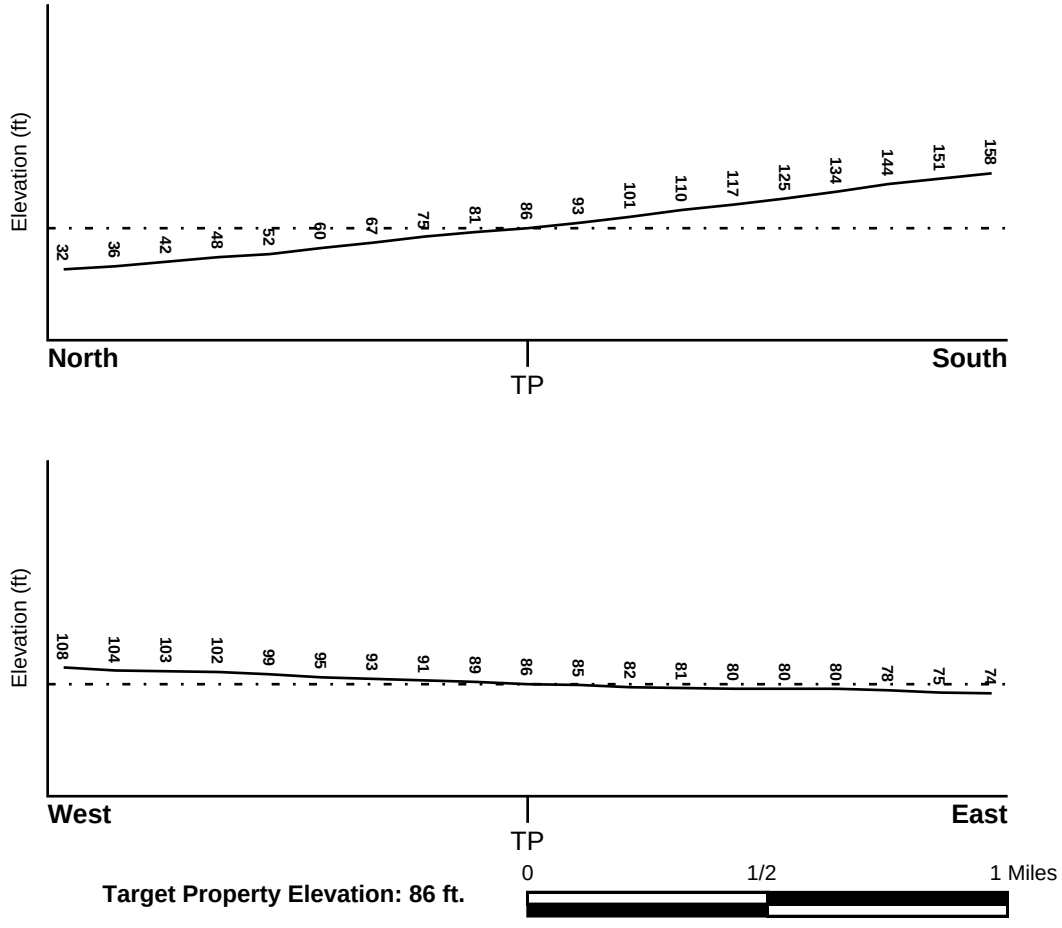
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NNE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06085C0038H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06085C0036H	FEMA FIRM Flood data
06085C0037H	FEMA FIRM Flood data
06085C0039H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
MOUNTAIN VIEW	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1 - 2 Miles SSW
Site Name:	Hillview Maintenance Yard
Site EPA ID Number:	CAD982400202
Groundwater Flow Direction:	NE ON A REGIONAL BASIS, WITH LOCAL FLOW CONDITIONS INFLUENCED BY PUMPING.
Inferred Depth to Water:	100 feet to 120 feet.
Hydraulic Connection:	Information is not available about the hydraulic connection between aquifers under the site.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information is inferred in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW

* ©1996 Site--specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
5	1/4 - 1/2 Mile NE	NE
1G	1/4 - 1/2 Mile NE	NE

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	BOTELLA
Soil Surface Texture:	clay loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
2	9 inches	41 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60
3	41 inches	76 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: No Other Soil Types

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000182869	1/4 - 1/2 Mile South
6	USGS40000182908	1/2 - 1 Mile West
21	USGS40000182665	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
22	CA2700772	1/2 - 1 Mile SSW

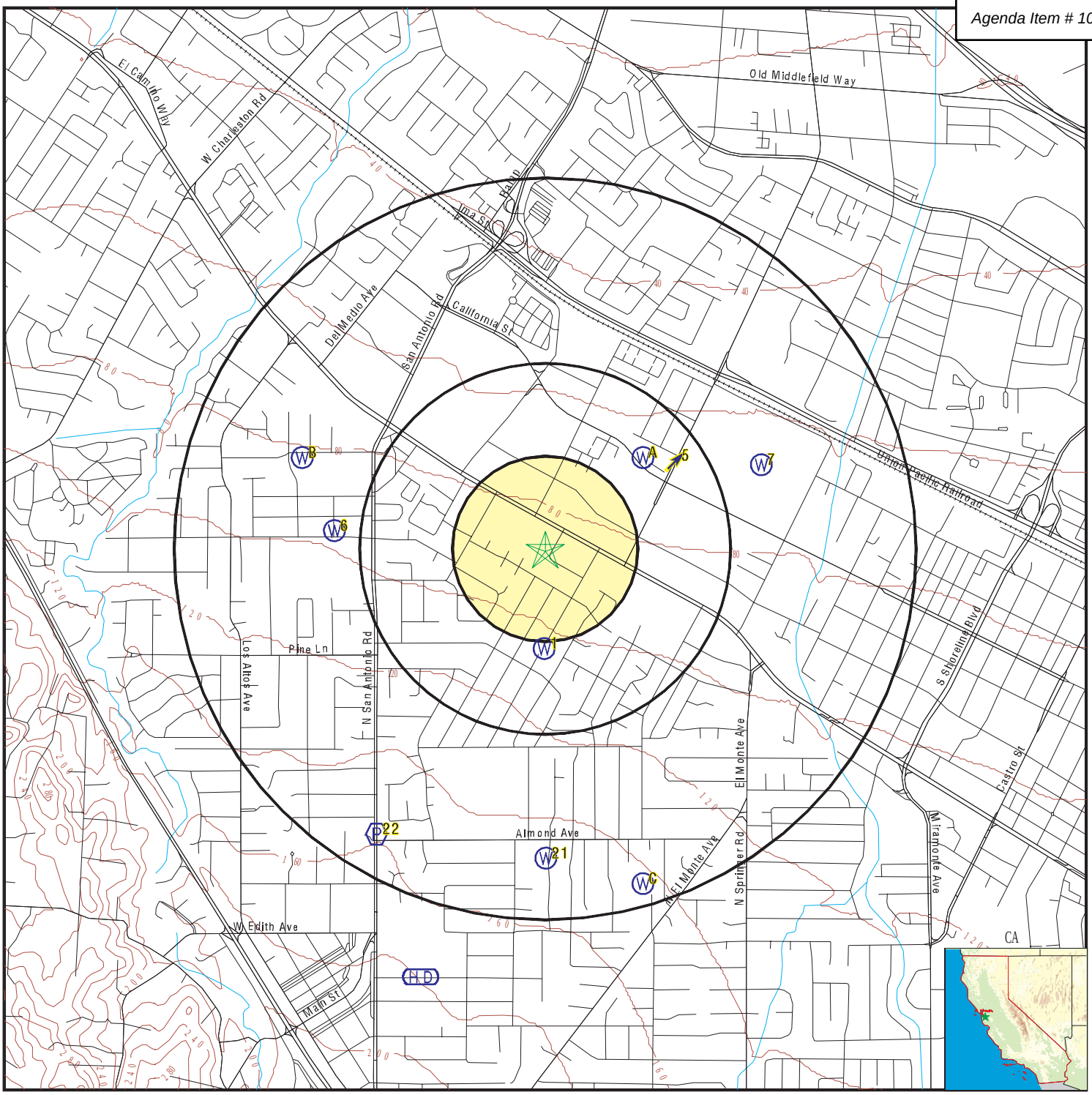
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	6874	1/4 - 1/2 Mile NE
A3	6876	1/4 - 1/2 Mile NE
A4	6877	1/4 - 1/2 Mile NE
7	6881	1/2 - 1 Mile ENE
B8	6871	1/2 - 1 Mile WNW
B9	6870	1/2 - 1 Mile WNW
B10	6869	1/2 - 1 Mile WNW
B11	6872	1/2 - 1 Mile WNW
B12	6879	1/2 - 1 Mile WNW
B13	6875	1/2 - 1 Mile WNW
B14	6873	1/2 - 1 Mile WNW
B15	6868	1/2 - 1 Mile WNW
B16	6864	1/2 - 1 Mile WNW
B17	6863	1/2 - 1 Mile WNW
B18	6865	1/2 - 1 Mile WNW
B19	6867	1/2 - 1 Mile WNW
B20	6866	1/2 - 1 Mile WNW
C23	6896	1/2 - 1 Mile SSE
C24	6878	1/2 - 1 Mile SSE
C25	6897	1/2 - 1 Mile SSE
C26	6906	1/2 - 1 Mile SSE
C27	6899	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 6253537.2s

Agenda Item # 10.



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Distel Circle Property	CLIENT:	Ninyo & Moore
ADDRESS:	330 Distel Circle Los Altos CA 94022	CONTACT:	Randy Wheeler
		INQUIRY #:	6253537.2s
LAT/LONG:	37.396371 / 122.105871	DATE:	November 04, 2020 1:01 pm

1339

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
1 **South** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000182869**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006S002W20L003M	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19600429	Well Depth:	504
Well Depth Units:	ft	Well Hole Depth:	805
Well Hole Depth Units:	ft		

A2 **NE** **1/4 - 1/2 Mile** **Lower**		**CA WELLS**	**6874**
Seq:	6874	Prim sta c:	06S/02W-20F03 M
Frds no:	4310001039	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA CUTTER - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220600.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

A3 **NE** **1/4 - 1/2 Mile** **Lower**		**CA WELLS**	**6876**
Seq:	6876	Prim sta c:	06S/02W-20L01 M
Frds no:	4310001043	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA MOSHER 01 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220600.0
Precision:	4	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

A4
NE
1/4 - 1/2 Mile
Lower

CA WELLS **6877**

Seq:	6877	Prim sta c:	06S/02W-20L02 M
Frds no:	4310001044	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA MOSHER 02 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220600.0
Precision:	4	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

5
NE
1/4 - 1/2 Mile
Lower

Site ID:	41-1012
Groundwater Flow:	NE
Shallow Water Depth:	8.26
Deep Water Depth:	11.52
Average Water Depth:	Not Reported
Date:	10/27/1998

AQUIFLOW **50011**

6
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000182908**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006S002W19H002M	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	268
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

7
ENE
1/2 - 1 Mile
Lower

CA WELLS **6881**

Seq:	6881	Prim sta c:	06S/02W-21D08 M
Frds no:	4310007009	County:	43
District:	05	User id:	HEN
System no:	4310007	Water type:	G
Source nam:	WELL 17 RECREATION	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	372359.0	Longitude:	1220539.0
Precision:	2	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4310007	System nam:	City Of Mountain View
Hqname:	Not Reported	Address:	231 NORTH WHISMAN ROAD
City:	MOUNTAIN VIEW	State:	CA
Zip:	94043	Zip ext:	Not Reported
Pop serv:	69000	Connection:	15069
Area serve:	MOUNTAIN VIEW		

Sample date:	04-FEB-14	Finding:	25.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	06-NOV-13	Finding:	24.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	14-AUG-13	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	21-MAY-13	Finding:	0.15
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		

Sample date:	21-MAY-13	Finding:	26.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	15-NOV-12	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	07-AUG-12	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	29-MAY-12	Finding:	25.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B8
WNW
1/2 - 1 Mile
Lower

CA WELLS **6871**

Seq:	6871	Prim sta c:	06S/02W-19H03 M
Frds no:	4310001033	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 121-03 - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

B9
WNW
1/2 - 1 Mile
Lower

CA WELLS **6870**

Seq:	6870	Prim sta c:	06S/02W-19H02 M
Frds no:	4310001032	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 121-02	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		
Sample date:	20-MAR-18	Finding:	7.223
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-MAR-18	Finding:	1.805
Chemical:	MOLYDBENDUM	Report units:	UG/L
Dlr:	0.		
Sample date:	20-MAR-18	Finding:	0.121
Chemical:	COBALT	Report units:	UG/L
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	07-FEB-18	Finding:	7.099
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-JAN-18	Finding:	7.215
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-DEC-17	Finding:	0.95
Chemical:	DCPA (TOTAL DI & MONO ACID DEGRADATES)		
Report units:	UG/L	Dlr:	0.
Sample date:	06-DEC-17	Finding:	0.182
Chemical:	COBALT	Report units:	UG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	108.8
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	06-DEC-17	Finding:	1.199
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	43.26
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	25.72
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	77.06
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	298.334
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	7.172
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-DEC-17	Finding:	1.772
Chemical:	MOLYDBENDUM	Report units:	UG/L
Dlr:	0.		
Sample date:	28-NOV-17	Finding:	1.2
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	14-NOV-17	Finding:	7.05
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-OCT-17	Finding:	7.358
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-SEP-17	Finding:	7.434
Chemical:	NITRATE (AS N)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.4		
Sample date:	12-SEP-17	Finding:	1.932
Chemical:	MOLYDBENDUM	Report units:	UG/L
Dlr:	0.		
Sample date:	12-SEP-17	Finding:	0.212
Chemical:	COBALT	Report units:	UG/L
Dlr:	0.		
Sample date:	06-SEP-17	Finding:	0.7
Chemical:	DCPA (TOTAL DI & MONO ACID DEGRADATES)		
Report units:	UG/L	Dlr:	0.
Sample date:	09-AUG-17	Finding:	7.477
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-JUL-17	Finding:	7.422
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUN-17	Finding:	113.2
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	07-JUN-17	Finding:	1.255
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	42.84
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	26.94
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	7.545
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUN-17	Finding:	1.644
Chemical:	MOLYDBENDUM	Report units:	UG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	0.159
Chemical:	COBALT	Report units:	UG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	82.72
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-MAY-17	Finding:	7.405
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-APR-17	Finding:	7.513
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	08-MAR-17	Finding:	109.9
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	08-MAR-17	Finding:	1.262
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	44.17
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	27.26
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	80.2
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	7.666
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-FEB-17	Finding:	7.344
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	10-JAN-17	Finding:	7.396
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-DEC-16	Finding:	1.761
Chemical:	MOLYDBENDUM	Report units:	UG/L
Dlr:	0.		
Sample date:	05-DEC-16	Finding:	0.155
Chemical:	COBALT	Report units:	UG/L
Dlr:	0.		
Sample date:	05-DEC-16	Finding:	109.1
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	05-DEC-16	Finding:	1.193
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	05-DEC-16	Finding:	27.31
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	05-DEC-16	Finding:	7.282
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-DEC-16	Finding:	7.271
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-DEC-16	Finding:	7.9
Chemical:	VANADIUM	Report units:	UG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	3.		
Sample date:	15-NOV-16	Finding:	7.262
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-OCT-16	Finding:	1.322
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-SEP-16	Finding:	57.3
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	21-SEP-16	Finding:	3.43
Chemical:	CHLOROFORM (THM)	Report units:	UG/L
Dlr:	1.		
Sample date:	21-SEP-16	Finding:	25.6
Chemical:	DIBROMOCHLOROMETHANE (THM)	Report units:	UG/L
Dlr:	1.		
Sample date:	21-SEP-16	Finding:	15.69
Chemical:	BROMOFORM (THM)	Report units:	UG/L
Dlr:	1.		
Sample date:	21-SEP-16	Finding:	12.55
Chemical:	BROMODICHLOROMETHANE (THM)	Report units:	UG/L
Dlr:	1.		
Sample date:	13-SEP-16	Finding:	7.646
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-SEP-16	Finding:	27.01
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-16	Finding:	1.613
Chemical:	MOLYDBENDUM	Report units:	UG/L
Dlr:	0.		
Sample date:	07-SEP-16	Finding:	0.174
Chemical:	COBALT	Report units:	UG/L
Dlr:	0.		
Sample date:	07-SEP-16	Finding:	1.224
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-16	Finding:	43.28
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-16	Finding:	79.39
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-AUG-16	Finding:	7.55
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	12-JUL-16	Finding:	7.485
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUN-16	Finding:	7.624
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-JUN-16	Finding:	27.13
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-JUN-16	Finding:	10.337
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	01-JUN-16	Finding:	43.51
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-JUN-16	Finding:	111.4
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	01-JUN-16	Finding:	10.44
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	01-JUN-16	Finding:	1.253
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	7.393
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-APR-16	Finding:	7.515
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-MAR-16	Finding:	108.8
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	08-MAR-16	Finding:	1.29
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-16	Finding:	27.73
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-16	Finding:	45.14
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-16	Finding:	85.23
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-16	Finding:	7.361
Chemical:	NITRATE (AS N)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.4		
Sample date:	01-FEB-16	Finding:	7.413
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-JAN-16	Finding:	7.436
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-DEC-15	Finding:	109.2
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	09-DEC-15	Finding:	7.422
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-DEC-15	Finding:	8.066
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	03-NOV-15	Finding:	7.636
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-OCT-15	Finding:	33.382
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-SEP-15	Finding:	300.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	79.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	25.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	59.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	25.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	15-SEP-15	Finding:	440.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	0.16
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	0.17
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	15-SEP-15	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	7.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-SEP-15	Finding:	310.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	260.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	7.4
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	770.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	15-SEP-15	Finding:	42.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	30.156
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUL-15	Finding:	33.659
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-JUN-15	Finding:	22.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	04-JUN-15	Finding:	7.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	03-JUN-15	Finding:	6.71
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	03-JUN-15	Finding:	33.281
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-FEB-15	Finding:	34.473
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-JAN-15	Finding:	34.641
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-DEC-14	Finding:	16.8
Chemical:	SOURCE TEMPERATURE C	Report units:	C

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.		
Sample date:	18-DEC-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	02-DEC-14	Finding:	23.579
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-DEC-14	Finding:	3.167
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	05-NOV-14	Finding:	4.991
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	05-NOV-14	Finding:	2.e-003
Chemical:	CADMIUM	Report units:	UG/L
Dlr:	1.		
Sample date:	05-NOV-14	Finding:	1.e-003
Chemical:	BERYLLIUM	Report units:	UG/L
Dlr:	1.		
Sample date:	05-NOV-14	Finding:	59.566
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	05-NOV-14	Finding:	8.e-003
Chemical:	ANTIMONY	Report units:	UG/L
Dlr:	6.		
Sample date:	07-OCT-14	Finding:	35.522
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-14	Finding:	34.789
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-14	Finding:	31.02
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	02-SEP-14	Finding:	7.4
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	06-AUG-14	Finding:	1.4e-002
Chemical:	CADMIUM	Report units:	UG/L
Dlr:	1.		
Sample date:	06-AUG-14	Finding:	35.195
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-14	Finding:	8.e-003
Chemical:	THALLIUM	Report units:	UG/L
Dlr:	1.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	09-JUL-14	Finding:	35.378
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-JUN-14	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-14	Finding:	35.358
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-JUN-14	Finding:	18.06
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	13-MAY-14	Finding:	34.427
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-MAY-14	Finding:	4.239
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	10-MAR-14	Finding:	6.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-MAR-14	Finding:	33.107
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-MAR-14	Finding:	7.4
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	18-FEB-14	Finding:	4.678
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	08-JAN-14	Finding:	34.868
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-DEC-13	Finding:	33.801
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-DEC-13	Finding:	7.1
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	19-NOV-13	Finding:	34.792
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-OCT-13	Finding:	35.961
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-SEP-13	Finding:	35.764
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	2.		
Sample date:	05-SEP-13	Finding:	7.34
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-AUG-13	Finding:	36.33
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-JUL-13	Finding:	35.537
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-JUN-13	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	03-JUN-13	Finding:	33.502
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JUN-13	Finding:	7.98
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-MAY-13	Finding:	33.751
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-APR-13	Finding:	32.245
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-MAR-13	Finding:	33.144
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-FEB-13	Finding:	2.339
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	12-FEB-13	Finding:	32.692
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-JAN-13	Finding:	32.476
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	19-DEC-12	Finding:	3.
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	19-DEC-12	Finding:	3.
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	19-DEC-12	Finding:	0.4
Chemical:	RADIUM 226 MDA95	Report units:	PCI/L
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	04-DEC-12	Finding:	7.1
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-DEC-12	Finding:	32.399
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	19-NOV-12	Finding:	35.769
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	19-NOV-12	Finding:	5.73
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	23-OCT-12	Finding:	100.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	2.8
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	23-OCT-12	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-OCT-12	Finding:	1.
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	570.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	460.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	23-OCT-12	Finding:	0.13
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	23-OCT-12	Finding:	39.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	23-OCT-12	Finding:	71.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	43.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	34.
Chemical:	MAGNESIUM	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.		
Sample date:	23-OCT-12	Finding:	900.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	320.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	390.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	400.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-SEP-12	Finding:	35.138
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-SEP-12	Finding:	7.64
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-AUG-12	Finding:	7.478
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	06-AUG-12	Finding:	36.035
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JUL-12	Finding:	36.312
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-JUN-12	Finding:	35.923
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-JUN-12	Finding:	7.2
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	34.625
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-12	Finding:	33.566
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-MAR-12	Finding:	34.708
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	07-MAR-12	Finding:	7.6
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-FEB-12	Finding:	33.385
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-JAN-12	Finding:	33.837
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

B10
WNW
1/2 - 1 Mile
Lower

CA WELLS 6869

Seq:	6869	Prim sta c:	06S/02W-19G02 M
Frds no:	4310001046	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA STEVENS - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

B11
WNW
1/2 - 1 Mile
Lower

CA WELLS 6872

Seq:	6872	Prim sta c:	06S/02W-19M01 M
Frds no:	4310001035	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 123-01	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	5	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	21-MAR-18	Finding:	2.351
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-DEC-17	Finding:	8.935
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	55.83
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	25.56
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	100.618
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-DEC-17	Finding:	0.795
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-SEP-17	Finding:	2.404
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUN-17	Finding:	0.731
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	50.31
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	8.209
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	23.46
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	24.15
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	8.614
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	0.856
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	56.63
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	05-DEC-16	Finding:	8.308
Chemical:	MAGNESIUM	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.		
Sample date:	05-DEC-16	Finding:	0.761
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-SEP-16	Finding:	2.223
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-SEP-16	Finding:	23.53
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-16	Finding:	54.58
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-16	Finding:	0.803
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-16	Finding:	8.366
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-JUN-16	Finding:	54.57
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-JUN-16	Finding:	8.104
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-JUN-16	Finding:	0.824
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAR-16	Finding:	23.98
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAR-16	Finding:	0.866
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAR-16	Finding:	58.12
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAR-16	Finding:	7.985
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	0.17
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	04-AUG-15	Finding:	9.7e-002
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	04-AUG-15	Finding:	260.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	5.1
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	04-AUG-15	Finding:	50.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	59.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	8.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	26.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	99.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	1.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-AUG-15	Finding:	160.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	130.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	7.6
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	420.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	04-AUG-15	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-15	Finding:	25.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	08-JUN-15	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-15	Finding:	24.
Chemical:	SOURCE TEMPERATURE C	Report units:	C

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.		
Sample date:	04-JUN-15	Finding:	7.9
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	03-JUN-15	Finding:	6.053
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	03-JUN-15	Finding:	49.77
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	10-MAR-15	Finding:	7.83
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	10-MAR-15	Finding:	23.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	05-MAR-15	Finding:	5.293
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	05-MAR-15	Finding:	25.3
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	05-MAR-15	Finding:	7.
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-MAR-15	Finding:	31.55
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	18-DEC-14	Finding:	7.6
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	18-DEC-14	Finding:	24.2
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	02-DEC-14	Finding:	37.22
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	02-DEC-14	Finding:	4.772
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	29-SEP-14	Finding:	8.556
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-14	Finding:	4.106
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	09-SEP-14	Finding:	36.33
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	02-SEP-14	Finding:	7.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-14	Finding:	200.1
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	04-JUN-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-14	Finding:	5.929
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	10-MAR-14	Finding:	6.9
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-MAR-14	Finding:	28.56
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	05-MAR-14	Finding:	1039.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	05-MAR-14	Finding:	7.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-DEC-13	Finding:	7.
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-DEC-13	Finding:	4.8
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	04-DEC-13	Finding:	44.7
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	04-DEC-13	Finding:	6.9
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	22-OCT-13	Finding:	0.94
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	22-OCT-13	Finding:	8.696
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-SEP-13	Finding:	27.8
Chemical:	IRON	Report units:	UG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	100.		
Sample date:	10-SEP-13	Finding:	3.6
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	05-SEP-13	Finding:	7.51
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	10-JUN-13	Finding:	7.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	03-JUN-13	Finding:	8.21
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	03-JUN-13	Finding:	4.6
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	03-JUN-13	Finding:	46.8
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	06-MAR-13	Finding:	41.4
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	06-MAR-13	Finding:	4.9
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	19-DEC-12	Finding:	3.
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	19-DEC-12	Finding:	2.3
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	19-DEC-12	Finding:	0.32
Chemical:	RADIUM 226 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-DEC-12	Finding:	5.4
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	12-DEC-12	Finding:	6.6
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-DEC-12	Finding:	22.9
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	12-DEC-12	Finding:	34.6
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	04-DEC-12	Finding:	7.2
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	0.15
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	250.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	0.11
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	23-OCT-12	Finding:	5.5
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	23-OCT-12	Finding:	49.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	55.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	7.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	23.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	90.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	160.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	130.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	8.2
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	420.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-OCT-12	Finding:	8.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	2.		
Sample date:	10-SEP-12	Finding:	7.8
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-SEP-12	Finding:	15.6
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	05-SEP-12	Finding:	8.2
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-SEP-12	Finding:	4.2
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	11-JUN-12	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-JUN-12	Finding:	6.
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	05-JUN-12	Finding:	40.2
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	04-JUN-12	Finding:	7.6
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-MAR-12	Finding:	5.
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	13-MAR-12	Finding:	38.9
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	07-MAR-12	Finding:	7.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		

B12
WNW
1/2 - 1 Mile
Lower

CA WELLS 6879

Seq:	6879	Prim sta c:	06S/02W-20M01 M
Frds no:	4310001038	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA ALVARADO - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

B13
WNW
1/2 - 1 Mile
Lower

CA WELLS 6875

Seq:	6875	Prim sta c:	06S/02W-20F04 M
Frds no:	4310001031	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 120-01 - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	5	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

B14
WNW
1/2 - 1 Mile
Lower

CA WELLS 6873

Seq:	6873	Prim sta c:	06S/02W-19M10 M
Frds no:	4310001036	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 123-02	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	5	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B15
WNW
1/2 - 1 Mile
Lower

CA WELLS **6868**

Seq:	6868	Prim sta c:	06S/02W-19G01 M
Frds no:	4310001045	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA PORTOLA - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

B16
WNW
1/2 - 1 Mile
Lower

CA WELLS **6864**

Seq:	6864	Prim sta c:	06S/02W-18Q10 M
Frds no:	4310001034	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 122-01 - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

B17
WNW
1/2 - 1 Mile
Lower

CA WELLS **6863**

Seq:	6863	Prim sta c:	06S/02W-18J10 M
Frds no:	4310001047	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA WILKIE - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

B18
WNW
1/2 - 1 Mile
Lower

CA WELLS 6865

Seq:	6865	Prim sta c:	06S/02W-19B02 M
Frds no:	4310001042	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA KNAPP 01 - INACTIVE	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	IR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

B19
WNW
1/2 - 1 Mile
Lower

CA WELLS 6867

Seq:	6867	Prim sta c:	06S/02W-19C10 M
Frds no:	4310001040	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA GLENBROOK - PRIVATE WELL	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	4	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Area serve: LOS ALTOS

B20
WNW
1/2 - 1 Mile
Lower

CA WELLS 6866

Seq:	6866	Prim sta c:	06S/02W-19B04 M
Frds no:	4310001041	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	NLA KNAPP - INACTIVE	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372400.0	Longitude:	1220700.0
Precision:	8	Status:	IR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

21
South
1/2 - 1 Mile
Higher

FED USGS USGS40000182665

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006S002W29B002M	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	695
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

22
SSW
1/2 - 1 Mile
Higher

FRDS PWS CA2700772

Epa region:	09	State:	CA
Pwsid:	CA2700772	Pwsname:	STRUVE RD WS #02
Cityserved:	Not Reported	Stateserved:	CA
Zipserved:	Not Reported	Fipscounty:	06053
Status:	Active	Retpopsrvd:	166
Pwssvcconn:	81	Psource longname:	Groundwater
Pwstype:	CWS	Owner:	Private
Contact:	LOIS & PAUL FORD	Contactorgname:	STRUVE RD WS #02
Contactphone:	6509484274	Contactaddress1:	12901 TRIPOLI CT
Contactaddress2:	Not Reported	Contactcity:	LOS ALTOS HILLS

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Contactstate:	CA	Contactzip:	94022
Pwsactivitycode:	A		
Pwsid:	CA2700772	Facid:	CA2700772002
Facname:	TREATMENT PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	ultraviolet radiation	Factypecode:	TP
PWS ID:	CA2700772	PWS name:	STRUVE RD WS #2
Address:	Not Reported	Care of:	Not Reported
City:	WATSONVILLE	State:	CA
Zip:	95076	Owner:	STRUVE RD WS #2
Source code:	Ground water	Population:	166
PWS ID:	CA2700772	PWS type:	System Owner/Responsible Party
PWS name:	STRUVE ROAD WATER SYSTEM #2		
PWS address:	Not Reported	PWS city:	LOS ALTOS HILLS
PWS state:	CA	PWS zip:	94022
PWS name:	STRUVE RD WS #02	PWS type code:	C
Retail population served:	166	Contact:	LOIS & PAUL FORD
Contact address:	12901 TRIPOLI CT	Contact address:	LOS ALTOS HILLS
Contact city:	CA	Contact state:	94
Contact zip:	6509484274	Contact telephone:	Not Reported
PWS ID:	CA2700772	Activity status:	Active
Date system activated:	7706	Date system deactivated:	Not Reported
Retail population:	00000284	System name:	STRUVE ROAD WATER SYSTEM #2
System address:	STRUVE ROAD WATER SYSTEM #2		
System address:	STRUVE RD	System city:	CASTROVILLE
System state:	CA	System zip:	95076
Population served:	101 - 500 Persons	Treatment:	Untreated
Latitude:	372307	Longitude:	1220647
Violation id:	0100005	Orig code:	S
State:	CA	Violation Year:	2001
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	03/01/2001
Cmp edt:	03/31/2001		
Violation id:	0200006	Orig code:	S
State:	CA	Violation Year:	2002
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	26	Violation name:	Monitoring, Repeat Minor (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2002
Cmp edt:	01/31/2002		
Violation id:	0200007	Orig code:	S
State:	CA	Violation Year:	2002
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	04/01/2002
Cmp edt:	04/30/2002		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation id:	0300008	Orig code:	S
State:	CA	Violation Year:	2003
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2003
Cmp edt:	07/31/2003		

Violation id:	0500009	Orig code:	S
State:	CA	Violation Year:	2005
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	24	Violation name:	Monitoring, Routine Minor (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2005
Cmp edt:	01/31/2005		

Violation id:	0600010	Orig code:	S
State:	CA	Violation Year:	2005
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	25	Violation name:	Monitoring, Repeat Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	12/01/2005
Cmp edt:	12/31/2005		

Violation id:	0600011	Orig code:	S
State:	CA	Violation Year:	2006
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	24	Violation name:	Monitoring, Routine Minor (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2006
Cmp edt:	01/31/2006		

Violation id:	0800012	Orig code:	S
State:	CA	Violation Year:	2007
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	25	Violation name:	Monitoring, Repeat Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2007
Cmp edt:	07/31/2007		

Violation id:	0900013	Orig code:	S
State:	CA	Violation Year:	2009
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	03/01/2009
Cmp edt:	03/31/2009		

Violation id:	1000014	Orig code:	S
State:	CA	Violation Year:	2010
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	04/01/2010
Cmp edt:	04/30/2010		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation id:	1100015	Orig code:	S
State:	CA	Violation Year:	2009
Contamination code:	1040	Contamination Name:	Nitrate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	331	Rule name:	Nitrates
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	12/01/2009
Cmp edt:	12/31/2009		

Violation id:	95V0001	Orig code:	F
State:	CA	Violation Year:	1993
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	51	Violation name:	Initial Tap Sampling for Pb and Cu
Rule code:	350	Rule name:	LCR
Violation measur:	0	Unit of measure:	Not Reported
State mcl:	0	Cmp bdt:	07/01/1993
Cmp edt:	04/04/2000		

PWS currently has or had major violation(s) or enforcement:Yes

Violation ID:	9300001	Violation source ID:	Not Reported
PWS telephone:	Not Reported	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Violation start date:	010193	Violation end date:	013193
Violation period (months):	001	Violation awareness date:	030293
Major violator:	Yes	Maximum contaminant level:	Not Reported
Number of required samples:	Not Reported	Number of samples taken:	Not Reported
Analysis method:	Not Reported	Analysis result:	Not Reported

Violation ID:	0300008	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	08/28/2003
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		

Violation ID:	0500009	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	02/17/2005
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		

Violation ID:	0500009	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	02/17/2005
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal

Violation ID:	0600010	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	01/19/2006
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		

Violation ID:	0600010	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	01/19/2006
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal

Violation ID:	0600011	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	02/16/2006
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		

Violation ID:	0600011	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	02/16/2006
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal

Violation ID:	0900013	Orig Code:	S

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcemnt FY:	2009	Enforcement Action:	04/21/2009
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	95V0001	Orig Code:	F
Enforcemnt FY:	2000	Enforcement Action:	04/04/2000
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0100005
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Routine Major (TCR)
Compliance start date:	3/1/2001 0:00:00	Compliance end date:	3/31/2001 0:00:00
Enforcement date:	No Enf Action as of	Enforcement action:	7/8/2009 0:00:00
Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0200006
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Repeat Minor (TCR)
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	1/31/2002 0:00:00
Enforcement date:	No Enf Action as of	Enforcement action:	7/8/2009 0:00:00
Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0300008
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Routine Major (TCR)
Compliance start date:	7/1/2003 0:00:00	Compliance end date:	7/31/2003 0:00:00
Enforcement date:	8/28/2003 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0500009
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Routine Minor (TCR)
Compliance start date:	1/1/2005 0:00:00	Compliance end date:	1/31/2005 0:00:00
Enforcement date:	2/17/2005 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0500009
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Routine Minor (TCR)
Compliance start date:	1/1/2005 0:00:00	Compliance end date:	1/31/2005 0:00:00
Enforcement date:	2/17/2005 0:00:00	Enforcement action:	State Public Notif Requested
Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0600010
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Repeat Major (TCR)
Compliance start date:	12/1/2005 0:00:00	Compliance end date:	12/31/2005 0:00:00
Enforcement date:	1/19/2006 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0600010
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Repeat Major (TCR)
Compliance start date:	12/1/2005 0:00:00	Compliance end date:	12/31/2005 0:00:00
Enforcement date:	1/19/2006 0:00:00	Enforcement action:	State Public Notif Requested
Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0600011
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Routine Minor (TCR)
Compliance start date:	1/1/2006 0:00:00	Compliance end date:	1/31/2006 0:00:00
Enforcement date:	2/16/2006 0:00:00	Enforcement action:	State Violation/Reminder Notice

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	0600011
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Routine Minor (TCR)
Compliance start date:	1/1/2006 0:00:00	Compliance end date:	1/31/2006 0:00:00
Enforcement date:	2/16/2006 0:00:00	Enforcement action:	State Public Notif Requested
Violation measurement:	Not Reported		
PWS name:	STRUVE RD WS #02	Population served:	166
PWS type code:	C	Violation ID:	95V0001
Contaminant:	LEAD & COPPER RULE	Violation type:	Initial Tap Sampling for Pb and Cu
Compliance start date:	7/1/1993 0:00:00	Compliance end date:	4/4/2000 0:00:00
Enforcement date:	4/4/2000 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	0		

C23
SSE
1/2 - 1 Mile
Higher

CA WELLS 6896

Seq:	6896	Prim sta c:	06S/02W-29J02 M
Frds no:	4310001025	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 107-01 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372300.0	Longitude:	1220600.0
Precision:	4	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

C24
SSE
1/2 - 1 Mile
Higher

CA WELLS 6878

Seq:	6878	Prim sta c:	06S/02W-20L03 M
Frds no:	4310001030	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 119-03	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372300.0	Longitude:	1220600.0
Precision:	5	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		
Sample date:	23-JAN-18	Finding:	3.913
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-DEC-17	Finding:	3.988
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-SEP-17	Finding:	3.903
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-AUG-17	Finding:	1.6
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	13-JUN-17	Finding:	3.894
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-MAR-17	Finding:	3.872
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-DEC-16	Finding:	3.777
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-SEP-16	Finding:	3.87
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-JUN-16	Finding:	3.785
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-MAR-16	Finding:	28.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	23-MAR-16	Finding:	440.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	0.73
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	0.14
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	23-MAR-16	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	43.
Chemical:	CHLORIDE	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.		
Sample date:	23-MAR-16	Finding:	26.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	84.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	320.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	3.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-MAR-16	Finding:	360.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	290.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	7.6
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	780.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-MAR-16	Finding:	42.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-NOV-15	Finding:	3.924
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-JUN-15	Finding:	7.6
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-15	Finding:	21.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	05-MAR-15	Finding:	20.3
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	05-MAR-15	Finding:	6.6
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	18-DEC-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	18-DEC-14	Finding:	19.4
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	02-SEP-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-14	Finding:	20.373
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-JUN-14	Finding:	7.2
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	10-MAR-14	Finding:	20.533
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-MAR-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-DEC-13	Finding:	1.8
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	10-DEC-13	Finding:	23.832
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-DEC-13	Finding:	6.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	18-SEP-13	Finding:	23.915
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-SEP-13	Finding:	7.19
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	19-JUN-13	Finding:	23.707
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-JUN-13	Finding:	1.9
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	03-JUN-13	Finding:	7.23
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	18.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.		
Sample date:	13-MAR-13	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	0.36
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	13-MAR-13	Finding:	1.
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	440.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	32.
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	13-MAR-13	Finding:	41.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	44.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	24.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	80.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	300.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	360.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	300.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	8.2
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	740.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	13-MAR-13	Finding:	18.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	13-MAR-13	Finding:	26.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	19-DEC-12	Finding:	0.39
Chemical:	RADIUM 226 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	19-DEC-12	Finding:	0.15
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	19-DEC-12	Finding:	2.9
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	19-DEC-12	Finding:	3.1
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	19-DEC-12	Finding:	3.
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	04-DEC-12	Finding:	21.113
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-DEC-12	Finding:	7.1
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-SEP-12	Finding:	24.349
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-SEP-12	Finding:	7.49
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	06-JUN-12	Finding:	24.846
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-JUN-12	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-MAR-12	Finding:	22.96
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-MAR-12	Finding:	7.8
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C25
SSE
1/2 - 1 Mile
Higher

CA WELLS 6897

Seq:	6897	Prim sta c:	06S/02W-29K05 M
Frds no:	4310001026	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 108-01 - INACTIVE	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372300.0	Longitude:	1220600.0
Precision:	8	Status:	IU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

C26
SSE
1/2 - 1 Mile
Higher

CA WELLS 6906

Seq:	6906	Prim sta c:	06S/02W-34G02 M
Frds no:	4310001037	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	ZANETTI WELL	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372300.0	Longitude:	1220600.0
Precision:	5	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		
Sample date:	20-FEB-18	Finding:	3.795
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	28-NOV-17	Finding:	2.6
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	14-NOV-17	Finding:	3.787
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	16-AUG-17	Finding:	3.801
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	16-MAY-17	Finding:	3.734
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-FEB-17	Finding:	3.811
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-DEC-16	Finding:	4.065
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-NOV-16	Finding:	4.107
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	10-AUG-16	Finding:	0.22
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	10-AUG-16	Finding:	1.3
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	10-AUG-16	Finding:	18.7
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	10-AUG-16	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	10-AUG-16	Finding:	19.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	10-AUG-16	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	460.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	0.22
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	0.28
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	09-AUG-16	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	180.
Chemical:	BARIUM	Report units:	UG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	100.		
Sample date:	09-AUG-16	Finding:	0.14
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	09-AUG-16	Finding:	46.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	26.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	30.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	390.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	4.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-AUG-16	Finding:	330.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	270.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	7.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	760.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	19.1
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	09-AUG-16	Finding:	54.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	17-MAY-16	Finding:	3.877
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	08-FEB-16	Finding:	4.55
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	16-NOV-15	Finding:	6.313
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-AUG-15	Finding:	34.523
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-JUN-15	Finding:	33.651
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-MAY-15	Finding:	17.2
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	27-MAY-15	Finding:	7.
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	10-MAR-15	Finding:	24.256
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-FEB-15	Finding:	7.6
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-FEB-15	Finding:	17.2
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	16-DEC-14	Finding:	20.032
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-NOV-14	Finding:	18.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	04-NOV-14	Finding:	8.8
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-SEP-14	Finding:	33.819
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-MAY-14	Finding:	6.8
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	10-MAR-14	Finding:	31.253
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	2.		
Sample date:	05-FEB-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	10-DEC-13	Finding:	20.923
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-NOV-13	Finding:	6.59
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	22-OCT-13	Finding:	3.
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	22-OCT-13	Finding:	4.
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	06-AUG-13	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-JUN-13	Finding:	2.6
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	13-MAY-13	Finding:	6.9
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-MAY-13	Finding:	7.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-FEB-13	Finding:	7.1
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	170.
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	16-JAN-13	Finding:	0.11
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	16-JAN-13	Finding:	46.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	16-JAN-13	Finding:	440.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	0.95
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	16-JAN-13	Finding:	730.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	0.12
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	16-JAN-13	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	270.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	330.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	350.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	95.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	28.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	45.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-13	Finding:	23.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	05-NOV-12	Finding:	7.2
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-AUG-12	Finding:	7.4
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	02-MAY-12	Finding:	7.1
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	27-FEB-12	Finding:	7.63
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C27
SSE
1/2 - 1 Mile
Higher

CA WELLS 6899

Seq:	6899	Prim sta c:	06S/02W-32D01 M
Frds no:	4310001024	County:	43
District:	05	User id:	HEN
System no:	4310001	Water type:	G
Source nam:	WELL 104-02	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372300.0	Longitude:	1220600.0
Precision:	5	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4310001	System nam:	Cwsc Los Altos Suburban
Hqname:	CALIFORNIA WTR SERV CO	Address:	949 B Street
City:	Los Altos	State:	CA
Zip:	94024	Zip ext:	Not Reported
Pop serv:	53940	Connection:	17895
Area serve:	LOS ALTOS		

Sample date:	23-JAN-18	Finding:	2.934
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	13-JUN-17	Finding:	2.936
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	15-JUN-16	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		

Sample date:	15-JUN-16	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		

Sample date:	15-JUN-16	Finding:	0.49
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		

Sample date:	15-JUN-16	Finding:	410.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		

Sample date:	15-JUN-16	Finding:	0.11
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		

Sample date:	15-JUN-16	Finding:	44.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	15-JUN-16	Finding:	100.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	15-JUN-16	Finding:	2.1
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	59.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	24.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	49.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	220.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	1.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-JUN-16	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	18.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	720.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	15-JUN-16	Finding:	150.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-JUL-15	Finding:	1.
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	04-JUN-15	Finding:	7.2
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-15	Finding:	19.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	05-MAR-15	Finding:	18.8
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	05-MAR-15	Finding:	6.5
Chemical:	PH, FIELD	Report units:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.		
Sample date:	14-JAN-15	Finding:	18.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	14-JAN-15	Finding:	0.99
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-15	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	18-DEC-14	Finding:	18.4
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	18-DEC-14	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	02-SEP-14	Finding:	7.5
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-14	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-DEC-13	Finding:	6.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-SEP-13	Finding:	7.19
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	18-JUN-13	Finding:	1.2
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	03-JUN-13	Finding:	7.45
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	310.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	0.12
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	12-MAR-13	Finding:	9.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	12-MAR-13	Finding:	0.85
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	460.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	46.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	12-MAR-13	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	18.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	18.
Chemical:	SOURCE TEMPERATURE C	Report units:	C
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	770.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	370.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	380.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	83.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	42.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	29.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-MAR-13	Finding:	60.
Chemical:	CHLORIDE	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dlr:	0.		
Sample date:	19-DEC-12	Finding:	0.46
Chemical:	RADIUM 226 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	19-DEC-12	Finding:	0.79
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	04-DEC-12	Finding:	6.7
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-SEP-12	Finding:	7.15
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-JUN-12	Finding:	7.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-MAR-12	Finding:	7.4
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		

1G
NE
1/4 - 1/2 Mile Lower

Site ID:	41-1012
Groundwater Flow:	NE
Shallow Water Depth:	8.26
Deep Water Depth:	11.52
Average Water Depth:	Not Reported
Date:	10/27/1998

AQUIFLOW **50011**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94022	60	3

Federal EPA Radon Zone for SANTA CLARA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94022

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Distel Circle Property
330 Distel Circle
Los Altos, CA 94022

Inquiry Number: 6253537.2s
November 04, 2020

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

330 DISTEL CIRCLE
LOS ALTOS, CA 94022

COORDINATES

Latitude (North):	37.3963710 - 37° 23' 46.93''
Longitude (West):	122.1058710 - 122° 6' 21.13''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	579144.0
UTM Y (Meters):	4139015.5
Elevation:	86 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

Target Property:	NW
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
330 DISTEL CIRCLE
LOS ALTOS, CA 94022

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	US ARMY CORP OF ENGI	330 DISTEL CIR	HAZNET, HWTS		TP
A2	US ARMY CORP OF ENGI	330 DISTEL CIR	HAZNET, HWTS		TP
A3	MIDPENINSULA REGIONA	330 DISTEL CIRCLE	CIWQS		TP
A4	POND 07 AND 08	330 DISTEL CIRCLE	FINDS		TP
A5	1X MIDPENISULA REGIO	330 DISTEL CIRCLE	HAZNET, HWTS		TP
A6	MIDPENISULA REGIONAL	330 DISTEL CIR	HAZNET, HWTS		TP
A7	ALMADN AIR FORCE STA	330 DISTEL CIR	HAZNET, HWTS		TP
A8	US ARMY CORPS OF ENG	330 DISTEL CIR	HWTS		TP
A9	MICHAEL J BANKOSH	330 DISTEL CIR	PEST LIC		TP
A10	MIDPENINSULA REGIONA	330 DISTEL CIR	HWTS		TP
A11	US ARMY CORP OF ENGI	330 DISTEL CIR	HAZNET, HWTS		TP
A12	POND 07 AND 08	330 DISTEL CIRCLE	CIWQS		TP
A13	MIDPENISULA REGIONAL	330 DISTEL CIR	HAZNET, HWTS		TP
Reg	JASCO CHEM CORP	1710 VILLA ST	NPL, SEMS, RCRA-SQG, US ENG CONTROLS, US INST...	Same	4647, 0.880, East
A14	R2 TECHNOLOGY INC	325 DISTEL CL	CUPA Listings	Lower	71, 0.013, ESE
B15	PALO ALTO MEDICAL FO	370 DISTEL CL	CUPA Listings	Higher	187, 0.035, SSE
B16	SUTTER BAY MEDICAL F	370 DISTEL CL	CERS HAZ WASTE	Higher	187, 0.035, SSE
B17	SUTTER BAY MEDICAL F	370 DISTEL CIR	RCRA NonGen / NLR	Higher	227, 0.043, SE
C18	SKYLINE HEIGHTS LLC	4970 EL CAMINO REAL	RCRA NonGen / NLR	Lower	246, 0.047, NNW
D19	FORMER PLATINUM CLEA	2290 WEST EL CAMINO	ENVIROSTOR, VCP	Lower	284, 0.054, NE
D20	PURE CLEANERS	2290 EL CAMINO REAL	CUPA Listings	Lower	284, 0.054, NE
D21	PLATINUM CLEANERS	2290 W EL CAMINO REA	CUPA Listings	Lower	284, 0.054, NE
D22	DELIA'S CLEANERS INC	2290 W EL CAMINO REA	DRYCLEANERS	Lower	284, 0.054, NE
D23	DELIA'S CLEANERS	2290 W EL CAMINO REA	CUPA Listings	Lower	284, 0.054, NE
D24	DCI MANAGEMENT GROUP	2290 W EL CAMINO REA	EDR Hist Cleaner	Lower	284, 0.054, NE
D25	DCI MANAGEMENT GROUP	2290 EL CAMINO REAL	RCRA-SQG, FINDS, ECHO	Lower	284, 0.054, NE
D26	AVANTE	5050 EL CAMINO REAL	CUPA Listings	Lower	285, 0.054, East
D27	FOOTHILL CHIROPRACTI	5050 EL CAMINO REAL	CUPA Listings	Lower	285, 0.054, East
C28	PURE CLEANERS	2290-A EL CAMINO REA	DRYCLEANERS, HWTS	Lower	335, 0.063, North
B29	QSECURE	333 DISTEL CL	CUPA Listings	Higher	370, 0.070, SE
E30	SPINAL & SPORTS CARE	2200 EL CAMINO REAL	CUPA Listings	Lower	443, 0.084, ENE
E31	WALTER'S FLOORS	5084 EL CAMINO REAL	LUST, HIST LUST, Cortese, HIST CORTESE	Higher	525, 0.099, East
E32	TAYLOR RENTAL	2246 W EL CAMINO REA	SWEEPS UST, HIST UST, CA FID UST	Lower	536, 0.102, ENE
E33	TAYLOR RENTALS	2246 W EL CAMINO REA	RCRA-SQG	Lower	536, 0.102, ENE
E34	UNITED RENTALS NORTH	2246 W EL CAMINO REA	CUPA Listings	Lower	536, 0.102, ENE
E35	B & H EQUIPMENT CO	2246 W EL CAMINO REA	HIST UST	Lower	536, 0.102, ENE
F36	728 PANCHITA LLC	728 PANCHITA WAY	RCRA NonGen / NLR	Higher	622, 0.118, SSW
E37	PERFORMANCE BICYCLE	2124 W EL CAMINO REA	RCRA NonGen / NLR	Lower	623, 0.118, East
38	INNOVUSION, INC.	4920 EL CAMINO REAL,	RCRA NonGen / NLR	Lower	651, 0.123, WNW

MAPPED SITES SUMMARY

Target Property Address:
330 DISTEL CIRCLE
LOS ALTOS, CA 94022

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
F39	MIKE RYAN	722 PANCHITA WAY	RCRA NonGen / NLR	Higher	706, 0.134, SSW
40	LATHAM SQUARE APARTM	2250 LATHAM ST	RCRA NonGen / NLR	Lower	831, 0.157, NE
41	HEATH, RICHARD	2280 LAYTHM STREET #	RCRA NonGen / NLR	Lower	886, 0.168, NNE
42	JACK IN THE BOX #042	4896 EL CAMINO REAL	CUPA Listings, CERS	Lower	1007, 0.191, NW
G43	JOHN PEAR	410 ORTEGA AVE	HIST UST	Lower	1015, 0.192, North
G44	JOHN PEAR	410 ORTEGA AVE	SWEEPS UST, CA FID UST	Lower	1015, 0.192, North
H45	NATUROPATHIC OPTIONS	5150 EL CAMINO REAL	RCRA NonGen / NLR	Higher	1029, 0.195, ESE
I46	BXP WEST EL CAMINO L	2440 W EL CAMINO REA	RCRA NonGen / NLR	Lower	1034, 0.196, NNW
I47	BP WEST EL CAMINO LL	2440 W EL CAMINO REA	CUPA Listings, EMI, CERS	Lower	1034, 0.196, NNW
I48	BOSTON PROPERTIES, L	2440 EL CAMINO REAL	CERS HAZ WASTE, CERS	Lower	1034, 0.196, NNW
I49	ALPINE ANIMAL HOSPIT	2460 W EL CAMINO REA	CUPA Listings, HWTS	Lower	1067, 0.202, NW
I50	ALPINE ANIMAL HOSPIT	2460 W EL CAMINO REA	CUPA Listings	Lower	1067, 0.202, NW
I51	ALPINE ANIMAL HOSPIT	2460 EL CAMINO REAL	CUPA Listings	Lower	1067, 0.202, NW
G52	CANDIDA MALFERRARI	400 ORTEGA AVE	RCRA NonGen / NLR	Lower	1139, 0.216, North
H53	DOLLAR RENT A CAR	4294 EL CAMINO REAL	SWEEPS UST, CA FID UST, CUPA Listings, CERS	Higher	1192, 0.226, ESE
J54	MARTIN DAVIDSSON	646 PANCHITA WAY	RCRA NonGen / NLR	Higher	1216, 0.230, SSW
J55	MARTIN DAVIDSSON	646 PANCHITA WAY	RCRA NonGen / NLR	Higher	1216, 0.230, SSW
56	ONE HOUR CLEANERS	580 RENGSTORFF AVE N	CPS-SLIC, DRYCLEANERS, CERS	Lower	1253, 0.237, ENE
K57	PRIME DENTAL CARE	4846 EL CAMINO REAL	CUPA Listings	Lower	1277, 0.242, NW
K58	JUHYONG YI DDS PRIME	4846 EL CAMINO REAL	RCRA NonGen / NLR	Lower	1277, 0.242, NW
L59	DIGAS	555 SHOWERS DR	LUST, HIST LUST, Cortese, CERS	Lower	1725, 0.327, NNW
L60	TARGET T0322	555 SHOWERS DR	LUST, CERS HAZ WASTE, CUPA Listings, HIST CORTESE,...	Lower	1725, 0.327, NNW
M61	LOS ALTOS GARDEN SUP	4730 EL CAMINO REAL	LUST, Cortese, HIST CORTESE, CERS	Lower	2018, 0.382, NW
M62	LOS ALTOS GARDEN SUP	4730 EL CAMINO REAL	LUST, HIST UST	Lower	2018, 0.382, NW
N63	UNOCAL	895 SAN ANTONIO	HIST CORTESE	Lower	2436, 0.461, WNW
N64	UNOCAL #4918	895 N. SAN ANTONIO R	LUST, HIST LUST, Cortese, CERS	Lower	2436, 0.461, WNW
O65	SYMTRON #2	111 ORTEGA AVENUE	RESPONSE, ENVIROSTOR, CERS	Lower	2500, 0.473, NNE
P66	SYMTRON CORP MOUNTAI	2235 MORA DR	RCRA-SQG, RESPONSE, ENVIROSTOR, FINDS, ECHO, CERS	Lower	2515, 0.476, NNE
Q67	QUALITY TUNE-UP #1	2580 EL CAMINO REAL	LUST, HIST LUST, Cortese, HIST CORTESE	Lower	2538, 0.481, NW
Q68	QUALITY TUNE-UP #1	2580 EL CAMINO REAL	LUST, CERS	Lower	2538, 0.481, NW
R69	SYMTRON CORP.	22352245 MORA DR	HIST CORTESE	Lower	2557, 0.484, NNE
P70	PLESSEY #2	2251, 2257, 2283 AND	RESPONSE, ENVIROSTOR, CERS	Lower	2562, 0.485, NNE
71	IRM COST SHARING SIT	2520 CALIFORNIA STRE	CPS-SLIC, EMI, CERS	Lower	2623, 0.497, North
O72	PLESSEY INC. NPDES	2294 MORA DR	CPS-SLIC, CERS	Lower	2637, 0.499, NNE
R73	PLESSEY MICRO SCIENC	2274 MORA DRIVE	CA BOND EXP. PLAN	Lower	2652, 0.502, NNE
R74	PLESSEY MICRO SCIENC	2274 MORA DR	SEMS-ARCHIVE, HIST Cal-Sites, RCRA NonGen / NLR,...	Lower	2652, 0.502, NNE
R75	DTSC FORMER PLESSEY	2274 MORA DR	RESPONSE, ENVIROSTOR, Cortese, HAZNET, HIST...	Lower	2652, 0.502, NNE
P76	PLESSEY #3	2256 MORA DRIVE	RESPONSE, ENVIROSTOR, CERS	Lower	2659, 0.504, NNE
O77	TRW/VIDAR	77 ORTEGA AVENUE	RESPONSE, ENVIROSTOR, DEED, CERS	Lower	2702, 0.512, NNE

MAPPED SITES SUMMARY

Target Property Address:
330 DISTEL CIRCLE
LOS ALTOS, CA 94022

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
P78	MORA DRIVE	2221-2291 MORA DRIVE	ENVIROSTOR, VCP, DEED	Lower	2742, 0.519, NNE
79	PROPOSED SAN ANTONIO	435 SAN ANTONIO ROAD	ENVIROSTOR, SCH	Lower	3253, 0.616, NNW
80	SHELL SERVICE STATIO	110 N RENGSTORFF	RCRA-SQG, LUST, HIST LUST, SWEEPS UST, HIST UST,...	Lower	3446, 0.653, NE
81	MVSA	225 SAN ANTONIO ROAD	ENVIROSTOR, VCP	Lower	3605, 0.683, NNW
82	LOS ALTOS HS	201 ALMOND AVE	RCRA-SQG, ENVIROSTOR, SCH, CERS HAZ WASTE, FINDS,..	Higher	4010, 0.759, SSW
S83	JASCO CHEMICAL CORP.	1710 VILLA ST	ENVIROSTOR, HIST UST, ENF, CIWQS, CERS	Lower	4683, 0.887, East
S84	JASCO CHEMICAL CO	1710 VILLA STREET	HIST Cal-Sites	Lower	4683, 0.887, East
S85	JASCO CHEMICAL CORPO	1710 VILLA STREET	CA BOND EXP. PLAN, EMI	Lower	4683, 0.887, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
US ARMY CORP OF ENGI 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002624102 HWTS	N/A
US ARMY CORP OF ENGI 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002611256 HWTS	N/A
MIDPENINSULA REGIONA 330 DISTEL CIRCLE WOODSIDE, CA 94022	CIWQS	N/A
POND 07 AND 08 330 DISTEL CIRCLE LOS ALTOS, CA 94022	FINDS Registry ID:: 110065510593	N/A
1X MIDPENISULA REGIO 330 DISTEL CIRCLE LOS ALTOS, CA 94022	HAZNET GEPAID: CAC000703192 HWTS	N/A
MIDPENISULA REGIONAL 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002661612 HWTS	N/A
ALMADN AIR FORCE STA 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002637235 HWTS	N/A
US ARMY CORPS OF ENG 330 DISTEL CIR LOS ALTOS, CA 94022	HWTS	N/A
MICHAEL J BANKOSH 330 DISTEL CIR LOS ALTOS, CA 94022	PEST LIC	N/A
MIDPENINSULA REGIONA 330 DISTEL CIR LOS ALTOS, CA 94022	HWTS	N/A

EXECUTIVE SUMMARY

US ARMY CORP OF ENGI 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002636173 HWTS	N/A
POND 07 AND 08 330 DISTEL CIRCLE LOS ALTOS, CA	CIWQS	N/A
MIDPENISULA REGIONAL 330 DISTEL CIR LOS ALTOS, CA 94022	HAZNET GEPAID: CAC002599053 HWTS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 07/29/2020 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JASCO CHEM CORP Cerclis ID:: 901126 EPA Id: CAD009103318	***1710 VILLA ST***	***E 1/2 - 1 (0.880 mi.)***	***0***	***11***

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 06/15/2020 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DCI MANAGEMENT GROUP	***2290 EL CAMINO REAL***	***NE 0 - 1/8 (0.054 mi.)***	***D25***	***14***

EXECUTIVE SUMMARY

EPA ID:: CAR000063586

TAYLOR RENTALS — 2246 W EL CAMINO REA — ENE 0 - 1/8 (0.102 mi.) — E33 — 16
EPA ID:: CAD983672197

State- and tribal - equivalent NPL

RESPONSE: A review of the RESPONSE list, as provided by EDR, has revealed that there are 6 RESPONSE sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SYMTRON #2	***111 ORTEGA AVENUE***	***NNE 1/4 - 1/2 (0.473 mi.)***	***O65***	***23***
Database: RESPONSE, Date of Government Version: 07/27/2020 Status: No Further Action Facility Id: 43360130				
SYMTRON CORP MOUNTAI	***2235 MORA DR***	***NNE 1/4 - 1/2 (0.476 mi.)***	***P66***	***23***
Database: RESPONSE, Date of Government Version: 07/27/2020 Status: No Further Action Facility Id: 43360124				
PLESSEY #2	***2251, 2257, 2283 AND***	***NNE 1/4 - 1/2 (0.485 mi.)***	***P70***	***24***
Database: RESPONSE, Date of Government Version: 07/27/2020 Status: No Further Action Facility Id: 43360131				
DTSC FORMER PLESSEY	***2274 MORA DR***	***NNE 1/2 - 1 (0.502 mi.)***	***R75***	***26***
Database: RESPONSE, Date of Government Version: 07/27/2020 Status: Certified / Operation & Maintenance Facility Id: 43360069				
PLESSEY #3	***2256 MORA DRIVE***	***NNE 1/2 - 1 (0.504 mi.)***	***P76***	***27***
Database: RESPONSE, Date of Government Version: 07/27/2020 Status: No Further Action Facility Id: 43360135				
TRW/VIDAR	***77 ORTEGA AVENUE***	***NNE 1/2 - 1 (0.512 mi.)***	***O77***	***27***
Database: RESPONSE, Date of Government Version: 07/27/2020 Status: Certified O&M - Land Use Restrictions Only Facility Id: 43360128				

State- and tribal - equivalent CERCLIS

ENVIROSTOR: A review of the ENVIROSTOR list, as provided by EDR, and dated 07/27/2020 has revealed that there are 12 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ALTOS HS	***201 ALMOND AVE***	***SSW 1/2 - 1 (0.759 mi.)***	***82***	***29***
Facility Id: 60002914 Status: Active				

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER PLATINUM CLEA	***2290 WEST EL CAMINO***	***NE 0 - 1/8 (0.054 mi.)***	***D19***	***13***

Facility Id: 60002117
Status: Certified

SYMTRON #2	***111 ORTEGA AVENUE***	***NNE 1/4 - 1/2 (0.473 mi.)***	***O65***	***23***
Facility Id: 43360130 Status: No Further Action				
SYMTRON CORP MOUNTAI	***2235 MORA DR***	***NNE 1/4 - 1/2 (0.476 mi.)***	***P66***	***23***
Facility Id: 43360124 Status: No Further Action				
PLESSEY #2	***2251, 2257, 2283 AND***	***NNE 1/4 - 1/2 (0.485 mi.)***	***P70***	***24***
Facility Id: 43360131 Status: No Further Action				
DTSC FORMER PLESSEY	***2274 MORA DR***	***NNE 1/2 - 1 (0.502 mi.)***	***R75***	***26***
Facility Id: 43360069 Status: Certified / Operation & Maintenance				
PLESSEY #3	***2256 MORA DRIVE***	***NNE 1/2 - 1 (0.504 mi.)***	***P76***	***27***
Facility Id: 43360135 Status: No Further Action				
TRW/VIDAR	***77 ORTEGA AVENUE***	***NNE 1/2 - 1 (0.512 mi.)***	***O77***	***27***
Facility Id: 43360128 Status: Certified O&M - Land Use Restrictions Only				
MORA DRIVE	***2221-2291 MORA DRIVE***	***NNE 1/2 - 1 (0.519 mi.)***	***P78***	***27***
Facility Id: 60002502 Status: Active				
PROPOSED SAN ANTONIO	***435 SAN ANTONIO ROAD***	***NNW 1/2 - 1 (0.616 mi.)***	***79***	***28***
Facility Id: 60002949 Status: Active				
MVSA	***225 SAN ANTONIO ROAD***	***NNW 1/2 - 1 (0.683 mi.)***	***81***	***29***
Facility Id: 60002855 Status: Active				
JASCO CHEMICAL CORP.	***1710 VILLA ST***	***E 1/2 - 1 (0.887 mi.)***	***S83***	***30***
Facility Id: 43280119 Status: Refer: RWQCB				

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, has revealed that there are 8 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALTER'S FLOORS	***5084 EL CAMINO REAL***	***E 0 - 1/8 (0.099 mi.)***	***E31***	***15***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014 Database: LUST, Date of Government Version: 06/08/2020 Status: Completed - Case Closed Facility Status: Case Closed Date Closed: 04/12/1996 Global Id: T0608501552				

EXECUTIVE SUMMARY

SCVWD ID: 06S2W20G01F
date9: 4/12/1996

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIGAS	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L59***	***21***

Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
date9: 9/17/1997

TARGET T0322	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L60***	***21***

Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 06/08/2020
Status: Completed - Case Closed
Date Closed: 09/17/1997
Global Id: T0608500515
SCVWD ID: 06S2W20C02F

LOS ALTOS GARDEN SUP	***4730 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.382 mi.)***	***M61***	***22***

Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 43-2112
Facility Status: Case Closed
date9: 4/29/1996

LOS ALTOS GARDEN SUP	***4730 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.382 mi.)***	***M62***	***22***

Database: LUST, Date of Government Version: 06/08/2020
Status: Completed - Case Closed
Global Id: T0608501940

UNOCAL #4918	***895 N. SAN ANTONIO R***	***WNW 1/4 - 1/2 (0.461 mi.)***	***N64***	***22***

Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 06/08/2020
Status: Completed - Case Closed
Facility Status: Pollution Characterization
Date Closed: 03/11/2013
Global Id: T0608500150
SCVWD ID: 06S2W20E01F

QUALITY TUNE-UP #1	***2580 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.481 mi.)***	***Q67***	***24***

Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
date9: 9/30/1996

QUALITY TUNE-UP #1	***2580 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.481 mi.)***	***Q68***	***24***

Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 06/08/2020
Status: Completed - Case Closed
Date Closed: 09/30/1996
Global Id: T0608501080
SCVWD ID: 06S2W20D01F

EXECUTIVE SUMMARY

CPS-SLIC: A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 3 CPS-SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ONE HOUR CLEANERS	***580 RENGSTORFF AVE N***	***ENE 1/8 - 1/4 (0.237 mi.)***	***56***	***20***
Database: SLIC REG 2, Date of Government Version: 09/30/2004 Database: CPS-SLIC, Date of Government Version: 06/08/2020 Facility Status: Completed - Case Closed Facility Id: SLT2O111117 Global Id: SLT2O111117				
IRM COST SHARING SIT	***2520 CALIFORNIA STRE***	***N 1/4 - 1/2 (0.497 mi.)***	***71***	***25***
Database: SLIC REG 2, Date of Government Version: 09/30/2004 Database: CPS-SLIC, Date of Government Version: 06/08/2020 Facility Status: Open - Verification Monitoring Facility Id: SL18311731 Global Id: SL18311731				
PLESSEY INC. NPDES	***2294 MORA DR***	***NNE 1/4 - 1/2 (0.499 mi.)***	***O72***	***25***
Database: CPS-SLIC, Date of Government Version: 06/08/2020 Facility Status: Completed - Case Closed Global Id: SL0608508217				

HIST LUST: A review of the HIST LUST list, as provided by EDR, and dated 03/29/2005 has revealed that there are 4 HIST LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALTER'S FLOORS	***5084 EL CAMINO REAL***	***E 0 - 1/8 (0.099 mi.)***	***E31***	***15***
SCVWD ID: 06S2W20G01				

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIGAS	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L59***	***21***
SCVWD ID: 06S2W20C02				
UNOCAL #4918	***895 N. SAN ANTONIO R***	***WNW 1/4 - 1/2 (0.461 mi.)***	***N64***	***22***
SCVWD ID: 06S2W20E01				
QUALITY TUNE-UP #1	***2580 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.481 mi.)***	***Q67***	***24***
SCVWD ID: 06S2W20D01				

State and tribal voluntary cleanup sites

VCP: A review of the VCP list, as provided by EDR, and dated 07/27/2020 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER PLATINUM CLEA	***2290 WEST EL CAMINO***	***NE 0 - 1/8 (0.054 mi.)***	***D19***	***13***
Status: Certified				

EXECUTIVE SUMMARY

Facility Id: 60002117

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 2 HIST Cal-Sites sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PLESSEY MICRO SCIENC	***2274 MORA DR***	***NNE 1/2 - 1 (0.502 mi.)***	***R74***	***25***
JASCO CHEMICAL CO	1710 VILLA STREET	E 1/2 - 1 (0.887 mi.)	S84	30

CERS HAZ WASTE: A review of the CERS HAZ WASTE list, as provided by EDR, and dated 07/20/2020 has revealed that there are 2 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SUTTER BAY MEDICAL F	370 DISTEL CL	SSE 0 - 1/8 (0.035 mi.)	B16	12

Lower Elevation	Address	Direction / Distance	Map ID	Page
BOSTON PROPERTIES, L	***2440 EL CAMINO REAL***	***NNW 1/8 - 1/4 (0.196 mi.)***	***I48***	***19***

Local Lists of Registered Storage Tanks

SWEEPS UST: A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOLLAR RENT A CAR	***4294 EL CAMINO REAL***	***ESE 1/8 - 1/4 (0.226 mi.)***	***H53***	***19***
Status: A				
Tank Status: A				
Comp Number: 36672				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAYLOR RENTAL	***2246 W EL CAMINO REA***	***ENE 0 - 1/8 (0.102 mi.)***	***E32***	***15***
Comp Number: 4662				
JOHN PEAR	***410 ORTEGA AVE***	***N 1/8 - 1/4 (0.192 mi.)***	***G44***	***18***
Comp Number: 48011				

EXECUTIVE SUMMARY

HIST UST: A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAYLOR RENTAL	***2246 W EL CAMINO REA***	***ENE 0 - 1/8 (0.102 mi.)***	***E32***	***15***
B & H EQUIPMENT CO Facility Id: 00000004662	2246 W EL CAMINO REA	ENE 0 - 1/8 (0.102 mi.)	E35	16
JOHN PEAR Facility Id: 00000048011	410 ORTEGA AVE	N 1/8 - 1/4 (0.192 mi.)	G43	18

CA FID UST: A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOLLAR RENT A CAR Facility Id: 43012037 Status: A	***4294 EL CAMINO REAL***	***ESE 1/8 - 1/4 (0.226 mi.)***	***H53***	***19***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAYLOR RENTAL Facility Id: 43004443 Status: A	***2246 W EL CAMINO REA***	***ENE 0 - 1/8 (0.102 mi.)***	***E32***	***15***
JOHN PEAR Facility Id: 43011926 Status: I	***410 ORTEGA AVE***	***N 1/8 - 1/4 (0.192 mi.)***	***G44***	***18***

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/15/2020 has revealed that there are 14 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SUTTER BAY MEDICAL F EPA ID:: CAL000093164	370 DISTEL CIR	SE 0 - 1/8 (0.043 mi.)	B17	12
728 PANCHITA LLC EPA ID:: CAC003018628	728 PANCHITA WAY	SSW 0 - 1/8 (0.118 mi.)	F36	16
MIKE RYAN EPA ID:: CAC002980951	722 PANCHITA WAY	SSW 1/8 - 1/4 (0.134 mi.)	F39	17
NATUROPATHIC OPTIONS EPA ID:: CAL000441379	5150 EL CAMINO REAL	ESE 1/8 - 1/4 (0.195 mi.)	H45	18
MARTIN DAVIDSSON EPA ID:: CAC002965123	646 PANCHITA WAY	SSW 1/8 - 1/4 (0.230 mi.)	J54	20
MARTIN DAVIDSSON	646 PANCHITA WAY	SSW 1/8 - 1/4 (0.230 mi.)	J55	20

EXECUTIVE SUMMARY

EPA ID:: CAC002982432

Lower Elevation	Address	Direction / Distance	Map ID	Page
SKYLINE HEIGHTS LLC EPA ID:: CAC003034547	4970 EL CAMINO REAL	NNW 0 - 1/8 (0.047 mi.)	C18	12
PERFORMANCE BICYCLE EPA ID:: CAL000322954	2124 W EL CAMINO REA	E 0 - 1/8 (0.118 mi.)	E37	16
INNOVUSION, INC. EPA ID:: CAC003016057	4920 EL CAMINO REAL,	WNW 0 - 1/8 (0.123 mi.)	38	17
LATHAM SQUARE APARTM EPA ID:: CAL000280916	2250 LATHAM ST	NE 1/8 - 1/4 (0.157 mi.)	40	17
HEATH, RICHARD EPA ID:: CAC002999920	2280 LAYTHM STREET #	NNE 1/8 - 1/4 (0.168 mi.)	41	17
BXP WEST EL CAMINO L EPA ID:: CAL000370939	2440 W EL CAMINO REA	NNW 1/8 - 1/4 (0.196 mi.)	I46	18
CANDIDA MALFERRARI EPA ID:: CAC002966813	400 ORTEGA AVE	N 1/8 - 1/4 (0.216 mi.)	G52	19
JUHYONG YI DDS PRIME EPA ID:: CAL000333242	4846 EL CAMINO REAL	NW 1/8 - 1/4 (0.242 mi.)	K58	21

ROD: A review of the ROD list, as provided by EDR, and dated 07/29/2020 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JASCO CHEM CORP EPA ID:: CAD009103318	***1710 VILLA ST***	***E 1/2 - 1 (0.880 mi.)***	***0***	***11***

CA BOND EXP. PLAN: A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there are 2 CA BOND EXP. PLAN sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PLESSEY MICRO SCIENC	2274 MORA DRIVE	NNE 1/2 - 1 (0.502 mi.)	R73	25
JASCO CHEMICAL CORPO	***1710 VILLA STREET***	***E 1/2 - 1 (0.887 mi.)***	***S85***	***30***

Cortese: A review of the Cortese list, as provided by EDR, and dated 06/22/2020 has revealed that there are 5 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALTER'S FLOORS Cleanup Status: COMPLETED - CASE CLOSED	***5084 EL CAMINO REAL***	***E 0 - 1/8 (0.099 mi.)***	***E31***	***15***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIGAS	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L59***	***21***

EXECUTIVE SUMMARY

Cleanup Status: COMPLETED - CASE CLOSED

LOS ALTOS GARDEN SUP ***4730 EL CAMINO REAL*** ***NW 1/4 - 1/2 (0.382 mi.)*** ***M61*** ***22***
Cleanup Status: COMPLETED - CASE CLOSED

UNOCAL #4918 ***895 N. SAN ANTONIO R*** ***WNW 1/4 - 1/2 (0.461 mi.)*** ***N64*** ***22***
Cleanup Status: COMPLETED - CASE CLOSED

QUALITY TUNE-UP #1 ***2580 EL CAMINO REAL*** ***NW 1/4 - 1/2 (0.481 mi.)*** ***Q67*** ***24***
Cleanup Status: COMPLETED - CASE CLOSED

CUPA Listings: A review of the CUPA Listings list, as provided by EDR, has revealed that there are 17 CUPA Listings sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALO ALTO MEDICAL FO	370 DISTEL CL	SSE 0 - 1/8 (0.035 mi.)	B15	12
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
QSECURE	333 DISTEL CL	SE 0 - 1/8 (0.070 mi.)	B29	15
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
DOLLAR RENT A CAR	***4294 EL CAMINO REAL***	***ESE 1/8 - 1/4 (0.226 mi.)***	***H53***	***19***
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				

Lower Elevation	Address	Direction / Distance	Map ID	Page
R2 TECHNOLOGY INC	325 DISTEL CL	ESE 0 - 1/8 (0.013 mi.)	A14	12
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
PURE CLEANERS	2290 EL CAMINO REAL	NE 0 - 1/8 (0.054 mi.)	D20	13
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
PLATINUM CLEANERS	2290 W EL CAMINO REA	NE 0 - 1/8 (0.054 mi.)	D21	13
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
DELIA'S CLEANERS	2290 W EL CAMINO REA	NE 0 - 1/8 (0.054 mi.)	D23	13
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
AVANTE	5050 EL CAMINO REAL	E 0 - 1/8 (0.054 mi.)	D26	14
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
FOOTHILL CHIROPRACTI	5050 EL CAMINO REAL	E 0 - 1/8 (0.054 mi.)	D27	14
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
SPINAL & SPORTS CARE	2200 EL CAMINO REAL	ENE 0 - 1/8 (0.084 mi.)	E30	15
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
UNITED RENTALS NORTH	2246 W EL CAMINO REA	ENE 0 - 1/8 (0.102 mi.)	E34	16
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
JACK IN THE BOX #042	***4896 EL CAMINO REAL***	***NW 1/8 - 1/4 (0.191 mi.)***	***42***	***17***
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
BP WEST EL CAMINO LL	***2440 W EL CAMINO REA***	***NNW 1/8 - 1/4 (0.196 mi.)***	***I47***	***18***
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
ALPINE ANIMAL HOSPIT	***2460 W EL CAMINO REA***	***NW 1/8 - 1/4 (0.202 mi.)***	***I49***	***19***
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
ALPINE ANIMAL HOSPIT	2460 W EL CAMINO REA	NW 1/8 - 1/4 (0.202 mi.)	I50	19
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				
ALPINE ANIMAL HOSPIT	2460 EL CAMINO REAL	NW 1/8 - 1/4 (0.202 mi.)	I51	19
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
PRIME DENTAL CARE	4846 EL CAMINO REAL	NW 1/8 - 1/4 (0.242 mi.)	K57	21
Database: CUPA SANTA CLARA, Date of Government Version: 05/08/2020				

DRYCLEANERS: A review of the DRYCLEANERS list, as provided by EDR, has revealed that there are 3 DRYCLEANERS sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DELIA'S CLEANERS INC	2290 W EL CAMINO REA	NE 0 - 1/8 (0.054 mi.)	D22	13
Database: DRYCLEANERS, Date of Government Version: 06/04/2020 EPA Id: CAR000063586				
PURE CLEANERS	***2290-A EL CAMINO REA***	***N 0 - 1/8 (0.063 mi.)***	***C28***	***14***
Database: DRYCLEANERS, Date of Government Version: 06/04/2020 EPA Id: CAL000287343				
ONE HOUR CLEANERS	***580 RENGSTORFF AVE N***	***ENE 1/8 - 1/4 (0.237 mi.)***	***56***	***20***
Database: DRYCLEANERS, Date of Government Version: 06/04/2020 EPA Id: CAD981632219				

HIST CORTESE: A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 6 HIST CORTESE sites within approximately 0.5 miles of the target property. property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALTER'S FLOORS	***5084 EL CAMINO REAL***	***E 0 - 1/8 (0.099 mi.)***	***E31***	***15***
Reg Id: 43-1594				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TARGET T0322	***555 SHOWERS DR***	***NNW 1/4 - 1/2 (0.327 mi.)***	***L60***	***21***
Reg Id: 43-0468				
LOS ALTOS GARDEN SUP	***4730 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.382 mi.)***	***M61***	***22***
Reg Id: 43-2112				
UNOCAL	895 SAN ANTONIO	WNW 1/4 - 1/2 (0.461 mi.)	N63	22
Reg Id: 43-0082				
QUALITY TUNE-UP #1	***2580 EL CAMINO REAL***	***NW 1/4 - 1/2 (0.481 mi.)***	***Q67***	***24***
Reg Id: 43-1088				
SYMTRON CORP.	22352245 MORA DR	NNE 1/4 - 1/2 (0.484 mi.)	R69	24
Reg Id: 43360124				

EXECUTIVE SUMMARY

Notify 65: A review of the Notify 65 list, as provided by EDR, and dated 08/21/2020 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELL SERVICE STATIO	***110 N RENGSTORFF***	***NE 1/2 - 1 (0.653 mi.)***	***80***	***28***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner: A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist Cleaner site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DCI MANAGEMENT GROUP	2290 W EL CAMINO REA	NE 0 - 1/8 (0.054 mi.)	D24	14

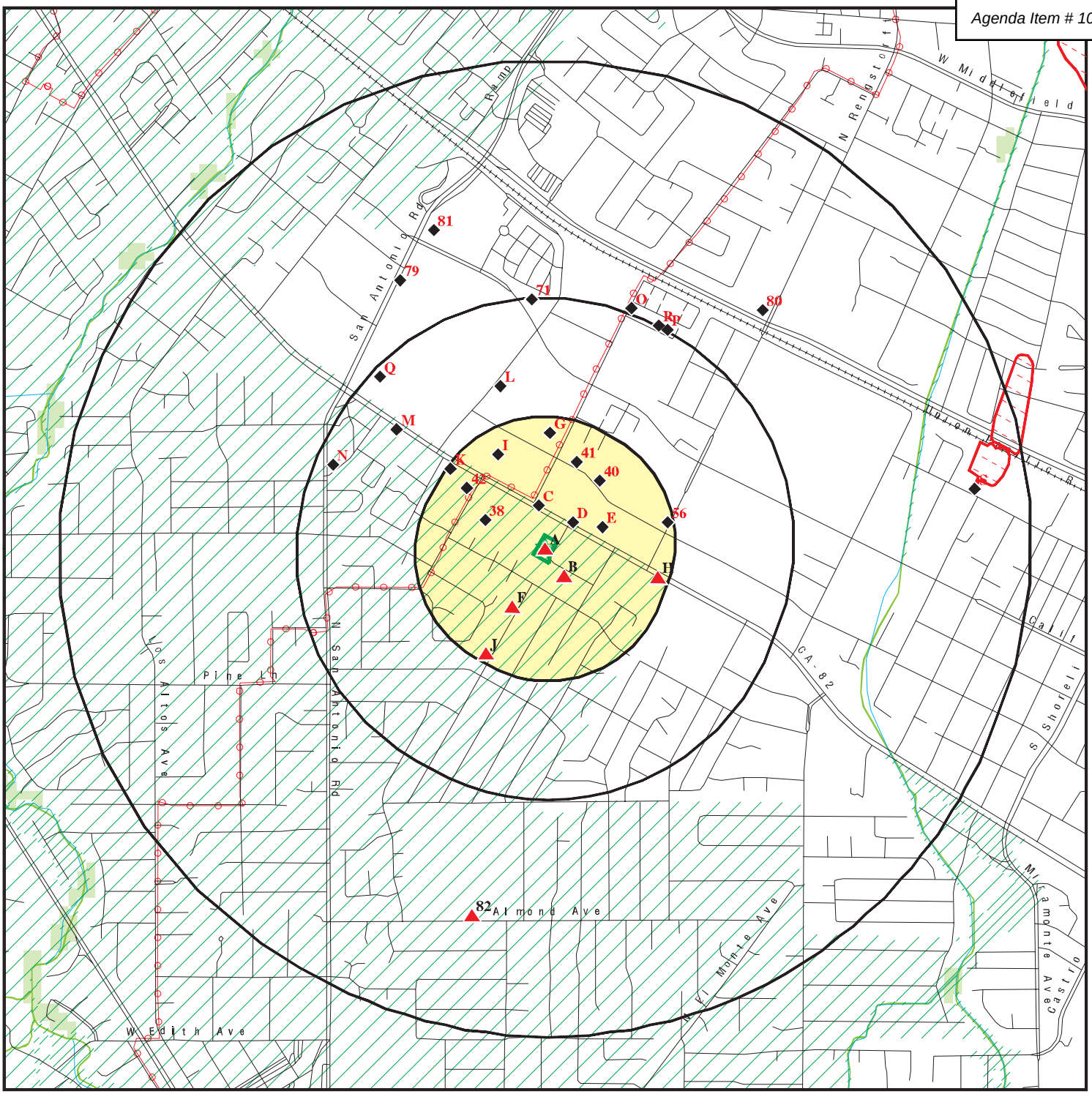
Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MOUNTAIN VIEW	S125742963	BEST BUY #0685	715 EL CAMINO REAL EAST	94040	CERS HAZ WASTE

OVERVIEW MAP - 6253537.2S

Agenda Item # 10.



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Distel Circle Property	CLIENT: Ninyo & Moore
ADDRESS: 330 Distel Circle Los Altos CA 94022	CONTACT: Randy Wheeler
LAT/LONG: 37.396371 / 122.105871	INQUIRY #: 6253537.2s DATE: November 04, 2020 12:58 pm

1413

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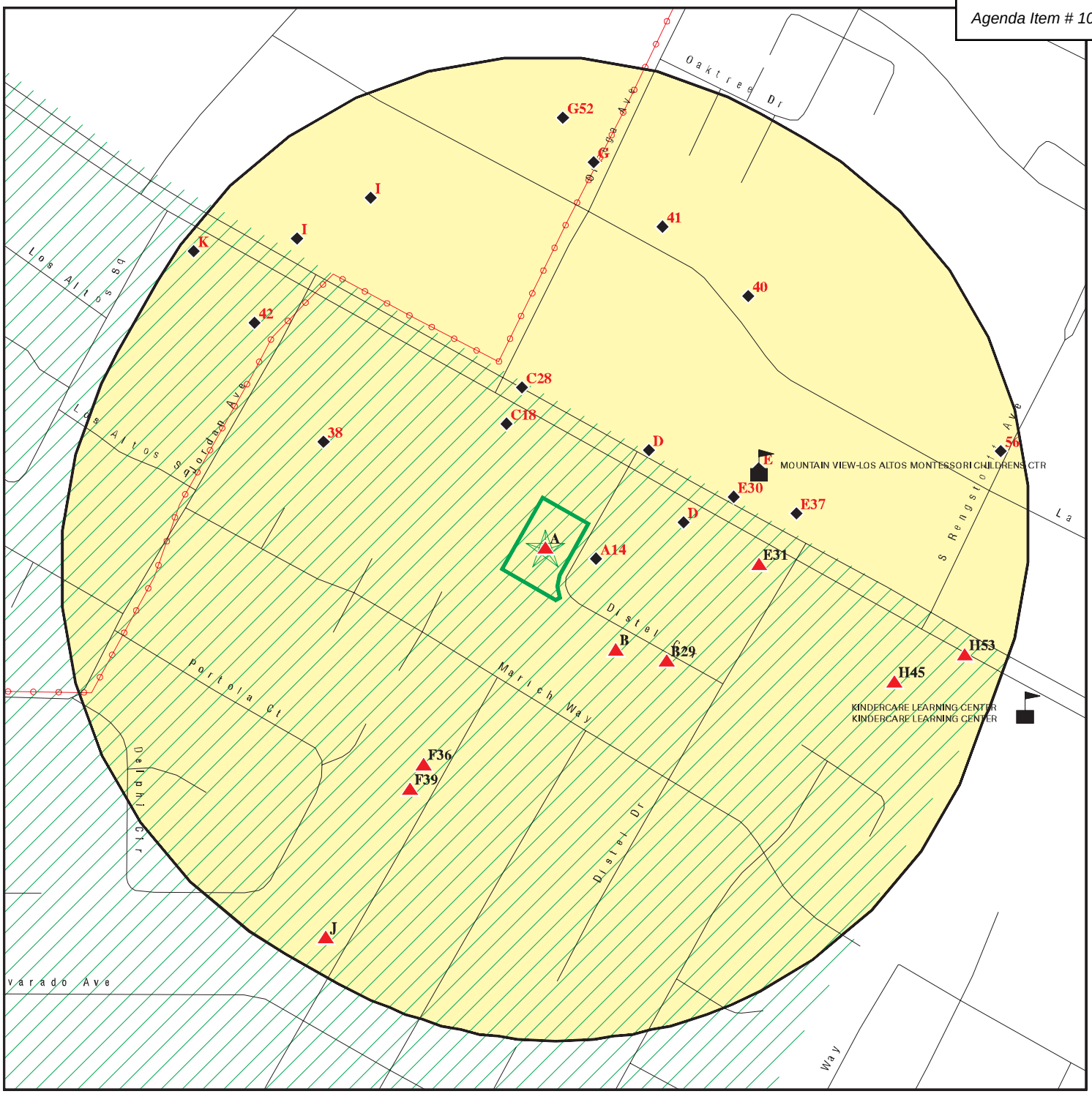
DETAIL MAP - 6253537.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Distel Circle Property	CLIENT: Ninyo & Moore
ADDRESS: 330 Distel Circle Los Altos CA 94022	CONTACT: Randy Wheeler
LAT/LONG: 37.396371 / 122.105871	INQUIRY #: 6253537.2s DATE: November 04, 2020 1:01 pm

1414

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		2	0	NR	NR	NR	2
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	3	3	NR	6
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		1	0	3	8	NR	12
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	0	7	NR	NR	8

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	1	2	NR	NR	3
HIST LUST	0.500		1	0	3	NR	NR	4
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		1	0	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	2	NR	2
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		1	1	NR	NR	NR	2
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	2	NR	NR	NR	3
HIST UST	0.250		2	1	NR	NR	NR	3
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		1	2	NR	NR	NR	3
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		5	9	NR	NR	NR	14
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	1	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	2	NR	2
Cortese	0.500		1	0	4	NR	NR	5
CUPA Listings	0.250		10	7	NR	NR	NR	17

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		2	1	NR	NR	NR	3
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	7	NR	NR	NR	NR	NR	7
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	5	NR	NR	6
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP	1	NR	NR	NR	NR	NR	1
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP	2	NR	NR	NR	NR	NR	2
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
HWTS	TP	9	NR	NR	NR	NR	NR	9
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		1	NR	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		20	31	24	27	18	0	120

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A1	**US ARMY CORP OF ENGINEERS**	**HAZNET**	**S112966161**
Target	**330 DISTEL CIR**	**HWTS**	**N/A**
Property	**LOS ALTOS, CA 94022**		
Actual: **86 ft.**	Click here for full text details		
	HAZNET		
	GEPAID CAC002624102		
A2	**US ARMY CORP OF ENGINEERS**	**HAZNET**	**S112958129**
Target	**330 DISTEL CIR**	**HWTS**	**N/A**
Property	**LOS ALTOS, CA 94022**		
Actual: **86 ft.**	Click here for full text details		
	HAZNET		
	GEPAID CAC002611256		
A3	**MIDPENINSULA REGIONAL OPEN SPACE DISTRICT**	**CIWQS**	**S121655643**
Target	**330 DISTEL CIRCLE**		**N/A**
Property	**WOODSIDE, CA 94022**		
Actual: **86 ft.**	Click here for full text details		
A4	**POND 07 AND 08**	**FINDS**	**1023261679**
Target	**330 DISTEL CIRCLE**		**N/A**
Property	**LOS ALTOS, CA 94022**		
Actual: **86 ft.**	Click here for full text details		
	FINDS		
	Registry ID: 110065510593		
A5	**1X MIDPENISULA REGIONAL OPEN SPACE DIST.**	**HAZNET**	**S112839095**
Target	**330 DISTEL CIRCLE**	**HWTS**	**N/A**
Property	**LOS ALTOS, CA 94022**		
Actual: **86 ft.**	Click here for full text details		
	HAZNET		
	GEPAID CAC000703192		

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A6 **Target Property**	**MIDPENISULA REGIONAL OPEN SPACE DISTRICT** **330 DISTEL CIR** **LOS ALTOS, CA 94022**	**HAZNET** **HWTS**	**S112982650** **N/A**
Actual: 86 ft.	Click here for full text details **HAZNET** GEPAID CAC002661612		
A7 **Target Property**	**ALMADN AIR FORCE STATION** **330 DISTEL CIR** **LOS ALTOS, CA 94022**	**HAZNET** **HWTS**	**S112974609** **N/A**
Actual: 86 ft.	Click here for full text details **HAZNET** GEPAID CAC002637235		
A8 **Target Property**	**US ARMY CORPS OF ENGINEERS** **330 DISTEL CIR** **LOS ALTOS, CA 94022**	**HWTS**	**S124597180** **N/A**
Actual: 86 ft.	Click here for full text details		
A9 **Target Property**	**MICHAEL J BANKOSH** **330 DISTEL CIR** **LOS ALTOS, CA 94022**	**PEST LIC**	**S117651022** **N/A**
Actual: 86 ft.	Click here for full text details		
A10 **Target Property**	**MIDPENINSULA REGIONAL OPEN SPACE DISTRICT** **330 DISTEL CIR** **LOS ALTOS, CA 94022**	**HWTS**	**S124618111** **N/A**
Actual: 86 ft.	Click here for full text details		

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A11	**US ARMY CORP OF ENGINEERS**	**HAZNET**	**S112973931**
Target	**330 DISTEL CIR**	**HWTS**	**N/A**
Property	**LOS ALTOS, CA 94022**		
Actual: **86 ft.**	Click here for full text details		
	HAZNET GEPAID CAC002636173		
A12	**POND 07 AND 08**	**CIWQS**	**S121665109**
Target	**330 DISTEL CIRCLE**		**N/A**
Property	**LOS ALTOS, CA**		
Actual: **86 ft.**	Click here for full text details		
A13	**MIDPENISULA REGIONAL OPEN SPACE DIST.**	**HAZNET**	**S112950602**
Target	**330 DISTEL CIR**	**HWTS**	**N/A**
Property	**LOS ALTOS, CA 94022**		
Actual: **86 ft.**	Click here for full text details		
	HAZNET GEPAID CAC002599053		
NPL	**JASCO CHEM CORP**	**NPL**	**1000175646**
Region	**1710 VILLA ST**	**SEMS**	**CAD009103318**
East	**MOUNTAIN VIEW, CA 94043**	**RCRA-SQG**	
1/2-1		**US ENG CONTROLS**	
4647 ft.		**US INST CONTROLS**	
	Click here for full text details	**ROD**	
		PRP	

NPL
Cerclis ID: 901126
EPA Id CAD009103318

SEMS
Site ID 0901126
EPA Id CAD009103318

RCRA-SQG
EPA Id CAD009103318

US ENG CONTROLS
EPA ID: CAD009103318
EPA ID: CAD009103318

US INST CONTROLS

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	JASCO CHEM CORP (Continued)		**1000175646**
	EPA ID: CAD009103318		
	ROD		
	EPA ID: CAD009103318		
A14	**R2 TECHNOLOGY INC**	**CUPA Listings**	**S121471702**
ESE	**325 DISTEL CL**		**N/A**
< 1/8	**LOS ALTOS, CA 94022**		
0.013 mi.			
71 ft.			
	Click here for full text details		
Relative: Lower			
B15	**PALO ALTO MEDICAL FOUNDATION**	**CUPA Listings**	**S112346406**
SSE	**370 DISTEL CL**		**N/A**
< 1/8	**LOS ALTOS, CA 94022**		
0.035 mi.			
187 ft.			
	Click here for full text details		
Relative: Higher			
B16	**SUTTER BAY MEDICAL FOUNDATION**	**CERS HAZ WASTE**	**S123536968**
SSE	**370 DISTEL CL**		**N/A**
< 1/8	**LOS ALTOS, CA 94022**		
0.035 mi.			
187 ft.			
	Click here for full text details		
Relative: Higher			
B17	**SUTTER BAY MEDICAL FOUNDATION/P.A.M.F**	**RCRA NonGen / NLR**	**1024790845**
SE	**370 DISTEL CIR**		**CAL000093164**
< 1/8	**LOS ALTOS, CA 94022**		
0.043 mi.			
227 ft.			
	Click here for full text details		
Relative: Higher			
	RCRA NonGen / NLR		
	EPA Id CAL000093164		
C18	**SKYLINE HEIGHTS LLC**	**RCRA NonGen / NLR**	**1025854319**
NNW	**4970 EL CAMINO REAL**		**CAC003034547**
< 1/8	**LOS ALTOS, CA 94022**		
0.047 mi.			
246 ft.			
	Click here for full text details		
Relative: Lower			
	RCRA NonGen / NLR		
	EPA Id CAC003034547		

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
D19 **NE** **< 1/8** **0.054 mi.** **284 ft.** **Relative: Lower**	**FORMER PLATINUM CLEANERS** **2290 WEST EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details **ENVIROSTOR** Facility Id 60002117 Status Certified **VCP** Facility Id 60002117 Status Certified	**ENVIROSTOR** **VCP**	**S113068127** **N/A**
D20 **NE** **< 1/8** **0.054 mi.** **284 ft.** **Relative: Lower**	**PURE CLEANERS** **2290 EL CAMINO REAL A** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CUPA Listings**	**S121473049** **N/A**
D21 **NE** **< 1/8** **0.054 mi.** **284 ft.** **Relative: Lower**	**PLATINUM CLEANERS** **2290 W EL CAMINO REAL 1** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CUPA Listings**	**S121474423** **N/A**
D22 **NE** **< 1/8** **0.054 mi.** **284 ft.** **Relative: Lower**	**DELIA'S CLEANERS INC** **2290 W EL CAMINO REAL STE 1** **MOUNTAIN VIEW, CA 94040** Click here for full text details **DRYCLEANERS** EPA Id CAR000063586	**DRYCLEANERS**	**S105808042** **N/A**
D23 **NE** **< 1/8** **0.054 mi.** **284 ft.** **Relative: Lower**	**DELIA'S CLEANERS** **2290 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CUPA Listings**	**S121468982** **N/A**

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
D24 **NE** **< 1/8** **0.054 mi.** **284 ft.** **Relative: Lower**	**DCI MANAGEMENT GROUP LTD** **2290 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040**	**EDR Hist Cleaner**	**1018893776** **N/A**
	Click here for full text details		
D25 **NE** **< 1/8** **0.054 mi.** **284 ft.** **Relative: Lower**	**DCI MANAGEMENT GROUP NO 77** **2290 EL CAMINO REAL NO 1** **MOUNTAIN VIEW, CA 94040**	**RCRA-SQG** **FINDS** **ECHO**	**1001959756** **CAR000063586**
	Click here for full text details		
	RCRA-SQG EPA Id CAR000063586		
	FINDS Registry ID: 110002931659		
	ECHO Registry ID 110002931659		
D26 **East** **< 1/8** **0.054 mi.** **285 ft.** **Relative: Lower**	**AVANTE** **5050 EL CAMINO REAL 200** **LOS ALTOS, CA 94022**	**CUPA Listings**	**S121468573** **N/A**
	Click here for full text details		
D27 **East** **< 1/8** **0.054 mi.** **285 ft.** **Relative: Lower**	**FOOTHILL CHIROPRACTIC GRP INC** **5050 EL CAMINO REAL #200** **LOS ALTOS, CA 94022**	**CUPA Listings**	**S121471355** **N/A**
	Click here for full text details		
C28 **North** **< 1/8** **0.063 mi.** **335 ft.** **Relative: Lower**	**PURE CLEANERS** **2290-A EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040**	**DRYCLEANERS** **HWTS**	**S106661672** **N/A**
	Click here for full text details		
	DRYCLEANERS EPA Id CAL000287343		

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B29 **SE** **< 1/8** **0.070 mi.** **370 ft.** **Relative:** **Higher**	**QSECURE** **333 DISTEL CL** **LOS ALTOS, CA 94022** Click here for full text details	**CUPA Listings**	**S121474784** **N/A**
E30 **ENE** **< 1/8** **0.084 mi.** **443 ft.** **Relative:** **Lower**	**SPINAL & SPORTS CARE CENTER** **2200 EL CAMINO REAL 8** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CUPA Listings**	**S121468969** **N/A**
E31 **East** **< 1/8** **0.099 mi.** **525 ft.** **Relative:** **Higher**	**WALTER'S FLOORS** **5084 EL CAMINO REAL** **LOS ALTOS, CA 94022** Click here for full text details **LUST** Date Closed 04/12/1996 Facility Status Case Closed Status Completed - Case Closed Global Id T0608501552 SCVWD ID 06S2W20G01F date9 4/12/1996 **HIST LUST** SCVWD ID 06S2W20G01 **Cortese** Cleanup Status COMPLETED - CASE CLOSED **HIST CORTESE** Reg Id 43-1594	**LUST** **HIST LUST** **Cortese** **HIST CORTESE**	**S103472901** **N/A**
E32 **ENE** **< 1/8** **0.102 mi.** **536 ft.** **Relative:** **Lower**	**TAYLOR RENTAL** **2246 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details **SWEEPS UST** Comp Number 4662 **CA FID UST**	**SWEEPS UST** **HIST UST** **CA FID UST**	**1000847336** **N/A**

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	TAYLOR RENTAL (Continued)		**1000847336**
	Facility Id 43004443 Status A		
E33 **ENE** **< 1/8** **0.102 mi.** **536 ft.** **Relative:** **Lower**	**TAYLOR RENTALS** **2246 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details **RCRA-SQG** EPA Id CAD983672197	**RCRA-SQG**	**1000857773** **CAD983672197**
E34 **ENE** **< 1/8** **0.102 mi.** **536 ft.** **Relative:** **Lower**	**UNITED RENTALS NORTHWEST INC** **2246 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CUPA Listings**	**S121468975** **N/A**
E35 **ENE** **< 1/8** **0.102 mi.** **536 ft.** **Relative:** **Lower**	**B & H EQUIPMENT CO** **2246 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details **HIST UST** Facility Id 00000004662	**HIST UST**	**U001594302** **N/A**
F36 **SSW** **< 1/8** **0.118 mi.** **622 ft.** **Relative:** **Higher**	**728 PANCHITA LLC** **728 PANCHITA WAY** **LOS ALTOS, CA 94022** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC003018628	**RCRA NonGen / NLR**	**1025839030** **CAC003018628**
E37 **East** **< 1/8** **0.118 mi.** **623 ft.** **Relative:** **Lower**	**PERFORMANCE BICYCLE SHOP #77** **2124 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details **RCRA NonGen / NLR** EPA Id CAL000322954	**RCRA NonGen / NLR**	**1024817874** **CAL000322954**

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
38 **WNW** **< 1/8** **0.123 mi.** **651 ft.** **Relative:** **Lower**	**INNOVUSION, INC.** **4920 EL CAMINO REAL, STE 100** **LOS ALTOS, CA 94022** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC003016057	**RCRA NonGen / NLR**	**1025836469** **CAC003016057**
F39 **SSW** **1/8-1/4** **0.134 mi.** **706 ft.** **Relative:** **Higher**	**MIKE RYAN** **722 PANCHITA WAY** **LOS ALTOS, CA 94022** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC002980951	**RCRA NonGen / NLR**	**1024761094** **CAC002980951**
40 **NE** **1/8-1/4** **0.157 mi.** **831 ft.** **Relative:** **Lower**	**LATHAM SQUARE APARTMENTS** **2250 LATHAM ST** **MOUNTAIN VIEW, CA 94040** Click here for full text details **RCRA NonGen / NLR** EPA Id CAL000280916	**RCRA NonGen / NLR**	**1024808660** **CAL000280916**
41 **NNE** **1/8-1/4** **0.168 mi.** **886 ft.** **Relative:** **Lower**	**HEATH, RICHARD** **2280 LAYTHM STREET #9** **MOUNTAIN VIEW, CA 94040** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC002999920	**RCRA NonGen / NLR**	**1024779962** **CAC002999920**
42 **NW** **1/8-1/4** **0.191 mi.** **1007 ft.** **Relative:** **Lower**	**JACK IN THE BOX #0421** **4896 EL CAMINO REAL** **LOS ALTOS, CA 94022** Click here for full text details	**CUPA Listings** **CERS**	**S120984140** **N/A**

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
G43 **North** **1/8-1/4** **0.192 mi.** **1015 ft.** **Relative: Lower**	**JOHN PEAR** **410 ORTEGA AVE** **MOUNTAIN VIEW, CA 94040** Click here for full text details **HIST UST** Facility Id 00000048011	**HIST UST**	**U001594320** **N/A**
G44 **North** **1/8-1/4** **0.192 mi.** **1015 ft.** **Relative: Lower**	**JOHN PEAR** **410 ORTEGA AVE** **MOUNTAIN VIEW, CA 94040** Click here for full text details **SWEEPS UST** Comp Number 48011 **CA FID UST** Facility Id 43011926 Status I	**SWEEPS UST** **CA FID UST**	**S101623001** **N/A**
H45 **ESE** **1/8-1/4** **0.195 mi.** **1029 ft.** **Relative: Higher**	**NATUROPATHIC OPTIONS** **5150 EL CAMINO REAL B14** **LOS ALTOS, CA 94022** Click here for full text details **RCRA NonGen / NLR** EPA Id CAL000441379	**RCRA NonGen / NLR**	**1024872731** **CAL000441379**
I46 **NNW** **1/8-1/4** **0.196 mi.** **1034 ft.** **Relative: Lower**	**BXP WEST EL CAMINO LP** **2440 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details **RCRA NonGen / NLR** EPA Id CAL000370939	**RCRA NonGen / NLR**	**1024832648** **CAL000370939**
I47 **NNW** **1/8-1/4** **0.196 mi.** **1034 ft.** **Relative: Lower**	**BP WEST EL CAMINO LLC, C/O BOS** **2440 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details **EMI** Facility Id 21037	**CUPA Listings** **EMI** **CERS**	**S112872600** **N/A**

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
I48 **NNW** **1/8-1/4** **0.196 mi.** **1034 ft.** **Relative: Lower**	**BOSTON PROPERTIES, L.P.** **2440 EL CAMINO REAL WEST** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CERS HAZ WASTE** **CERS**	**S121742719** **N/A**
I49 **NW** **1/8-1/4** **0.202 mi.** **1067 ft.** **Relative: Lower**	**ALPINE ANIMAL HOSPITAL** **2460 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CUPA Listings** **HWTS**	**S121473785** **N/A**
I50 **NW** **1/8-1/4** **0.202 mi.** **1067 ft.** **Relative: Lower**	**ALPINE ANIMAL HOSPITAL** **2460 W EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CUPA Listings**	**S121468997** **N/A**
I51 **NW** **1/8-1/4** **0.202 mi.** **1067 ft.** **Relative: Lower**	**ALPINE ANIMAL HOSPITAL** **2460 EL CAMINO REAL** **MOUNTAIN VIEW, CA 94040** Click here for full text details	**CUPA Listings**	**S112345282** **N/A**
G52 **North** **1/8-1/4** **0.216 mi.** **1139 ft.** **Relative: Lower**	**CANDIDA MALFERRARI** **400 ORTEGA AVE** **MOUNTAIN VIEW, CA 94040** Click here for full text details **RCRA NonGen / NLR** EPA Id CAC002966813	**RCRA NonGen / NLR**	**1024747041** **CAC002966813**
H53 **ESE** **1/8-1/4** **0.226 mi.** **1192 ft.** **Relative: Higher**	**DOLLAR RENT A CAR** **4294 EL CAMINO REAL** **LOS ALTOS, CA 94022** Click here for full text details **SWEEPS UST** Status A	**SWEEPS UST** **CA FID UST** **CUPA Listings** **CERS**	**S101594618** **N/A**

DOLLAR RENT A CAR (Continued) **S101594618**

Tank Status A
Comp Number 36672

CA FID UST
Facility Id 43012037
Status A

J54
SSW
1/8-1/4
0.230 mi.
1216 ft.

Relative:
Higher

MARTIN DAVIDSSON **RCRA NonGen / NLR** **1024745356**
646 PANCHITA WAY **CAC002965123**
LOS ALTOS, CA 94022

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002965123

J55
SSW
1/8-1/4
0.230 mi.
1216 ft.

Relative:
Higher

MARTIN DAVIDSSON **RCRA NonGen / NLR** **1024762570**
646 PANCHITA WAY **CAC002982432**
LOS ALTOS, CA 94022

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002982432

56
ENE
1/8-1/4
0.237 mi.
1253 ft.

Relative:
Lower

ONE HOUR CLEANERS **CPS-SLIC** **S102339621**
580 RENGSTORFF AVE N **DRYCLEANERS** **N/A**
MOUNTAIN VIEW, CA 94040 **CERS**

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Facility Id SLT2O111117
Global Id SLT2O111117

Click here to access the California GeoTracker records for this facility

DRYCLEANERS
EPA Id CAD981632219

K57
NW
1/8-1/4
0.242 mi.
1277 ft.

Relative:
Lower

PRIME DENTAL CARE
4846 EL CAMINO REAL #A
LOS ALTOS, CA 94022

CUPA Listings

S112346487
N/A

Click here for full text details

K58
NW
1/8-1/4
0.242 mi.
1277 ft.

Relative:
Lower

JUHYONG YI DDS PRIME DENTAL CARE
4846 EL CAMINO REAL STE A
LOS ALTOS, CA 94022

RCRA NonGen / NLR

1024820327
CAL000333242

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000333242

L59
NNW
1/4-1/2
0.327 mi.
1725 ft.

Relative:
Lower

DIGAS
555 SHOWERS DR
MOUNTAIN VIEW, CA 94040

LUST
HIST LUST
Cortese
CERS

S100937119
N/A

Click here for full text details

LUST
Facility Status Case Closed
date9 9/17/1997

HIST LUST
SCVWD ID 06S2W20C02

Cortese
Cleanup Status COMPLETED - CASE CLOSED

L60
NNW
1/4-1/2
0.327 mi.
1725 ft.

Relative:
Lower

TARGET T0322
555 SHOWERS DR
MOUNTAIN VIEW, CA 94040

LUST
CERS HAZ WASTE
CUPA Listings
HIST CORTESE
CERS

S102428789
N/A

Click here for full text details

LUST
Date Closed 09/17/1997
Status Completed - Case Closed
Global Id T0608500515
SCVWD ID 06S2W20C02F

HIST CORTESE
Reg Id 43-0468

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
M61 **NW** **1/4-1/2** **0.382 mi.** **2018 ft.** **Relative: Lower**	**LOS ALTOS GARDEN SUPPLY** **4730 EL CAMINO REAL** **LOS ALTOS, CA 94022**	**LUST** **Cortese** **HIST CORTESE** **CERS**	**S102432747** **N/A**

Click here for full text details

LUST
Facility Status Case Closed
Facility Id 43-2112
date9 4/29/1996

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id 43-2112

M62 **NW** **1/4-1/2** **0.382 mi.** **2018 ft.** **Relative: Lower**	**LOS ALTOS GARDEN SUPPLY** **4730 EL CAMINO REAL** **LOS ALTOS, CA 94022**	**LUST** **HIST UST**	**U001594147** **N/A**

Click here for full text details

LUST
Status Completed - Case Closed
Global Id T0608501940

HIST UST
Facility Id 00000014086

N63 **WNW** **1/4-1/2** **0.461 mi.** **2436 ft.** **Relative: Lower**	**UNOCAL** **895 SAN ANTONIO** **LOS ALTOS, CA 94202**	**HIST CORTESE**	**S105708738** **N/A**

Click here for full text details

HIST CORTESE
Reg Id 43-0082

N64 **WNW** **1/4-1/2** **0.461 mi.** **2436 ft.** **Relative: Lower**	**UNOCAL #4918** **895 N. SAN ANTONIO ROAD** **LOS ALTOS, CA 94022**	**LUST** **HIST LUST** **Cortese** **CERS**	**S103880863** **N/A**

Click here for full text details

LUST
Date Closed 03/11/2013
Facility Status Pollution Characterization
Status Completed - Case Closed
Global Id T0608500150

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNOCAL #4918 (Continued) **S103880863**

SCVWD ID 06S2W20E01F

HIST LUST
SCVWD ID 06S2W20E01

Cortese
Cleanup Status COMPLETED - CASE CLOSED

O65
NNE
1/4-1/2
0.473 mi.
2500 ft.

Relative:
Lower

SYMTRON #2
111 ORTEGA AVENUE
MOUNTAIN VIEW, CA 94040

RESPONSE
ENVIROSTOR
CERS

S103623014
N/A

Click here for full text details

RESPONSE
Status No Further Action
Facility Id 43360130

ENVIROSTOR
Facility Id 43360130
Status No Further Action

P66
NNE
1/4-1/2
0.476 mi.
2515 ft.

Relative:
Lower

SYMTRON CORP MOUNTAIN VIEW DIV
2235 MORA DR
MOUNTAIN VIEW, CA 94040

RCRA-SQG
RESPONSE
ENVIROSTOR
FINDS
ECHO
CERS

1000420286
CAD000819821

Click here for full text details

RCRA-SQG
EPA Id CAD000819821

RESPONSE
Status No Further Action
Facility Id 43360124

ENVIROSTOR
Facility Id 43360124
Status No Further Action

FINDS
Registry ID: 110002146375

ECHO
Registry ID 110002146375

Q67
NW
1/4-1/2
0.481 mi.
2538 ft.

Relative:
Lower

QUALITY TUNE-UP #1
2580 EL CAMINO REAL
MOUNTAIN VIEW, CA 94040

LUST
HIST LUST
Cortese
HIST CORTESE

S104396947
N/A

Click here for full text details

LUST
Facility Status Case Closed
date9 9/30/1996

HIST LUST
SCVWD ID 06S2W20D01

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id 43-1088

Q68
NW
1/4-1/2
0.481 mi.
2538 ft.

Relative:
Lower

QUALITY TUNE-UP #1
2580 EL CAMINO REAL
MOUNTAIN VIEW, CA 94040

LUST
CERS

S105035627
N/A

Click here for full text details

LUST
Date Closed 09/30/1996
Status Completed - Case Closed
Global Id T0608501080
SCVWD ID 06S2W20D01F

R69
NNE
1/4-1/2
0.484 mi.
2557 ft.

Relative:
Lower

SYMTRON CORP.
22352245 MORA DR
MOUNTAIN VIEW, CA 94040

HIST CORTESE

S105025102
N/A

Click here for full text details

HIST CORTESE
Reg Id 43360124

P70
NNE
1/4-1/2
0.485 mi.
2562 ft.

Relative:
Lower

PLESSEY #2
2251, 2257, 2283 AND 2287 MORA DRIVE
MOUNTAIN VIEW, CA 94040

RESPONSE
ENVIROSTOR
CERS

S103883832
N/A

Click here for full text details

RESPONSE
Status No Further Action
Facility Id 43360131

ENVIROSTOR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PLESSEY #2 (Continued) **S103883832**

Facility Id 43360131
Status No Further Action

71
North
1/4-1/2
0.497 mi.
2623 ft.

Relative:
Lower

IRM COST SHARING SITE **CPS-SLIC** **S102284312**
2520 CALIFORNIA STREET **EMI** **N/A**
MOUNTAIN VIEW, CA 94043 **CERS**

Click here for full text details

CPS-SLIC
Facility Status Open - Verification Monitoring
Facility Id SL18311731
Global Id SL18311731

Click here to access the California GeoTracker records for this facility

EMI
Facility Id 971

O72
NNE
1/4-1/2
0.499 mi.
2637 ft.

Relative:
Lower

PLESSEY INC. NPDES **CPS-SLIC** **S106916856**
2294 MORA DR **CERS** **N/A**
MOUNTAIN VIEW, CA 94040

Click here for full text details

CPS-SLIC
Facility Status Completed - Case Closed
Global Id SL0608508217

Click here to access the California GeoTracker records for this facility

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R73
NNE
1/2-1
0.502 mi.
2652 ft.

Relative:
Lower

PLESSEY MICRO SCIENCES **CA BOND EXP. PLAN** **S100833251**
2274 MORA DRIVE **N/A**
MOUNTAIN VIEW, CA 94040

Click here for full text details

R74
NNE
1/2-1
0.502 mi.
2652 ft.

Relative:
Lower

PLESSEY MICRO SCIENCE INC **SEMS-ARCHIVE** **1000386389**
2274 MORA DR **HIST Cal-Sites** **CAD009440371**
MOUNTAIN VIEW, CA 94040 **RCRA NonGen / NLR**
FINDS
ECHO
WDS

Click here for full text details

SEMS-ARCHIVE
Site ID 0901213
EPA Id CAD009440371

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PLESSEY MICRO SCIENCE INC (Continued) **1000386389**

RCRA NonGen / NLR
EPA Id CAD009440371

FINDS
Registry ID: 110002636470

ECHO
Registry ID 110002636470

WDS
Facility Id 2 438379001
Facility Status Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

R75
NNE
1/2-1
0.502 mi.
2652 ft.

Relative: Lower

DTSC FORMER PLESSEY MICROSCIENCE SITE
2274 MORA DR
MOUNTAIN VIEW, CA 94040

Click here for full text details

RESPONSE **S103981838**
ENVIROSTOR **N/A**
Cortese
HAZNET
HIST CORTESE
HWTS

RESPONSE
Status Certified / Operation & Maintenance
Facility Id 43360069

ENVIROSTOR
Facility Id 43360069
Status Certified / Operation & Maintenance

Cortese
Envirostor Id 43360069
Cleanup Status CERTIFIED / OPERATION & MAINTENANCE

HAZNET
GEPAID CAL000383486

HIST CORTESE
Reg Id 43360069

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
P76	**PLESSEY #3**	**RESPONSE**	**S102804169**
NNE	**2256 MORA DRIVE**	**ENVIROSTOR**	**N/A**
1/2-1	**MOUNTAIN VIEW, CA 94040**	**CERS**	
0.504 mi.			
2659 ft.			
Relative: Lower			

Click here for full text details

RESPONSE
Status No Further Action
Facility Id 43360135

ENVIROSTOR
Facility Id 43360135
Status No Further Action

O77	**TRW/VIDAR**	**RESPONSE**	**S100946989**
NNE	**77 ORTEGA AVENUE**	**ENVIROSTOR**	**N/A**
1/2-1	**MOUNTAIN VIEW, CA 94040**	**DEED**	
0.512 mi.		**CERS**	
2702 ft.			
Relative: Lower			

Click here for full text details

RESPONSE
Status Certified O&M - Land Use Restrictions Only
Facility Id 43360128

ENVIROSTOR
Facility Id 43360128
Status Certified O&M - Land Use Restrictions Only

DEED
Envirostor ID 43360128
Status CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

P78	**MORA DRIVE**	**ENVIROSTOR**	**S120714345**
NNE	**2221-2291 MORA DRIVE**	**VCP**	**N/A**
1/2-1	**MOUNTAIN VIEW, CA 94040**	**DEED**	
0.519 mi.			
2742 ft.			
Relative: Lower			

Click here for full text details

ENVIROSTOR
Facility Id 60002502
Status Active

VCP
Facility Id 60002502
Status Active

DEED
Envirostor ID 60002502
Status ACTIVE

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
79 **NNW** **1/2-1** **0.616 mi.** **3253 ft.** **Relative: Lower**	**PROPOSED SAN ANTONIO ELEMENTARY SCHOOL** **435 SAN ANTONIO ROAD, 2535 CALIFORNIA STREET, 350, 506, 510-** **MOUNTAIN VIEW, CA 94040**	**ENVIROSTOR** **SCH**	**S126143196** **N/A**

Click here for full text details

ENVIROSTOR
Facility Id 60002949
Status Active

SCH
Facility Id 60002949
Status Active

---

80 **NE** **1/2-1** **0.653 mi.** **3446 ft.** **Relative: Lower**	**SHELL SERVICE STATION** **110 N RENGSTORFF** **MOUNTAIN VIEW, CA 94040**	**RCRA-SQG** **LUST** **HIST LUST** **SWEEPS UST** **HIST UST** **CA FID UST** **Cortese** **CUPA Listings** **HIST CORTESE** **Notify 65** **CERS**	**1000288537** **CAD980675961**

Click here for full text details

RCRA-SQG
EPA Id CAD980675961

LUST
Facility Status Pollution Characterization
Status Completed - Case Closed
Global Id T0608501243
SCVWD ID 06S2W17R01F

HIST LUST
SCVWD ID 06S2W17R01

SWEEPS UST
Status A
Tank Status A
Comp Number 56732

HIST UST
Facility Id 00000056732

CA FID UST
Facility Id 43001282
Status A

Cortese

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	SHELL SERVICE STATION (Continued)		**1000288537**
	Cleanup Status COMPLETED - CASE CLOSED		
	HIST CORTESE		
	Reg Id 43-1265		
81	**MVSA**	**ENVIROSTOR**	**S125242590**
NNW	**225 SAN ANTONIO ROAD, 2580 CALIFORNIA STREET, 201 SAN ANTONI**	**VCP**	**N/A**
1/2-1	**MOUNTAIN VIEW, CA 94040**		
0.683 mi.			
3605 ft.			
Relative: Lower	**Click here for full text details**		
	ENVIROSTOR		
	Facility Id 60002855		
	Status Active		
	VCP		
	Facility Id 60002855		
	Status Active		
82	**LOS ALTOS HS**	**RCRA-SQG**	**1000101636**
SSW	**201 ALMOND AVE**	**ENVIROSTOR**	**CAD981693864**
1/2-1	**LOS ALTOS, CA 94022**	**SCH**	
0.759 mi.		**CERS HAZ WASTE**	
4010 ft.		**FINDS**	
		ECHO	
Relative: Higher	**Click here for full text details**	**CUPA Listings**	
		NPDES	
		CIWQS	
		CERS	
	RCRA-SQG		
	EPA Id CAD981693864		
	ENVIROSTOR		
	Facility Id 60002914		
	Status Active		
	SCH		
	Facility Id 60002914		
	Status Active		
	FINDS		
	Registry ID: 110002755395		
	ECHO		
	Registry ID 110002755395		
	NPDES		

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LOS ALTOS HS (Continued) **1000101636**

Facility Status Active

S83
East
1/2-1
0.887 mi.
4683 ft.

Relative:
Lower

JASCO CHEMICAL CORP.
1710 VILLA ST
MOUNTAIN VIEW, CA 94042

Click here for full text details

ENVIROSTOR
Facility Id 43280119
Status Refer: RWQCB

HIST UST
Facility Id 00000008412

ENF
Status Historical
Facility Id 201774
Status Historical

ENVIROSTOR
HIST UST
ENF
CIWQS
CERS

U001594367
N/A

S84
East
1/2-1
0.887 mi.
4683 ft.

Relative:
Lower

JASCO CHEMICAL CO
1710 VILLA STREET
MOUNTAIN VIEW, CA 94041

Click here for full text details

HIST Cal-Sites

1000175630
N/A

S85
East
1/2-1
0.887 mi.
4683 ft.

Relative:
Lower

JASCO CHEMICAL CORPORATION
1710 VILLA STREET
MOUNTAIN VIEW, CA 95246

Click here for full text details

EMI
Facility Id 5477

CA BOND EXP. PLAN
EMI

S105960435
N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	06/22/2020	06/22/2020	09/04/2020
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	06/30/2019	05/28/2020	08/12/2020
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	07/20/2020	07/21/2020	10/07/2020
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	07/20/2020	07/21/2020	10/07/2020
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	07/20/2020	07/21/2020	10/07/2020
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	06/30/2020	07/21/2020	10/07/2020
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	06/01/2020	06/02/2020	08/14/2020
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	06/22/2020	06/22/2020	09/04/2020
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	05/01/2019	05/14/2019	07/17/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	06/01/2020	06/02/2020	08/14/2020
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	05/28/2020	05/29/2020	08/12/2020
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	08/19/2020	08/21/2020	09/04/2020
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	06/04/2020	06/05/2020	08/17/2020
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2018	06/16/2020	08/28/2020
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	07/20/2020	07/21/2020	10/07/2020
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	07/13/2020	07/16/2020	09/29/2020
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	08/05/2020	08/05/2020	10/23/2020
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	05/28/2020	05/29/2020	08/12/2020
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2019	04/15/2020	07/02/2020
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	05/18/2020	05/18/2020	07/31/2020
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	07/06/2020	07/07/2020	09/17/2020
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	10/13/2020	10/14/2020	11/03/2020
CA	ICE	ICE	Department of Toxic Subsances Control	05/18/2020	05/19/2020	07/31/2020
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	06/08/2020	06/09/2020	08/19/2020
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	05/28/2020	05/29/2020	08/12/2020
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	MINES	Mines Site Location Listing	Department of Conservation	06/08/2020	06/09/2020	08/19/2020
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	05/28/2020	06/02/2020	08/14/2020
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	08/21/2020	08/21/2020	08/27/2020
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	08/10/2020	08/10/2020	10/29/2020
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	06/01/2020	06/02/2020	08/14/2020
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	PROC	Certified Processors Database	Department of Conservation	06/08/2020	06/09/2020	08/19/2020
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	08/03/2020	08/05/2020	10/22/2020
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	05/11/2020	05/12/2020	07/27/2020
CA	SWRCY	Recycler Database	Department of Conservation	06/08/2020	06/09/2020	08/19/2020
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	06/06/2020	06/09/2020	08/20/2020
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	06/08/2020	06/09/2020	08/19/2020
CA	UST	Active UST Facilities	SWRCB	06/08/2020	06/09/2020	08/20/2020
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	05/26/2020	06/09/2020	08/20/2020
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	05/20/2020	05/20/2020	08/06/2020
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	07/27/2020	07/27/2020	10/08/2020
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	11/19/2019	01/07/2020	03/09/2020
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	06/08/2020	06/09/2020	08/20/2020
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	06/08/2020	06/09/2020	08/19/2020
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	06/22/2020	06/22/2020	09/10/2020
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2015	02/22/2017	09/28/2017

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2018	12/04/2019	01/15/2020
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	06/30/2020	07/15/2020	07/21/2020
US	CORRACTS	Corrective Action Report	EPA	06/15/2020	06/22/2020	09/17/2020
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020
US	Delisted NPL	National Priority List Deletions	EPA	07/29/2020	08/03/2020	08/25/2020
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	06/27/2020	07/02/2020	09/28/2020
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	06/15/2020	06/22/2020	09/17/2020
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	04/03/2019	04/05/2019	05/14/2019
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FEMA UST	Underground Storage Tank Listing	FEMA	02/01/2020	03/19/2020	06/09/2020
US	FINDS	Facility Index System/Facility Registry System	EPA	02/03/2020	03/03/2020	05/28/2020
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	08/05/2020	08/13/2020	10/21/2020
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/17/2020	08/17/2020	10/21/2020
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	06/22/2020	06/23/2020	09/17/2020
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/29/2020	05/20/2020	08/12/2020
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	04/14/2020	05/26/2020	08/12/2020
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/15/2020	05/20/2020	08/12/2020
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/14/2020	05/20/2020	08/12/2020
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/08/2020	05/20/2020	08/12/2020
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/29/2020	05/20/2020	08/12/2020
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/14/2020	05/20/2020	08/12/2020
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	04/14/2020	05/26/2020	08/12/2020
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/14/2020	05/20/2020	08/12/2020
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/03/2020	05/20/2020	08/12/2020
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/14/2020	05/20/2020	08/13/2020
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/08/2020	05/20/2020	08/12/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	07/29/2020	08/03/2020	08/25/2020
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	07/29/2020	08/03/2020	08/25/2020
US	LUCIS	Land Use Control Information System	Department of the Navy	05/15/2020	05/19/2020	06/18/2020
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	05/28/2020	05/28/2020	08/13/2020
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/05/2020	08/10/2020	10/08/2020
US	NPL	National Priority List	EPA	07/29/2020	08/03/2020	08/25/2020
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	10/09/2019	10/11/2019	12/20/2019
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	PCS	Permit Compliance System	EPA, Office of Water	07/14/2011	08/05/2011	09/29/2011
US	PCS ENF	Enforcement data	EPA	12/31/2014	02/05/2015	03/06/2015
US	PCS INACTIVE	Listing of Inactive PCS Permits	EPA	11/05/2014	01/06/2015	05/06/2015
US	PRP	Potentially Responsible Parties	EPA	04/27/2020	05/06/2020	06/09/2020
US	Proposed NPL	Proposed National Priority List Sites	EPA	07/29/2020	08/03/2020	08/25/2020
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	06/15/2020	06/22/2020	09/18/2020
US	RMP	Risk Management Plans	Environmental Protection Agency	07/24/2020	08/03/2020	10/21/2020
US	ROD	Records Of Decision	EPA	07/29/2020	08/03/2020	08/25/2020
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	07/29/2020	08/03/2020	08/25/2020
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	07/29/2020	08/03/2020	08/25/2020
US	SSTS	Section 7 Tracking Systems	EPA	07/20/2020	07/21/2020	10/08/2020
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2018	02/05/2020	04/24/2020
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/17/2020	09/10/2020
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	06/01/2020	06/02/2020	06/09/2020
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	03/18/2020	03/19/2020	06/09/2020
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	02/13/2020	02/20/2020	05/15/2020
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	06/15/2020	06/22/2020	09/10/2020
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	03/18/2020	03/19/2020	06/09/2020
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	02/13/2020	02/20/2020	05/15/2020
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	05/01/2020	05/21/2020	08/13/2020
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2018	07/02/2020	09/17/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	08/10/2020	10/20/2020	11/02/2020
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2018	04/10/2019	05/16/2019
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/01/2019	04/29/2020	07/10/2020
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	06/30/2018	07/19/2019	09/10/2019
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2018	10/02/2019	12/10/2019
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	05/31/2018	06/19/2019	09/03/2019
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CA	State Wetlands	Wetland Inventory	Department of Fish and Wildlife			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		Endeavor Business Media			
US	Electric Power Transmission Line Data		Endeavor Business Media			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

DISTEL CIRCLE PROPERTY
330 DISTEL CIRCLE
LOS ALTOS, CA 94022

TARGET PROPERTY COORDINATES

Latitude (North):	37.396371 - 37° 23' 46.94''
Longitude (West):	122.105871 - 122° 6' 21.14''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	579144.0
UTM Y (Meters):	4139015.5
Elevation:	86 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641106 MOUNTAIN VIEW, CA
Version Date:	2012
Northwest Map:	5640620 PALO ALTO, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

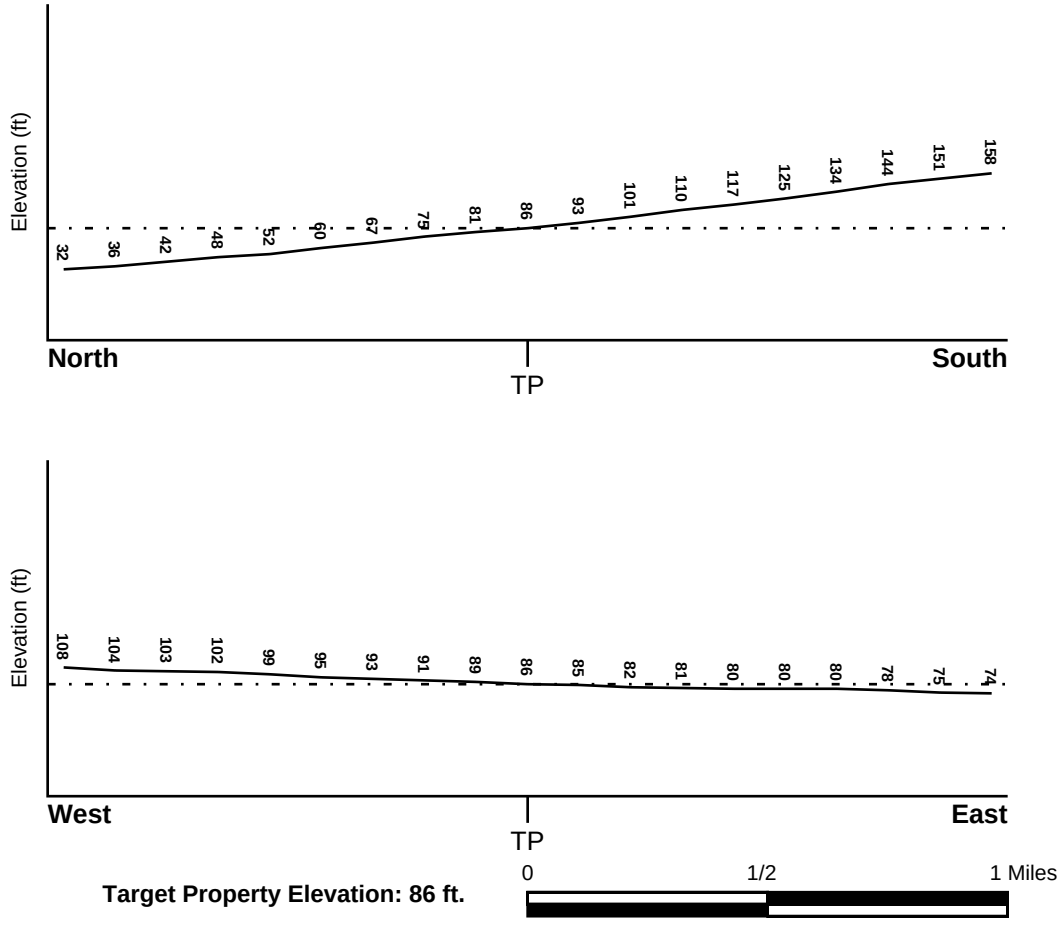
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NNE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06085C0038H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06085C0036H	FEMA FIRM Flood data
06085C0037H	FEMA FIRM Flood data
06085C0039H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
MOUNTAIN VIEW	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1 - 2 Miles SSW
Site Name:	Hillview Maintenance Yard
Site EPA ID Number:	CAD982400202
Groundwater Flow Direction:	NE ON A REGIONAL BASIS, WITH LOCAL FLOW CONDITIONS INFLUENCED BY PUMPING.
Inferred Depth to Water:	100 feet to 120 feet.
Hydraulic Connection:	Information is not available about the hydraulic connection between aquifers under the site.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information is inferred in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW

* ©1996 Site--specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
5	1/4 - 1/2 Mile NE	NE
1G	1/4 - 1/2 Mile NE	NE

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	BOTELLA
Soil Surface Texture:	clay loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	MODERATE
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
2	9 inches	41 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60
3	41 inches	76 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: No Other Soil Types

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000182869	1/4 - 1/2 Mile South
6	USGS40000182908	1/2 - 1 Mile West
21	USGS40000182665	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
22	CA2700772	1/2 - 1 Mile SSW

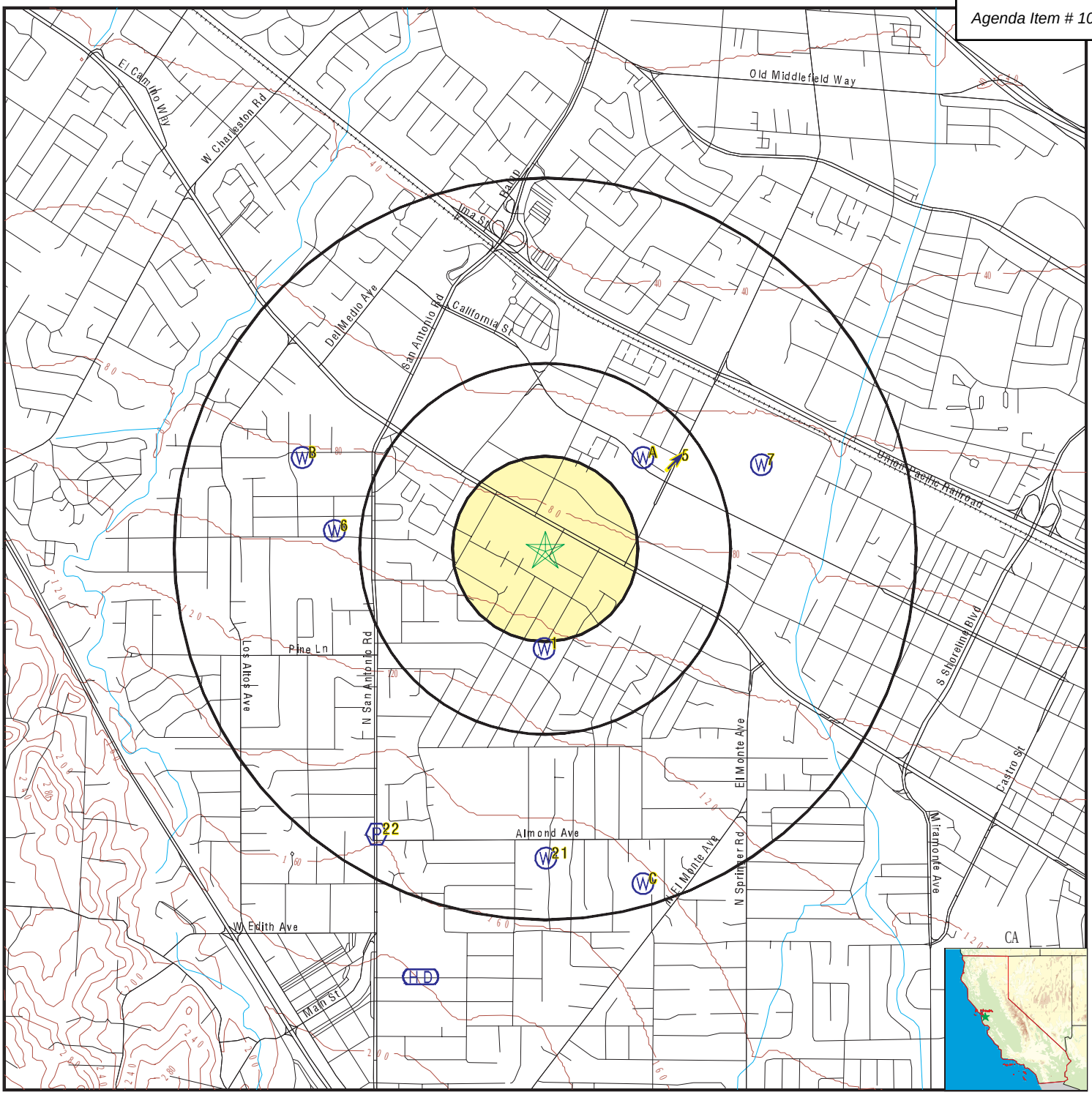
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	6874	1/4 - 1/2 Mile NE
A3	6876	1/4 - 1/2 Mile NE
A4	6877	1/4 - 1/2 Mile NE
7	6881	1/2 - 1 Mile ENE
B8	6871	1/2 - 1 Mile WNW
B9	6870	1/2 - 1 Mile WNW
B10	6869	1/2 - 1 Mile WNW
B11	6872	1/2 - 1 Mile WNW
B12	6879	1/2 - 1 Mile WNW
B13	6875	1/2 - 1 Mile WNW
B14	6873	1/2 - 1 Mile WNW
B15	6868	1/2 - 1 Mile WNW
B16	6864	1/2 - 1 Mile WNW
B17	6863	1/2 - 1 Mile WNW
B18	6865	1/2 - 1 Mile WNW
B19	6867	1/2 - 1 Mile WNW
B20	6866	1/2 - 1 Mile WNW
C23	6896	1/2 - 1 Mile SSE
C24	6878	1/2 - 1 Mile SSE
C25	6897	1/2 - 1 Mile SSE
C26	6906	1/2 - 1 Mile SSE
C27	6899	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 6253537.2s

Agenda Item # 10.



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

N

SITE NAME:	Distel Circle Property	CLIENT:	Ninyo & Moore
ADDRESS:	330 Distel Circle Los Altos CA 94022	CONTACT:	Randy Wheeler
		INQUIRY #:	6253537.2s
LAT/LONG:	37.396371 / 122.105871	DATE:	November 04, 2020 1:01 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000182869**
A2 **NE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6874**
A3 **NE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6876**
A4 **NE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6877**
5 **NE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**50011**
6 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000182908**
7 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6881**
B8 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6871**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B9 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6870**
B10 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6869**
B11 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6872**
B12 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6879**
B13 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6875**
B14 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6873**
B15 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6868**
B16 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6864**
B17 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6863**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B18 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6865**
B19 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6867**
B20 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**6866**
21 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000182665**
22 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**CA2700772**
C23 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**6896**
C24 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**6878**
C25 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**6897**
C26 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**6906**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C27 **SSE** **1/2 - 1 Mile** **Higher**	**Click here for full text details**	**CA WELLS**	**6899**
1G **NE** **1/4 - 1/2 Mile** **Lower**	**Click here for full text details**	**AQUIFLOW**	**50011**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94022	60	3

Federal EPA Radon Zone for SANTA CLARA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94022

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix D:

SITE DOCUMENTATION AND REGULATORY RECORDS

From: CEPA Public Records
To: Luke Swickard
Subject: Your CEPA public records request #20-1732 has been closed.
Date: Thursday, November 12, 2020 12:50:14 PM

-- Attach a non-image file and/or reply ABOVE THIS LINE with a message, and it will be sent to staff on this request. --

CEPA Public Records

Hi there

Record request #20-1732 has been closed. The closure reason supplied was:

Good afternoon Luke,

Thank you for your recent record request received on 11/04/2020 for the following address in LOS ALTOS:

330 Distel Circle

We have no records for this location. However, additional electronic documents may be found on the following websites:

- Local Oversight Program (LOP)
- GEOTracker (GT)
- Spill Reports Website – California Office of Emergency Services (Cal OES):

Please be advised that in some cities, other participating agencies may be responsible for maintaining the type of files you requested. This link may be of assistance in determining who will have the documents you are looking for in the future:

- UNIDOCS – Who regulates what in Santa Clara County

View Request 20-1732

http://cepascc-ca.nextrequest.com/requests/20-1732

POWERED BY NEXTREQUEST

The All in One Records Requests Platform

Questions about your request? Reply to this email or sign in to contact staff at CEPA.

Technical support: See our help page

Site Name: Midpeninsula Open Space District Property
Site Address: 330 Distel Circle, Los Altos, CA 94022

Type of Business: Administrative Government Office Building.
Current Owner: Midpeninsula Regional Open Space District
Dates of Ownership: August 1990 to Present
Previous Owner: Gary P. Sheerer and James J. Lenihan
Dates of Ownership: Unknown to
Type(s) of Business: Office Use
Date of Original Construction of Site Building(s): 1975

BACKGROUND & USE

What is the current use of the property?

	Hotel/Motel		Industrial/Storage/Warehouse: Type:
	Warehouse (type):		Vacant Land/Farming/Agricultural/Cattle Grazing
X	Office		Multi-Family Residential
	Retail		Other:

What is the intended future use of the property? Affordable Housing

Site Tenant History

Year(s)	Tenant / Type of Business
N/A	N/A

Please fill in the following information regarding the site utilities, as appropriate and indicate the date service was originally initiated/installed:

Water Provider:
Sewer Provider:
Electrical Provider:
Natural Gas Provider: PG&E

Is the property currently used, or previously been used, for an industrial or manufacturing operation, as a gasoline station, a motor repair facility, a commercial printing facility, a dry cleaners, a photo developing laboratory, a junkyard or a landfill, or as a waste treatment, storage, disposal, processing or recycling facility?

___ Yes Type:
_X_ No
___ Unknown

Has the facility or the property ever generated, treated, stored, transported or disposed of hazardous waste substances other than on an incidental basis? Are waste manifest forms available?

___ Yes Description:_____
_X_ No
___ Unknown

Have any demolition debris, hazardous substances, petroleum products, unidentified waste materials, automotive or industrial batteries, tires, trash or refuse been dumped, buried and/or burned on the property?

___ Yes Description:_____
_X_ No
___ Unknown

TANKS (fuel tanks, oil tanks, etc)

Are there currently, or have there been previously, any underground storage tanks on the property such as gasoline/diesel fuel tanks, waste oil tanks?

___Yes _X_ No ___Unknown

If YES, please provide number, size, age of tanks

Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____

Has there ever been a reported or unreported release or spill (including failed leak tests) from the tank? (If YES, provide details).

___Yes _X_ No ___Unknown

Are there currently, or have there been previously, any above ground storage tanks on the property?

___Yes _X_ No ___Unknown

If YES, please provide number, size, age of tanks

Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____
Tanks_____ Size_____ Contents_____ Age_____

Has there ever been a reported or unreported release or spill (including failed leak tests) from the tank? (If YES, provide details).

___Yes _X_ No ___Unknown

Has there ever been a reported or unreported release or spill from the tank? (If YES, provide details).

___Yes _X_ No ___Unknown

Details:_____

_____

UTILITIES/DISCHARGES

Is the property served, or has the property been served, by a private water well?

___Yes __X__ No ___Unknown

If yes, is groundwater under the property used as a source of drinking water?

___Yes __X__ No ___Unknown

Has the water from the well ever been tested? (If YES, please provide test results)

___Yes __X__ No ___Unknown

Has the well water been identified as contaminated by any governmental agency?

___Yes __X__ No ___Unknown

Are there any groundwater monitoring wells or irrigation wells on the property?

___Yes __X__ No ___Unknown

If Yes, how many____ and when were they installed?_____

Does the property discharge waste water, or storm water into a municipal sanitary sewer system? If Yes, does the facility discharge under an NPDES Permit or Waste Discharge Permit?

___Yes ____ No __X__Unknown Permit Number/Agency:_____

Are there any current or previous sumps used for waste-water collection/treatment on the property?

___Yes __X__ No ___Unknown

Are there any septic systems, dry wells or leach fields on the property?

___Yes __X__ No ___Unknown If Yes, Where?:_____

ENVIRONMENTAL COMPLIANCE

Is there knowledge of environmental liens or governmental notification or involvement relating to past or current use or disposal of hazardous substances?

___Yes __X__ No ___Unknown

Is there any environmental litigation, administrative action or cleanup action involving the property related to a release or threatened release of any hazardous substance or petroleum product?

___Yes __X__ No ___Unknown

Has the property or related facilities or operations ever been the subject of enforcement actions by governmental authorities resulting in penalties of any kind?

___Yes __X__ No ___Unknown

ENVIRONMENTAL CONDITIONS

Has groundwater or soils on the property ever been tested?

___Yes __X__ No ___Unknown

If Yes, provide details:

_____

Have any contaminants been identified which exceed standards or guidelines levels?

___Yes __X__ No ___Unknown

If Yes, provide details:

_____

BUILDING CONDITIONS

What is/are the age of the structure(s)? 45 years old.

Have any major renovations been completed and if so, describe type and when completed:

None under Midpen ownership.

Has an asbestos and/or lead-based paint survey been performed on the site structure(s)?

___Yes ____ No __X__Unknown

If Yes, was asbestos containing materials identified?

___Yes ____ No

If Yes, was lead-based paint present identified?

___Yes ____ No

THIS QUESTIONNAIRE WAS COMPLETED BY

Name (Print) Allen Ishibashi

Signature Sr. Real Property Agent

Title

Address 330 Distel Circle, Los Altos

Phone Number 650-625-6546

Date 11/6/2020

Please return the completed questionnaire (by email or fax) to Ninyo & Moore at the following address:

Randy L. Wheeler, Senior Geologist
Ninyo & Moore
1401 Halyard Drive, Suite 110
West Sacramento, California 95691
916-373-9858 (office)
916-373-9792 (fax)
916-317-3284 (cell)
rlwheeler@ninyoandmoore.com

Appendix E:

HISTORICAL RESEARCH DOCUMENTATION

Distel Circle Property
330 Distel Circle
Los Altos, CA 94022

Inquiry Number: 6253537.3
November 04, 2020

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

11/04/20

Site Name:

Distel Circle Property
330 Distel Circle
Los Altos, CA 94022
EDR Inquiry # 6253537.3

Client Name:

Ninyo & Moore
309 S Summit View Dr
Fort Collins, CO 80524
Contact: Randy Wheeler

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Ninyo & Moore were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 2A2E-4E26-9A90

PO # NA

Project 402649015

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 2A2E-4E26-9A90

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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Distel Circle Property
330 Distel Circle
Los Altos, CA 94022

Inquiry Number: 6253537.4
November 04, 2020

EDR Historical Topo Map Report
with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

Site Name:	Client Name:
Distel Circle Property	Ninyo & Moore
330 Distel Circle	309 S Summit View Dr
Los Altos, CA 94022	Fort Collins, CO 80524
EDR Inquiry # 6253537.4	Contact: Randy Wheeler

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Ninyo & Moore were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: 402649015

Coordinates:

Latitude:	37.396371 37° 23' 47" North
Longitude:	-122.105871 -122° 6' 21" West
UTM Zone:	Zone 10 North
UTM X Meters:	579142.07
UTM Y Meters:	4139219.62
Elevation:	85.33' above sea level

Maps Provided:

2012	1948
1997, 1999	1947
1994, 1995	1943
1980, 1981	1902
1973	1899
1968	1897
1961	
1953, 1955	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

Mountain View
2012
7.5-minute, 24000

Palo Alto
2012
7.5-minute, 24000

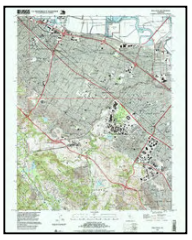
Cupertino
2012
7.5-minute, 24000

Mindego Hill
2012
7.5-minute, 24000

1997, 1999 Source Sheets

Mindego Hill
1997
7.5-minute, 24000
Aerial Photo Revised 1991

Mountain View
1997
7.5-minute, 24000
Aerial Photo Revised 1997



Palo Alto
1999
7.5-minute, 24000
Aerial Photo Revised 1999

1994, 1995 Source Sheets

Palo Alto
1994
7.5-minute, 24000
Aerial Photo Revised 1991

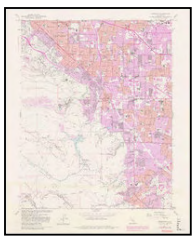
Mountain View
1995
7.5-minute, 24000
Aerial Photo Revised 1991

Cupertino
1995
7.5-minute, 24000
Aerial Photo Revised 1991

Mindego Hill
1995
7.5-minute, 24000
Aerial Photo Revised 1991

1980, 1981 Source Sheets

Mindego Hill
1980
7.5-minute, 24000
Aerial Photo Revised 1978



Cupertino
1980
7.5-minute, 24000
Aerial Photo Revised 1979

Mountain View
1981
7.5-minute, 24000
Aerial Photo Revised 1979

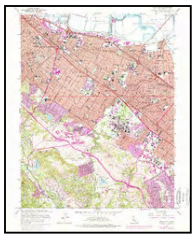
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1973 Source Sheets

Mindego Hill
1973
7.5-minute, 24000
Aerial Photo Revised 1968

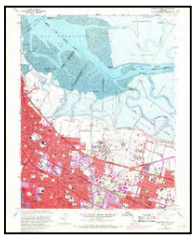
Mountain View
1973
7.5-minute, 24000
Aerial Photo Revised 1973



Palo Alto
1973
7.5-minute, 24000
Aerial Photo Revised 1973

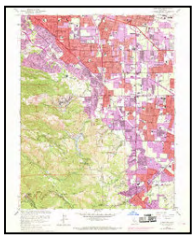
Cupertino
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1968 Source Sheets

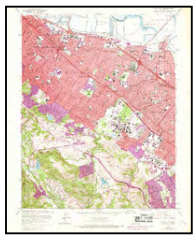


Mountain View
1968
7.5-minute, 24000
Aerial Photo Revised 1968

Mindego Hill
1968
7.5-minute, 24000
Aerial Photo Revised 1968

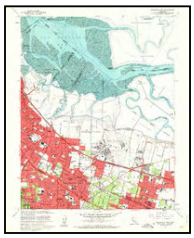


Cupertino
1968
7.5-minute, 24000
Aerial Photo Revised 1968

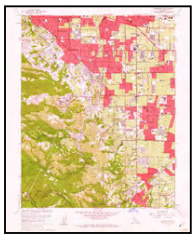


Palo Alto
1968
7.5-minute, 24000
Aerial Photo Revised 1968

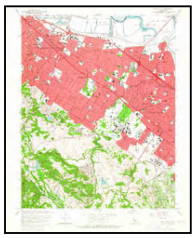
1961 Source Sheets



Mountain View
1961
7.5-minute, 24000
Aerial Photo Revised 1960



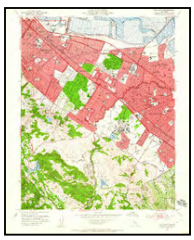
Cupertino
1961
7.5-minute, 24000
Aerial Photo Revised 1960



Palo Alto
1961
7.5-minute, 24000
Aerial Photo Revised 1960

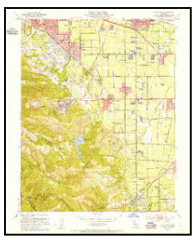
Mindego Hill
1961
7.5-minute, 24000
Aerial Photo Revised 1960

1953, 1955 Source Sheets



Palo Alto
1953
7.5-minute, 24000
Aerial Photo Revised 1948

Mountain View
1953
7.5-minute, 24000
Aerial Photo Revised 1948



Cupertino
1953
7.5-minute, 24000
Aerial Photo Revised 1948

Mindego Hill
1955
7.5-minute, 24000
Aerial Photo Revised 1953

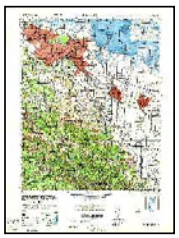
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1948 Source Sheets

Palo Alto
1948
15-minute, 62500
Aerial Photo Revised 1948

1947 Source Sheets



PALO ALTO
1947
15-minute, 50000

1943 Source Sheets

Palo Alto
1943
15-minute, 62500
Aerial Photo Revised 1940

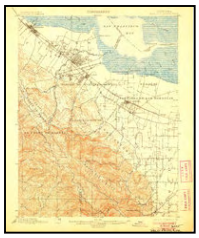
1902 Source Sheets

Santa Cruz
1902
30-minute, 125000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

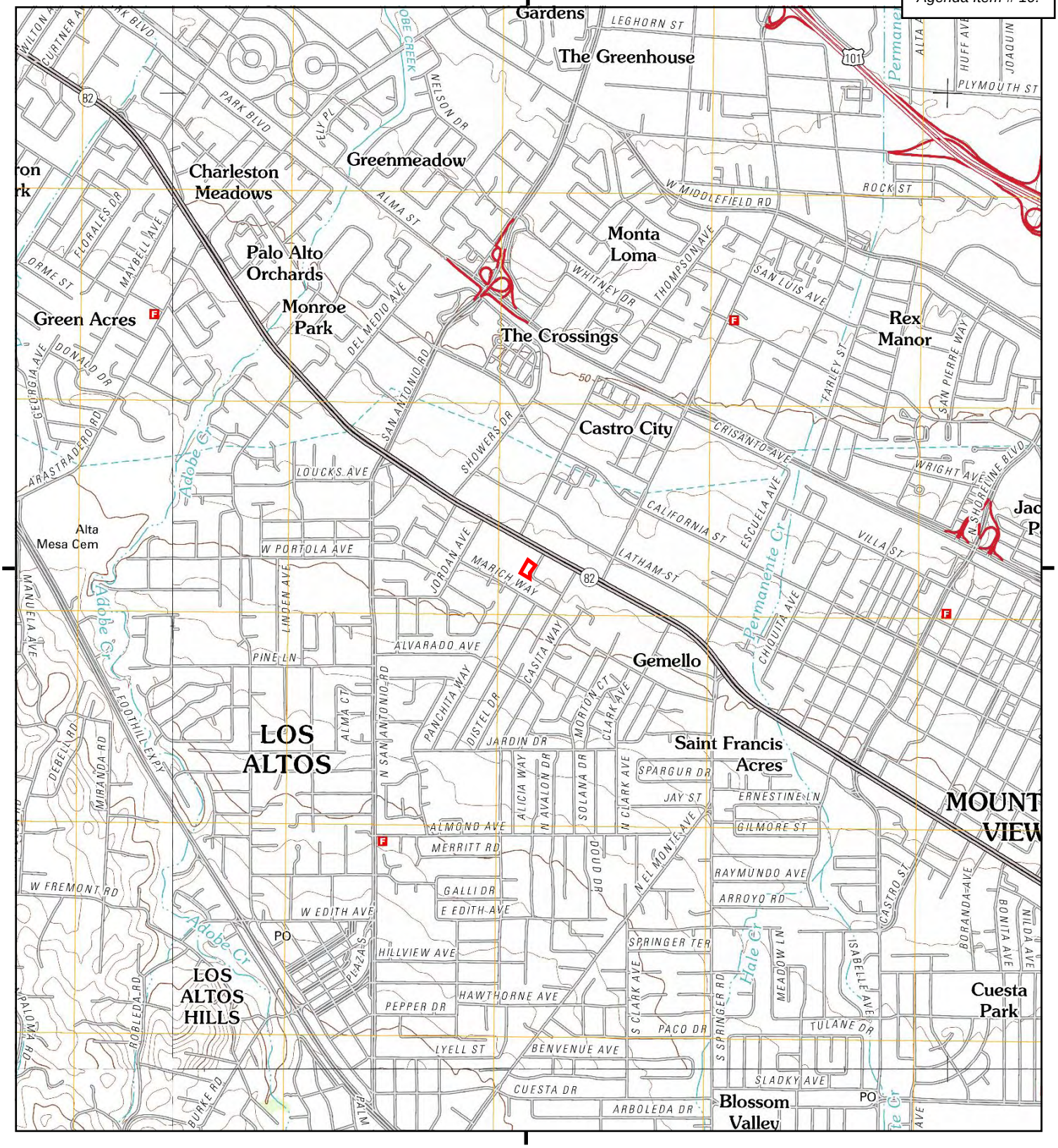
1899 Source Sheets



Palo Alto
1899
15-minute, 62500

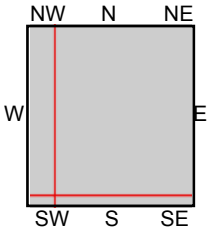
1897 Source Sheets

Palo Alto
1897
15-minute, 62500



This report includes information from the following map sheet(s).

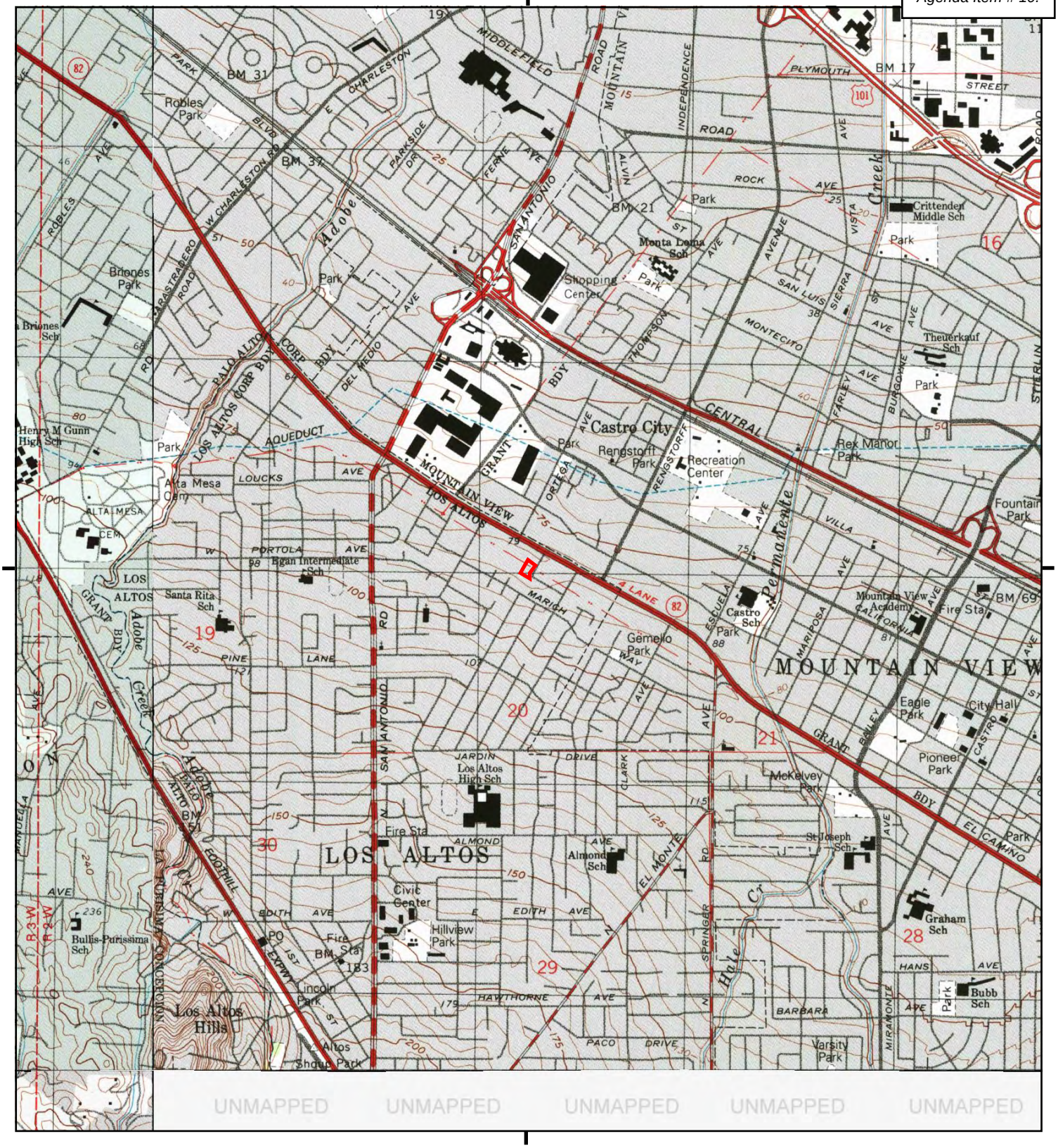
0 Miles 0.25 0.5 1 1.5



TP, Mountain View, 2012, 7.5-minute
S, Cupertino, 2012, 7.5-minute
SW, Mindego Hill, 2012, 7.5-minute
NW, Palo Alto, 2012, 7.5-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

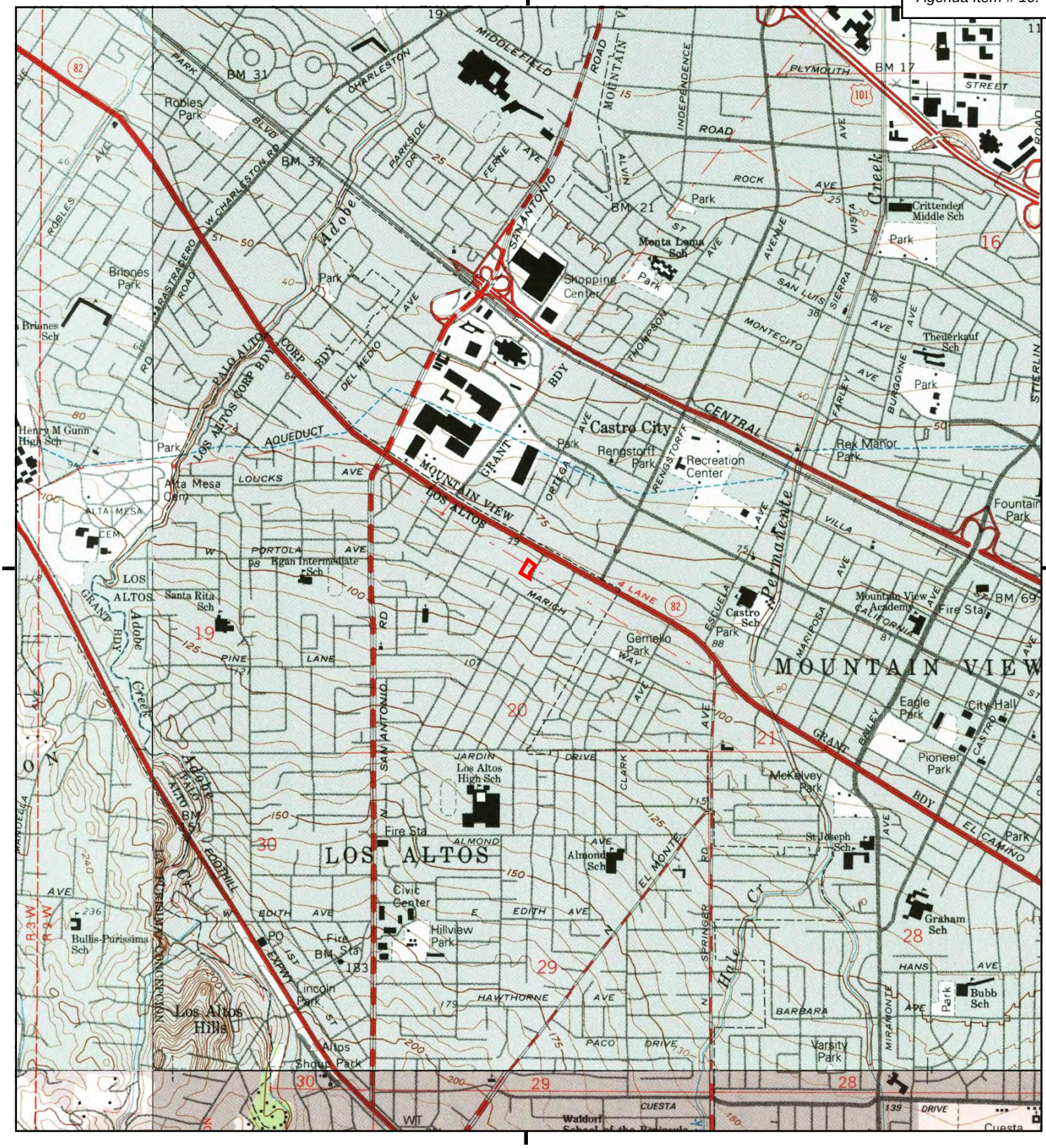
NW N NE
W E
SW S SE

TP, Mountain View, 1997, 7.5-minute
SW, Mindego Hill, 1997, 7.5-minute
NW, Palo Alto, 1999, 7.5-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1480

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

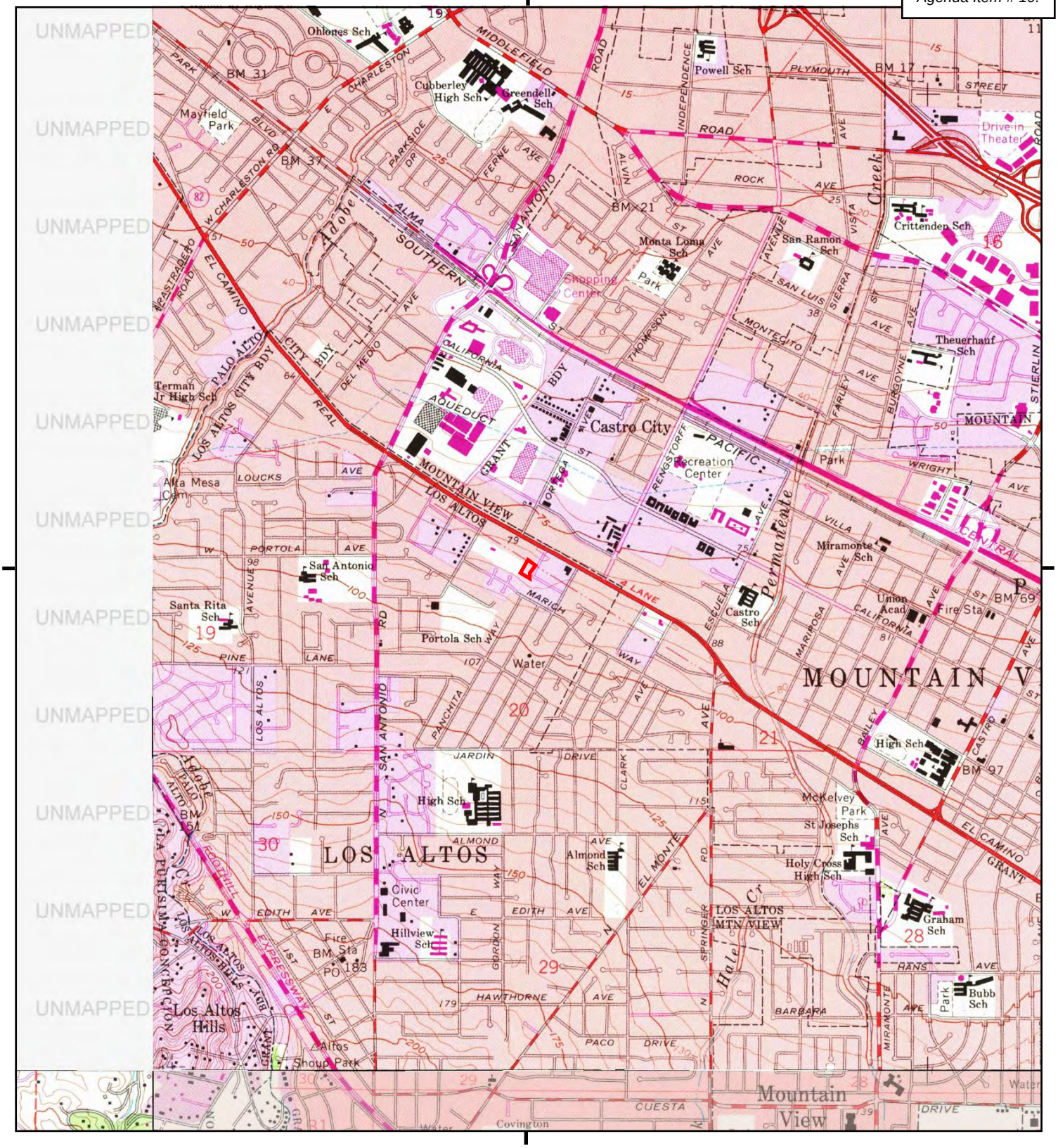
TP, Mountain View, 1995, 7.5-minute
S, Cupertino, 1995, 7.5-minute
SW, Mindego Hill, 1995, 7.5-minute
NW, Palo Alto, 1994, 7.5-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1481

Historical Topo Map

Agenda Item # 10.



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

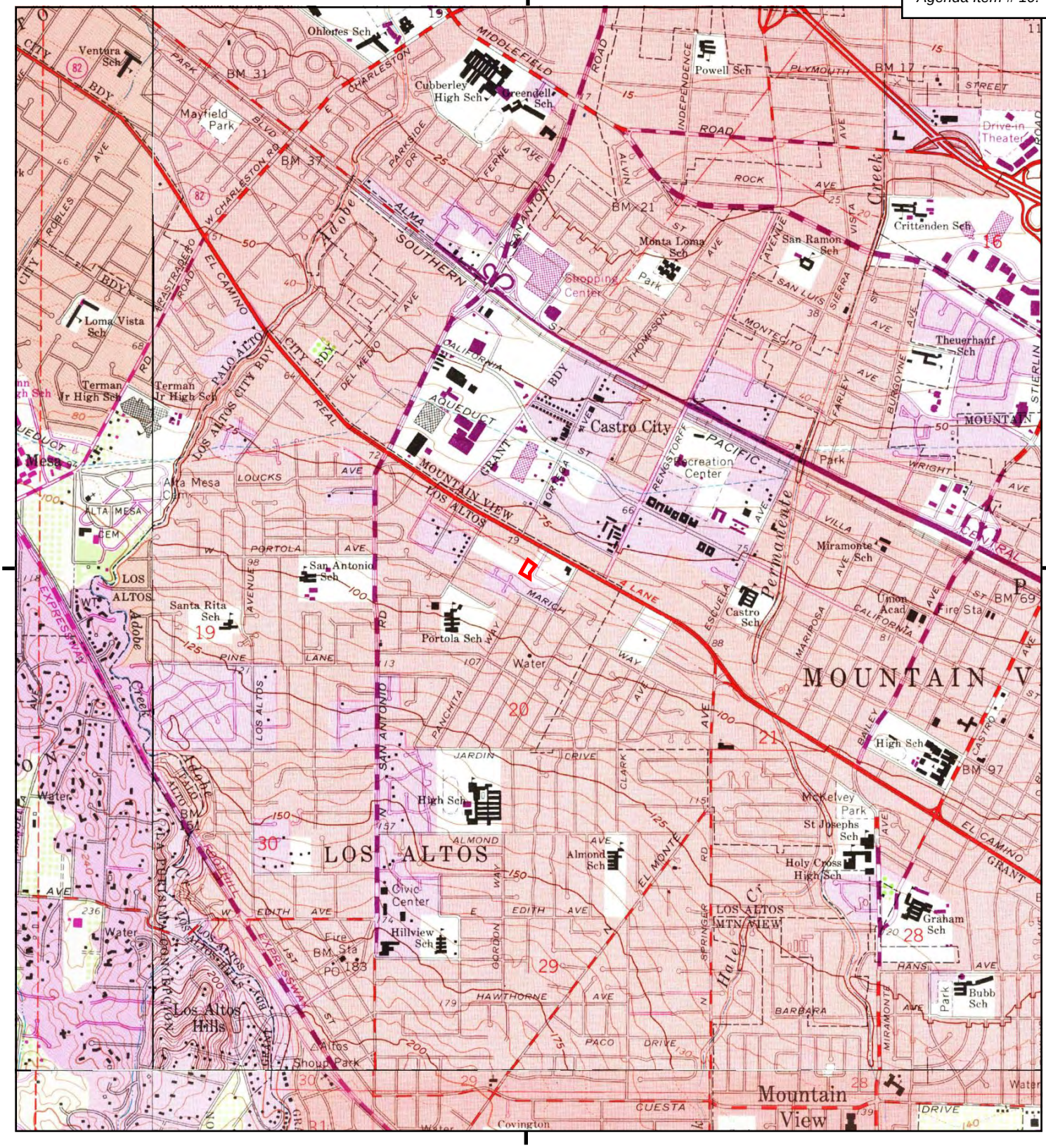
TP, Mountain View, 1981, 7.5-minute
S, Cupertino, 1980, 7.5-minute
SW, Mindego Hill, 1980, 7.5-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1482

Historical Topo Map

Agenda Item # 10.



This report includes information from the following map sheet(s).

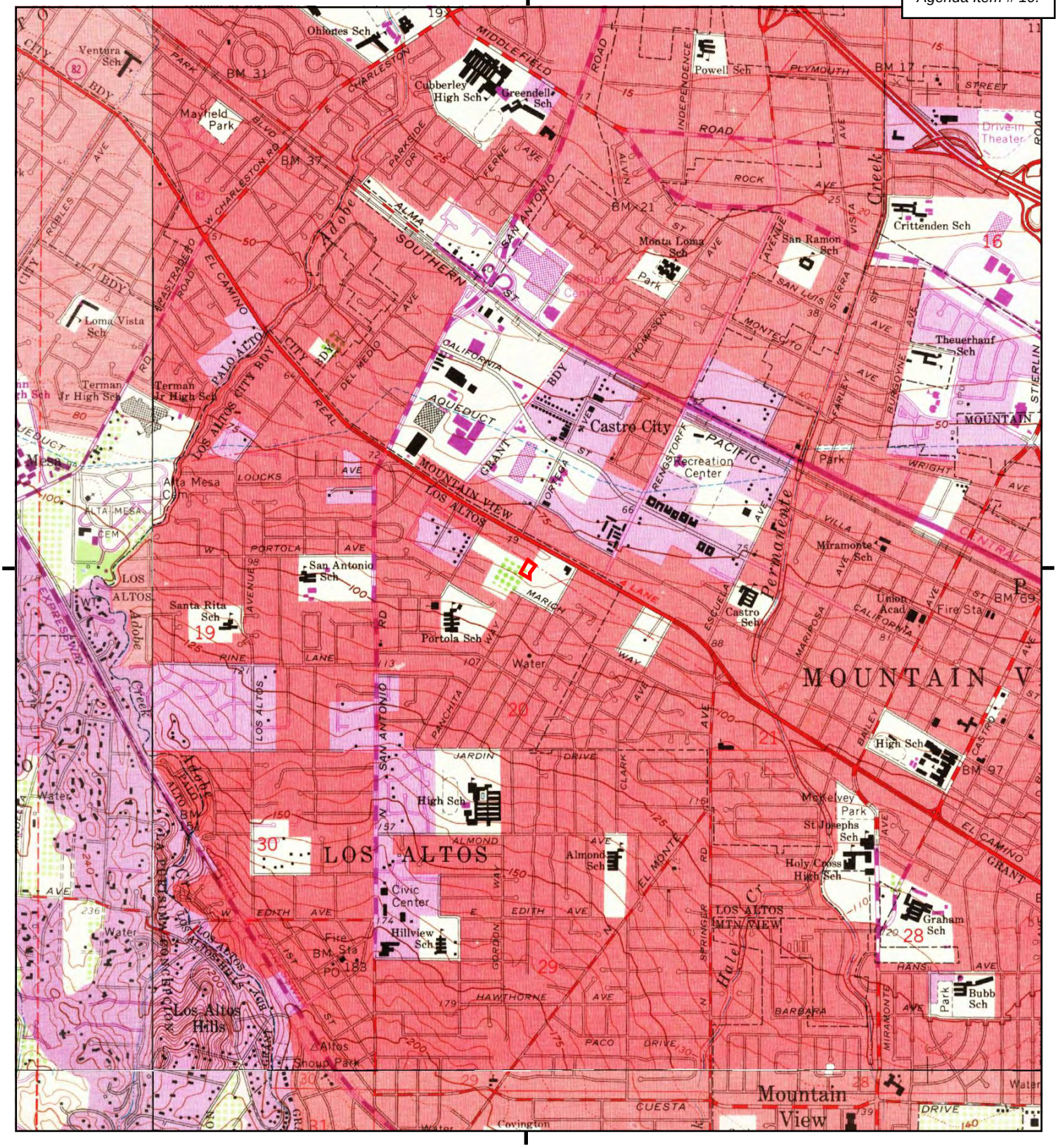
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Mountain View, 1973, 7.5-minute
S, Cupertino, 1973, 7.5-minute
SW, Mindego Hill, 1973, 7.5-minute
NW, Palo Alto, 1973, 7.5-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1483



This report includes information from the following map sheet(s).

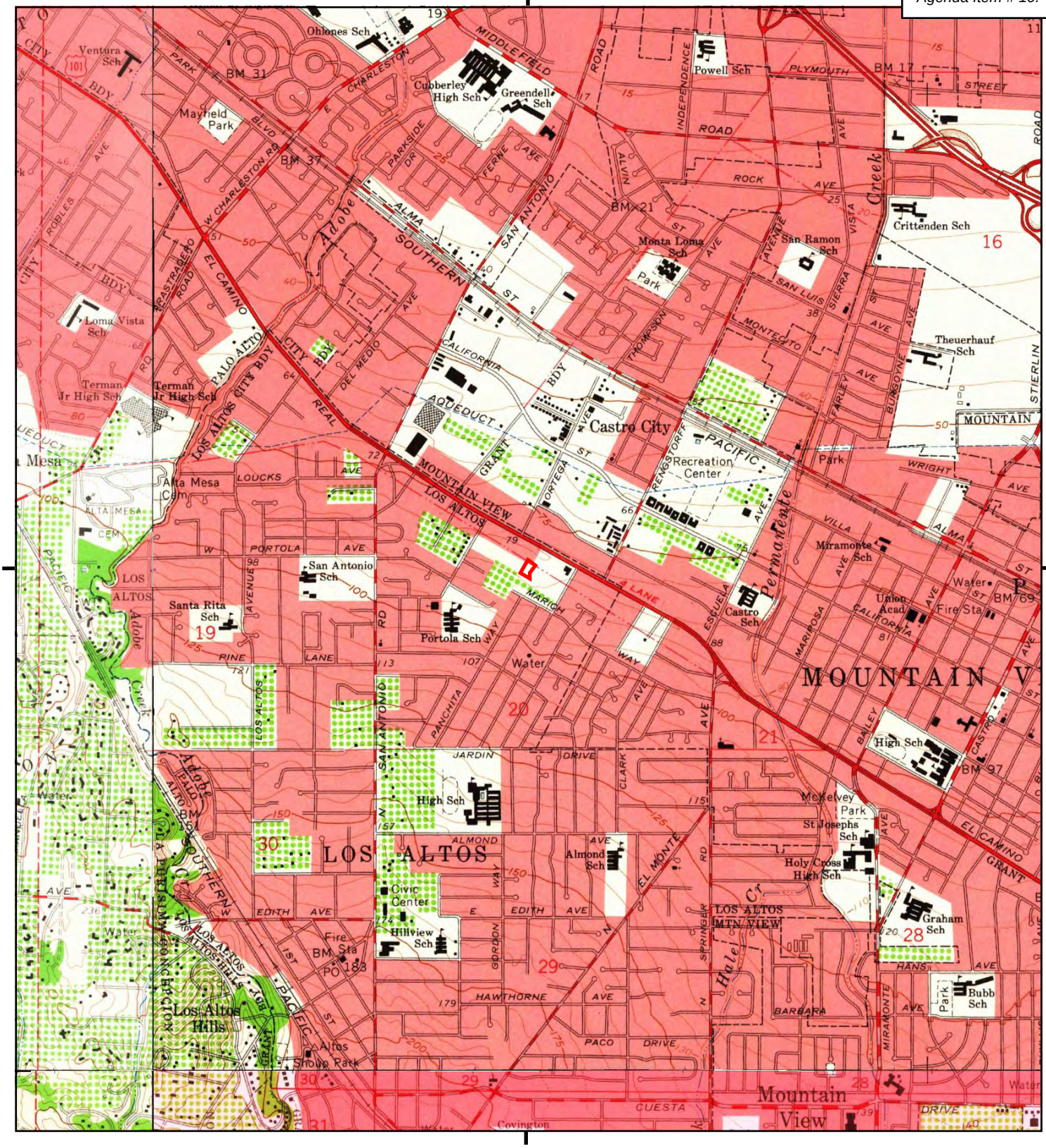
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Mountain View, 1968, 7.5-minute
S, Cupertino, 1968, 7.5-minute
SW, Mindego Hill, 1968, 7.5-minute
NW, Palo Alto, 1968, 7.5-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1484



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

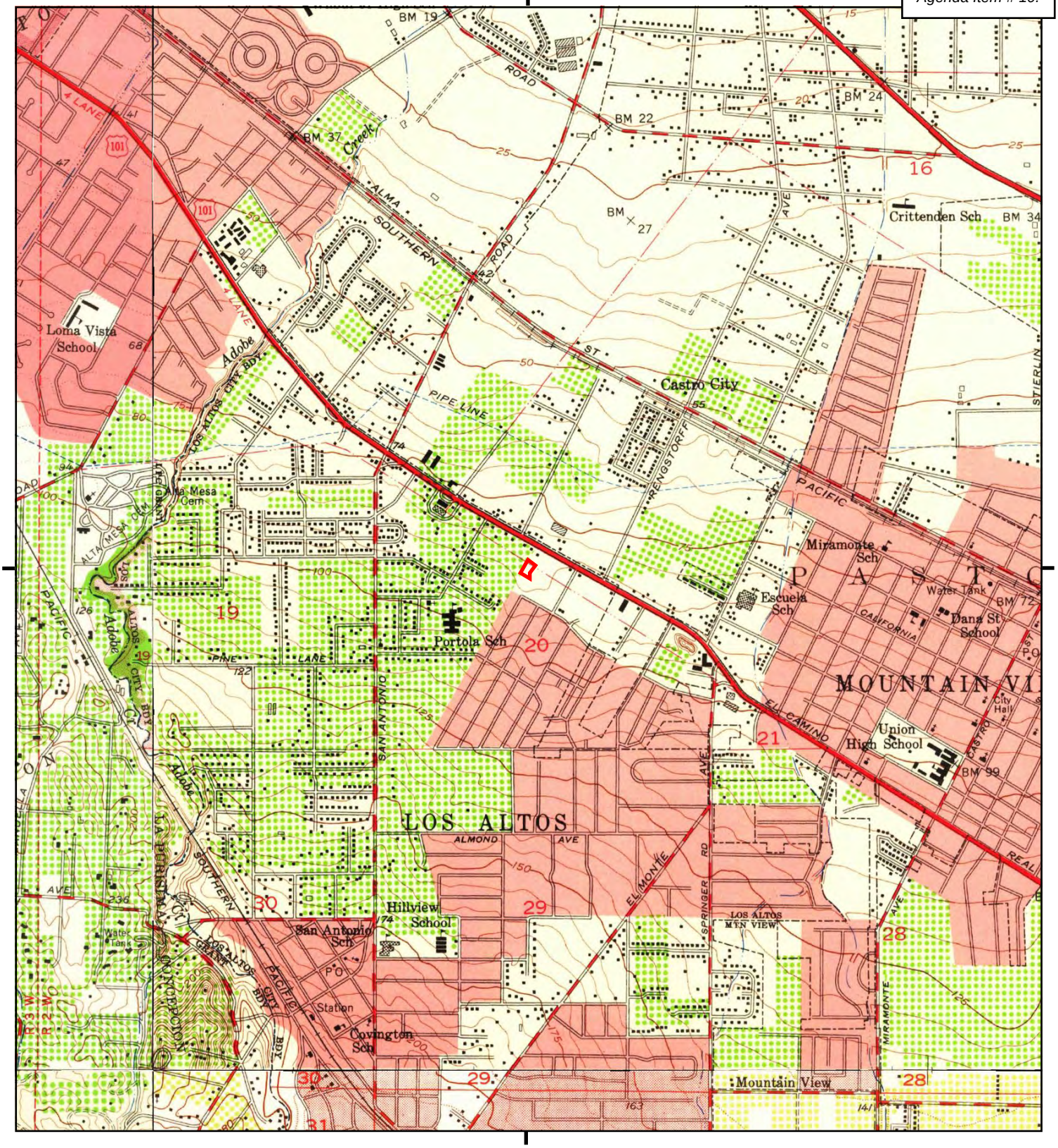
TP, Mountain View, 1961, 7.5-minute
S, Cupertino, 1961, 7.5-minute
SW, Mindego Hill, 1961, 7.5-minute
NW, Palo Alto, 1961, 7.5-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1485

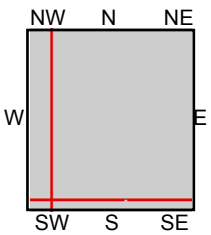
Historical Topo Map

Agenda Item # 10.



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



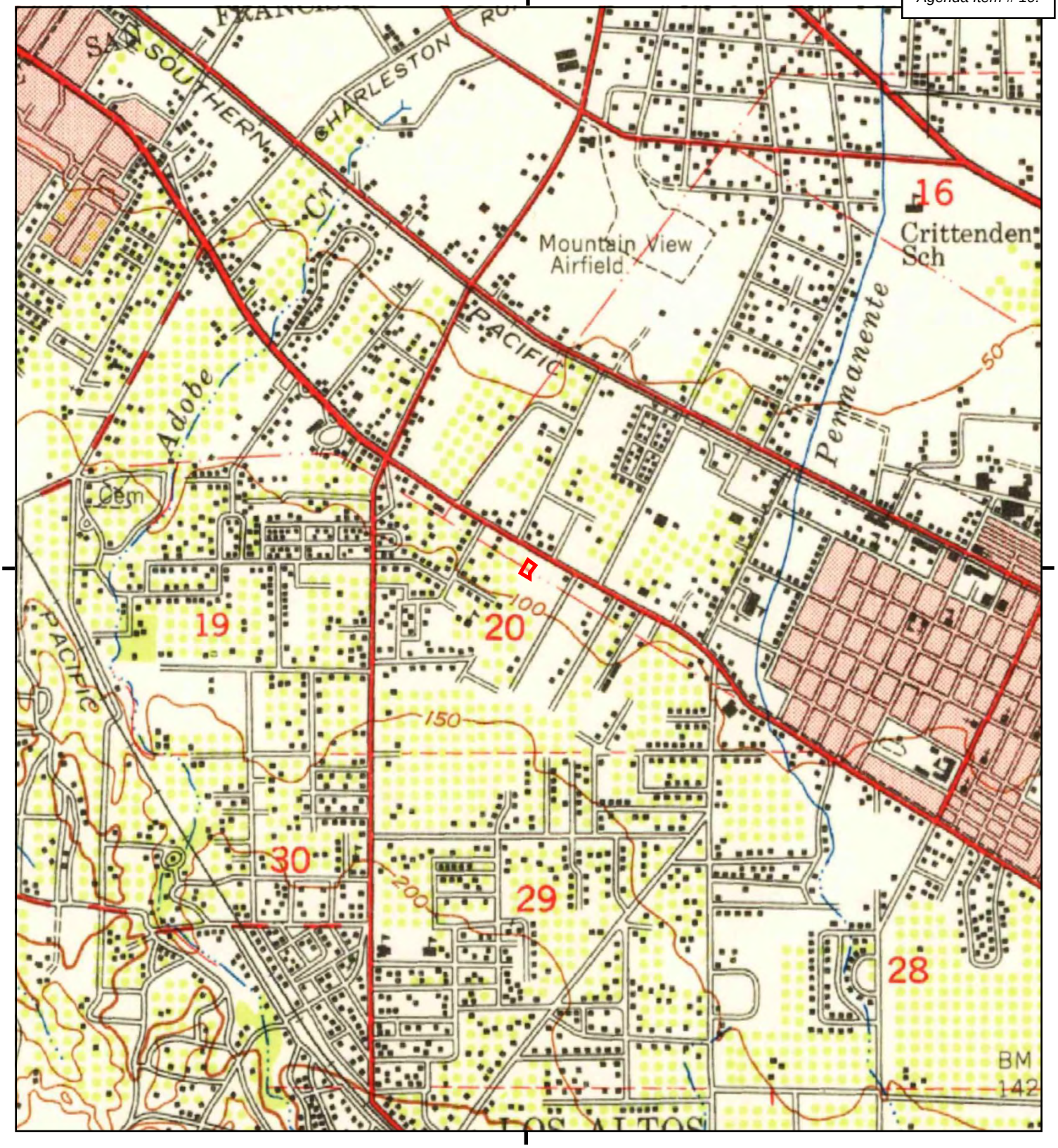
TP, Mountain View, 1953, 7.5-minute
S, Cupertino, 1953, 7.5-minute
SW, Mindego Hill, 1955, 7.5-minute
NW, Palo Alto, 1953, 7.5-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1486

Historical Topo Map

Agenda Item # 10.



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

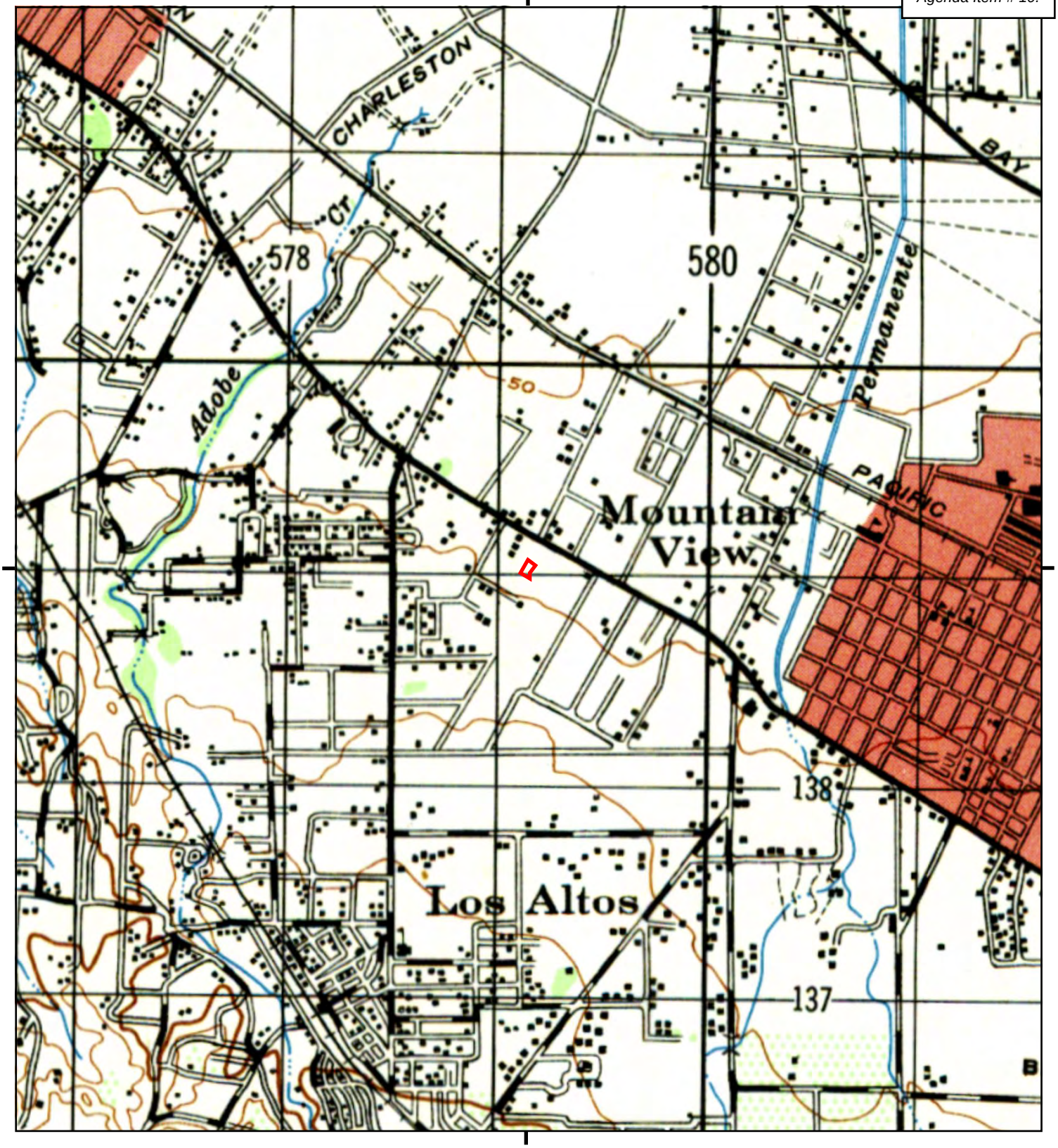
NW N NE
W E
SW S SE

TP, Palo Alto, 1948, 15-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1487

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

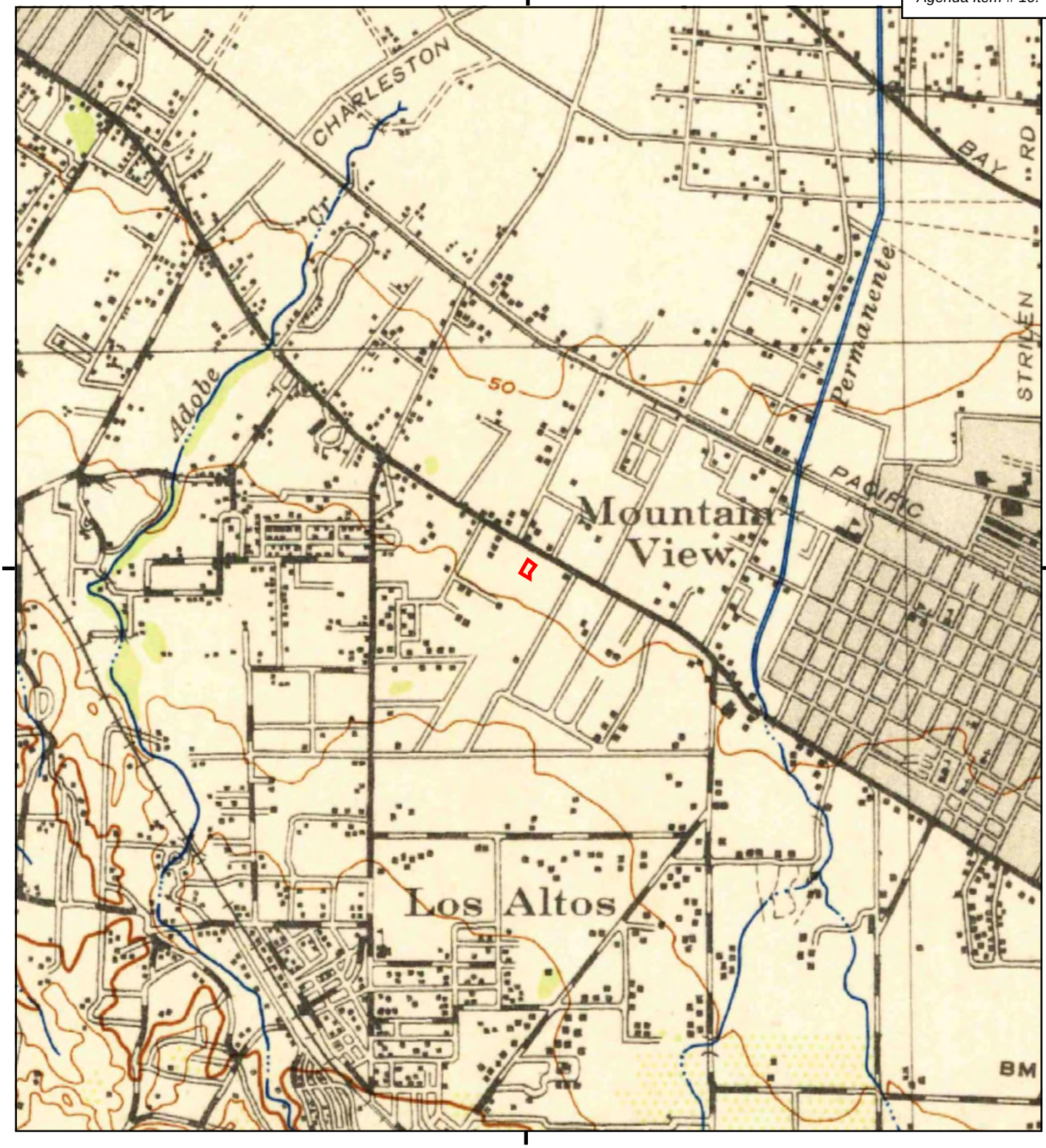
NW N NE
W E
SW S SE

TP, PALO ALTO, 1947, 15-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1488

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1943, 15-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1489

Historical Topo Map

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Santa Cruz, 1902, 30-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1490

Historical Topo Map

Agenda Item # 10.

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1899, 15-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1491

Agenda Item # 10.

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1897, 15-minute

SITE NAME: Distel Circle Property
ADDRESS: 330 Distel Circle
Los Altos, CA 94022
CLIENT: Ninyo & Moore

1492

Distel Circle Property

330 Distel Circle

Los Altos, CA 94022

Inquiry Number: 6253537.8

November 04, 2020

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Site Name:

Distel Circle Property
330 Distel Circle
Los Altos, CA 94022
EDR Inquiry # 6253537.8

Client Name:

Ninyo & Moore
309 S Summit View Dr
Fort Collins, CO 80524
Contact: Randy Wheeler

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Flight Date: August 27, 1998	USDA
1991	1"=500'	Acquisition Date: January 01, 1991	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1974	1"=500'	Flight Date: June 26, 1974	USGS
1968	1"=500'	Flight Date: June 14, 1968	USGS
1963	1"=500'	Flight Date: June 24, 1963	EDR Proprietary Aerial Viewpoint
1956	1"=500'	Flight Date: July 02, 1956	USDA
1950	1"=500'	Flight Date: April 03, 1950	USDA
1948	1"=500'	Acquisition Date: September 26, 1948	USGS/DOQQ
1943	1"=500'	Flight Date: October 05, 1943	USDA
1939	1"=500'	Flight Date: August 01, 1939	USDA

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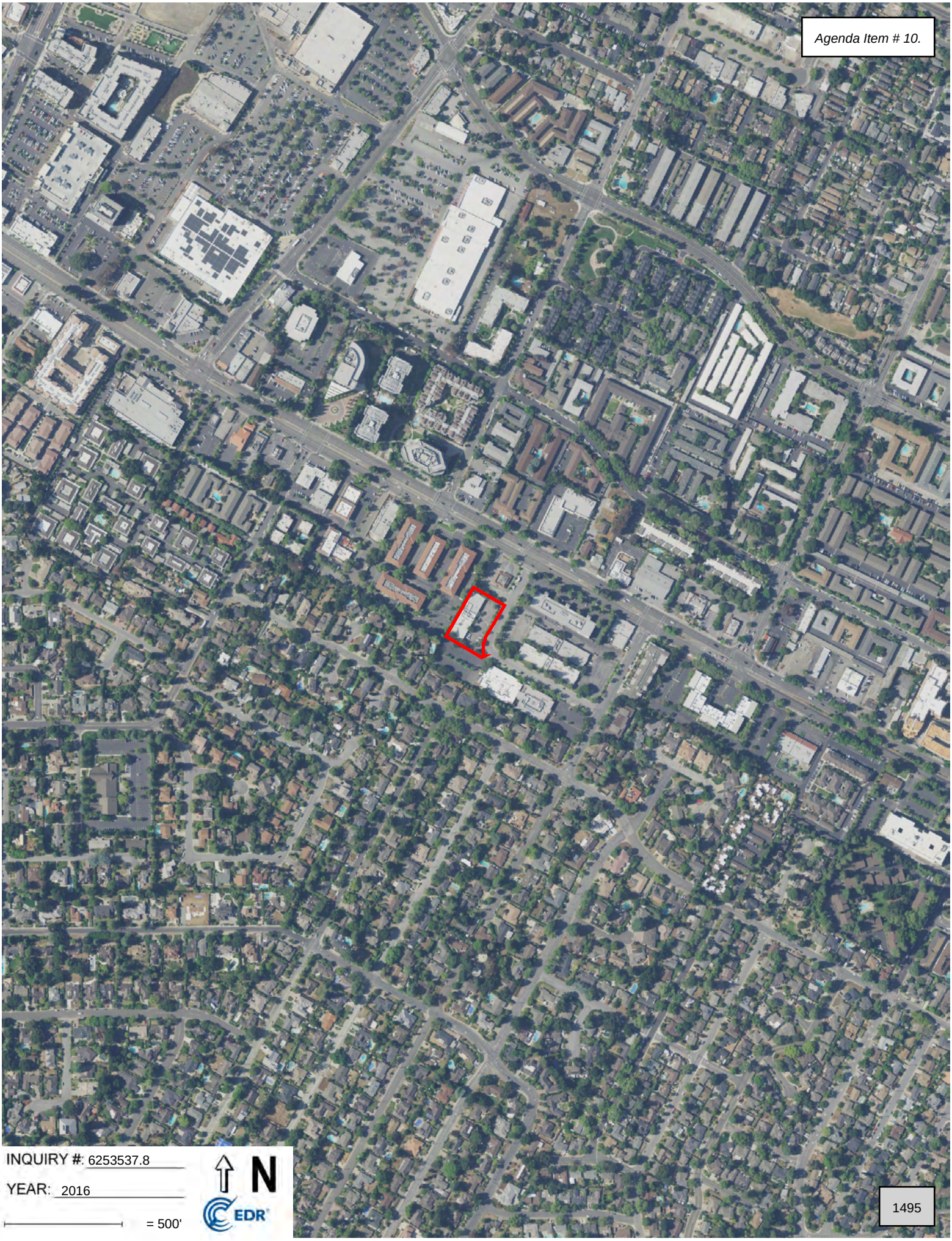


INQUIRY #: 6253537.8

YEAR: 2016

= 500'

N

EDR

1495

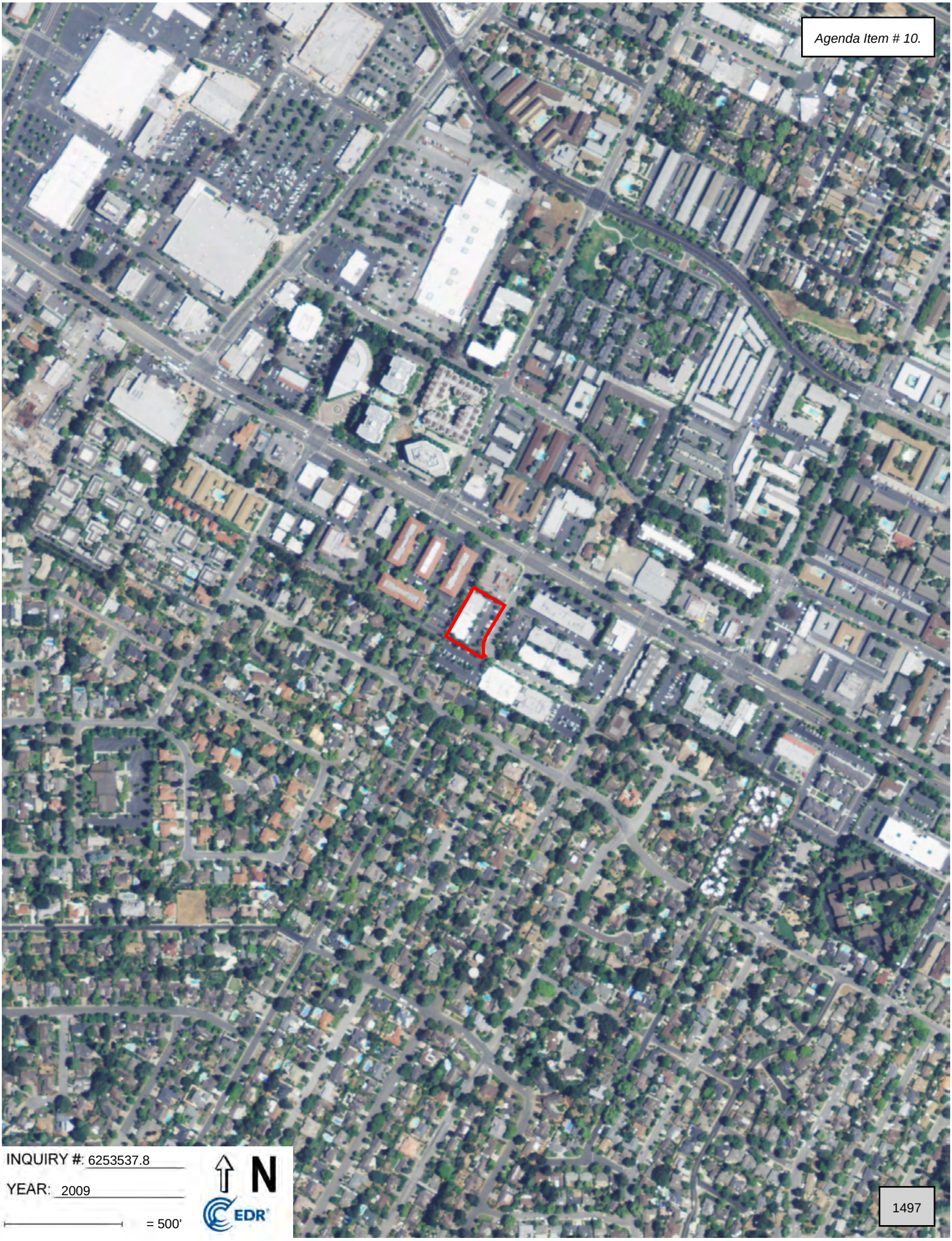
INQUIRY #: 6253537.8

YEAR: 2012

= 500'

N

EDR



INQUIRY #: 6253537.8

YEAR: 2009

= 500'

N

EDR

INQUIRY #: 6253537.8

YEAR: 2006

= 500'

N

EDR

INQUIRY #: 6253537.8

YEAR: 1998

= 500'

N

EDR

INQUIRY #: 6253537.8

YEAR: 1991

= 500'

N

EDR

1500

INQUIRY #: 6253537.8

YEAR: 1982

= 500'

N

EDR

1501

INQUIRY #: 6253537.8

YEAR: 1974

= 500'

N

EDR

1502

INQUIRY #: 6253537.8

YEAR: 1968

= 500'

N

EDR

INQUIRY #: 6253537.8

YEAR: 1963

= 500'

N

EDR

1504

INQUIRY #: 6253537.8

YEAR: 1956

= 500'

N

EDR

1505

INQUIRY #: 6253537.8

YEAR: 1950

= 500'

N

EDR

1506

INQUIRY #: 6253537.8

YEAR: 1948

= 500'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 6253537.8

YEAR: 1943

= 500'

N

EDR

INQUIRY #: 6253537.8

YEAR: 1939

= 500'

N

EDR

Distel Circle Property
330 Distel Circle
Los Altos, CA 94022

Inquiry Number: 6253537.5
November 09, 2020

The EDR-City Directory Image Report

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1985	☑	☐	Haines Criss-Cross Directory
1981	☑	☐	Haines Criss-Cross Directory
1976	☑	☐	Haines Criss-Cross Directory
1971	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

330 Distel Circle
Los Altos, CA 94022

Year	*CD Image*	*Source*	
DISTEL CIR			
2017	pg A1	EDR Digital Archive	
2014	pg A2	EDR Digital Archive	
2010	pg A3	EDR Digital Archive	
2005	pg A4	EDR Digital Archive	
2000	pg A5	EDR Digital Archive	
1995	pg A6	EDR Digital Archive	
1992	pg A7	EDR Digital Archive	
1985	pg A8	Haines Criss-Cross Directory	
1981	pg A10	Haines Criss-Cross Directory	
1981	pg A9	Haines Criss-Cross Directory	
1976	pg A11	Haines Criss-Cross Directory	
1971	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

DISTEL CIR 2017

330 THORNEWOOD
333 KO, OLIVER
OLIVER L KO CPA
370 PALO ALTO MEDICAL FOUNDATION

DISTEL CIR 2014

330	THORNEWOOD
333	GLOWLINK COMMUNICATIONS TECH
370	BROWN LLOYD MD PALO ALTO MEDICAL FOU
	FLOYD JOYCELLEN MD PALO ALTO MEDICAL
	HUA NANCY MD PALO ALTO MEDICAL FOUND
	LASTUFKA FRANCIS MD PALO ALTO MEDICA
	MCGANN K PATTI MD PALO ALTO MEDICAL
	PALO ALTO MEDICAL FOUNDATION
	STRAW WILLIAM E MD PALO ALTO MEDICAL
	SUKHDEO SASTRI MD PALO ALTO MEDICAL
	SUTCLIFFE TRENNA MD PALO ALTO MEDICA
	WEIRICH ERICA MD PALO ALTO MEDICAL F
	WOO KIRSTIN MD PALO ALTO MEDICAL FOU

DISTEL CIR 2010

333 GLOWLINK COMMUNICATIONS TECH
KO, OLIVER
Q SECURE
370 PALO ALTO MEDICAL FOUNDATION

DISTEL CIR 2005

325	RADIAL LABS INC
330	KAIDARA INC
	KAIDARA SOFTWARE INC
	MIDPENINSULA REGIONAL OPEN SP
333	APPOTECH USA INC
	GLOWLINK COMMUNICATIONS TCH
	PHALANXBIO INC
	TUVOX INC
370	AMBERT CONSTRUCTION
	OLIVER LAIMING CO
	PACIFIC RIM SOURCING CORP
	PALO ALTO MEDICAL FOUNDATION
	PAMF CENTER

DISTEL CIR 2000

330	ALZHEIMERS ASSOCIATION
	MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
	OPEN SPACE DISTRICT MIDPENINSULA REGIONAL OPEN SPACE DISTRI
333	TALARIAN CORPORATION
370	ALTOS ENGINEERING APPLICATIONS INCORPORATED
	AMBERT CONSTRUCTION
	BLCK WILLIAM J MD PALO ALTO MEDICAL CLINIC FOUNDATION
	COSTALES FRED MD PALO ALTO MEDICAL FOUNDATION
	GAVIN THERESA MD PALO ALTO MEDICAL FOUNDATION
	HOOPER DAVID E MD PALO ALTO MEDICAL FOUNDATION
	KO OLIVER L CPA
	LIU ARTHUR C K MD PALO ALTO MEDICAL CLINIC LOS
	LOUIS ALLEN ASSOCIATES INCORPORATED
	M V DEVELOPMENT
	MARTINO JULIA MD PALO ALTO MEDICAL FOUNDATION
	MCGANN K PATTI MD PALO ALTO MEDICAL FOUNDATION
	MIL KERED INCORPORATED
	PACIFIC RIM SOURCING CORPORATION
	PALO ALTO MEDICAL FOUNDATION
	SEPETKA MARIA S MD PALO ALTO MEDICAL FOUNDATION
	STRAW WILLIAM E MD PALO ALTO MEDICAL FOUNDATION
	TRANS CONTINENTAL REAL ESTATE
	TRUJILLO LAUREL MD PALO ALTO MEDICAL FOUNDATION
	WONG JEFFREY H ATTORNEY LAW

DISTEL CIR 1995

330 INTERNATIONAL TECHNOLOGY GROUP
370 ALTOS ENGINEERING APPLICATIONS
BAYMARK BUSINESS PRODUCTS
DEWITT, E
LIR CORP
LOUIS ALLEN ASSOC INC
LOVE, ROBERT T
375 ASK COMPUTER SALES & SUPPORT

DISTEL CIR 1992

330 DESKTOP PRESENTATNS
INTL TECHNOLOGY GRP
370 ALTOS ENGRG APPLCTN
BAYMARK BSNS PRDCTS
L I R CORPORATION
375 ASK COMPUTER SYSTEM

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

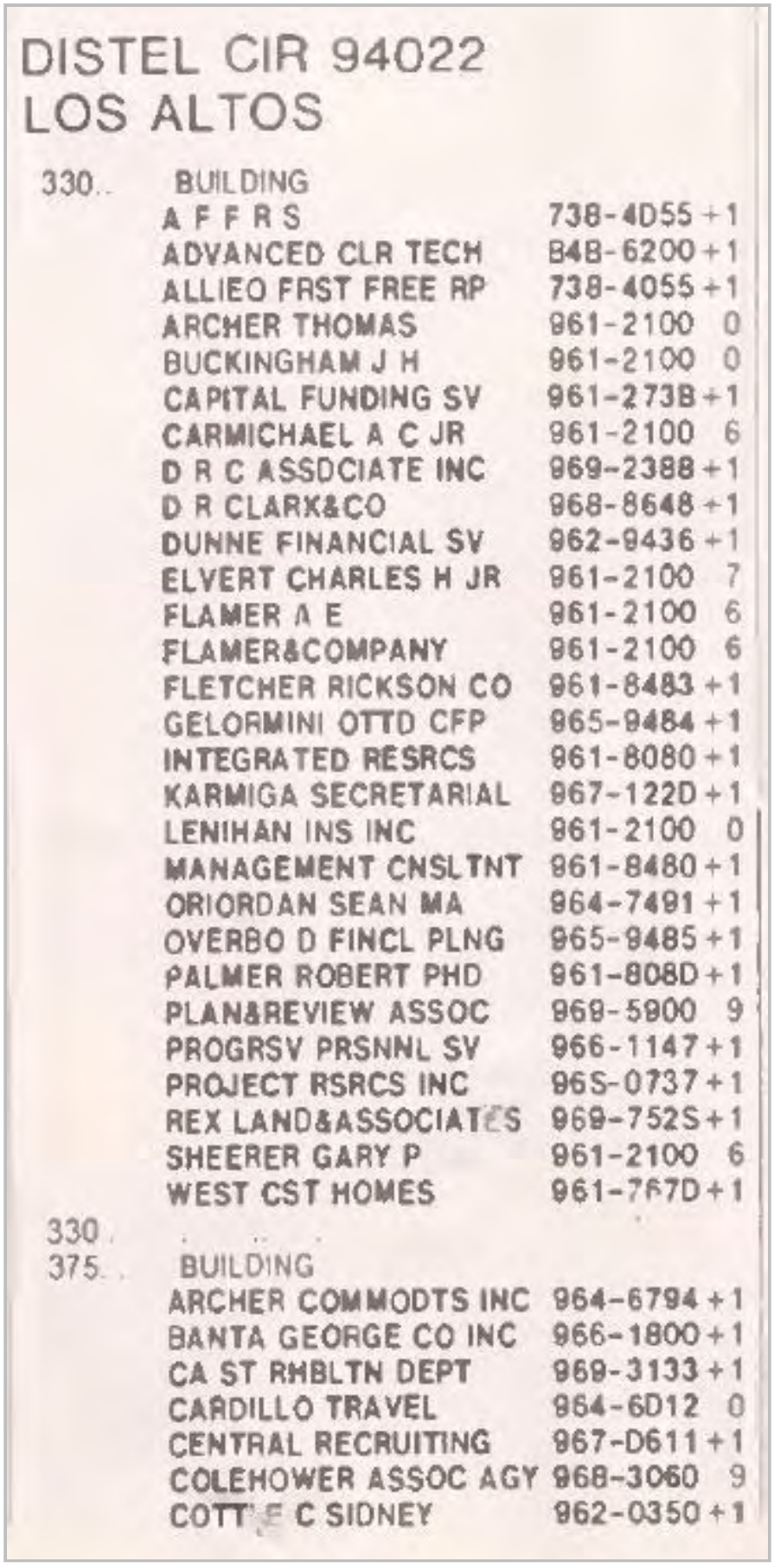
DISTEL CIR 1985

DISTEL CIR 94022
LOS ALTOS

330	BUCKINGHAM JEFFREY	861-2100	
	CARMICHAEL A C JR	961-2100	
	COONS STEVE	961-2100	6
	ELVERT CHARLES N JR	861-2100	7
	FLAMER A E	961-2100	6
	FLAMER&COMPANY	861-2100	
	GARCIA LEE A	961-2100	4
	LENINAN JAMES J	961-2100	
	LEWIS JEFF	961-2100	
	PERSONAL CMPTR INS	868-1615	+5
	PLAN&REVIEW ASSOCS	968-5900	9
	RUTN ROGER	961-2100	4
	SNEERER GARY P	861-2100	6
375	A S K COMPUTER SYST	869-4442	4
	ASK COMPUTER SYSTMS	869-4442	
	BUNDSEN&WALLACE	968-4475	3
	MID PNSLA REG OPEN	865-4717	
	MIDPNSLA OPEN SPACE	865-4717	2
	SPENCER T E&CO EST	869-7472	4
	WALLACE JOSEPN J	968-4475	3
395	XXXX	00	
*	20 BUS 1 RES	1 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

DISTEL CIR 1981



DISTEL CIR 94022
LOS ALTOS

330.. BUILDING

A F F R S	738-4D55 +1
ADVANCED CLR TECH	848-6200 +1
ALLIED FRST FREE RP	738-4055 +1
ARCHER THOMAS	961-2100 0
BUCKINGHAM J H	961-2100 0
CAPITAL FUNDING SV	961-273B +1
CARMICHAEL A C JR	961-2100 6
D R C ASSOCIATE INC	969-2388 +1
D R CLARK&CO	968-8648 +1
DUNNE FINANCIAL SV	962-9436 +1
ELVERT CHARLES H JR	961-2100 7
FLAMER A E	961-2100 6
FLAMER&COMPANY	961-2100 6
FLETCHER RICKSON CO	961-8483 +1
GELORMINI OTTO CFP	965-9484 +1
INTEGRATED RESRCS	961-8080 +1
KARMIGA SECRETARIAL	967-122D +1
LENIHAN INS INC	961-2100 0
MANAGEMENT CNSLTNT	961-8480 +1
ORIORDAN SEAN MA	964-7491 +1
OVERBO D FINCL PLNG	965-9485 +1
PALMER ROBERT PHD	961-808D +1
PLAN&REVIEW ASSOC	968-5900 9
PROGRSV PRSNNL SV	966-1147 +1
PROJECT RSRCS INC	96S-0737 +1
REX LAND&ASSOCIATES	969-752S +1
SHEERER GARY P	961-2100 6
WEST CST HOMES	961-767D +1

330 . . . .

375.. BUILDING

ARCHER COMMODTS INC	964-6794 +1
BANTA GEORGE CO INC	966-1800 +1
CA ST RHBLTN DEPT	969-3133 +1
CARDILLO TRAVEL	964-6D12 0
CENTRAL RECRUITING	967-D611 +1
COLEHOWER ASSOC AGY	968-3060 9
COTTLE C SIDNEY	962-0350 +1

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

DISTEL CIR 1981

DISTEL CIR 94022 CONT

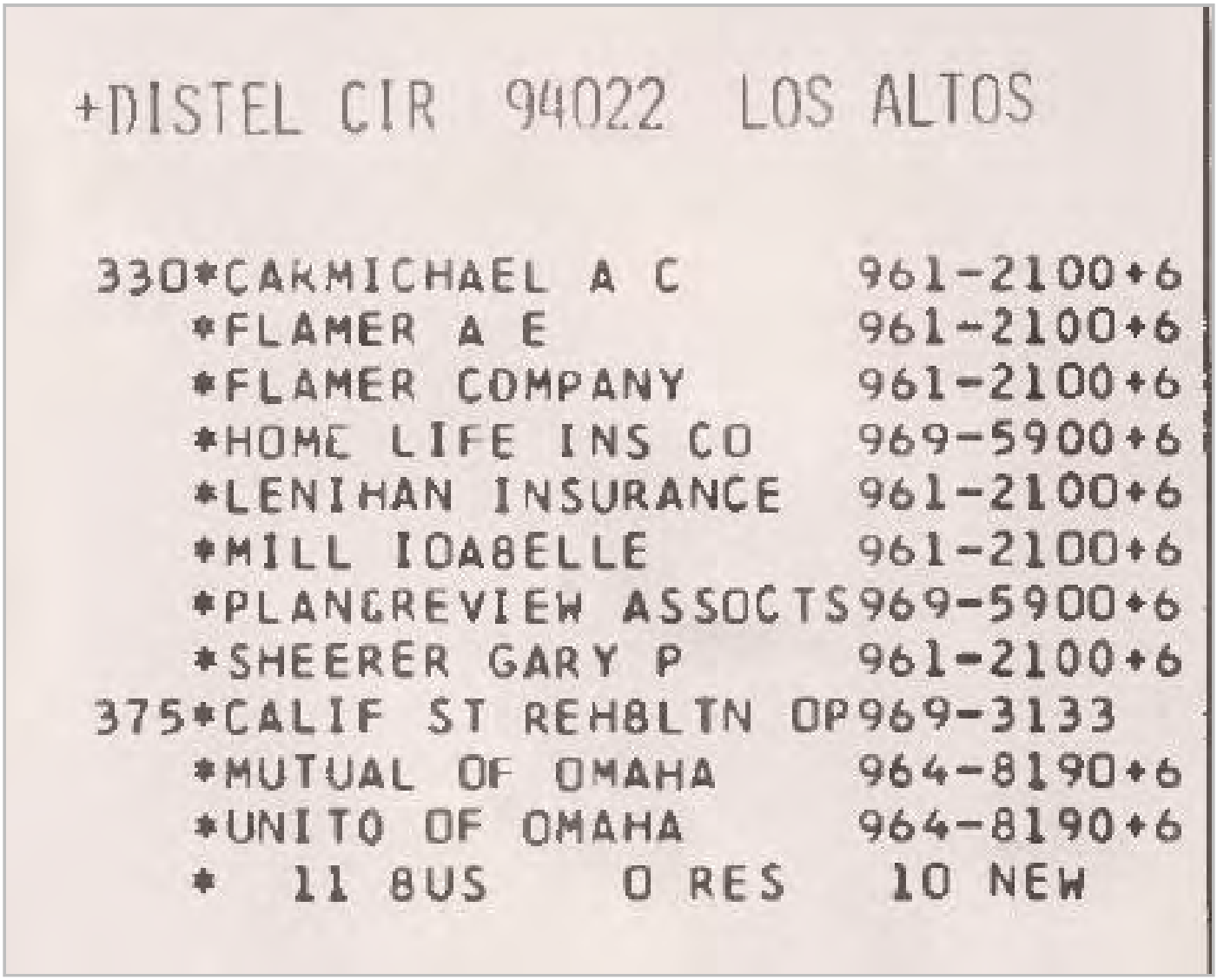
	F R S ASSOCIATES	982-0350 +1
	GOLDEN GATE U MBA	961-3000 +1
BD	HERITAGE CMDTY CNSL	964-8633 8
6D	HOLMES PROPERTIES	964-8100 9
	I R T I	985-8102 +1
	INNOVATIVE REHABILI	965-8102 0
	INPROTEC SYS INC	965-4680 +1
	JUDD LOREN E	964-1165 +1
	NASH SHARON PHD	984-6755 9
	ROSS KERSKE	965-3098 0
	STANFORD MICROSYSTM	965-4800 8
	STANLEY HOME PRDCTS	969-6262 8
	STATE FARM INS LA	964-1165 9
	VARIAN ASSOCIATES	968-8141 8
	WATSON CHIROPRACTIC	889-1032
	WATSON CHRIS DC	989-1032
	WATSON STEPHEN C OC	989-1032
A	MUTUAL OF OMAHA	964-8190 6
A	STANLEY HOME PRDCTS	981-6100 8
A	UNITD OF OMAHA	984-8190 +1

375

730D	BEACH C H DC	965-9400 +1
D	CULVER ROBERT L OC	965-9400 +1
D	FALLICK MARTIN L DC	965-9400 +1
D	WILLIAMS P A DC	965-9400 +1
*	55 BUS 4 RES	34 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

DISTEL CIR 1976



+DISTEL CIR 94022 LOS ALTOS

330*CARMICHAEL A C 961-2100+6
*FLAMER A E 961-2100+6
*FLAMER COMPANY 961-2100+6
*HOME LIFE INS CO 969-5900+6
*LENIHAN INSURANCE 961-2100+6
*MILL IOABELLE 961-2100+6
*PLANGREVIEW ASSOCTS 969-5900+6
*SHEERER GARY P 961-2100+6
375*CALIF ST REHBLTN OP 969-3133
*MUTUAL OF OMAHA 964-8190+6
*UNITO OF OMAHA 964-8190+6
* 11 BUS 0 RES 10 NEW

Appendix F:

VAPOR ENCROACHMENT SCREENING MATRIX

Phase I ESA Vapor Encroachment Conditions (VEC) matrix includes a (1) Search Radius Test, (2) Chemicals of Concern Test (COC), and (3) a Critical Distance Test [1].

(1) Search Radius Test: Are there any known or suspect contaminated properties in the primary area of concern within the corresponding search radii (including the site)?

☐ Yes ☒ No — If ***No***, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If ***Yes***, then:

(2) Chemicals of Concern Test: Are COC likely to be present within the area of concern for those known or suspect contaminated sites identified based on the Search Distance Test?

☐ Yes ☒ No — If ***No***, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If ***Yes***, then:

(3) Critical Distance Test*: A plume test to determine whether or not COC in the contaminated plume(s) may be within the critical distance.

☐ Yes ☒ No — (3a) Is information related to the contaminated(s) plume available (i.e. isoconcentration maps, site drawings, etc.)?
(3b) If ***No***, then a VEC cannot be ruled out; check ***Yes*** in #4 below indicating it is likely a VEC exists. If ***Yes***, then:

☐ Yes ☒ No — (3c) Is the site less than 100 feet to the nearest edge of a contaminated [non-petroleum hydrocarbon] plume(s)? If ***Yes***, then check ***Yes*** in #4 below indicating it is likely a VEC exists.

☐ Yes ☒ No — (3d) Is the site less than 30 feet to the nearest edge of a dissolved petroleum hydrocarbon plume(s)? If ***Yes***, then check ***Yes*** in #4 below indicating it is likely a VEC exists.

*If the distance from the nearest edge of a contaminated plume to the nearest existing or planned structure on the site is less than 100 feet for non-petroleum hydrocarbon COC, or less than 30 feet for dissolved petroleum hydrocarbons, then it is presumed that a VEC *currently* exists beneath the site. If the distance from the nearest edge of the contaminated plume is greater than or equal to 100 feet for non-petroleum hydrocarbons, or 30 feet for dissolved petroleum hydrocarbon chemicals of concern, then it is presumed unlikely that a VEC *currently* exists beneath the site.

(4) Is it likely that a VEC *currently* exists beneath the site?

☐ Yes ☒ No — If ***No***, then the VEC screening is complete and no further investigation is recommended at this time. If ***Yes***, Ninyo & Moore recommends performing additional assessment, such as a Tier 2 VEC assessment according to ASTM E 2600-10.

[1] Based on guidance presented in the ASTM E 2600-10 Standard.

APPENDIX E
INTERVIEW DOCUMENTATION

PIERS ENVIRONMENTAL SERVICES

ENVIRONMENTAL QUESTIONAIRE / DISCLOSURE STATEMENT AND PROPERTY OBSERVATION FORM

SUBJECT SITE ADDRESS: 330 Distel Circle, Los Altos, CA

PERSON INTERVIEWED: Donal Manning

TITLE: PIERS PM **DATE:** 8/19/21

If you indicate an affirmative response (YES) to any of the below listed questions, please attach a separate sheet with details explaining the issue.

QUESTION	USER / OR KEY SITE MANAGER	OWNER	TENANT	PM OBSERVED
1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
2. Are you aware of any AULs, (Activity and Land Use Limitations), such as, engineering controls, land use restrictions or institutional controls that are in place at the site and/ or have been filed or recorded in a registry under federal, tribal, state or local law?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
3. Do you have any specialized knowledge, specific information and/or direct experience in relation to hazardous chemicals (types, quantities, processes, disposal techniques) used at the property or nearby properties?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
4. Does the price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO

QUESTION	USER / OR KEY SITE MANAGER	OWNER	TENANT	PM OBSERVED
5. Are you aware of any known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example: Do you know the past uses of the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
5A. Do you know the specific chemicals that are present or once were present at the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
5B. Do you know of spills or other chemicals releases that have taken place on the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
5C. Do you know of any environmental cleanups that have taken place on the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
5D. Do you know of any environmental violations in connection with the Property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
6. Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
7. Is the property or any adjoining property currently used for an industrial use?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
7A) Did you observe evidence or do you have any prior knowledge that the property or adjoining property has been used for an industrial use in the past?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
8. Is the property or adjoining property currently or previously used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, landfill, waste treatment, storage, disposal, processing, or recycling facility?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO

QUESTION	USER / OR KEY SITE MANAGER	OWNER	TENANT	PM OBSERVED
9. Are there currently or were there previously any discarded auto or industrial batteries, or other chemicals > 5 gal in volume or 50 gallons in the aggregate on site?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
10. Did you observe evidence or do you have prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site or that is of an unknown origin?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
11. Are there currently or were there previously any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
12. Is there currently, or was there previously any stained soil located on the Property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
13. Are there currently or were there previously any registered or unregistered storage tanks (above or underground) located on the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
14. Are there currently or were there previously any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
15. Is there currently or was there previously evidence of leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO

QUESTION	USER / OR KEY SITE MANAGER	OWNER	TENANT	PM OBSERVED
16. If the property is served by a private well or non-public water system, do you have any knowledge that contaminants have been identified in the well or system that exceed allowable limits ?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
17.Do you know of any past, threatened, pending, violations of environmental laws, lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
18. Have you been informed of the current or past existence of hazardous substances or petroleum products with respect to the property or any facility located on the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
19. Do you have any knowledge of any environmental assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
20. Does the property discharge any waste water (not including sanitary waste or storm water) onto the property or adjacent property and/or into a sanitary sewer system or storm water system?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
21. Is there a transformer, capacitor, or any hydraulic equipment, for which there are any records indicating the presence of PCBs?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
22. Have any hazardous substances or petroleum products, tires, auto or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO

QUESTION	USER / OR KEY SITE MANAGER	OWNER	TENANT	PM OBSERVED
23. Are there currently or were there previously any water monitoring wells located on the property?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO
24. Are there currently or were there previously any water monitoring wells located on any adjacent and/or nearby properties?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☒ NO

Why are you having this project performed? (Please Check One)

To qualify for LLP under CERCLA? ☒

To understand potential environmental conditions impacting the use of the property ? ☐

Other, please state: ☐

What type of transaction is taking place? (Please Check One)

☒ **Purchase** ☐ **Refinance**

☐ **Exchange** ☐ **Other**

By signing this form below, I represent to the best of my knowledge, that the above facts and statements are true and correct and to the best of my knowledge no material facts have been suppressed or misstated.

PRINT NAME:	Donal Manning
RELATION TO PROPERTY:	PIERS PM
DATE:	7/21/21
SIGNATURE	Donal Manning

APPENDIX F
QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL(S)

DONAL MANNING
SENIOR PROJECT MANAGER
ENVIRONMENTAL PROFESSIONAL

Mr. Manning serves as a PIERS Chief Executive Officer (CEO) and Senior Project Manager providing our clients and projects with outstanding expertise and reporting experience with Phase I Environmental Site Assessments, Phase II Subsurface Investigations, and remedial project oversight.

Mr. Manning joined PIERS in 2015 with a strong documented record of managing complex environmental remediation and geologic assessment projects. Prior to joining PIERS, Mr. Manning worked managed another environmental consulting firms since 2003. Mr. Manning has managed and assisted in performing Phase I and Phase II site investigations for city and county agencies, large corporations, lending institutions, real estate professionals and developers.

AS CEO, Mr. Manning is a key player in PIERS decision-making on complex projects and offers our clients superior knowledge on a vast array of environmental issues.

KAY PANNELL

SENIOR PROJECT MANAGER
REGISTERED ENVIRONMENTAL PROFESSIONAL #5800
REGISTERED ENVIRONMENTAL PROPERTY ASSESSOR #100002
M.S. GEOBIOLOGY

Ms. Pannell has successfully served PIERS since 2002. She brings over 26 years of experience in all aspects of environmental consulting, including Phase I Environmental Site Assessments, Phase II Subsurface Investigations, Phase III Remedial Project Oversight, Remedial Investigation/Feasibility Studies, Superfund Site Clean-up and Case Closure. Ms. Pannell's extensive experience in the industry has given her comprehensive knowledge of environmental regulations, laws, and remedial applications technology, which she applies on a daily basis at PIERS.

Ms. Pannell brings to PIERS an extraordinary depth and breadth of experience, including work in soil and groundwater sampling and analysis, underground storage tank removal and remediation, lead and asbestos abatement, chemical lab packing, industrial landfill investigation and remediation, radioactive waste removal, unexploded ordinance disposal, and wetland characterizations. Ms. Pannell's clients have included the U.S. Navy, the U.S. Army Corps of Engineers, various oil companies, and private sector individuals. Her projects have ranged from investigations of a single site underground fuel tank leak, to the technical coordination for a Superfund site, to conducting scientific research on regional geologic conditions affecting a major military installation.

Ms. Pannell's previous position as a Project Manager and technical coordinator for a nation-wide environmental consulting firm gave her the opportunity to work on the Navy CLEAN contract for naval base closures. The projects included water production well closure, radioactive waste removal at an industrial landfill, napalm-contaminated soil removal, lead-contaminated soil removal, groundwater contaminate plume characterizations, and a scientific research study of wetlands. Later, as a Quality Control Manager at another nation-wide environmental consulting firm, she expanded her expertise with U.S. Army Corps of Engineers contracts that included unexploded ordinance disposal, lead and asbestos abatement, industrial landfill remediation and closure, lead (bullet) removal from soil, and leaking underground storage tank removals.

Ms. Pannell's exemplary project management skills come from years of experience in cost estimation, proposal and technical writing, scheduling, client and agency negotiations, subcontractor and vendor oversight, quality control management, and employee supervision. Ms. Pannell's strong skills in data analysis and interpretation, diverse experience in project management, academic expertise, excellent communication skills, and outstanding rapport with environmental regulatory agencies make her an invaluable member of the PIERS team. Clients can depend upon Ms. Pannell's integrity, efficiency, knowledge, and commitment to excellence on any project.

330 DISTEL CIRCLE
NOISE AND VIBRATION ASSESSMENT

Los Altos, California

May 10, 2022

Prepared for:

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I&R Job No.: 21-178

INTRODUCTION

The construction of a residential complex is proposed at 330 Distel Circle, in the city of Los Altos, California. The project would consist of 90 apartment units within a five-story building located on a 0.87 acre site. The project would demolish the existing 12,120 square foot office building and associated surface parking and landscaping in order to construct a new, five-story apartment building totaling approximately 114,970 square feet. The apartment building would include 90, 100 percent affordable studio, one-, two-, and three-bedroom apartment units situated around a central courtyard on top of podium parking. The ground floor would contain the residential lobby, utility, trash, and maintenance rooms, bike storage, car parking (including mechanized parking stalls) and loading stalls. Apartments would be located on floors 2 – 5. The five-story building would have a maximum building height of 64 feet.

The project is bordered by Distel Circle and commercial offices to the east, a parking lot and commercial offices to the south, a school to the west, and a fast-food restaurant to the north. Single-family residential units are nearby to the southwest of the project site.

This report evaluates the project's potential to result in significant noise and vibration impacts with respect to applicable California Environmental Quality Act (CEQA) guidelines. The report is divided into three sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions; 2) the General Plan Consistency Section discusses noise and land use compatibility utilizing policies in the City's General Plan; and, 3) the Impacts and Mitigation Measures Section describes the significance criteria used to evaluate project impacts, provides a discussion of each project impact, and presents mitigation measures, where necessary, to provide a compatible project in relation to adjacent noise sources and land uses.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more

intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA).* This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This *energy-equivalent sound/noise descriptor* is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level* (*CNEL*) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level* (*DNL* or L_{dn}) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA L_{dn}. Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} and nighttime levels are 10 dB lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12 to 17 dB with open windows. With standard construction and closed windows in good condition, the noise attenuation factor is around 20 dB for an older structure and 25 dB for a newer dwelling. Sleep and speech interference is therefore of concern when exterior noise levels are about 57 to 62 dBA L_{dn} with open windows and 65 to 70 dBA L_{dn} if the windows are closed. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to

achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed, those facing major roadways and freeways typically need special glass windows.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, DNL or L_{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
		Broadcast/recording studio
	10 dBA	
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous or frequent intermittent vibration levels produce. The guidelines in Table 3 represent syntheses of vibration criteria for human response and potential damage to buildings resulting from construction vibration.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to cause damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as paint flaking or minimal extension of cracks in building surfaces; minor, including limited surface cracking; or major, that may threaten the structural integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher. The damage criteria presented in Table 3 include several categories for ancient, fragile, and historic structures, the types of structures most at risk to damage. Most buildings are included within the categories ranging from “Historic and some old buildings” to “Modern industrial/commercial buildings”. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020.

Regulatory Background

The State of California and the City of Los Altos have established regulatory criteria that are applicable in this assessment. The State CEQA Guidelines, Appendix G, are used to assess the potential significance of impacts pursuant to local General Plan policies, Municipal Code standards, or the applicable standards of other agencies. A summary of the applicable regulatory criteria is provided below.

State CEQA Guidelines. The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

(b) Generation of excessive groundborne vibration or groundborne noise levels;

(c) For a project located within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels.

Checklist items (a) and (b) are applicable to the proposed project. The project is not located within two miles of a public airport or in the vicinity of a private airstrip and would not expose people

residing or working in the project area to excessive aircraft noise levels; therefore, item (c) is not carried further in this analysis.

2019 California Building Code, Title 24, Part 2. The current version of the California Building Code (CBC) requires interior noise levels in multi-family residential units attributable to exterior environmental noise sources to be limited to a level not exceeding 45 dBA L_{dn}/CNEL in any habitable room.

City of Los Altos General Plan. The Natural Environment & Hazards Element of the City of Los Altos' General Plan contains the following Noise and Land Use Compatibility Standards policies that are applicable to the Project.

Policy 7.2: Enforce the following maximum acceptable noise levels for new construction of various noise-sensitive uses in an existing noise environment.

- 60 dBA CNEL is the maximum acceptable outdoor noise exposure level for single-family residential areas.

- 65 dBA CNEL is the maximum acceptable outdoor noise exposure level for multiple-family residential areas.

- 70 dBA CNEL is the maximum acceptable outdoor noise exposure level for schools (public and private), libraries, churches, hospitals, nursing homes, parks, commercial, and recreation areas. Excepted from these standards are golf courses, stables, water recreation, and cemeteries.

Policy 7.3: Work to achieve indoor noise levels not exceeding 45 dBA CNEL in the event that outdoor acceptable noise exposure levels cannot be achieved by various noise attenuation mitigation measures.

Policy 7.5: Require reasonable mitigation measures to reduce noise levels to those determined to be acceptable in the event that significant increased noise levels will result from an improvement to the circulation system.

Policy 7.9: Minimize stationary noise sources and noise emanating from construction activities.

City of Los Altos Municipal Code. Chapter 6.16 Noise Control of the City's Municipal Code establishes noise level limits applicable to the project as follows:

<u>6.16.050 Exterior noise limits.</u>
A. Maximum permissible sound levels by receiving land use.

1. The noise standards for the various categories of land use identified by the noise control office as presented in Table 4 of this section, unless otherwise specifically indicated, shall apply to all such property within a designated zone.
2. No person shall operate, or cause to be operated, any source of sound at any location within the city, or allow the creation of any noise on property owned, leased, occupied, or otherwise

controlled by such person, which causes the noise level, when measured on any other property, either incorporated or unincorporated, to exceed:

a. The noise standard for that land use as specified in Table 4 for a cumulative period of more than thirty (30) minutes in any hour (L_{50}); or
b. The noise standard plus five dB for a cumulative period of more than fifteen (15) minutes in any hour(L_{25}); or
c. The noise standard plus ten (10) dB for a cumulative period of more than five (5) minutes in any hour(L_{08}); or
d. The noise standard plus fifteen (15) dB for a cumulative period of more than one minute in any hour (L_{02}); or
e. The noise standard plus twenty (20) dB or the maximum measured ambient for any period of time (L_{max});.

3. If the measured ambient level exceeds that permissible within any of the first four noise limit categories above, the allowable noise exposure standard shall be increased in five dB increments in each category as appropriate to encompass or reflect such ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.
4. If the noise measurement occurs on a property adjacent to a zone boundary, the noise level limit applicable to the lower noise zone, plus five dB, shall apply.
5. If possible, the ambient noise shall be measured at a consistent location on the property with the alleged offending noise source inoperative. If for any reason the alleged offending noise source cannot be shut down, the ambient noise shall be estimated by performing a measurement in the same general source at least ten (10) dB below the ambient in order that only the ambient level be measured. If the difference between the ambient and the noise source is five to ten (10) dB, then the level of the ambient itself can be reasonably determined by subtracting a one decibel correction to account for the contribution of the source.

B. Corrections for character of sound. In the event the alleged offensive noise contains a steady, audible tone, such as a whine, screech, or hum, or contains music or speech conveying informational content, the standard limits set forth in Table 4 shall be reduced by five dB.

TABLE 4: Exterior Noise Limits, L_{50}

Receiving Land Use Category	**Time Period**	**L_{50} Noise Level (dBA)***
All R1 Zoning Districts	10:00 p.m. -- 7:00 a.m.	45
	7:00 a.m. -- 10:00 p.m.	55
All R3 and PCF Zoning Districts	10:00 p.m. -- 7:00 a.m.	50
	7:00 a.m. -- 10:00 p.m.	55
All OA Zoning Districts	10:00 p.m. -- 7:00 a.m.	55
	7:00 a.m. -- 10:00 p.m.	60
All C Zoning Districts	10:00 p.m. -- 7:00 a.m.	60
	7:00 a.m.--10:00 p.m.	65

* Levels not to be exceeded more than 30 minutes in any hour, L_{50}

6.16.070 Prohibited acts.

A. Noise disturbances prohibited. No person shall unnecessarily make or continue, or cause to be made or continued, any noise disturbance.

B. Specific prohibitions. The following acts, and the causing or permitting thereof, are declared to be in violation of this chapter:

6. Construction and demolition.

a.

i. Single-family zoning districts. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work on weekdays before 7:00 a.m. and after 5:30 p.m. and on Saturdays before 9:00 a.m. or after 3:00 p.m. or any time on Sundays or the city observed holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day, such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public utilities or by special exception. This section shall apply to operations on residentially zoned property only. This section shall not apply to the use of lawn or garden tools;

ii. All other zoning districts (excluding single-family districts). Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work on weekdays before 7:00 a.m. and after 7:00 p.m. and Saturdays before 9:00 a.m. or after 6:00 p.m. or any time on Sundays or the city observed holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day, such that the sound there from creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by special exception. This section shall apply to operations on properties other than residentially zoned property. This section shall not apply to the use of lawn or garden tools;

b. Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum noise levels at affected properties will not exceed those listed in the following schedules (Table 5):

i: Mobile equipment. Maximum noise levels for the nonscheduled, intermittent, short-term operation (less than ten (10) days) of mobile equipment:

ii: Stationary equipment. Maximum noise levels for the respectively scheduled and relatively long-term operation (periods of ten (10) days or more) of stationary equipment:

TABLE 5: Maximum Noise Levels for the nonscheduled, Intermittent, and Short–Term Operations (Less than ten (10) days) for Mobile and Stationary Equipment

	All R1 Zoning Districts	All PCF and R3 Zoning Districts	All OA and C Zoning Districts
Daily, except Sundays and legal holidays 7:00 a.m. & 7:00 p.m.	75 dBA	80 dBA	85 dBA
Daily, 7:00 p.m. & 7:00 a.m. and all day Sundays and legal holidays	50 dBA	55 dBA	60 dBA

c. Deliveries, start-up and closing down. The construction times above shall apply to deliveries of materials and equipment, and arrival of workers, start-up and closing down and departure activities on a job site.

12. Air-conditioning or air-handling equipment. Operating or permitting the operation of any air-conditioning or air-handling equipment in such a manner as to exceed any of the following sound levels without a variance (Table 6):

TABLE 6: Air-Conditioning or Air-Handling Equipment Operational Sound Levels

Measurement Location	Residentially zoned properties, dB(A)
Any point on a neighboring property line, five feet above grade level, no closer than three feet from any wall	50
Center of a neighboring patio, five feet above grade level, no closer than three feet from any wall	45
Outside the neighboring living area window nearest the equipment location, not more than three feet from the window opening, but at least three feet from any other surface	45

Existing Noise Environment

Figure 1 shows the project site, vicinity, and noise measurement locations. As shown on this figure, commercial land uses along Distel Circle exist to the east and south. Further south and southwest, there are single-family residences. Commercial office buildings exist northwest of the site. A noise monitoring survey was performed to quantify and characterize ambient noise levels at the site and in the project vicinity between Tuesday, March 22, 2022 and Thursday, March 24, 2022. The monitoring survey included two long-term noise measurements (LT-1 and LT-2) and three short-term noise measurements (ST-1, ST-2, and ST-3). The noise environment at the site results primarily from vehicular traffic along El Camino Real. Vehicular traffic along Distel Circle, occasional aircraft, and intermittent autos in the parking lots also contribute to the noise environment.

Long-term noise measurement LT-1 was made near the northeast corner of the site, approximately 40 feet northwest of the Distel Circle centerline, and approximately 265 feet southwest of the El Camino Real centerline. This location was selected to quantify noise levels at the proposed building façade generated by traffic along El Camino Real and Distel Circle. Hourly average noise levels at this location ranged from 56 to 65 dBA L_{eq} during the day and from 47 to 60 dBA L_{eq} at night. The CNEL between Tuesday and Thursday averaged 62 dBA. The daily trends in noise levels at LT-1 for all measured days are shown in Figures 2-4.

Long-term noise measurement LT-2 was made in the southwest corner of the site, approximately 170 feet west of the Distel Circle centerline, and approximately 470 feet southwest of the El Camino Real centerline. This location was selected to quantify noise levels at the rear of the proposed building, and near adjacent residential and commercial land uses. Hourly average noise levels at this location ranged from 46 to 59 dBA L_{eq} during the day and from 43 to 58 dBA L_{eq} at night. The CNEL between Tuesday and Thursday averaged 55 dBA. The daily trends in noise levels at LT-2 for all measured days are shown in Figures 5-7.

Short-term noise measurement ST-1 was made on Thursday, March 24, 2022 over a ten-minute period starting at 10:40 a.m. ST-1 was made at the southeastern corner of the site. This location was selected to quantify the ambient noise levels at the proposed façade of the building furthest from El Camino Real. The 10-minute average noise level measured at this location was 54 dBA L_{eq}.

Short-term noise measurement ST-2 was made on Thursday, March 24, 2022 over a ten-minute period starting at 11:10 a.m. ST-2 was made at the northwestern corner of the site. This location was selected to quantify the ambient noise levels at the corner of the proposed building closest to El Camino Real and nearby commercial uses. The 10-minute average noise level measured at this location was 54 dBA L_{eq}.

Short-term noise measurement ST-3 was made on Thursday, March 24, 2022 over a ten-minute period starting at 12:00 p.m. ST-3 was made south of the site near the rear yards of single-family residential land uses. The 10-minute average noise level measured at this location was 50 dBA L_{eq}.

Short-term noise measurement data is summarized in Table 7.

FIGURE 1 Noise Measurement Locations

Source: Google Earth 2022

TABLE 7 Summary of Short-Term Noise Measurement Data (dBA)

Noise Measurement Location	L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	L_{eq}
ST-1: Southeastern corner of the site. (03/24/2022, 10:40 a.m. - 10:50 a.m.)	71	64	56	50	47	54
ST-2: Northwestern corner of the site (03/24/2022, 11:10 a.m. - 11:20 a.m.)	65	60	57	52	46	54
ST-3: South of the site. (03/24/2022, 12:00 p.m. - 12:10 p.m.)	61	59	52	48	46	50

FIGURES 2-7 Daily Trends in Noise Levels at LT-1 and LT-2

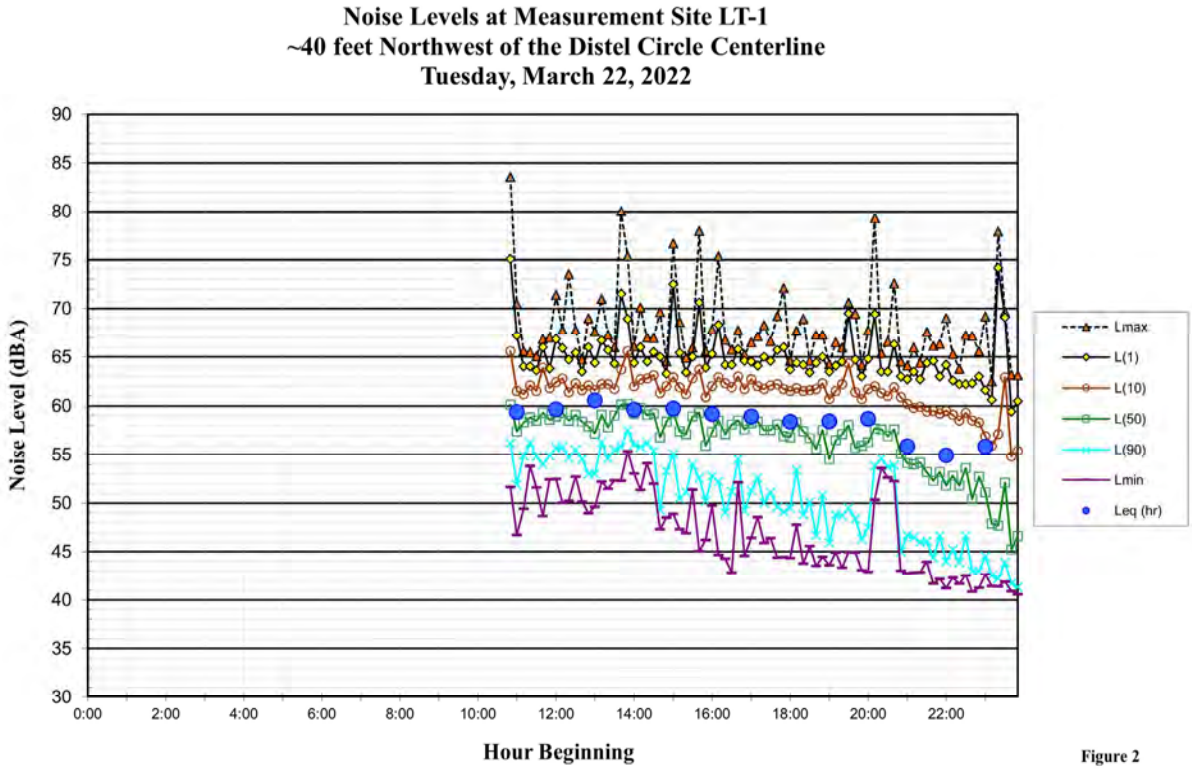

Figure 2

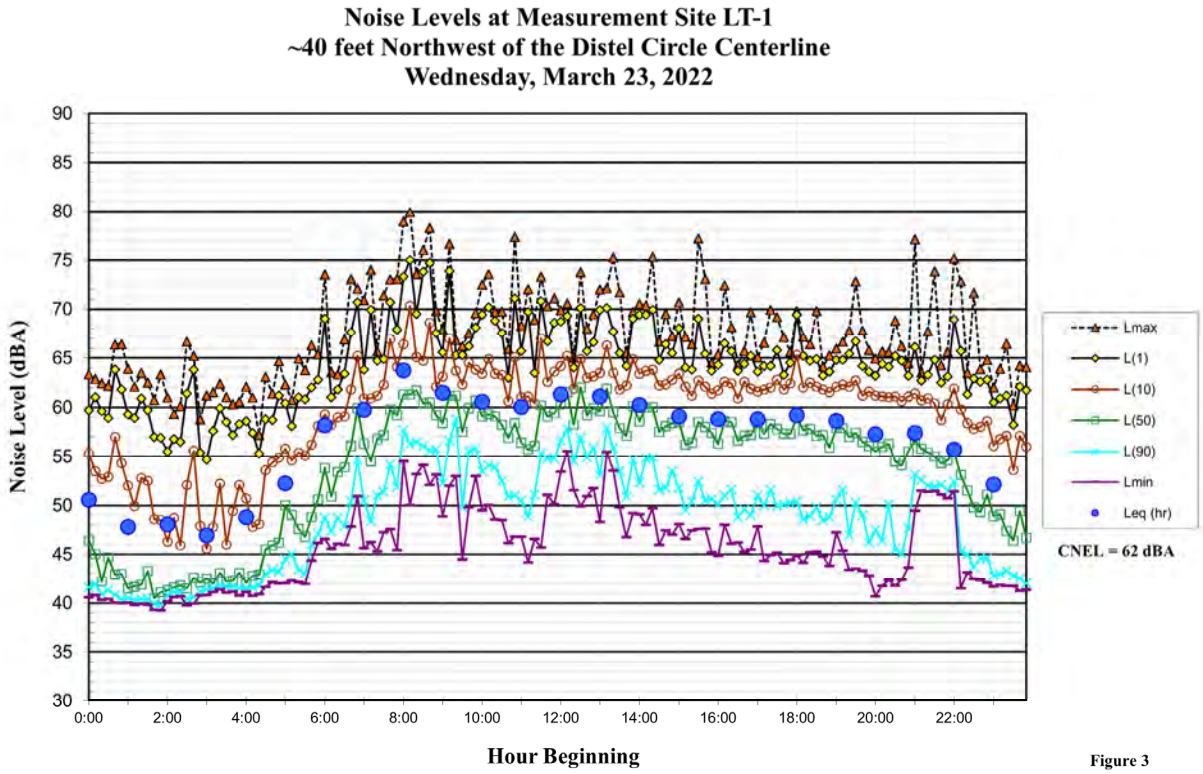

Figure 3

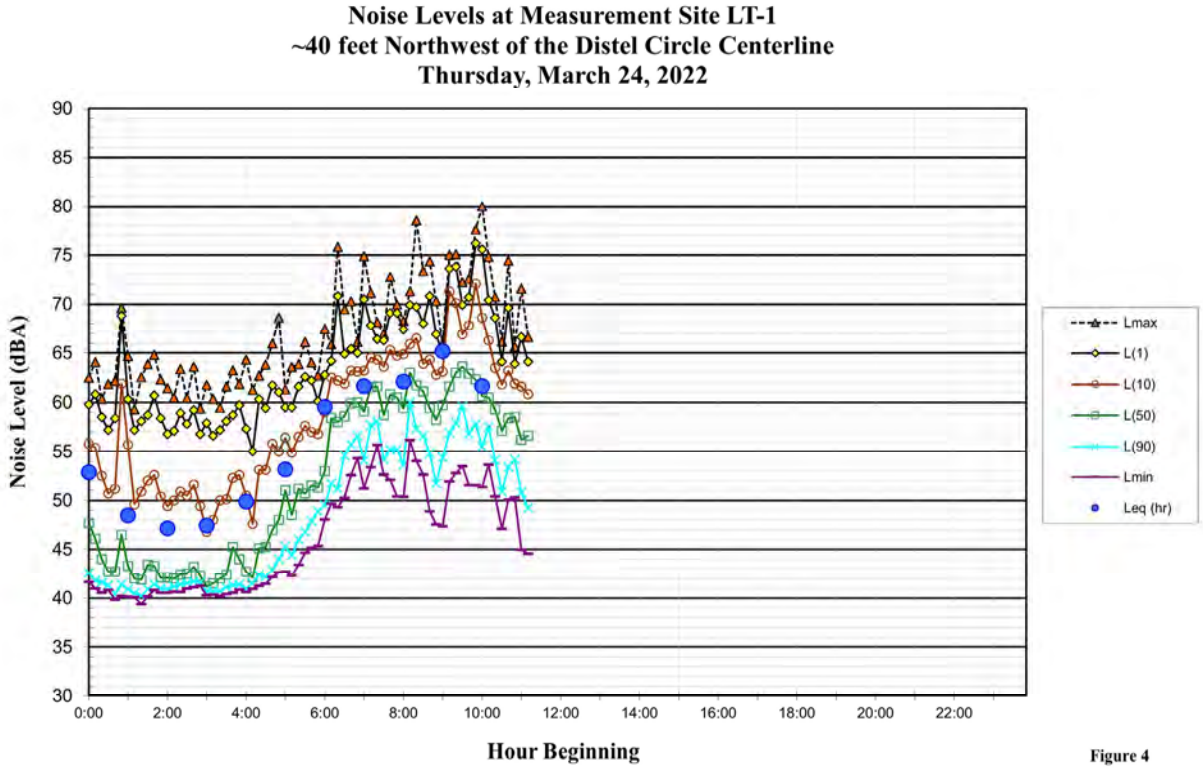

Figure 4

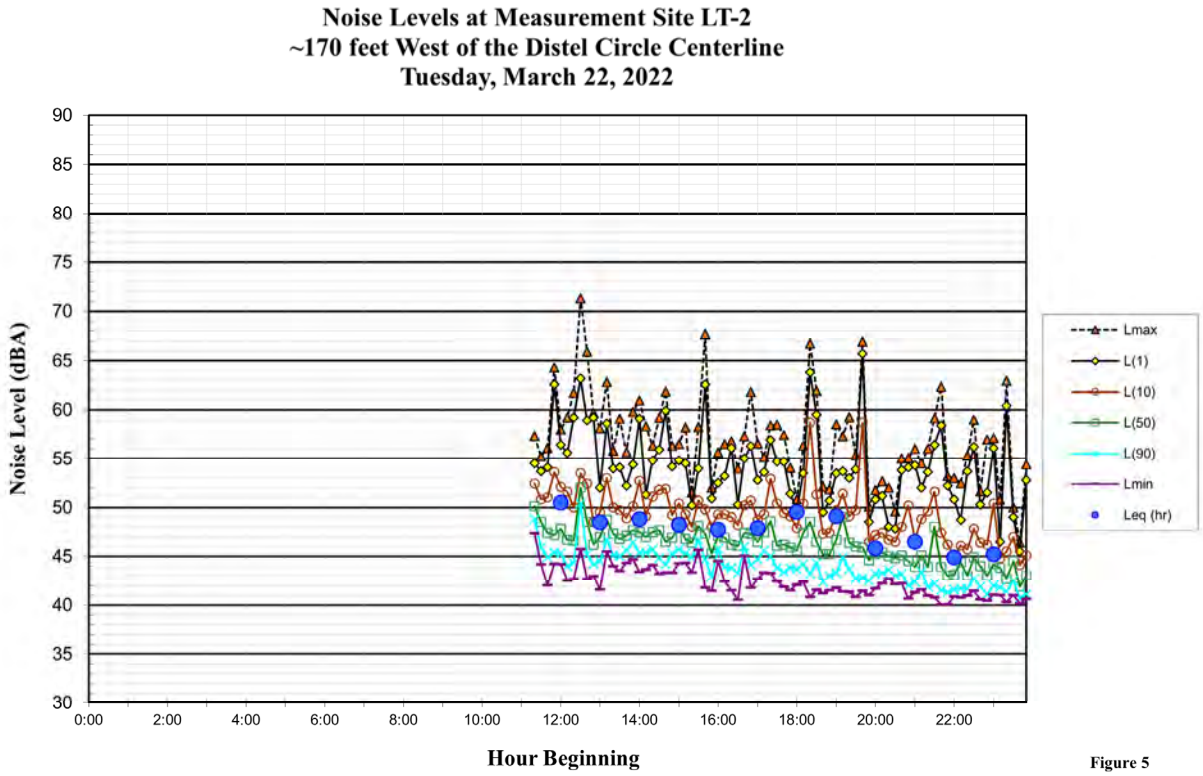

Figure 5

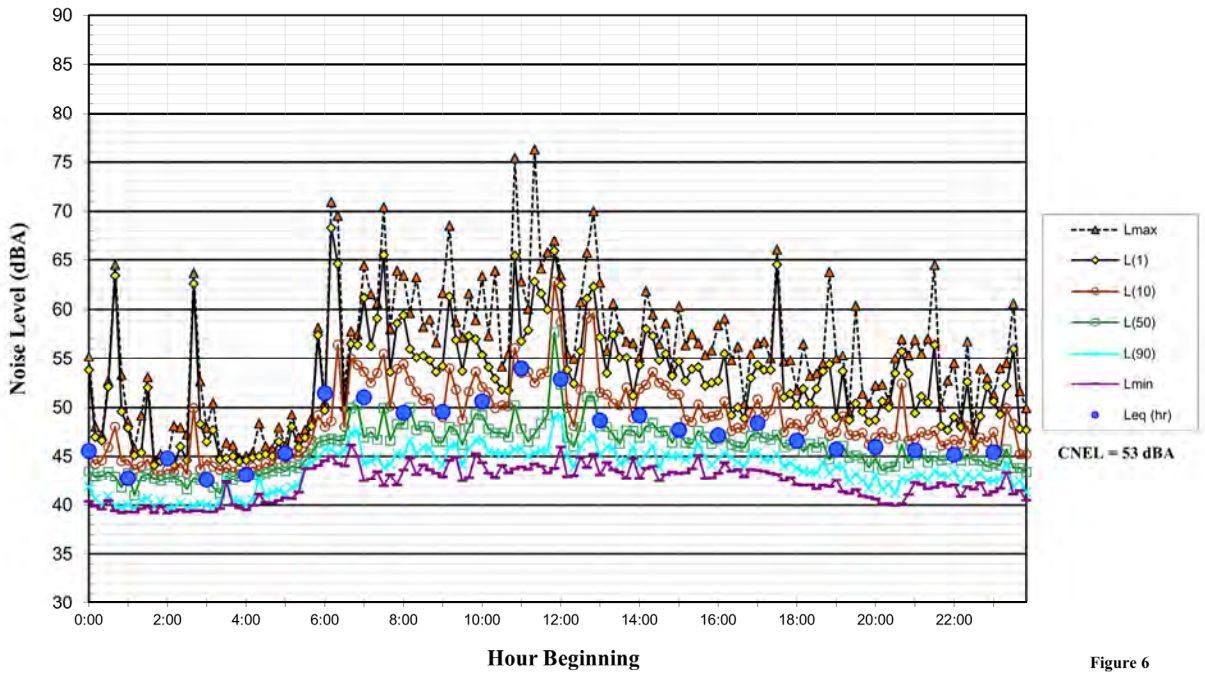

Figure 6

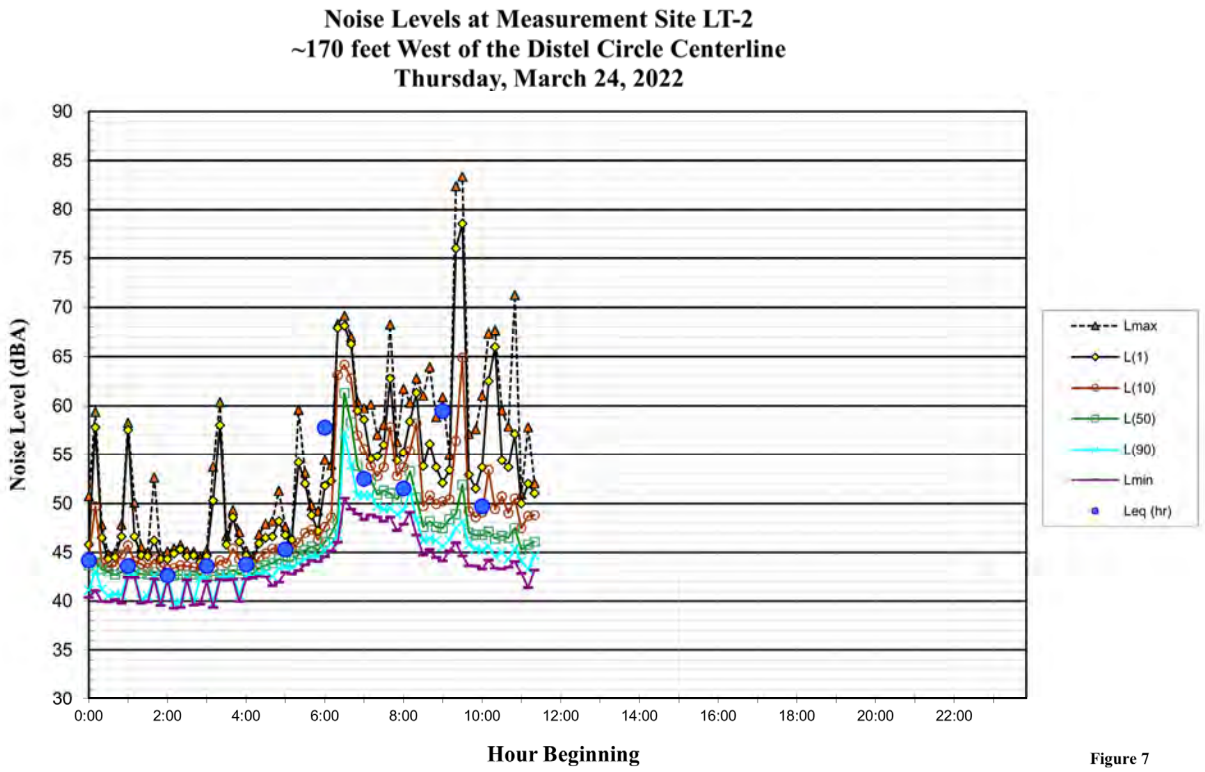

Figure 7

GENERAL PLAN CONSISTENCY ANALYSIS

The exposure of the proposed project to excessive levels of noise and vibration is not considered under CEQA. This section addresses the Noise and Land Use Compatibility of the project to determine consistency with the policies set forth in the City's General Plan.

Noise and Land Use Compatibility

The applicable Los Altos General Plan policies were presented in detail in the Regulatory Background section and are summarized below for the proposed project:

- The City's Noise Element establishes 65 dBA CNEL as the maximum acceptable outdoor noise exposure level for multiple-family residential areas.

- The City's standard for interior noise levels in residences is 45 dBA CNEL.

Future Exterior Noise at Outdoor Use Areas

The future noise environment at the project site would continue to result from vehicular traffic along El Camino Real. The average daily traffic (ADT) on El Camino Real was based on AM and PM peak-hour existing and future (cumulative plus project plus project) traffic volumes for the nearby roadway provided by the project's traffic consultant.[1] Future traffic noise levels are calculated to increase by less than 0.2 dBA CNEL. The northern end of the building (nearest to El Camino Real) is located about 260 feet from the centerline of the roadway. The measured noise level at this location (represented by measurement LT-1), approximately 10 feet above the ground, was 62 dBA CNEL, and represents the noise exposure at the ground level and second floors of the proposed five story building. Buildings located between the project site and El Camino Real to the north, east, and west partially block the line of sight to the traffic reducing the noise from the roadway.

The front of the proposed building would face Distel Circle. The primary outdoor use area is a courtyard located on the second story of the rear side of the building, enclosed by four residential levels on the north, east, and south sides. The acoustical shielding provided by the building would reduce the noise level in the courtyard to 55 dBA CNEL or less in the common outdoor use area. There are balconies shown on the side and rear facades of the building and the facades facing the courtyard. The noise level on the balconies directly facing El Camino Real would range from about 62 dBA CNEL on the second floor to about 67 dBA CNEL on the fourth and fifth floors. Noise levels on all other balconies would be substantially below 65 dBA CNEL given the distances from the roadway and shielding provided the building itself. These are not common use areas. It is generally recognized that noise guidelines are not applied to private balconies, given that it is not possible to mitigate the noise, and the balcony is a worthwhile benefit even if it is considered noisy. The design for the project results in compatible noise levels in the primary outdoor use area and at most of the balconies consistent with the General Plan.

1 Email correspondence with Nick Towstopiat, Assistant Project Manager, David J. Powers & Associates, Inc., April 13, 2022. Attachment: *330 Distel Circle Volume Spreadsheet - AirQuality.xlsx.*

Future Interior Noise Environment

The City of Los Altos, through policies in the General Plan and Building Code, requires that interior noise levels resulting from exterior sources of environmental noise, such as traffic, be maintained at 45 dBA CNEL or less inside new residences. The interior noise level depends on the noise level incident on the exterior of the building and the exterior-to-interior noise reduction provided by the building. As discussed above, the exterior noise exposure of the building facades would range from 67 dBA CNEL on the upper floors of the façade that would face El Camino Real to less than 55 dBA CNEL on the façade facing away from El Camino Real.

Interior noise levels would vary depending upon the design of the buildings (relative window area to wall area) and the selected construction materials and methods. Standard residential construction provides approximately 15 dBA of exterior-to-interior noise reduction, assuming the windows are partially open for ventilation. Standard construction with the windows closed provides approximately 20 to 25 dBA of noise reduction in interior spaces. Where exterior noise levels range from 60 to 65 dBA CNEL, the inclusion of adequate forced-air mechanical ventilation is often the method selected to reduce interior noise levels to acceptable levels by allowing for closing the windows to control noise. In noise environments of 65 to 70 dBA CNEL, a combination of forced-air mechanical ventilation and sound-rated windows and doors is often required to meet the interior noise level limit.

For consistency with the General Plan and Building Code, the following Conditions of Approval are recommended for consideration by the City:

- Provide a suitable form of forced-air mechanical ventilation, as determined by the local building official, for all residential units so that windows can be closed at the discretion of the occupants to control environmental noise.

- During final project design, after building elements have been designed and specified, a detailed acoustical design review shall be prepared and submitted to the City confirming that the design would result in interior noise levels at or below 45 dBA CNEL in all habitable rooms in the residential units.

NOISE IMPACTS AND MITIGATION MEASURES

This section describes the significance criteria used to evaluate project impacts under CEQA, provides a discussion of each project impact, and presents mitigation measures, where necessary, to provide a compatible project in relation to adjacent land uses.

Significance Criteria

The following criteria were used to evaluate the significance of environmental noise and vibration resulting from the project:

1. **Temporary or Permanent Noise Increases in Excess of Established Standards.** A significant impact would be identified if project construction or operations would result in a substantial temporary or permanent increase in ambient noise levels at sensitive receivers

in excess of the local noise standards contained in the Los Altos General Plan or Municipal Code, as follows:

- Operational Noise in Excess of Standards. A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan or Municipal Code. The City of Los Altos limits sound levels generated by air-conditioning or air-handling equipment to 50 dBA at residential property lines and 45 dBA at residential patios and building façades. Other operational noise sources are subject limits to the levels specified in Table 4.

- Permanent Noise Increase. A significant impact would be identified if traffic or school activity noise generated by the project would substantially increase noise levels at sensitive receivers in the vicinity. A substantial increase would occur if: a) the noise level increase is 5 dBA CNEL or greater, with a future noise level of less than 60 dBA CNEL, or b) the noise level increase is 3 dBA CNEL or greater, with a future noise level of 60 dBA CNEL or greater.

- Temporary Noise Increase. A significant temporary noise impact would be identified if construction would occur outside of the hours specified in the Municipal Code or if construction noise levels would exceed the City's construction noise limits at adjacent noise sensitive land uses. Construction occurring during allowable hours is limited to 75 dBA in single-family residential areas, 80 dBA in multi-family residential areas, and 85 dBA in commercial areas.

2. **Generation of Excessive Groundborne Vibration.** A significant impact would be identified if the construction of the project would generate excessive vibration levels. Groundborne vibration levels exceeding 0.3 in/sec PPV would be considered excessive as such levels would have the potential to result in cosmetic damage to buildings.

Impact 1: **Temporary or Permanent Noise Increases in Excess of Established Standards.** Project traffic would not result in a substantial permanent noise level increase at existing noise-sensitive land uses in the project vicinity. However, existing noise-sensitive land uses could be exposed to operational and construction noise levels in excess of the applicable noise thresholds. **This is a potentially significant impact.**

Permanent Noise Increases from On-Site Operational Noise

The City of Los Altos limits sound levels generated by air-conditioning or air-handling equipment to 50 dBA at residential property lines and 45 dBA at residential patios and building façades. The descriptor for the noise limit is not specified. For consistency with the provisions of the code, a reasonable interpretation of this standard would identify the criteria as an hourly average L_{eq}. Other operational noise sources are regulated by limits specified in Table 4.

Parking

Vehicle access to the project site would be provided by one driveway on Distel Circle, which would lead to the ground-level podium parking garage containing a total of 90 vehicle parking

spaces. The parking garage would include surface parking spaces and mechanical parking stalls that allow for the stacking of parked cars. These mechanical lift parking stalls provide multiple parking spaces per stall by stacking two cars vertically, and in some cases, with a third car stacked in a pit area below grade.

Noise measurements of a similar parking lift system were made in Redwood City, California by Illingworth & Rodkin, Inc. on September 6, 2018. The noise measurements recorded the sounds produced by a CityLift two level, 13 car mechanical lift, and these data were used to estimate noise levels produced by the proposed parking lift system. The lift equipment installed at the Redwood City parking facility was within an enclosed concrete structure and noise measurements were made at two locations inside the building facing the car stacker. The results of these measurements indicated that the average sound level for an operational cycle was 63 to 66 dBA L_{eq} with a maximum instantaneous noise level of 74 to 76 dBA L_{max} occurring when the upper lift came to rest at the lower position.

The nearest single-family residence to the southwest would be exposed to the highest operational noise levels produced by the mechanical lifts as the noise would leave the building through the open metal screens proposed to aid in the ventilation of the parking area. Based on the noise data collected during the operation of similar mechanical lifts, the nearest single-family residential receptor to the southwest would be exposed to average sound levels of 39 dBA L_{eq} assuming up to 20-minutes of mechanical lift noise per hour, and maximum sound levels up to 54 dBA L_{max}. These noise levels would be audible, but would not exceed the City of Los Altos standards for average or maximum noise level events.

Noise associated with on-site circulation and parking for the townhomes would be similar to levels generated by use of the current parking lot and below noise levels generated by vehicular traffic traveling along El Camino Real and those specified in Table 4. This is a **less-than-significant** impact.

Mechanical Equipment

The proposed project would include mechanical equipment such as heating, ventilation, and air conditioning systems (HVAC). Based on the project plans, dated March 2, 2022, solar panels and air conditioning equipment (air-cooled condensing units) would be located on the southwestern side of the rooftop, about 120 feet from the nearest residential land use to the southwest. Typical residential air-cooled condensing units generate noise levels ranging from 50 to 60 dBA at 50 feet from the equipment, depending on the equipment selected. Noise from the rooftop equipment located is calculated to generate noise levels of up to 39 to 49 dBA L_{eq} at the closest residential property line and nearest residential building. The projected noise levels are calculated to be below the property line limit but could exceed the limit at the nearest residential building façade by up to 4 dBA. This is a **potentially significant** impact.

Mitigation Measure 1a: The following mitigation measures would reduce this impact to a less-than-significant level.

Prior to the issuance of building permits, air conditioning or air handling equipment shall be selected and/or designed to reduce noise levels on adjacent residences to meet the City's

requirements. A qualified acoustical consultant shall be retained by the project applicant to review the selected equipment to determine it would comply with the City's 45 dBA L_{eq} residential noise limit at the nearest residential building. Noise reduction measures, if required, would include but are not limited to selection of quieter equipment and/or installation of noise barriers such as roof screens.

Permanent Noise Increases from Project Traffic

Neither the City of Los Altos nor the State of California define the traffic noise level increase that is considered substantial. A significant impact would typically be identified if project generated traffic were to result in a permanent noise level increase of 3 dBA CNEL or greater in a residential area where the resulting noise environment would exceed or continue to exceed 60 dBA CNEL or result in a permanent noise increase of 5 dBA CNEL or greater in a residential area where the resulting in a noise environment would continue to be 60 dBA CNEL or less. For reference, a 3 dBA CNEL noise increase would be expected if the project would double existing traffic volumes along a roadway.

As discussed previously, a review of the project's trip traffic information indicates that there will be an increase in cumulative traffic plus project generated traffic noise of less than 0.2 dBA CNEL. This is a **less-than-significant** impact.

Overall Operational Noise

The overall increase in noise levels attributable to the project would result primarily from vehicles in the parking garage and mechanical equipment noise sources. Operational noise levels from the parking lifts are calculated to reach 46 dBA CNEL, and operational noise levels from the mechanical equipment are assumed to be maintained at 45 dBA CNEL or less. The overall project generated noise level would be 49 dBA CNEL. When added to the existing CNEL measured as part of the noise survey (53 dBA CNEL), the noise environment at the nearest sensitive receptor is calculated to increase by up to 1 dBA CNEL. The increase in the CNEL noise level would not be detectable and would remain below the 5 dBA CNEL threshold that defines a substantial permanent noise increase. This is a **less-than-significant** impact.

Temporary Noise Increases from Project Construction

Chapter 6.16.070 of the City's Municipal Code establishes allowable hours of construction within residentially zoned properties between 7:00 a.m. and 5:30 p.m. Monday through Friday and between 9:00 a.m. and 3:00 p.m. on Saturdays. Construction in all other zoning districts (excluding single-family districts) is permissible between 7:00 a.m. and 7:00 p.m. Monday through Friday and 9:00 a.m. and 6:00 p.m. on Saturdays. Construction activities are not permitted on Sundays or the City observed holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day. In addition, where technically and economically feasible, maximum noise levels from construction activities should not exceed those listed in Tables 3 and 4 in Chapter 6.16.070 of the City's Municipal Code.

The City also provides recommended maximum noise level limits for construction activities occurring over a period of less than 10 days but does not provide limits for longer duration construction. This analysis applies the noise limits to project construction, given that construction would occur for a period greater than 10 days. Construction occurring during allowable hours is limited to 75 dBA in single-family residential areas, 80 dBA in multi-family residential areas, and 85 dBA in commercial areas. This code is not explicit in terms of the acoustical descriptor associated with the noise level limit. A reasonable interpretation of this standard would identify the criteria as an hourly average L_{eq}.

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), if the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

Construction activities would include demolition, excavation, site preparation, grading, building construction, paving, and architectural coating. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. The hauling of excavated materials and construction materials would generate truck trips on local roadways as well.

Typical construction noise levels at a distance of 50 feet are shown in Tables 8 and 9. Table 8 shows the average noise level ranges, by construction phase and Table 9 shows the maximum noise level ranges for different construction equipment. As shown in Tables 8 and 9, construction activities generate considerable amounts of noise, especially during demolition and earth-moving activities when heavy equipment is used. Hourly average noise levels generated by construction are about 65 to 88 dBA L_{eq} for residential buildings, measured at a distance of 50 feet from the center of a busy construction site, as shown in Table 8. The typical range of maximum instantaneous noise levels for construction equipment used at this site would be 77 to 90 dBA L_{max} at a distance of 50 feet, as shown in Table 9. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

Equipment expected to be used in each construction phase are summarized in Table 10, along with the quantity of each type of equipment, the reference noise level at 50 feet assuming the operation of the two loudest pieces of construction equipment, and the estimated noise levels at the nearest property lines projected from the center of the construction activity by phase. Federal Highway Administration’s (FHWA’s) Roadway Construction Noise Model (RCNM) was used to calculate the hourly average noise levels for each phase of construction, assuming the two loudest pieces of equipment would operate simultaneously, as recommend by the FTA for construction noise evaluations. This construction noise model includes representative sound levels for the most common types of construction equipment and the approximate usage factors of such equipment that were developed based on an extensive database of information gathered during the construction of the Central Artery/Tunnel Project in Boston, Massachusetts (CA/T Project or "Big

Dig"). The usage factors represent the percentage of time that the equipment would be operating at full power.

Project construction would occur within about 60 feet of the adjoining residential property to the southwest and commercial properties to the north and northeast. Construction would occur approximately 170 feet from the commercial building to the southwest and about 350 feet from the motel located across El Camino Real. Construction noise levels would be anticipated to exceed the single-family residential limit of 75 dBA when there is heavy construction activity within about 140 feet of the residential property to the southwest, and would not exceed the commercial limit of 85 dBA.

TABLE 8 Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

I - All pertinent equipment present at site.
II - Minimum required equipment present at site.

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

TABLE 9 Construction Equipment 50-Foot Noise Emission Limits

Equipment Category	L_{max} Level (dBA)[1,2]	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor[3]	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

[1] Measured at 50 feet from the construction equipment, with a "slow" (1 sec.) time constant.

[2] Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

[3] Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

TABLE 10 Construction Noise Levels

Phase	Construction Equipment (Quantity)	Calculated Hourly Average L_{eq} (dBA) at Nearest Property Lines From Operation of Two Loudest Pieces of Construction Equipment				
		Noise Level at 50 feet	Northwest Commercial (60 feet)	Northeast Commercial (60 feet)	Southeast Commercial (170 ft)	Southwest Residential (60 feet)
Demolition	Concrete/Industrial Saw (1)* Excavator (2) Rubber-Tired Dozer (1) Tractor/Loader/Backhoe (2)*	85	83	83	74	83
Site Preparation	Grader (2)* Rubber-Tired Dozer (2) Tractor/Loader/Backhoe (2)	84	82	82	73	82
Grading/ Excavation	Excavator (4) Grader (2) Rubber Tired Dozer (1) Concrete/Industrial Saw (2)* Tractor/Loader/Backhoe (2)	86	84	84	75	84
Trenching/ Foundation	Excavator (2)* Tractor/Loader/Backhoe (2)*	82	80	80	71	80
Building Exterior	Crane (3) Forklift (2) Generator Set (1)* Tractor/Loader/Backhoe (2)* Welders (2)	82	80	80	71	80
Building Interior/ Architectural Coating	Aerial Lift (2) Air Compressor (10)*	77	75	75	66	75
Paving	Cement and Mortar Mixer (4) Paver (4) Paving Equipment (4) Roller (4) Tractor/Loader/Backhoe (4)*	83	81	81	72	81

*Denotes two loudest pieces of construction equipment per phase

Construction would comply with City of Los Altos' Municipal Code specified hours of construction, but would be anticipated to exceed the construction noise limits during some periods of construction when heavy construction is located immediately adjacent to receptors. This is a **potentially significant** temporary impact.

Mitigation Measure 1b: Modification, placement, and operation of construction equipment are possible means for minimizing the impact of construction noise on existing sensitive receptors. Construction equipment should be well-maintained and used judiciously to be as quiet as possible. Additionally, construction activities for the proposed project should include the following best management practices to reduce noise from construction activities near sensitive land uses:

- Construction activities shall be limited to the hours between 7:00 a.m. and 5:30 p.m., Monday through Friday, and on Saturdays between 9:00 a.m. and 3:00 p.m., in accordance with the City's Municipal Code. Construction is prohibited on Sundays and holidays unless permission is granted with a development permit or other planning approval.

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

- Unnecessary idling of internal combustion engines should be strictly prohibited.

- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.

- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

- A temporary noise barrier shall be erected along the northeast and southeast property lines of the residence at 311 Marich Way. The barrier should be designed to achieve a minimum 9-dBA of noise reduction for ground level activities and 5-dBA of noise reduction from upper level activities in order to reduce construction noise levels in the rear yard to 75 dBA L_{eq} or less.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.

- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.

- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the

disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

Implementation of the above best management practices would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. With the implementation of these measures and recognizing that noise generated by construction activities would occur over a temporary period, the impact would be **less-than-significant**.

Impact 2 **Exposure to Excessive Groundborne Vibration due to Construction.** Construction-related vibration levels would not exceed 0.3 in/sec PPV at the nearest structures. **This is a less-than-significant impact.**

The City of Los Altos does not specify a construction vibration limit. For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.25 in/sec PPV for historic and some old buildings (see Table 3). The 0.3 in/sec PPV vibration limit would be applicable to properties in the vicinity of the project site.

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include demolition, site preparation, grading and excavation, trenching and foundation, building (exterior), interior/ architectural coating and paving. Pile driving is not anticipated for construction of the building foundation.

Table 11 presents typical vibration levels from construction equipment at 25 feet. Jackhammers typically generate vibration levels of 0.035 in/sec PPV and drilling typically generates vibration levels of 0.09 in/sec PPV at 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Table 11 also presents construction vibration levels calculated at the location of the nearest building about 50 feet away from the property site boundary. Vibration levels are highest close to the source, and then attenuate with increasing distance at the rate $(D_{ref}/D)^{1.1}$, where D is the distance from the source in feet and D_{ref} is the reference distance of 25 feet.

TABLE 11 Vibration Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	PPV at 50 ft. (in/sec)
Clam shovel drop		0.202	0.094
Hydromill (slurry wall)	in soil	0.002	0.001
	in rock	0.004	0.002
Vibratory Roller		0.210	0.099
Hoe Ram		0.089	0.004
Large bulldozer		0.089	0.004
Caisson drilling		0.089	0.004
Loaded trucks		0.076	0.036
Jackhammer		0.035	0.016
Small bulldozer		0.003	0.001

Source: Transit Noise and Vibration Impact Assessment Manual, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, September 2018, as modified by Illingworth & Rodkin, Inc., May 2022.

As indicated in Table 10, construction-related vibration levels would not exceed 0.3 in/sec PPV at the nearest structures. This is a less-than-significant impact.

Mitigation Measure 2: None required.

HEXAGON TRANSPORTATION CONSULTANTS, INC.

330 Distel Circle

Transportation Analysis

Prepared for:

David J. Powers & Associates, Inc.

July 19, 2022

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Executive Summary

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed affordable housing development located at 330 Distel Circle in Los Altos, California. The project site is currently occupied by 12,120 square feet of office uses. The project proposes to replace the existing office building on site with a 90-unit, five-story affordable housing development. Vehicular access to the project site would be provided via a driveway to a parking garage located along Distel Circle.

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Los Altos' Draft Vehicle Miles Travelled (VMT) Policy and Interim VMT Policy. The local transportation analysis supplements the VMT analysis by identifying potential adverse operational effects that may arise due to the new development, as well as evaluating the effects of the new development on site access, circulation, and other safety-related elements in the proximate area of the project. Potential impacts to pedestrians, bicycles, and transit were also considered.

Based on trip generation rates recommended by the Institute of Transportation Engineers (ITE), it is estimated that the proposed project would generate 296 net new daily trips, with 14 net new trips (-7 inbound and 21 outbound) during the AM peak hour and 24 net new trips (21 inbound and 3 outbound) during the PM peak hour. Trip credits were taken for the existing uses on site and proximity to a major bus stop.

Vehicular Miles Travelled (VMT) Analysis

The Los Altos' Draft VMT Policy establishes screening criteria for developments that are expected to cause a less-than-significant transportation impact under CEQA and are not required to prepare further VMT analysis. According to the Draft VMT Policy, since the project proposes 100 percent affordable housing, it would meet the City's screening criteria and would be presumed to have a less-than-significant transportation impact on VMT and would be screened out from further VMT analysis. Because the Draft VMT Policy has not yet been formally adopted, the project's potential impact on VMT were evaluated according to the City's Interim VMT Policy.

The City's Interim VMT Policy sets a threshold of significance for residential VMT per capita at 15 percent below the regional average of 13.95 VMT per capita (or 11.86). Per the Santa Clara County map based VMT evaluation tool, the project site is located within an area with a residential VMT per capita of 9.51 without the project, which is below the threshold set forth in the interim policy. Therefore, the project would also be screened out from further analysis using the threshold of significance in the Interim VMT Policy.

Local Transportation Analysis

The results of the intersection level of service analysis under existing conditions, near-term conditions, and cumulative conditions, with and without the project, are summarized in Table ES-1. The results determined that the addition of project trips would not adversely affect traffic operations at the signalized study intersections because these trips would not increase the average delay at the intersection by more than four seconds.

The unsignalized intersections of San Antonio Road and Jordan Avenue and Distel Circle and El Camino Real operate at an unacceptable level of service during at least one peak hour under all study scenarios, without and with the project. Therefore, a signal warrant check was conducted for the intersections based on the peak-hour traffic warrant. The analysis shows that the signal warrant is not met at either of these intersections.

This report also makes the following conclusions and recommendations for the project:

- On-street parking should be prohibited approximately 40 feet to the south and 35 feet to the north of the project driveway. This would provide adequate sight distance for exiting drivers at the driveway to see the oncoming traffic along Distel Circle. The project driveway should also be free and clear of any obstructions such as shrubs or other landscape features to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Distel Circle.
- The site plan does not provide the height of the pit for the three-level mechanical stacker. Minimum 7 feet deep parking pits should be provided to accommodate the height of a design vehicle.
- The applicant should work with the City and Mission Trail Waste Systems to design a plan for waste collection service.

Table ES-1
Intersection Level of Service Summary

#	Intersection	Peak Hour	Count Date	Intersection Control	LOS Standard	Existing Conditions						Near-Term Conditions						Cumulative Conditions					
						No Project		Project Conditions				No Project		Project Conditions				No Project		Project Conditions			
						Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Crit Delay (sec)	Incr. in Crit V/C	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Crit Delay (sec)	Incr. in Crit V/C	Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Crit Delay (sec)	Incr. in Crit V/C
1	Los Altos Avenue & El Camino Real	AM	10/10/2019	Signal	D	20.9	C	20.9	C	0.0	0.000	20.6	C	20.6	C	0.0	0.000	23.4	C	23.4	C	0.0	0.000
		PM	10/10/2019			15.5	B	15.5	B	0.0	0.000	15.5	B	15.5	B	-0.3	-0.001	19.3	B	19.3	B	0.0	0.000
2	Del Medio Avenue & El Camino Real	AM	5/29/2019	Signal	D	43.8	D	43.8	D	0.1	0.000	45.0	D	45.0	D	0.1	0.000	52.5	D	52.6	D	0.2	0.000
		PM	5/29/2019			48.3	D	48.5	D	0.3	0.009	50.2	D	50.4	D	0.3	0.000	**73.2**	**E**	**73.6**	**E**	**0.7**	**0.000**
3	San Antonio Road & El Camino Real*	AM	10/10/2019	Signal	E	62.6	E	62.7	E	0.0	0.000	63.5	E	63.6	E	0.1	0.000	76.4	E	76.6	E	0.2	0.000
		PM	10/10/2019			61.3	E	61.5	E	0.3	0.004	63.3	E	63.5	E	0.4	0.001	**>80**	**F**	**>80**	**F**	**0.8**	**0.002**
4	Showers Drive & El Camino Real	AM	4/12/2018	Signal	D	49.7	D	49.8	D	0.1	0.000	50.5	D	50.6	D	0.1	0.000	**57.8**	**E**	**58.1**	**E**	**0.4**	**0.000**
		PM	4/12/2018			53.8	D	53.9	D	0.3	0.004	**55.0**	**E**	**55.2**	**E**	**0.3**	**0.000**	**75.6**	**E**	**76.2**	**E**	**0.9**	**0.007**
5	Jordan Avenue & El Camino Real	AM	10/22/2019	Signal	D	19.0	B	19.0	B	-0.8	-0.001	19.2	B	19.2	B	0.0	0.005	21.0	C	21.1	C	0.0	0.000
		PM	10/22/2019			35.2	D	35.3	D	0.2	0.007	35.6	D	35.8	D	0.2	0.000	45.8	D	46.1	D	0.5	0.007
6	Ortega Avenue & El Camino Real	AM	11/2/2021	Signal	D	47.0	D	47.1	D	0.2	0.000	48.0	D	48.1	D	0.2	0.007	**57.5**	**E**	**57.9**	**E**	**0.5**	**0.000**
		PM	11/2/2021			40.1	D	40.2	D	0.1	0.000	40.8	D	40.9	D	0.1	0.002	48.5	D	48.7	D	-4.4	0.049
7	Distel Drive & El Camino Real	AM	10/10/2019	Signal	D	28.2	C	28.4	C	0.7	0.005	28.6	C	28.8	C	0.2	0.004	31.3	C	31.5	C	0.3	0.002
		PM	10/10/2019			37.4	D	37.5	D	0.1	0.001	38.3	D	38.3	D	0.1	0.002	50.5	D	50.6	D	0.1	0.001
8	Rengstorff Avenue & El Camino Real*	AM	10/10/2019	Signal	E	50.2	D	50.2	D	0.0	0.001	51.6	D	51.6	D	0.3	-0.009	65.9	E	65.8	E	-0.2	0.002
		PM	10/10/2019			42.1	D	42.2	D	0.1	-0.003	44.1	D	44.1	D	0.1	0.002	55.9	E	55.9	E	0.1	0.002
9	San Antonio Road & Portola Avenue	AM	10/10/2019	Signal	D	19.5	B	19.5	B	0.0	0.005	19.8	B	19.8	B	0.0	0.002	32.5	C	32.5	C	0.1	0.000
		PM	10/10/2019			10.2	B	10.2	B	0.0	0.000	10.3	B	10.3	B	0.0	0.000	11.0	B	11.0	B	0.0	0.000
10	San Antonio Road & Jordan Avenue	AM	11/2/2021	TWSC	D	**>80**	**F**	**>80**	**F**	**-0.5**	**0.000**	**>80**	**F**	**>80**	**F**	**-0.6**	**0.000**	**>80**	**F**	**>80**	**F**	**-1.7**	**0.000**
		PM	11/2/2021			**63.6**	**F**	**63.8**	**F**	**0.1**	**0.000**	**66.6**	**F**	**66.7**	**F**	**0.2**	**0.000**	**>80**	**F**	**>80**	**F**	**0.7**	**0.000**
11	San Antonio Road & Almond Avenue	AM	10/15/2019	Signal	D	18.8	B	18.8	B	-0.1	0.000	18.4	B	18.4	B	0.0	0.000	27.2	C	27.2	C	-0.1	0.000
		PM	10/15/2019			15.5	B	15.5	B	0.0	0.000	15.8	B	15.8	B	0.0	0.000	20.2	C	20.2	C	0.0	0.000
12	Distel Circle & El Camino Real	AM	10/10/2019	TWSC	D	**>80**	**F**	**>80**	**F**	**1.4**	**0.160**	**>80**	**F**	**>80**	**F**	**1.7**	**0.180**	**>80**	**F**	**>80**	**F**	**4.6**	**0.440**
		PM	10/10/2019			**>80**	**F**	**>80**	**F**	**9.3**	**0.040**	**>80**	**F**	**>80**	**F**	**11.5**	**0.050**	**>80**	**F**	**>80**	**F**	**76.1**	**0.140**
13	Distel Drive & Marich Way	AM	11/2/2021	TWSC	D	18.4	C	18.5	C	0.1	0.000	18.7	C	18.8	C	0.1	0.000	25.2	D	25.4	D	0.2	0.000
		PM	11/2/2021			10.5	B	10.6	B	0.0	0.000	10.6	B	10.6	B	0.0	0.000	11.0	B	11.0	B	0.0	0.000
14	Distel Circle & Distel Drive	AM	11/2/2021	TWSC	D	13.4	B	13.5	B	0.2	0.020	13.5	B	13.6	B	0.1	0.020	15.1	C	15.3	C	0.2	0.020
		PM	11/2/2021			9.7	A	9.7	A	0.0	0.000	9.7	A	9.8	A	0.0	0.000	10.0	A	10.0	B	0.0	0.010

Notes:
* Denotes CMP Intersection
TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and worst movement delay is reported for stop-controlled intersections.
Bold indicates substandard level of service
Bold indicates noncompliance. The project exceeds thresholds in the Jurisdiction's Guidelines.

Introduction

This report presents the results of the Transportation Analysis (TA) conducted for the proposed affordable housing development located at 330 Distel Circle in Los Altos, California (see Figure 1). The project site is currently occupied by 12,120 square feet of office uses. The project proposes to replace the existing office building on site with a 90-unit, five-story affordable housing development. Vehicular access to the project site would be provided via a driveway to a parking garage located along Distel Circle (see Figure 2).

CEQA Transportation Analysis Scope and Methodology

Senate Bill 743 (SB 743) requires local jurisdictions to use Vehicle Miles Traveled (VMT) instead of Level of Service (LOS) to analyze transportation impacts under the California Environmental Quality Act (CEQA). The City of Los Altos is in the process of developing a new citywide VMT Policy to comply with State law and provide established and consistent criteria for analyzing transportation impacts of development projects and long-range plans. The City of Los Altos' Draft VMT Policy establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. The City's VMT methodology also includes screening criteria that are used to identify types, characteristics, and/or locations of projects that would not exceed the CEQA thresholds of significance. If a project or a component of a mixed-use project meets the screening criteria, it is then presumed that the project or the component would result in a less-than-significant VMT impact and a VMT analysis is not required. For a project that does not meet the screening criteria, a project's VMT impact is determined by comparing the project VMT to the appropriate thresholds of significance based on the type of development. For residential developments, the threshold of significance set forth in the Draft VMT Policy is 15 percent below the citywide average daily VMT per capita.

However, since the City has not yet formally adopted the Draft VMT Policy, the project has also been analyzed according to the City's interim VMT policy. The Interim VMT Policy sets a threshold of significance for residential VMT per capita at 15 percent below the regional average of 13.95 VMT per capita (or 11.86). Any project that does not have at least a 15 percent reduction would need to mitigate its impacts to less than significant based on this threshold.

Local Transportation Analysis Scope

The local transportation analysis supplements the VMT analysis by identifying potential adverse operational effects that may arise due to the new development, as well as evaluating the effects of the new development on site access, circulation, and other safety-related elements in the proximate area of the project.

The effects of the project were evaluated in accordance with the standards set forth by the City of Los Altos and the Santa Clara Valley Transportation Authority (VTA).

The local transportation analysis includes an analysis of AM and PM peak hour traffic conditions for 10 signalized intersections and 4 unsignalized intersections in the vicinity of the project site. Since the project is expected to generate fewer than 100 net PM peak hour trips, a CMP roadway segment analysis is not required. An analysis of site access, on-site circulation, and transit, bicycle, and pedestrian access is also included.

Study Intersections

1. El Camino Real and Los Altos Avenue
2. El Camino Real and Del Medio Avenue
3. El Camino Real and San Antonio Avenue (CMP)
4. El Camino Real and Showers Drive
5. El Camino Real and Jordan Avenue
6. El Camino Real and Ortega Avenue
7. El Camino Real and Distel Drive
8. El Camino Real and Rengstorff Avenue (CMP)
9. N. San Antonio Road and W. Portola Avenue
10. N. San Antonio Road and Jordan Avenue (unsignalized)
11. N. San Antonio Road and Almond Avenue
12. El Camino Real and Distel Circle (unsignalized)
13. Marich Way and Distel Drive (unsignalized)
14. Distel Circle and Distel Drive (unsignalized)

Traffic conditions at the study intersections were analyzed for both the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour typically occurs between 7:00 AM and 9:00 AM and the PM peak hour typically occurs between 4:00 PM and 6:00 PM on a regular weekday. These are the peak commute hours during which most traffic congestion occurs on the roadways.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing traffic volumes at study intersections were based on pre-pandemic traffic counts conducted in 2018 and 2019 and new counts collected in 2021 where pre-pandemic counts were not available. New counts were factored by comparing new counts to available pre-pandemic counts.

Scenario 2: *Existing plus Project Conditions.* Existing traffic volumes with the project were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects the project would have on the existing roadway network.

Scenario 3: *Near-term Conditions.* Near-term traffic volumes were estimated by adding to existing traffic volumes the projected volumes from approved but not yet constructed projects that would generate trips at the study intersections.

Scenario 4: *Near-term plus Project Conditions.* Near-term traffic volumes with the project were estimated by adding to near-term traffic volumes the additional traffic generated by the project. Near-term plus project conditions were evaluated relative to near-term conditions.

Scenario 5: *Cumulative (2040) Conditions.* Cumulative traffic volumes were estimated by applying a one percent annual growth factor to existing traffic volumes and adding the projected volumes from approved and pending (proposed but not yet approved) projects that would generate trips at the study intersections.

Scenario 6: *Cumulative (2040) Plus Project Conditions.* Cumulative traffic volumes with the project were estimated by adding to cumulative traffic volumes the additional traffic generated by the project. Cumulative plus project conditions were evaluated relative to cumulative conditions.

Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from new traffic counts, driveway counts, traffic studies for nearby projects, and field observations. The following data were collected from these sources:

- existing peak-hour intersection turning-movement volumes
- lane configurations
- intersection signal timing and phasing
- trips for nearby approved and pending developments

Level of Service Standards and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

Signalized Intersections

The City of Los Altos utilizes PTV VISTRO software and the *Highway Capacity Manual (HCM), 6th Edition* methodology to evaluate intersection operations. The HCM method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. Control delay is the amount of delay that is attributed to the particular traffic control device at the intersection, and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The correlation between average delay and level of service is shown in Table 1. In the City of Los Altos, the level of service standard for signalized intersections is LOS D. The level of service standard for CMP signalized intersections is LOS E or better.

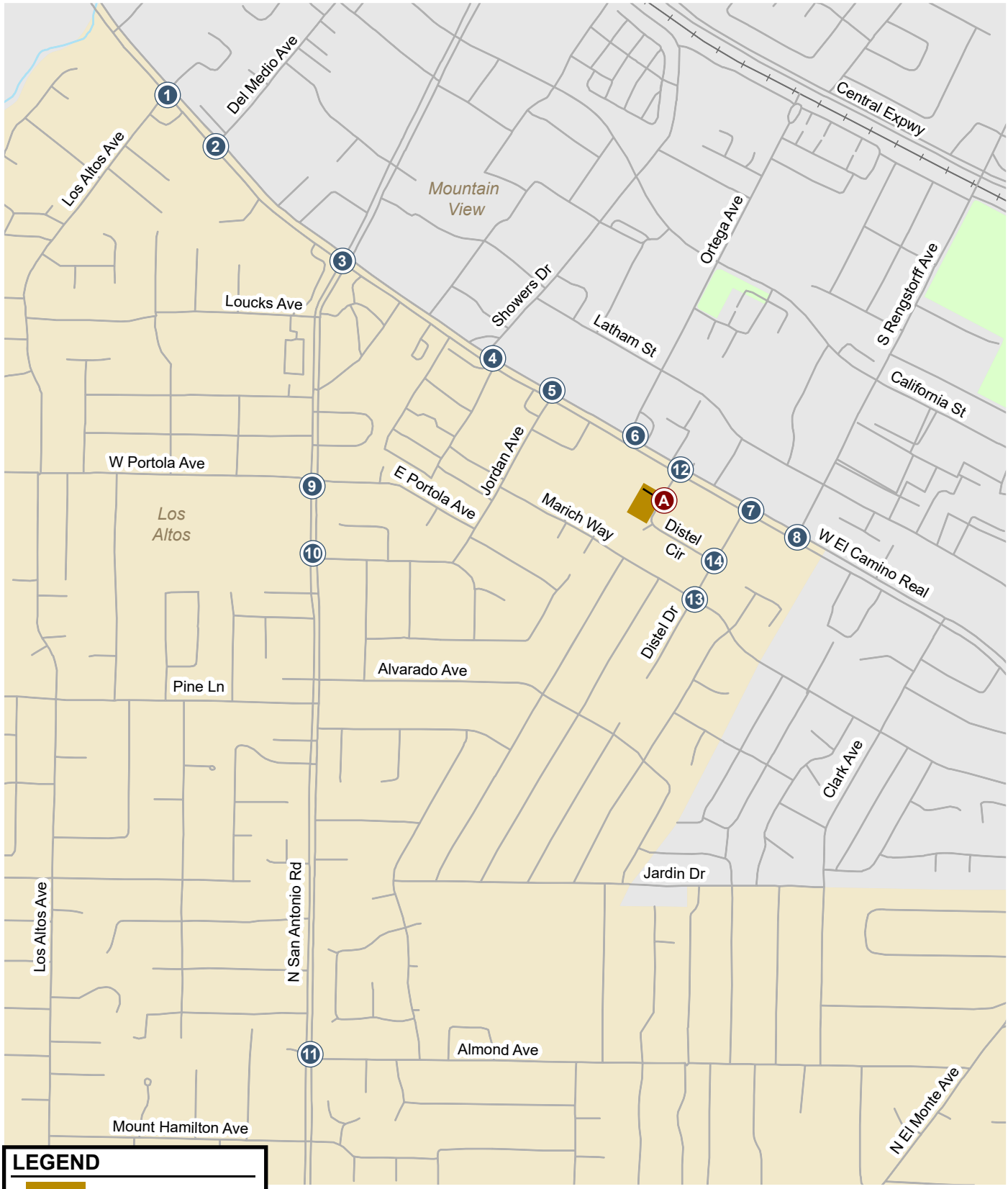


Figure 1
Site Location and Study Intersections

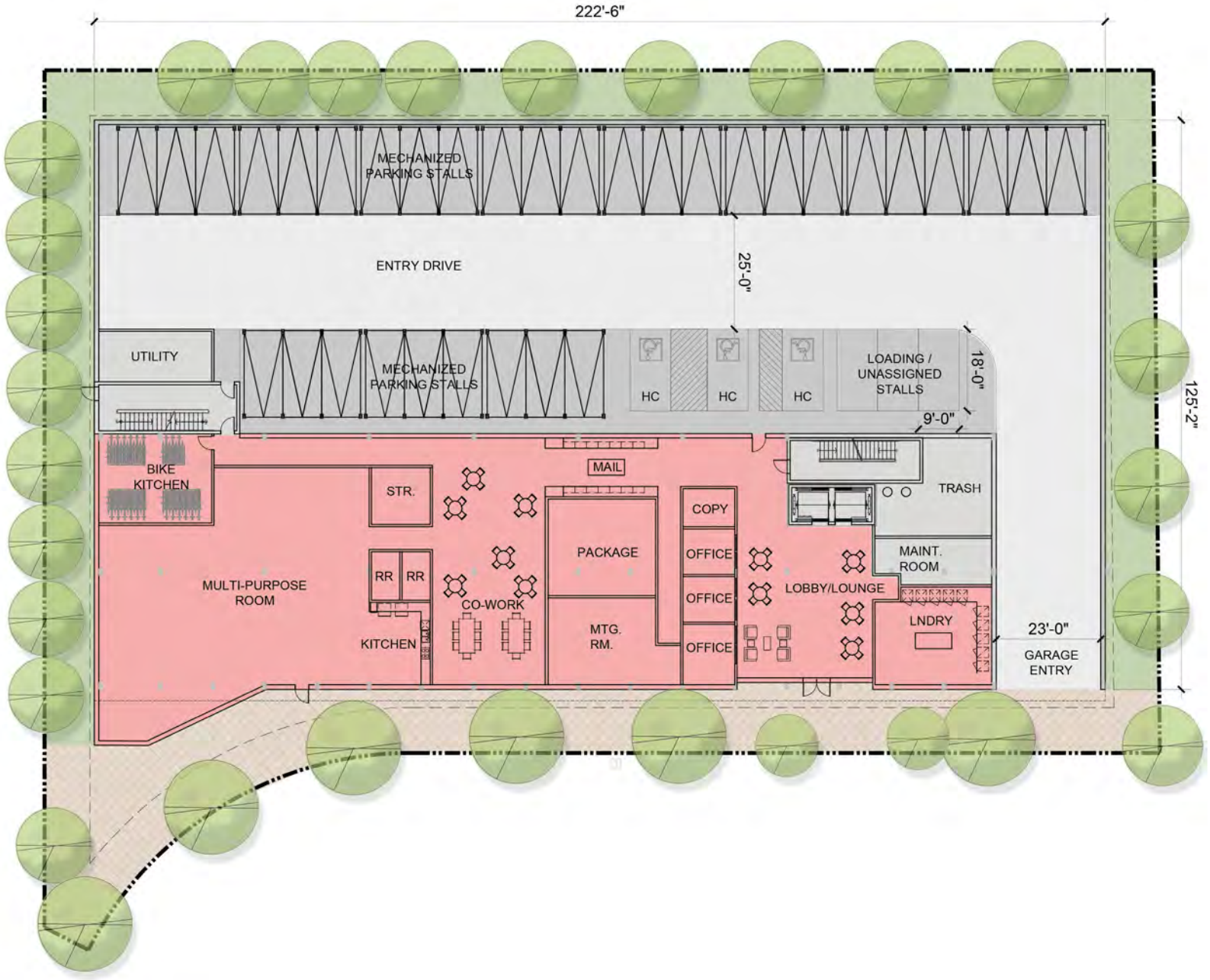


Figure 2
Site Plan

Not to Scale

Table 1
Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though some vehicles may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *Highway Capacity Manual, 6th Edition*, p.10-16.

Unsignalized Intersections

Level of service analysis at unsignalized intersections is generally used to determine the need for modification in the type of intersection control (i.e., all-way stop or signalization). As part of the evaluation, traffic volumes, delays and traffic signal warrants are evaluated to determine if the existing intersection control is appropriate.

For unsignalized intersections, level of service depends on the average delay experienced by vehicles on the stop-controlled approaches. Thus, for all-way stop controlled intersections, level of service is determined by the average delay for all movements through the intersection. For side street stop-controlled intersections (two-way or T-intersections), operations are defined by the average control delay experienced by vehicles entering the intersection from the stop-controlled approaches on minor streets or from left-turn approaches on major streets. For two-way or T-intersections, the level of service is reported based on the average delay for the worst approach. The level of service definitions for unsignalized intersections is shown in Table 2. The City of Los Altos does not have an adopted level of service standard for

unsignalized intersections. For the purpose of this study, the minimum acceptable level of service for unsignalized intersections is LOS D.

Table 2
Unsignalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0

Source: Transportation Research Board, *Highway Capacity Manual, 6th Edition* p17-2.

Adverse Operational Effects on Nearby Intersections

For this analysis, the criteria used to determine an adverse effect on signalized intersections are based on City of Los Altos Level of Service standards. Adverse effects to the unsignalized study intersections were identified based on engineering judgment.

City of Los Altos Signalized Intersections

According to City of Los Altos level of service standard, a development is said to create an adverse operational effect on traffic conditions at a signalized intersection if for either peak hour, either of the following conditions occurs:

1. The level of service at the intersection drops below its respective level of service standard (LOS D or better for local intersections) when project traffic is added, or
2. An intersection that operates below its level of service standard under no-project conditions experiences an increase in critical-movement delay of four or more seconds, and the volume-to-capacity ratio (v/c) is increased by one percent (0.01) or more when project traffic is added.

An adverse operational effect at a signalized intersection is said to be satisfactorily mitigated when measures are implemented that would restore intersection operations back to background (without the project) conditions or better.

CMP Signalized Intersections

The definition of an adverse operational effect at a CMP intersection is the same as for the City of Los Altos, except that the CMP standard for acceptable level of service at a CMP intersection is LOS E or better. An adverse operational impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection conditions to background conditions or better.

Unsignalized Intersections

The City of Los Altos has not established criteria to define an adverse operational effect for unsignalized intersections. Unlike signalized intersections, which typically represent constraint points for the roadway network, unsignalized intersections rarely limit the potential capacity of a roadway. The determination of appropriate improvements to unsignalized intersections typically includes a qualitative and quantitative analysis of movement delay, movement traffic volumes, intersection safety, and need for signalization. For this reason, adverse effects and the associated improvements to unsignalized intersections are frequently determined on the basis of professional judgment.

Report Organization

This report is divided into four chapters. Chapter 2 describes the existing roadway network, transit services, and pedestrian facilities. Chapter 3 presents a discussion of Vehicle Miles Traveled. Chapter 4 describes intersection operations and includes the analysis of other transportation issues including site access, on-site circulation, and pedestrian, bicycle, and transit facilities.

Existing Conditions

This chapter describes the existing conditions for transportation facilities in the vicinity of the site, including the roadway network, transit service, and pedestrian and bicycle facilities.

Existing Roadway Network

Regional access to the project is provided via State Route 82 (SR 82). Local access to the project site is provided via San Antonio Road, Rengstorff Avenue, Distel Drive, and Distel Circle. These facilities are described below.

SR 82, also known as El Camino Real, is a north-south arterial that extends from Daly City in the north to San Jose in the South. For the purpose of this study, El Camino Real is considered an east-west roadway. In the project vicinity, El Camino Real is six lanes wide, has landscaped medians with left-turn pockets at intersections, sidewalks on both sides of the street, and parking allowed on either side of the road in some locations. The speed limit on El Camino Real is 35 mph. It provides access to the project site via Distel Circle.

San Antonio Road is a north-south arterial that extends northward from Foothill Expressway to US 101. In the project vicinity, it is four lanes wide and has landscaped medians with left-turn pockets at intersections and bike lanes and sidewalks on both sides of the street. The speed limit on San Antonio Road is 35 mph.

Distel Drive is a north-south local street that extends southward from El Camino Real and ends in a cul de sac south of Marich Way. In the project vicinity, it is two lanes wide and parking is allowed on both sides of the street. North of Distel Circle, Distel Drive has sidewalks on both sides of the street. Between Distel Circle and Marich Way, there is a sidewalk on only the west side of the street. There are no sidewalks south of Marich Way.

Rengstorff Avenue is a north-south arterial that extends northward from El Camino Real to Charleston Road. In the project vicinity, it is four lanes wide, has a left turning lanes at intersections, has a landscaped median, sidewalks on both sides of the street, and is a bike route. Parking is allowed along the street. The speed limit on Rengstorff Avenue is 35 mph.

Distel Circle is an L-shaped local street connecting El Camino Real to Distel Drive. It is two lanes wide and has sidewalks on both sides of the street. It provides direct access to the project site.

Existing Pedestrian and Bicycle Facilites

Existing Pedestrian Facilites

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the vicinity of the project site, continuous sidewalks exist along Distel Circle, Distel Drive north of Distel Circle, El Camino Real, Los Altos Avenue, San Antonio Road, Del Medio Avenue, Showers Drive, Jordan Avenue, Ortega Avenue, Rengstorff Avenue, and Almond Avenue. Continuous sidewalks are not present along some of the local residential streets like Portola Avenue and Marich Way. Crosswalks with pedestrian signal heads are present at the signalized intersections within the vicinity of the project site.

At the intersection of El Camino Real and Distel Circle, the City has installed a hybrid beacon signal head allowing pedestrians to safely cross El Camino Real. This pedestrian hybrid beacon signal (also known as the High intensity Activated Crosswalk or HAWK) is a pedestrian-activated warning device located on mast arms over a pedestrian crossing. The beacon head consists of two red lenses above a single yellow lens. The beacon head is “dark” until a pedestrian wants to cross the street. The pedestrian pushes a button to activate the beacon. After displaying brief flashing and steady yellow intervals, the device displays a steady red light for drivers on El Camino Real and a “WALK” sign to pedestrians, allowing them to cross while traffic is stopped. After the pedestrian phase ends, the “WALK” sign changes to a flashing orange hand to notify pedestrians that their clearance time is ending. The hybrid beacon displays alternating flashing red lights to drivers while pedestrians finish their crossings before once again going dark at the conclusion of the cycle. Without a pedestrian call, these beacon signals heads are dark, and El Camino Real is uncontrolled. Therefore, this intersection is analyzed as side-street stop controlled.

Existing Bicycle Facilites

Bicycle facilities in the vicinity of the project site include bike paths, protected bike lanes, bike lanes, and bike routes. Bike paths (Class I facilities) separate pedestrians and bicyclists from motor vehicle traffic; however, pedestrians and bicyclists may have to share the path with other active transportation users. Protected bike lanes (Class IV facilities) are for the exclusive use of bicycles and include a vertical or grade separation between the bikeway and motor vehicle traffic. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III facilities) are roadways shared between bicycles and vehicles. Bike routes are often designated for use by bicycles with “sharrow” pavement markings and signage. The existing bicycle facilities within the study area are described below and are shown on Figure 3. While most streets in the project area lack bicycle facilities, they have slow traffic speeds and are conducive to bicycling.

Class I bike paths in the project area include a connection between Delphi Circle and Panchita Way and a connection between Los Altos Avenue and Arastradero Road.

Class IV protected bike lanes in the project area include:

- Almond Avenue between San Antonio Road and Alicia Way

Class II bike lanes in the project area include:

- Almond Avenue between Alicia Way and El Monte Avenue
- San Antonio Road between Foothill Expressway and El Camino Real
- California Street between Del Medio Avenue and Castro Street
- Central Expressway between San Antonio Road and Moffett Boulevard

- Rengstorff Avenue between El Camino Real and Middlefield Road
- Showers Drive between El Camino Real and Central Expressway
- Jardin Drive between Valencia Drive and Alicia Way
- El Monte Avenue between Springer Road and O'Keefe Lane

Class III bike routes in the project area include

- Los Altos Avenue between Edith Avenue and El Camino Real

Existing Transit Service

Existing transit services (as of December 2021) in the study area are provided by the VTA and Mountain View and are shown on Figure 4. The project site is primarily served by four VTA bus routes (21, 22, 522, and 40), two Mountain View Community Shuttles (Gray Route and Red Route), and two Mountain View Go Shuttles (Mvgo C and D). The nearest bus stops to the project site are located near the intersection of El Camino Real and Distel Circle, approximately 300 feet from the project site and are serviced by Bus Route 22 and the Mvgo shuttles.

Route 21 provides service between the Palo Alto Transit Center and the Santa Clara Transit Center. Near the project site, it provides service along San Antonio Road, Showers Drive and California Street. On weekdays, it provides service between 5:37 AM and 8:49 PM with headways of approximately 30 minutes.

Route 22/522 provides service between the Palo Alto Transit Center and the Eastridge Transit Center via El Camino Real. Near the project site, it provides service along El Camino Real, with a bus stop located approximately 300 feet from the project site. On weekdays, it provides service between 4:25 AM and 3:01 AM with headways of approximately 10-15 minutes. Rapid 522 follows the same path as Route 22 but with limited stops. The closest bus stop to the project site serviced by Rapid 522 is located at the intersection of El Camino Real and Showers Drive at a distance of approximately 0.5 miles. It provides service every 10 to 20 minutes between 5:22 AM and 11:11 PM on weekdays.

Route 40 provides service between Foothill College and the Mountain View Transit Center via San Antonio Road, Rengstorff Avenue, and Shoreline Drive. Near the project site, it provides service along San Antonio Road, El Camino Real, Showers Drive, California Street, and Rengstorff Avenue with a bus stop located at the intersection of Showers Drive and El Camino Real, approximately 0.4 miles from the project site. On weekdays, it provides service between 6:25 AM and 10:28 PM with headways of approximately 30 minutes.

Mountain View Community Shuttle is a free shuttle service with two routes (Gray – Clockwise, Red – Counterclockwise) operated by the Mountain View Transportation Management Association in partnership with the City of Mountain View and funded by Google. It provides service to the Mountain View Downtown Transit Center, Whisman and Middlefield Roads, Rengstorff Park, and the Senior Center, and forms a loop around the City of Mountain View. Bus stops are located near the intersection of California Street and Rengstorff Avenue, approximately 0.5 miles from the project site. Service on weekdays is provided between 10:00 AM and 5:55 PM with approximately 30-minute headways.

Mountain View Go (Mvgo) service is a free shuttle service operated by the Mountain View Transportation Management Association. Routes C and D provide service in the project area with bus stops along El Camino Real near the intersection of Distel Circle, approximately 300 feet from the project site. The routes provide service to the Mountain View Transit Center via San Antonio Road, El Camino Real, Shoreline Boulevard, Charleston Road, and Garcia Avenue. Route C operates in the morning between 6:35 AM and 9:52 AM with headways of approximately 15 minutes and in the evening between 3:32 PM and 7:56 PM with headways of approximately 60 minutes. Route D operates in the

morning between 6:40 AM and 10:05 AM with headways of approximately 40 minutes and in the evening between 2:49 PM and 8:03 PM with headways of approximately 45 minutes.

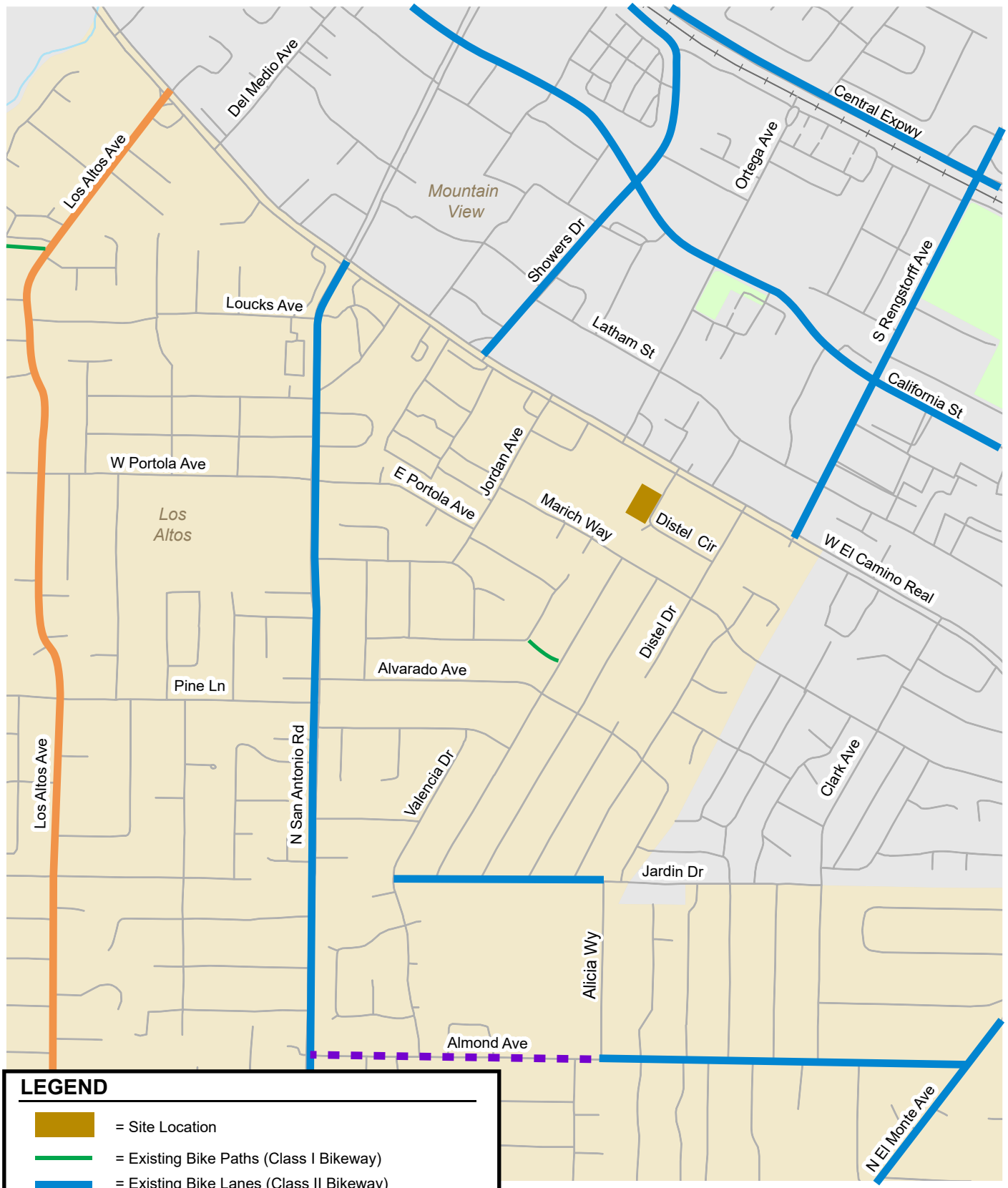


Figure 3
Existing Bicycle Facilities

Figure 4
Existing Transit Services

CEQA Analysis

Senate Bill 743 (SB 743) was signed in 2013 and requires that, for land use projects, vehicle miles traveled (VMT) per capita, employee, or net VMT are to be used as metrics for transportation analysis. SB 743 requires lead agencies to implement its guidelines, requiring them to select a VMT methodology, choose significance thresholds, and determine feasible mitigation measures. VMT should be reduced to minimize the transportation impact a development has on a community. The goal of SB 743 is to encourage development that reduces VMT. SB 743 required VMT to be used as the metric for transportation analysis by July 2020.

The City of Los Altos is in the process of developing a new citywide VMT policy to comply with State law and provide established and consistent criteria for analyzing transportation impacts of development projects and long-range plans. The Draft Los Altos VMT Policy contains the following screening criteria for developments that are expected to cause a less-than-significant transportation impact under CEQA and are not required to prepare further VMT analysis:

- Small Project Screening: Any development that would generate fewer than 50 daily vehicle trips shall be presumed to have a less-than-significant transportation impact.
- Map-Based Screening: Residential and employment land use projects located in areas of low VMT, defined as exhibiting VMT that is 15 percent or more below the existing citywide average VMT, shall be presumed to have a less-than-significant transportation impact. Citywide average VMT per capita or per employee baseline values are obtained from VTA and may be amended periodically to reflect the best available data and most relevant base year.
- Local-Serving Retail Screening: Retail commercial projects comprised of stores of up to 60,000 gross square feet shall be presumed to have a less-than-significant transportation impact.
- Local-Serving Public Facilities Screening: Local-serving public facilities (publicly owned or controlled) shall be presumed to have a less than significant VMT impact. For schools, only public neighborhood elementary schools shall be presumed to be a local-serving use and satisfy this screening criterion. Other examples of projects that may be screened out by this criterion include a branch library, community or senior center, and a fire station.
- Affordable Housing Screening: Projects with 100 percent affordable housing shall be presumed to have a less-than-significant transportation impact on VMT.
- Screening based on Existing Use: Redevelopment projects that replace existing VMT-generating uses and result in a net decrease in total VMT shall be presumed to cause a less than significant impact. For redevelopment projects that result in a net increase in total VMT, the screening criteria for each land use will be based on the size of the proposed development without any credit for the existing use.

- Transportation Project Screening: Transportation projects that reduce or do not increase VMT shall be presumed to have a less than significant VMT impact. Examples include transportation projects that enhance pedestrian, bike, or transit infrastructure, and transportation projects that maintain current infrastructure, without adding new automobile capacity.

Since the project proposes 100 percent affordable housing, it would be presumed to have a less-than-significant transportation impact on VMT per the Draft VMT Policy and would be screened out from further VMT analysis.

However, since the Draft VMT Policy has not yet been formally adopted by the City, the department has implemented an interim administrative policy for identifying VMT impacts of development projects. The Interim VMT Policy sets a threshold of significance for residential VMT per capita at 15 percent below the regional average of 13.95 VMT per capita (or 11.86). Any project that does not have at least a 15 percent reduction would need to mitigate its impacts to less than significant based on this threshold.

Per the Santa Clara County map based VMT evaluation tool, the project site is located within an area with a residential VMT per capita of 9.51 without the project, which is below the threshold set forth in the Interim VMT Policy (see Appendix A). Although the Interim VMT Policy uses the regional average as the basis, it should be noted that the project also would comply with the residential VMT threshold set forth in the Draft VMT Policy, which is 15 percent below the citywide average residential VMT per capita of 12.22(or 10.39). Therefore, the project would also be screened out from further analysis using the threshold of significance in the Interim VMT Policy.

Local Transportation Analysis

This chapter contains the local transportation analysis including a description of the method by which project traffic is estimated, intersection operations, any adverse effects on study intersections caused by the project, site access, on-site circulation, effects on bicycle, pedestrian, and transit facilities, and parking. The LTA supplements the CEQA VMT analysis and identifies transportation operational issues that may arise due to a development project.

Project Description

The project site is currently occupied by 12,120 square feet of office uses. The project proposes to replace the existing office building on site with a 90-unit, five-story affordable housing development. Vehicular access to the project site would be provided via a driveway to a parking garage located along Distel Circle.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear were estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic traveling to and from the proposed residential development was estimated for the AM and PM peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel were estimated. In the project trip assignment, the project trips were assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Through empirical research, data have been collected that indicate the amount of traffic that can be expected to be generated by many types of land uses. The standard trip generation rates can be applied to predict the future traffic increases that would result from a new development.

Project trip generation was estimated by applying to the proposed project size the appropriate trip generation rates obtained from the ITE *Trip Generation Manual, 11th Edition* (2021). The average trip generation rates for Affordable Housing-Income Limits (ITE Land Use 223) were applied to the project. ITE defines Affordable Housing-Income Limits as multifamily housing that is rented at below market rate to households that include at least one employed member and eligibility is a function of limited household income.

Since the project would replace the existing 12,120 square-foot office building on site, trip credits were taken for the existing use. Trip generation for the office use was estimated using average trip generation rates for General Office Building (ITE Land Use 710).

The project site is also located within 2000-feet of a bus stop served by VTA Route 22 with headways of approximately 10-15 minutes and Mountain View Go shuttle Routes C and D with headways of approximately 15 and 45 minutes, respectively, during the peak hours (detail in Chapter 2). VTA defines a major bus stop as a stop where six or more buses per hour from the same or different routes stop during the peak period and allows for a trip credit of 2 percent for housing and employment uses. This trip credit was applied to the proposed project and existing use trip estimates.

The project will be required to implement a Travel Demand Management (TDM) Plan intended to services, incentives, facilities, and actions that reduce single–occupant vehicle (SOV) trips to help relieve traffic congestion, parking demand, greenhouse gas emissions, and air pollution problems. The purpose of TDM is to foster a better pedestrian/bicycle environment, support transit, and make it easier and more appealing for residents and visitors to use alternatives to driving or driving alone. To be conservative, this analysis does not assume any reductions in vehicle trips due to TDM measures.

Net Project Trips

Table 3 shows the trip generation estimates. After accounting for trip credits, the project is estimated to generate 296 net new daily trips, with 14 net new trips (-7 inbound and 21 outbound) during the AM peak hour and 24 net new trips (21 inbound and 3 outbound) during the PM peak hour.

Table 3
Project Trip Generation Estimates

Land Use	ITE Land Use Code	Reduction %	Size	Daily Rate	Daily Trip	AM Peak Hour Rate	AM Peak Hour Trip In	AM Peak Hour Trip Out	AM Peak Hour Trip Total	PM Peak Hour Rate	PM Peak Hour Trip In	PM Peak Hour Trip Out	PM Peak Hour Trip Total
Affordable Housing - Income Limits	**223**		**90** Dwelling Units	4.810	433	0.360	9	23	32	0.460	24	17	41
Housing near a Major Bus Stop		*2%*			*-9*		*0*	*0*	*0*		*0*	*0*	*0*
General Office Building	**710**		**-12,120** Square Feet	10.840	-131	1.520	-16	-2	-18	1.440	-3	-14	-17
Employment near a Major Bus Stop		*2%*			*3*		*0*	*0*	*0*		*0*	*0*	*0*
Net Project Trips					**296**		**-7**	**21**	**14**		**21**	**3**	**24**

Source: ITE Trip Generation Manual, 11th Edition 2021

Trip Distribution and Trip Assignment

The trip distribution pattern for the project was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The peak-hour trips generated by the existing and proposed uses were assigned to the roadway system based on the directions of approach and departure, the roadway network connections, and the location of the project driveway. The trips generated by the existing use were subtracted from the roadway network prior to assigning project trips. Figure 5 shows the trip distribution pattern for the project site. Figure 6 shows the trip assignment.

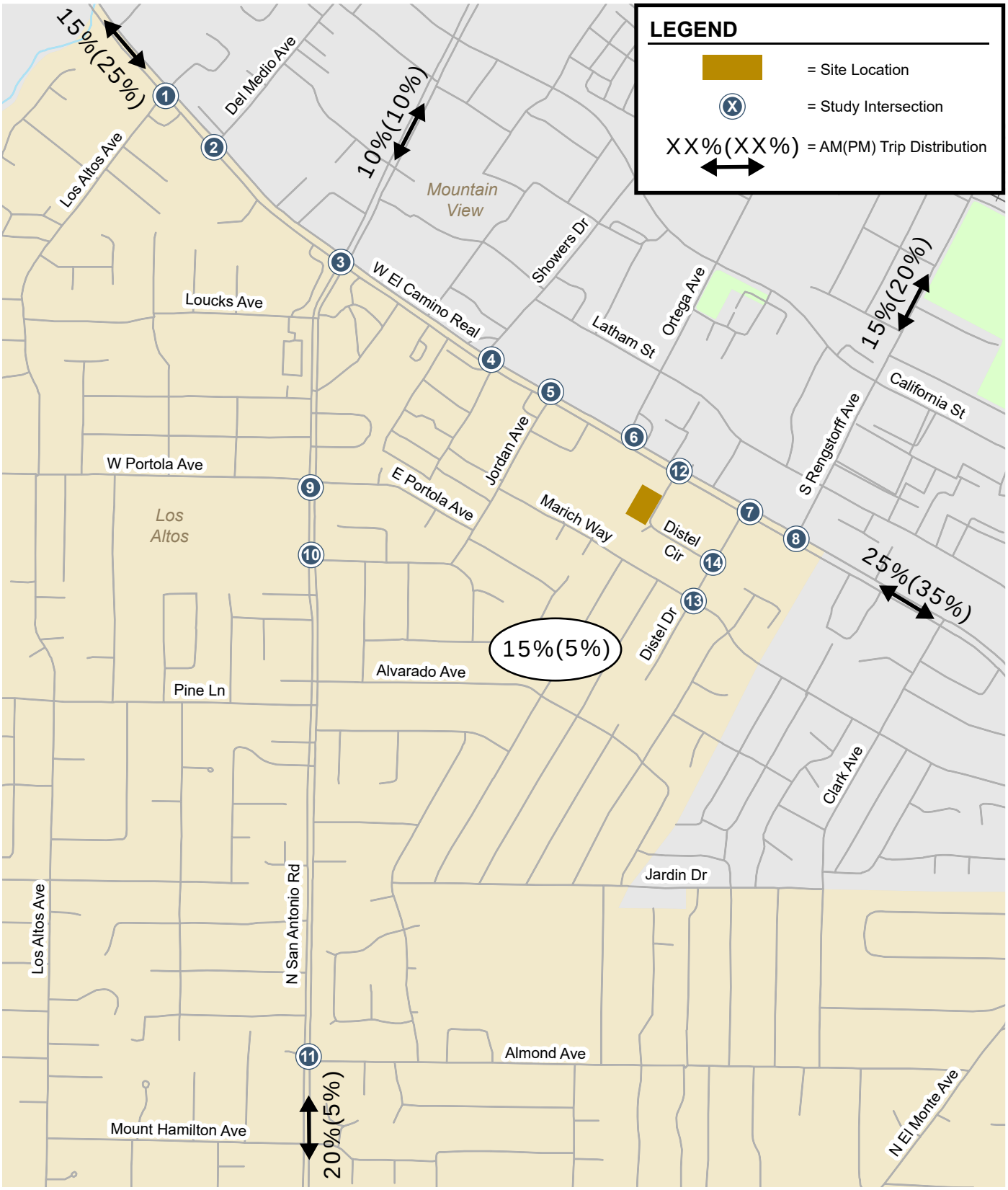
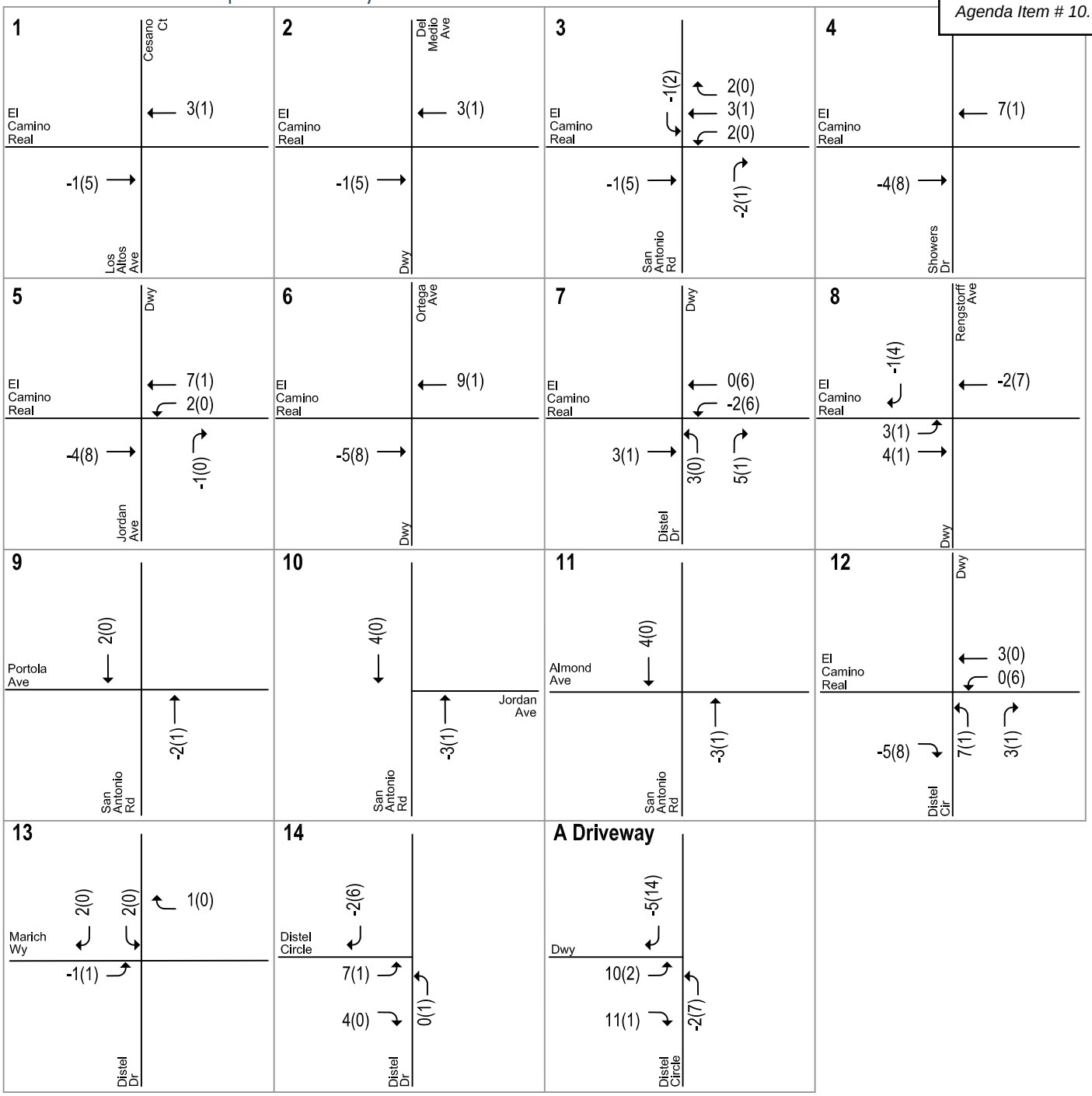


Figure 5
Project Trip Distribution

Not to Scale



LEGEND

XX(XX) = AM(PM) Peak-Hour Trips

Figure 6
Project Trip Assignment

Existing Intersection Operations

Existing Intersection Lane Configurations and Traffic Volumes

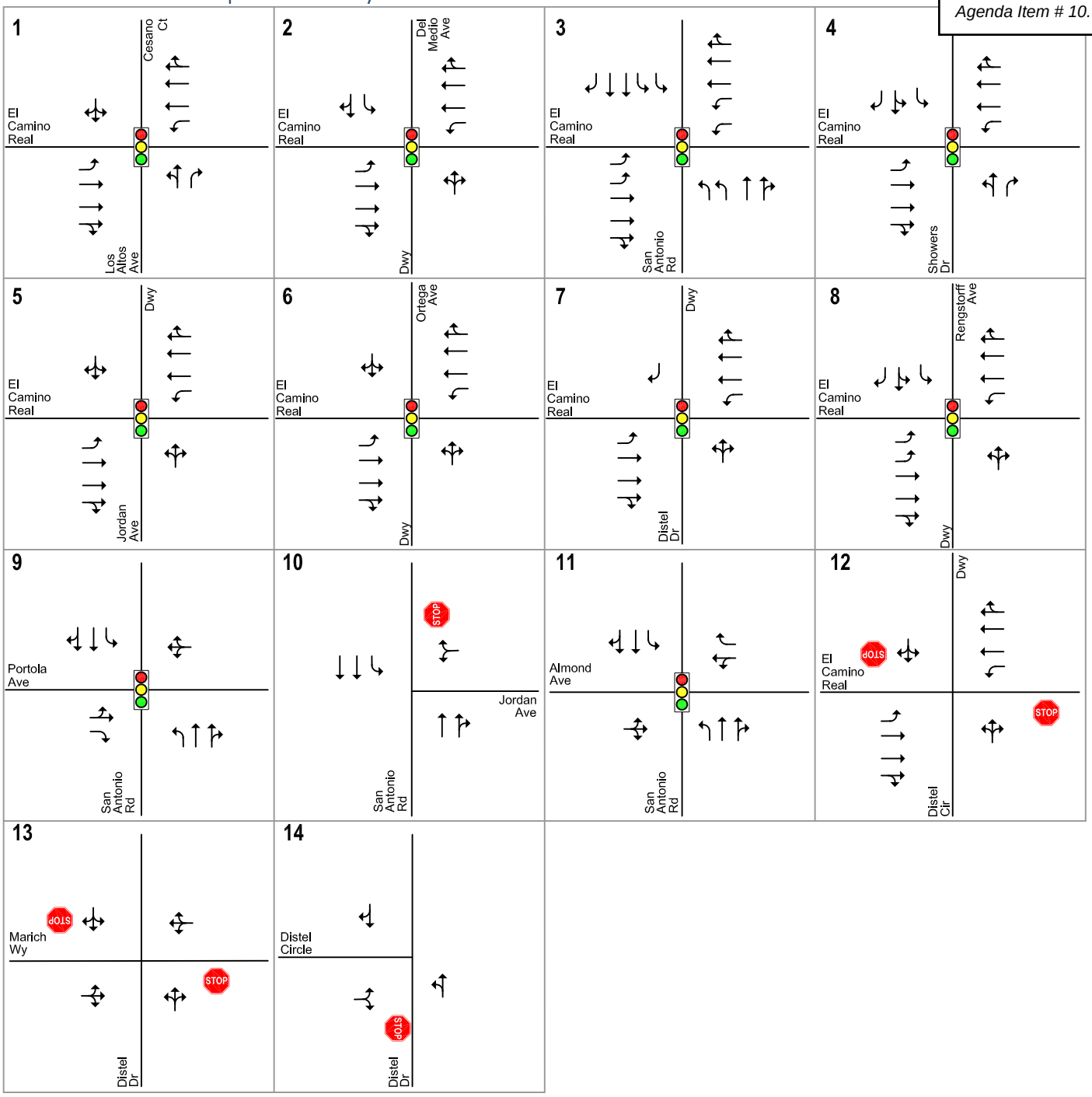
The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 7.

Existing traffic volumes at study intersections were based on pre-pandemic traffic counts conducted in 2018 and 2019 and new counts collected in 2021 where pre-pandemic counts were not available. Due to regional shelter-in-place orders during the COVID-19 pandemic, the 2021 traffic counts do not represent typical traffic conditions. These counts were factored by comparing new counts to available pre-pandemic counts. The factor was derived based on 2019 counts at two intersections (El Camino Real/Distel Drive and El Camino Real/Distel Circle) and new counts conducted at these intersections. Compared to the 2019 counts, the new 2021 counts were 41 percent lower during the AM peak hour, and the PM peak hour counts were 32 percent lower. These percentages were used to adjust the 2021 intersection counts to reflect pre-COVID conditions. The adjusted existing peak-hour intersection volumes are shown on Figure 8. Intersection turning-movement counts conducted for this analysis are presented in Appendix B. The volume summary sheets with the adjusted existing counts are presented in Appendix C.

Existing Intersection Levels of Service

Table 4 shows that all signalized study intersections operate at an acceptable level of service during both AM and PM peak hours. The intersection levels of service calculation sheets are included in Appendix D.

The unsignalized intersections of San Antonio Road and Jordan Avenue and Distel Circle and El Camino Real operate at an unacceptable level of service during at least one peak hour. Therefore, a signal warrant check (*MUTCD 2010 Edition, Part 4, Warrant 3*) was conducted for the intersections based on the peak-hour traffic warrant. The analysis shows that the signal warrant is not met at either of these intersections. The signal warrant calculation sheets can be found in Appendix E.



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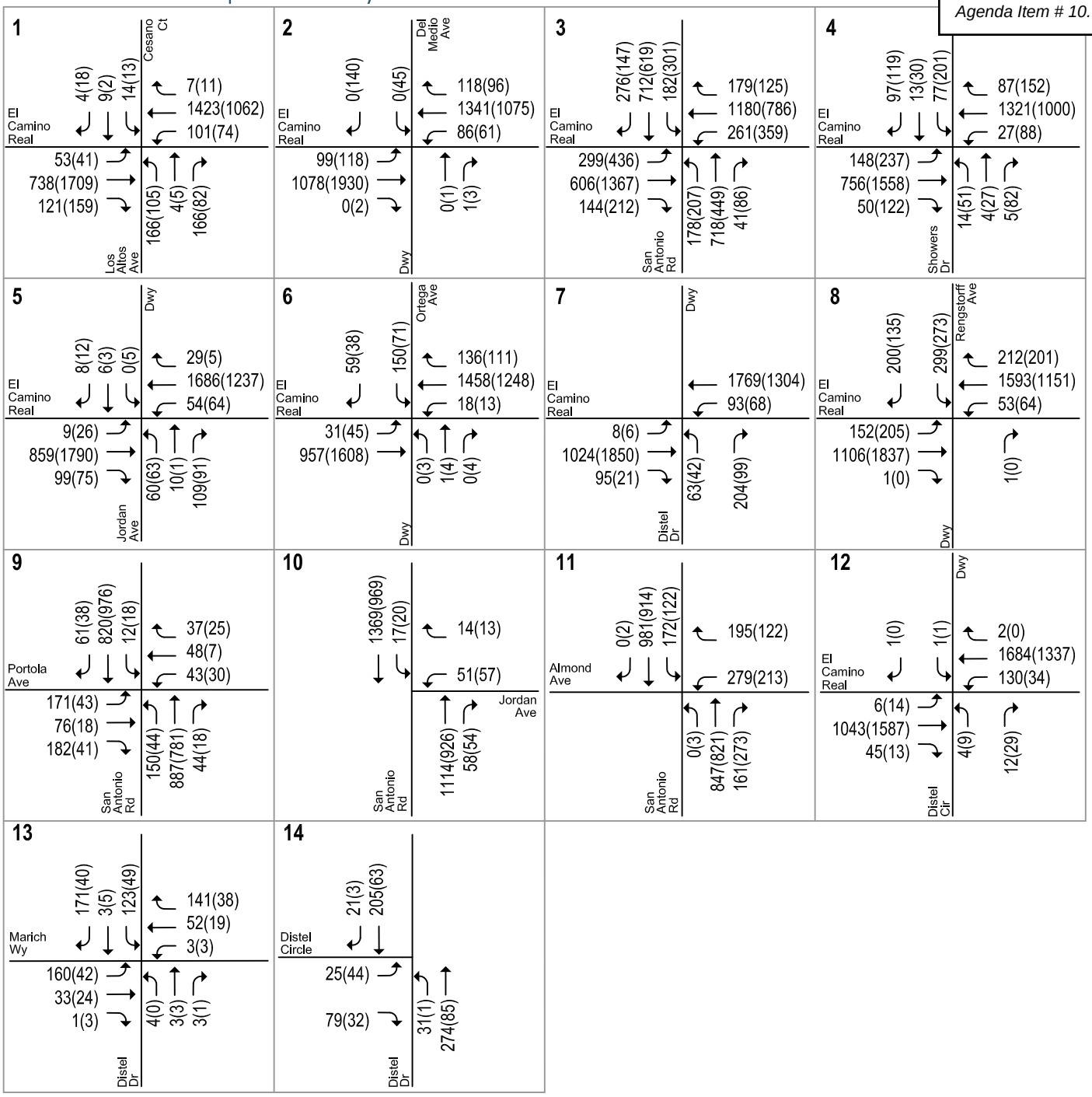
STOP = Stop Sign

= Traffic Signal

Figure 7
Existing Lane Configurations

NORTH
Not to Scale



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 8
Existing Traffic Volumes

Table 4
Existing Level of Service

#	Intersection	Peak Hour	Count Date	Intersection Control	LOS Standard	Existing Conditions No Project Avg. Delay (sec)[1]	Existing Conditions No Project LOS
1	Los Altos Avenue & El Camino Real	AM	10/10/2019	Signal	D	20.9	C
		PM	10/10/2019			15.5	B
2	Del Medio Avenue & El Camino Real	AM	5/29/2019	Signal	D	43.8	D
		PM	5/29/2019			48.3	D
3	San Antonio Road & El Camino Real*	AM	10/10/2019	Signal	E	62.6	E
		PM	10/10/2019			61.3	E
4	Showers Drive & El Camino Real	AM	4/12/2018	Signal	D	49.7	D
		PM	4/12/2018			53.8	D
5	Jordan Avenue & El Camino Real	AM	10/22/2019	Signal	D	19.0	B
		PM	10/22/2019			35.2	D
6	Ortega Avenue & El Camino Real	AM	11/2/2021	Signal	D	47.0	D
		PM	11/2/2021			40.1	D
7	Distel Drive & El Camino Real	AM	10/10/2019	Signal	D	28.2	C
		PM	10/10/2019			37.4	D
8	Rengstorff Avenue & El Camino Real*	AM	10/10/2019	Signal	E	50.2	D
		PM	10/10/2019			42.1	D
9	San Antonio Road & Portola Avenue	AM	10/10/2019	Signal	D	19.5	B
		PM	10/10/2019			10.2	B
10	San Antonio Road & Jordan Avenue	AM	11/2/2021	TWSC	D	**>80**	**F**
		PM	11/2/2021			**63.6**	**F**
11	San Antonio Road & Almond Avenue	AM	10/15/2019	Signal	D	18.8	B
		PM	10/15/2019			15.5	B
12	Distel Circle & El Camino Real	AM	10/10/2019	TWSC	D	**>80**	**F**
		PM	10/10/2019			**>80**	**F**
13	Distel Drive & Marich Way	AM	11/2/2021	TWSC	D	18.4	C
		PM	11/2/2021			10.5	B
14	Distel Circle & Distel Drive	AM	11/2/2021	TWSC	D	13.4	B
		PM	11/2/2021			9.7	A

Notes:

* Denotes CMP Intersection

TWSC - Two Way Stop Control

[1] Average delay is reported for signalized and worst movement delay is reported for stop-controlled intersections.

Bold indicates substandard level of service

Existing Plus Project Intersection Operations

Existing Plus Project Intersection Lane Configurations and Traffic Volumes

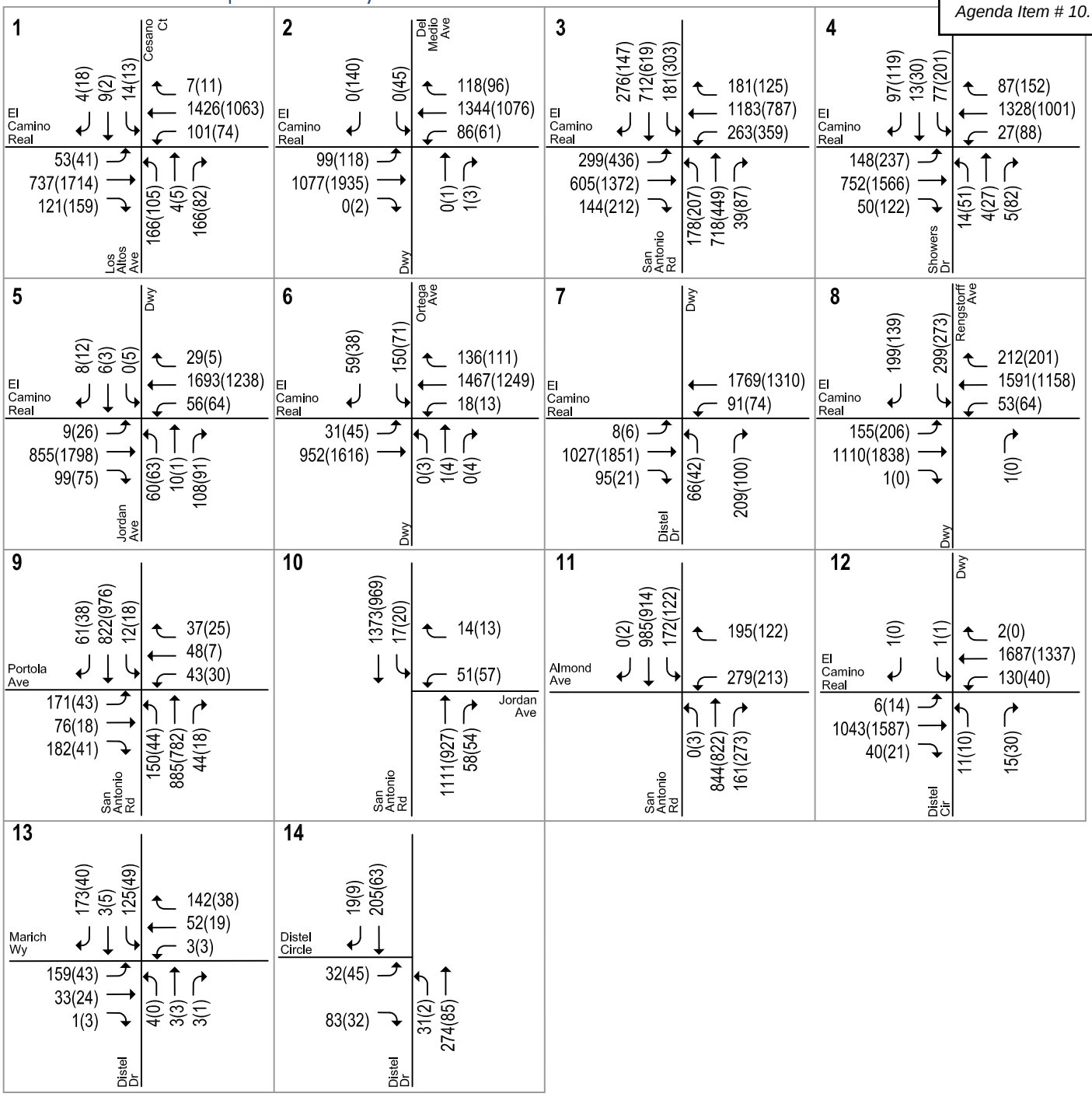
The intersection lane configurations under existing plus project conditions are assumed to be the same as under existing conditions. Project trips, as represented in the above project trip assignment, were added to existing traffic volumes to obtain existing plus project traffic volumes. The existing plus project traffic volumes are shown on Figure 9.

Existing Plus Project Level of Service Analysis

Table 5 shows that all signalized study intersections would continue to operate at an acceptable level of service during both AM and PM peak hours. Since the project would add trips to existing low-delay movements, there would be a decrease in overall average delay at some intersections. The intersection level of service calculation sheets are included in Appendix D.

Since the unsignalized intersections of San Antonio Road and Jordan Avenue, and Distel Circle and El Camino Real would operate at an unacceptable level of service under existing plus project conditions, a signal warrant check (*MUTCD 2010 Edition, Part 4, Warrant 3*) was conducted for the intersections based on the peak-hour traffic warrant. The analysis shows that the signal warrant would not be met with the project for either of these intersections. The signal warrant calculation sheets can be found in Appendix E.

Typically, when facing high delays at a stop-controlled approach, vehicles will reroute to a signalized intersection, if possible, to avoid waiting for an acceptable gap in traffic on a busy major street. Vehicles facing delay while turning from the stop-controlled Distel Circle approach onto El Camino Real could instead access El Camino Real using the signalized intersection at Distel Drive. Likewise, vehicles facing delay while turning from the stop-controlled Jordan Avenue approach onto San Antonio Road could instead access San Antonio Road using the signalized intersection at Portola Avenue. Both signalized intersections operate at acceptable levels of service during both the AM and PM peak hours. Thus, because the unsignalized study intersections are not expected to meet the signal warrants and because there are alternate routes that vehicles can use to avoid lengthy delays on stop-controlled approaches, signalization is not recommended at these unsignalized intersections.



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 9
Existing Plus Project Traffic Volumes

Table 5
Existing Plus Project Intersection Level of Service Summary

#	Intersection	Peak Hour	Intersection Control	LOS Standard	Existing Conditions					
					No Project		Project Conditions			
					Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Crit Delay (sec)	Incr. in Crit V/C
1	Los Altos Avenue & El Camino Real	AM	Signal	D	20.9	C	20.9	C	0.0	0.000
		PM			15.5	B	15.5	B	0.0	0.000
2	Del Medio Avenue & El Camino Real	AM	Signal	D	43.8	D	43.8	D	0.1	0.000
		PM			48.3	D	48.5	D	0.3	0.009
3	San Antonio Road & El Camino Real*	AM	Signal	E	62.6	E	62.7	E	0.0	0.000
		PM			61.3	E	61.5	E	0.3	0.004
4	Showers Drive & El Camino Real	AM	Signal	D	49.7	D	49.8	D	0.1	0.000
		PM			53.8	D	53.9	D	0.3	0.004
5	Jordan Avenue & El Camino Real	AM	Signal	D	19.0	B	19.0	B	-0.8	-0.001
		PM			35.2	D	35.3	D	0.2	0.007
6	Ortega Avenue & El Camino Real	AM	Signal	D	47.0	D	47.1	D	0.2	0.000
		PM			40.1	D	40.2	D	0.1	0.000
7	Distel Drive & El Camino Real	AM	Signal	D	28.2	C	28.4	C	0.7	0.005
		PM			37.4	D	37.5	D	0.1	0.001
8	Rengstorff Avenue & El Camino Real*	AM	Signal	E	50.2	D	50.2	D	0.0	0.001
		PM			42.1	D	42.2	D	0.1	-0.003
9	San Antonio Road & Portola Avenue	AM	Signal	D	19.5	B	19.5	B	0.0	0.005
		PM			10.2	B	10.2	B	0.0	0.000
10	San Antonio Road & Jordan Avenue	AM	TWSC	D	**>80**	**F**	**>80**	**F**	**-0.5**	**0.000**
		PM			**63.6**	**F**	**63.8**	**F**	**0.1**	**0.000**
11	San Antonio Road & Almond Avenue	AM	Signal	D	18.8	B	18.8	B	-0.1	0.000
		PM			15.5	B	15.5	B	0.0	0.000
12	Distel Circle & El Camino Real	AM	TWSC	D	**>80**	**F**	**>80**	**F**	**1.4**	**0.160**
		PM			**>80**	**F**	**>80**	**F**	**9.3**	**0.040**
13	Distel Drive & Marich Way	AM	TWSC	D	18.4	C	18.5	C	0.1	0.000
		PM			10.5	B	10.6	B	0.0	0.000
14	Distel Circle & Distel Drive	AM	TWSC	D	13.4	B	13.5	B	0.2	0.020
		PM			9.7	A	9.7	A	0.0	0.000

Notes:
* Denotes CMP Intersection
TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and worst movement delay is reported for stop-controlled intersections.
Bold indicates substandard level of service

Future Roadway Network

The roadway network under near-term, near-term plus project, cumulative, and cumulative plus project conditions would be the same as the existing roadway network because: 1) there are no approved projects in the area that would alter the existing roadway network, and 2) the project would not alter the existing roadway network.

Future Traffic Volumes

Near-Term Traffic Volumes

Near-term traffic volumes for the study intersections were estimated by adding to existing traffic volumes the trips generated by nearby approved but not yet completed or occupied projects. A list of approved developments was obtained from the websites of the Cities of Los Altos and Mountain View. Nearby approved projects that are expected to generate a significant number of vehicle trips at one or more study intersections include the following:

- 4856 El Camino Real (Los Altos) – 50 condominium units
- 5150 El Camino Real (Los Altos) – 172 condominium units and 24 townhomes
- 4898 El Camino Real (Los Altos) – 21 condominium units
- 2580 and 2590 California Street/201 San Antonio Circle (Mountain View) – 632 residential units and 20,000 square feet of commercial space
- 1720 Villa Street (Mountain View) – 226 apartment units
- 2300 West El Camino Real (Mountain View) – 153-room hotel
- 570 South Rengstorff Avenue (Mountain View) – 85 rowhouses
- 1919 – 1933 Gamel Way and 574 Escuela Avenue (Mountain View) – 121 condominium units

Trip generation estimates for the approved projects were based on their respective traffic study, if available. For projects that did not require a traffic study (due to their small size), trips were estimated based on ITE trip rates. The estimated trips from the approved projects were distributed and assigned throughout the study area based on the trip distribution assumptions present in the traffic studies or based on knowledge of the study area.

Near-term plus project conditions were derived by adding to near-term traffic volumes the traffic generated by the proposed project. The peak hour intersection traffic volumes under near-term as well as near-term plus project conditions are shown on Figure 10 and Figure 11, respectively. A tabular summary of traffic volumes at each study intersection is contained in Appendix C.

Cumulative (2040) Traffic Volumes

Cumulative (2040) traffic volumes for the study intersections were estimated by applying a one percent annual growth factor to existing traffic volumes and adding the projected volumes from approved (listed above) and pending (proposed but not yet approved) projects that would generate trips at the study intersections.

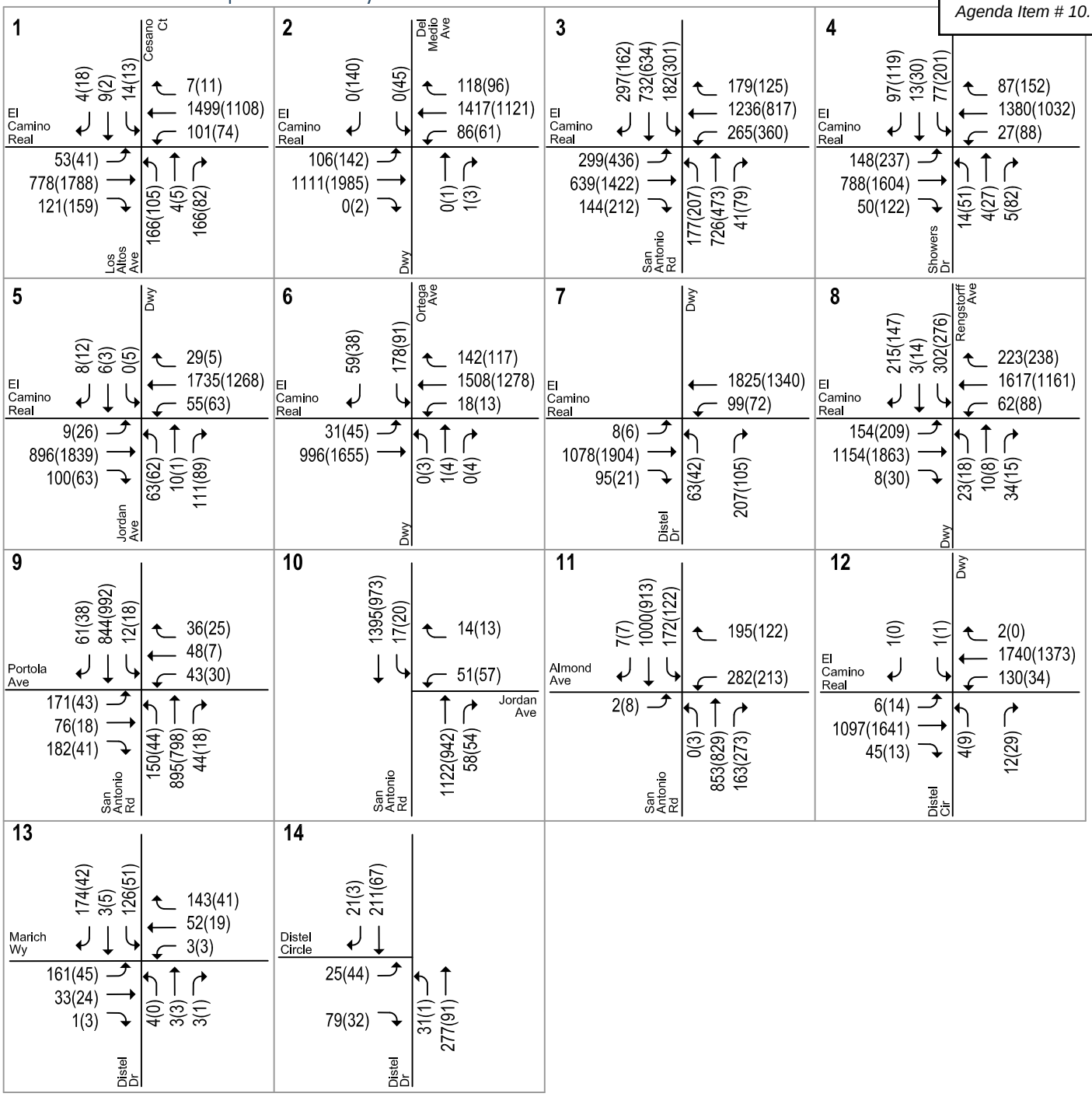
A list of pending developments was obtained from the websites of the Cities of Los Altos and Mountain View. Nearby pending projects that are expected to generate a significant number of vehicle trips at one or more study intersections include the following:

- 4350 El Camino Real (Los Altos) – 47 condominium units
- 4896 El Camino Real (Los Altos) – 45,082 square feet of office and 4 condominium units
- 590 Castro Street (Mountain View) – 106,000 square feet of office space

- 365 – 405 San Antonio Road and 2585 – 2595 California Street (Mountain View) – 182,352 square feet of commercial space
- City Lot 12 (Mountain View) – 120 affordable rental housing units and 2,300 square feet of ground floor commercial space
- 334 San Antonio Road (Mountain View) – 62 condominium units and 2,003 square feet of ground floor retail space

Trip generation estimates for the pending projects were based on their respective traffic study, if available. For projects that did not require a traffic study (due to their small size) or have a complete traffic study, trips were estimated based on ITE trip rates. The estimated trips from the pending projects were distributed and assigned throughout the study area based on the trip distribution assumptions present in the traffic studies or based on knowledge of the study area.

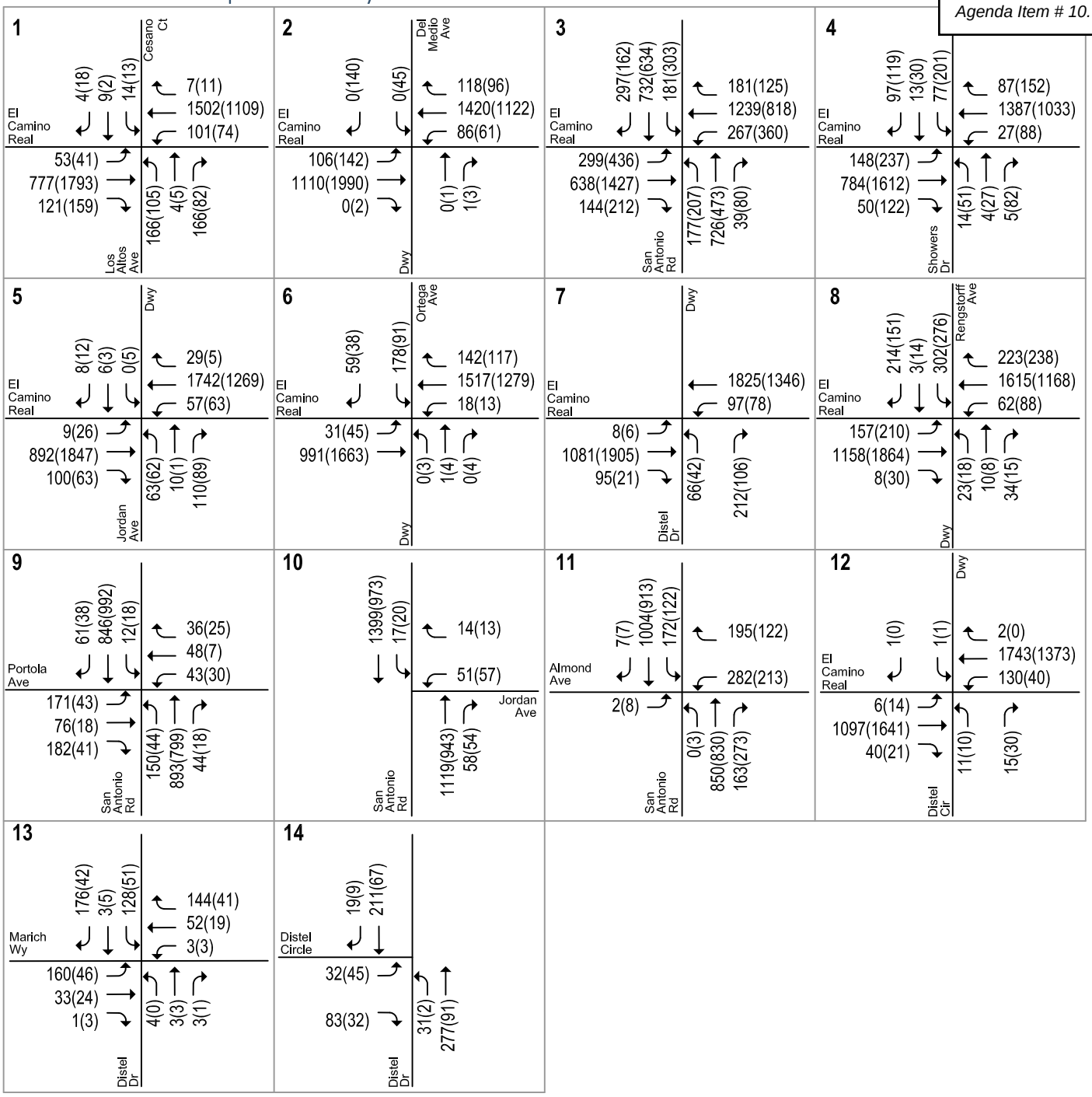
Cumulative plus project conditions were derived by adding to cumulative traffic volumes the traffic generated by the proposed project. The peak hour intersection traffic volumes under cumulative as well as cumulative plus project conditions are shown on Figure 12 and Figure 13, respectively. A tabular summary of traffic volumes at each study intersection is contained in Appendix C.



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

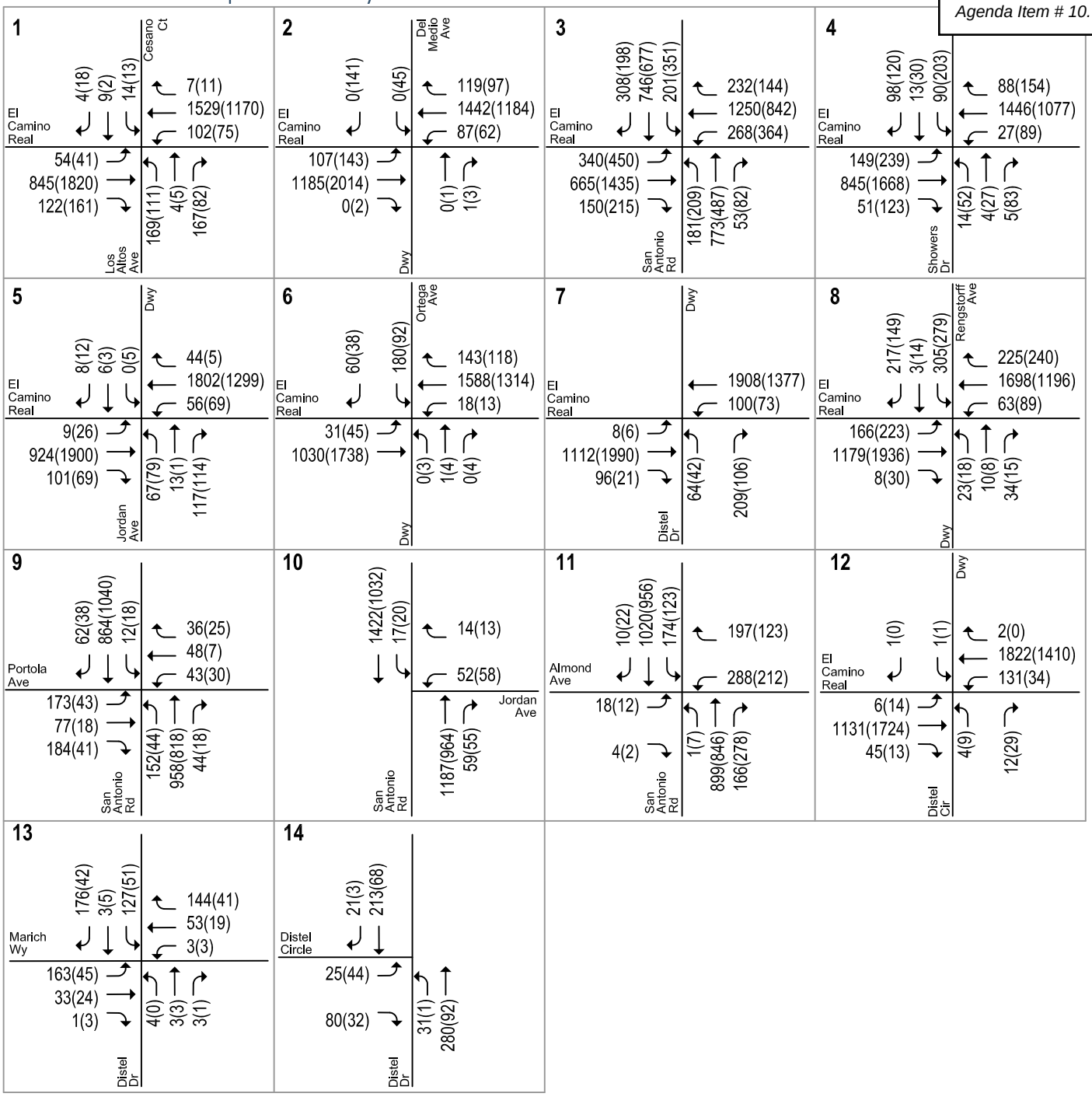
Figure 10
Near-Term Traffic Volumes



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 11
Near-Term Plus Project Traffic Volumes

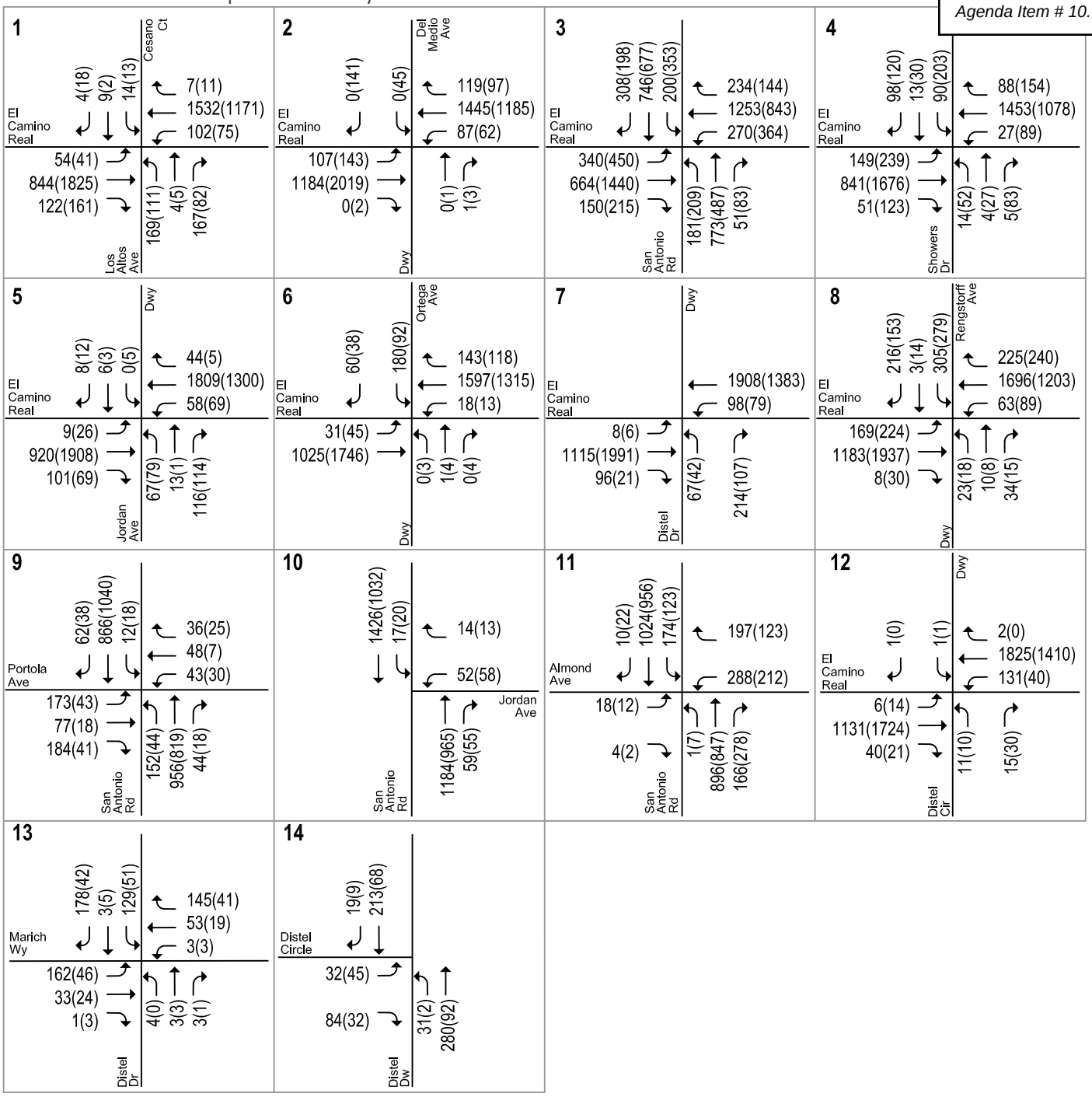


LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 12
Cumulative Traffic Volumes

NORTH
Not to Scale



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 13
Cumulative Plus Project Traffic Volumes

NORTH
Not to Scale

Future Intersection Levels of Service

Near-term Intersection Levels of Service

Table 6 shows that most study intersections would operate at an acceptable level of service during both AM and PM peak hours. The signalized intersection of Showers Drive and El Camino Real would operate at an unacceptable level of service during the PM peak hour. Two unsignalized study intersections (Distel Circle and El Camino Real, and San Antonio Road and Jordan Avenue) also are expected to continue to operate at a poor level of service.

The intersection level of service calculation sheets are included in Appendix D.

A signal warrant check (MUTCD 2010 Edition, Part 4, Warrant 3) was conducted for the unsignalized intersections that would operate unacceptably during at least one peak hour based on the peak-hour traffic warrant. The analysis shows that the signal warrant would not be met for either of these intersections. The signal warrant calculation sheets can be found in Appendix E.

Near-term Plus Project Intersection Levels of Service

The results of the intersection level of service analysis under near term plus project conditions are summarized in Table 6. Since the project would add trips to low-delay movements, there would be a decrease in overall average delay at some intersections.

The signalized intersection of Showers Drive and El Camino Real is expected to operate at an unacceptable level of service during the PM peak hour. The addition of project trips would not adversely affect traffic operations at the intersection because these trips would not increase the average delay at the intersection by more than four seconds.

The intersection levels of service calculation sheets are included in Appendix E.

Two unsignalized study intersections (Distel Circle and El Camino Real, and San Antonio Road and Jordan Avenue) also would continue to operate at a poor level of service under near-term plus project conditions. A signal warrant check (MUTCD 2010 Edition, Part 4, Warrant 3) based on the peak-hour traffic warrant was conducted for the unsignalized intersections that would operate unacceptably during at least one peak hour. The analysis shows that the signal warrant would not be met for either of these intersections under near-term plus project conditions. The signal warrant calculation sheets can be found in Appendix E.

Vehicles facing delay at Distel Circle and El Camino Real could instead access El Camino Real using the signalized intersection at Distel Drive and vehicles facing delay at Jordan Avenue and San Antonio Road could instead access San Antonio Road using the signalized intersection at Portola Avenue. Both signalized intersections would operate at acceptable level of service during both AM and PM peak hours under near-term plus project conditions. Thus, signalization is not recommended at these unsignalized intersections.

Table 6
Near-term Intersection Level of Service Summary

#	Intersection	Peak Hour	Intersection Control	LOS Standard	Near-Term Conditions					
					No Project		Project Conditions			
					Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Crit Delay (sec)	Incr. in Crit V/C
1	Los Altos Avenue & El Camino Real	AM	Signal	D	20.6	C	20.6	C	0.0	0.000
		PM			15.5	B	15.5	B	-0.3	-0.001
2	Del Medio Avenue & El Camino Real	AM	Signal	D	45.0	D	45.0	D	0.1	0.000
		PM			50.2	D	50.4	D	0.3	0.000
3	San Antonio Road & El Camino Real*	AM	Signal	E	63.5	E	63.6	E	0.1	0.000
		PM			63.3	E	63.5	E	0.4	0.001
4	Showers Drive & El Camino Real	AM	Signal	D	50.5	D	50.6	D	0.1	0.000
		PM			**55.0**	**E**	**55.2**	**E**	**0.3**	**0.000**
5	Jordan Avenue & El Camino Real	AM	Signal	D	19.2	B	19.2	B	0.0	0.005
		PM			35.6	D	35.8	D	0.2	0.000
6	Ortega Avenue & El Camino Real	AM	Signal	D	48.0	D	48.1	D	0.2	0.007
		PM			40.8	D	40.9	D	0.1	0.002
7	Distel Drive & El Camino Real	AM	Signal	D	28.6	C	28.8	C	0.2	0.004
		PM			38.3	D	38.3	D	0.1	0.002
8	Rengstorff Avenue & El Camino Real*	AM	Signal	E	51.6	D	51.6	D	0.3	-0.009
		PM			44.1	D	44.1	D	0.1	0.002
9	San Antonio Road & Portola Avenue	AM	Signal	D	19.8	B	19.8	B	0.0	0.002
		PM			10.3	B	10.3	B	0.0	0.000
10	San Antonio Road & Jordan Avenue	AM	TWSC	D	**>80**	**F**	**>80**	**F**	**-0.6**	**0.000**
		PM			**66.6**	**F**	**66.7**	**F**	**0.2**	**0.000**
11	San Antonio Road & Almond Avenue	AM	Signal	D	18.4	B	18.4	B	0.0	0.000
		PM			15.8	B	15.8	B	0.0	0.000
12	Distel Circle & El Camino Real	AM	TWSC	D	**>80**	**F**	**>80**	**F**	**1.7**	**0.180**
		PM			**>80**	**F**	**>80**	**F**	**11.5**	**0.050**
13	Distel Drive & Marich Way	AM	TWSC	D	18.7	C	18.8	C	0.1	0.000
		PM			10.6	B	10.6	B	0.0	0.000
14	Distel Circle & Distel Drive	AM	TWSC	D	13.5	B	13.6	B	0.1	0.020
		PM			9.7	A	9.8	A	0.0	0.000

Notes:

* Denotes CMP Intersection

TWSC - Two Way Stop Control

[1] Average delay is reported for signalized and worst movement delay is reported for stop-controlled intersections.

Bold indicates substandard level of service

Cumulative (2040) Intersection Levels of Service

The results of the intersection level of service analysis under cumulative conditions are summarized in Table 7. The following intersections are expected to operate unacceptably during at least one peak hour.

- Del Medio and El Camino Real (signalized) (PM peak hour)
- San Antonio Road and El Camino Real (signalized) (PM peak hour)
- Showers Drive and El Camino Real (signalized) (both peak hours)
- Ortega Avenue and El Camino Real (signalized) (AM peak hour)
- San Antonio Road & Jordan Avenue (unsignalized) (both peak hours)
- Distel Circle and El Camino Real (unsignalized) (both peak hours)

The intersection level of service calculation sheets are included in Appendix D.

A signal warrant check (MUTCD 2010 Edition, Part 4, Warrant 3) was conducted for the unsignalized intersections expected to operate unacceptably during at least one peak hour based on the peak-hour traffic warrant. The analysis shows that the signal warrant would not be met for any unsignalized study intersections. The signal warrant calculation sheets can be found in Appendix E.

Cumulative (2040) Plus Project Intersection Levels of Service

The results of the intersection level of service analysis under cumulative plus project conditions are summarized in Table 7. Since the project would add trips to low-delay movements, there would be a decrease in overall average delay at some intersections. The project would not cause an adverse effect at the study intersections during either peak hour as compared to cumulative conditions. The intersection level of service calculation sheets are included in Appendix D.

A signal warrant check (MUTCD 2010 Edition, Part 4, Warrant 3) based on the peak-hour traffic warrant was conducted for the unsignalized intersections expected to operate unacceptably during at least one peak hour. The analysis shows that the signal warrant would not be met for any unsignalized study intersections. The signal warrant calculation sheets can be found in Appendix E.

Vehicles facing delay at Distel Circle and El Camino Real could instead access El Camino Real using the signalized intersection at Distel Drive and vehicles facing delay at Jordan Avenue and San Antonio Road could instead access San Antonio Road using the signalized intersection at Portola Avenue. Both signalized intersections would operate at acceptable level of service during both AM and PM peak hours under cumulative plus project conditions. Thus, signalization is not recommended at these unsignalized study intersections.

Table 7
Cumulative Intersection Level of Service Summary

#	Intersection	Peak Hour	Intersection Control	LOS Standard	Cumulative Conditions					
					No Project		Project Conditions			
					Avg. Delay (sec)[1]	LOS	Avg. Delay (sec)[1]	LOS	Incr. in Avg. Crit Delay (sec)	Incr. in Crit V/C
1	Los Altos Avenue & El Camino Real	AM	Signal	D	23.4	C	23.4	C	0.0	0.000
		PM			19.3	B	19.3	B	0.0	0.000
2	Del Medio Avenue & El Camino Real	AM	Signal	D	52.5	D	52.6	D	0.2	0.000
		PM			**73.2**	**E**	**73.6**	**E**	**0.7**	**0.000**
3	San Antonio Road & El Camino Real*	AM	Signal	E	76.4	E	76.6	E	0.2	0.000
		PM			**>80**	**F**	**>80**	**F**	**0.8**	**0.002**
4	Showers Drive & El Camino Real	AM	Signal	D	**57.8**	**E**	**58.1**	**E**	**0.4**	**0.000**
		PM			**75.6**	**E**	**76.2**	**E**	**0.9**	**0.007**
5	Jordan Avenue & El Camino Real	AM	Signal	D	21.0	C	21.1	C	0.0	0.000
		PM			45.8	D	46.1	D	0.5	0.007
6	Ortega Avenue & El Camino Real	AM	Signal	D	**57.5**	**E**	**57.9**	**E**	**0.5**	**0.000**
		PM			48.5	D	48.7	D	-4.4	0.049
7	Distel Drive & El Camino Real	AM	Signal	D	31.3	C	31.5	C	0.3	0.002
		PM			50.5	D	50.6	D	0.1	0.001
8	Rengstorff Avenue & El Camino Real*	AM	Signal	E	65.9	E	65.8	E	-0.2	0.002
		PM			55.9	E	55.9	E	0.1	0.002
9	San Antonio Road & Portola Avenue	AM	Signal	D	32.5	C	32.5	C	0.1	0.000
		PM			11.0	B	11.0	B	0.0	0.000
10	San Antonio Road & Jordan Avenue	AM	TWSC	D	**>80**	**F**	**>80**	**F**	**-1.7**	**0.000**
		PM			**>80**	**F**	**>80**	**F**	**0.7**	**0.000**
11	San Antonio Road & Almond Avenue	AM	Signal	D	27.2	C	27.2	C	-0.1	0.000
		PM			20.2	C	20.2	C	0.0	0.000
12	Distel Circle & El Camino Real	AM	TWSC	D	**>80**	**F**	**>80**	**F**	**4.6**	**0.440**
		PM			**>80**	**F**	**>80**	**F**	**76.1**	**0.140**
13	Distel Drive & Marich Way	AM	TWSC	D	25.2	D	25.4	D	0.2	0.000
		PM			11.0	B	11.0	B	0.0	0.000
14	Distel Circle & Distel Drive	AM	TWSC	D	15.1	C	15.3	C	0.2	0.020
		PM			10.0	A	10.0	B	0.0	0.010

Notes:
* Denotes CMP Intersection
TWSC - Two Way Stop Control
[1] Average delay is reported for signalized and worst movement delay is reported for stop-controlled intersections.
Bold indicates substandard level of service

Queuing Analysis

For selected high-demand movements at the study intersections, the estimated maximum vehicle queues were compared to the existing or planned storage capacity. The queuing analysis is used to determine the appropriate storage lengths for the high-demand turn lanes where the proposed project would add a substantial number of trips to these movements. Vehicle queues were estimated using Vistro.

The basis of the analysis is as follows: (1) Vistro is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement.

The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur at 95 percent of the signal cycles. Or, a queue length longer than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time. The 95th percentile queue length is also known as the “design queue length”. Vehicle queuing for the peak hours was evaluated for the following turn movements:

- Westbound left-turn from El Camino Real onto Distel Circle
- Westbound left-turn from El Camino Real onto Distel Drive

Because vehicle queuing is considered an operational issue not subject to CEQA significance thresholds, the queuing analysis was conducted for existing and near-term conditions without and with the proposed project and not under cumulative conditions. The queuing analysis at each of the selected locations is discussed further below and summarized in Table 8.

Westbound Left Turn from El Camino Real onto Distel Circle

Under all scenarios, the westbound left-turn queue is projected to be less than the available storage capacity during the AM and PM peak hours.

Westbound Left Turn from El Camino Real onto Distel Drive

The queuing analysis indicates that during the AM peak hour, the 95th percentile vehicle queue for the westbound left-turn movement under existing conditions and near-term conditions exceeds the left-turn storage by one vehicle. The proposed residential use is expected to generate fewer inbound trips during the AM peak hour than the existing office building, resulting in a small decrease in the traffic volume at this movement. Therefore, because the project would not contribute to the existing queue storage deficiency during the AM peak hour, it would not be required to construct or fund any improvements at this intersection. The storage length is expected to be sufficient for the westbound left-turn movement under all scenarios during the PM peak hour.

Table 8
Queuing Analysis

	El Camino Real/Distel Circle WBLT		El Camino Real/Distel Drive WBLT	
	AM	PM	AM	PM
Existing				
Volume (vph)	130	34	93	68
95th% Queue (veh)[1]	2	1	7	4
95th% Queue (ft)[2]	50	25	175	100
Storage (ft)	200	200	150	150
Adequate (Y/N)	Y	Y	***N***	Y
Existing Plus Project				
Volume (vph)	130	40	91	74
95th% Queue (veh)[1]	2	1	7	4
95th% Queue (ft)[2]	50	25	175	100
Storage (ft)	200	200	150	150
Adequate (Y/N)	Y	Y	***N***	Y
Near-Term				
Volume (vph)	130	34	99	72
95th% Queue (veh)[1]	2	1	7	1
95th% Queue (ft)[2]	50	25	175	25
Storage (ft)	200	200	150	150
Adequate (Y/N)	Y	Y	***N***	Y
Near-Term Plus Project				
Volume (vph)	130	40	97	78
95th% Queue (veh)[1]	2	1	7	4
95th% Queue (ft)[2]	50	25	175	100
Storage (ft)	200	200	150	150
Adequate (Y/N)	Y	Y	***N***	Y

Notes:
WBLT = westbound left turn movement
[1] 95th percentile queue reported from Vistro.
[3] Assumes 25 feet per vehicle queued.

Site Access and Circulation

The site access and on-site circulation evaluation is based on the October 18, 2021 site plan prepared by ktgy Architecture + Planning. Site access was evaluated to determine the adequacy of the site's driveway with regard to the following: traffic volume, delays, vehicle queues, geometric design, and sight distance. On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles. The site plan for the project is shown on Figure 2.

Site Access

The site would be accessed by a two-way driveway leading to a parking garage. The site plan shows the driveway to be approximately 23 feet in width, which is an adequate width for a two-way driveway in accordance with the City of Los Altos Municipal Code (14.74.200).

Driveway Operations

The total traffic volume estimated to use the driveway is 32 trips (9 inbound and 23 outbound) in the AM peak hour and 41 trips (24 inbound and 17 outbound) in the PM peak hour (see Table 3). This is equivalent to one new trip every two minutes in the AM peak hour and one new trip every one to two minutes in the PM peak hour. Since the gross project trips at the driveway are minimal, the driveway is expected to operate acceptably during both peak hours under project conditions.

Sight Distance

The proposed driveway location was evaluated to determine if the sight distance at the driveway would be adequate. The project driveway should be free and clear of any obstructions to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent roadways. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers entering and exiting the site. Adequate sight distance reduces the likelihood of a collision at driveways and provides drivers with the ability to locate sufficient gaps in traffic to exit a driveway. Sight distance of a driveway is evaluated based on the stopping sight distance recommended by Caltrans for a given design speed.

The speed limit along Distel Circle near the project site is 25 mph. The Caltrans recommended stopping sight distance at this speed is 150 feet. This means that a driver must be able to see 150 feet down Distel Circle to locate a sufficient gap to turn out of the driveway. Distel Circle has a 90-degree bend approximately 160 feet south of the project driveway, bending east to connect to Distel Drive. The roadway curve will discourage vehicles from exceeding the speed limit in this section of Distel Circle and is far enough away from the project driveway such that it will not interfere with the required sight distance. However, on-street parking is currently permitted on both sides of the driveway, which could restrict the sight distance for traffic exiting the project site.

Recommendation: It is recommended that on-street parking be prohibited approximately 40 feet to the south and 35 feet to the north of the project driveway. This would provide adequate sight distance for exiting drivers at the driveway to see the oncoming traffic along Distel Circle. The project driveway should also be free and clear of any obstructions such as shrubs or other landscape features to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Distel Circle.

On-Site Circulation

On-site vehicle circulation was evaluated for the at-grade parking garage. The driveway would provide access to 33 90-degree two to three level mechanical stacker parking stalls as well as 7 surface parking spaces. The dimensions of the parking spaces would be a minimum of 9 feet wide and 18 feet

deep, meeting the City's required dimensions for 90-degree parking spaces. The drive aisle that provides access to the parking spaces is approximately 25 feet in width, which meets the City's standard.

The project proposes to provide 83 mechanical stacker parking spaces split between 33 two and three level stalls in the form of a mechanical lift system. There are a net total of 68 spaces in 24 3-level stalls along the west edge of the site and 15 spaces in 9 2-level stalls in the center of the site. Hexagon checked the turning paths for passenger vehicles to maneuver in and out of the various parking spaces, using an AASHTO passenger vehicle as the design vehicle. Figure 14 shows the turning maneuvers. The design vehicle would need to make multi-point turns to turn around completely to back into the parking space at the end of the garage. It is recommended that larger cars use the parking spaces towards the front of the garage instead of the back of the garage.

The height of the garage would be 14 feet. Based on the height of a large SUV, which is typically approximately 6.3 feet, the garage would be able to accommodate 2 SUVs on the two-level mechanical stacker.

Recommendation: The site plan does not provide the height of the pit for the three-level mechanical stacker. Minimum 7 feet deep parking pits should be provided to accommodate the height of a design vehicle.

Bicycle Storage

The bicycle storage room is located on the ground floor on the west side of the project site. Bicyclists could access the bicycle storage room via the garage or through the lobby/lounge.

Trash Enclosure

The site plan shows a trash room near the garage entry. Currently, the site plan does not show an access or egress point from the trash room.

Recommendation: The applicant should work with the City and Mission Trail Waste Systems to design a plan for waste collection service.

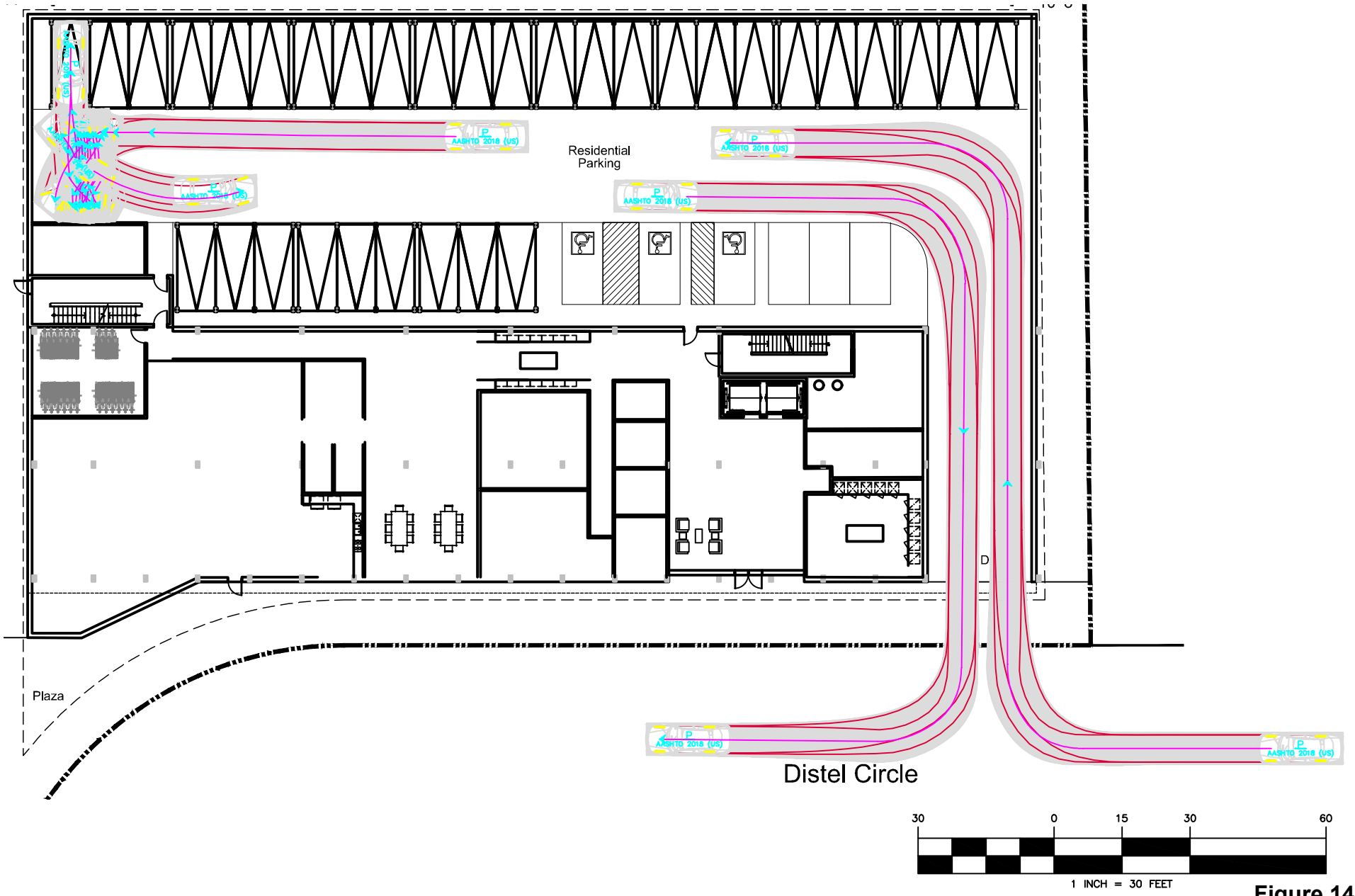


Figure 14
Vehicle Turning Template

N
Not to Scale

Pedestrian, Bicycle, and Transit Analysis

Pedestrian and Bicycle Access

Pedestrian facilities in the study area consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections (see Chapter 2 for details). Currently, the sidewalk in front of the project site is five feet wide. The project proposes to provide a new 14-foot wide sidewalk with curb and gutter replacement. The project frontage is also designed to be pedestrian friendly with landscaping and streetlighting. There is no need for new curb ramps or crosswalks along the project frontage.

The existing sidewalks and crosswalks provide adequate access to transit and nearby points of interest including restaurants and stores along El Camino Real.

There are some bicycle facilities in the immediate vicinity of the project site (see Chapter 2 for details). The project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities.

School Access

The Los Altos Complete Streets Master Plan identifies future transportation improvements that aim to prioritize walking, biking, and other travel modes. The master plan includes an update to the Bicycle and Pedestrian Transportation Plan and identifies bicycle and pedestrian facility improvements in the project's vicinity that would benefit future residents. Additionally, these improvements would also contribute to the Safe Routes to School Plan, which encourages students and parents to walk and bike to school.

Public schools that will serve the residents of the proposed development are Almond Elementary School, Egan Junior High School, and Los Altos High School. The City has released draft Walk n Roll maps for each school that services the Los Altos community. The Walk n Roll maps designate pedestrian and bicycle-friendly routes that students and parents can use to walk and bike to school. The project site is located near Distel Drive and Marich Way, which are both identified in numerous Walk n Roll maps. Walk n Roll maps for Almond Elementary School, Egan Junior High School, and Los Altos High School are included in Appendix F.

Almond Elementary School – Suggested walking and bicycling routes identified on the Walk n Roll Map for Almond Elementary School between the project site and the school are Distel Drive, Marich Way, Casita Way, Alicia Way, Jardin Drive, Solana Drive, Verano Avenue, and Clark Avenue. Sidewalks are absent along both sides of all these streets, except Jardin Drive, which has a sidewalk along one side of the street. Furthermore, none of these streets have any existing bicycle facilities except Jardin Avenue, which has a bike lane between Valencia Drive and Avalon Drive. The Los Altos Complete Streets Plan proposes a sidewalk/walkway along Alicia Way as well as bicycle routes along Distel Drive, Marich Way, Casita Way, Alicia Way and Solana Drive.

Egan Junior High School – Suggested walking and bicycling routes identified on the Walk n Roll Map for Egan Junior School between the project site and the school are Distel Drive, Marich Way, Jordan Avenue, and Portola Avenue. Sidewalks are absent along both sides of all these streets, except Portola Avenue, which has a sidewalk along one side of the street. Furthermore, none of these streets have any existing bicycle facilities. The Los Altos Complete Streets Plan proposes a sidewalk/walkway along Jordan Avenue between Marich Way and Portola Avenue, major maintenance and enhancement along Portola Avenue, and bicycle routes along Distel Drive, Marich Way, Jordan Avenue, and Portola Avenue.

Los Altos High School – Suggested walking and bicycling routes identified on the Walk n Roll Map for Los Altos High School between the project site and the school are Distel Drive, Marich Way, Panchita

Way, and Casita Way. Sidewalks are absent along both sides of all these streets. Furthermore, none of these streets have any existing bicycle facilities. The Los Altos Complete Streets Plan proposes bicycle routes along Distel Drive, Marich Way, Panchita Way, and Casita Way.

Transit Service

The site is well-served by bus transit as described in Chapter 2. There are two VTA bus lines (22 and 522) that serve the immediate project area and two Mountain View Go shuttles (Route C and D). The bus stops closest to the project site area at the El Camino Real/Distel Circle intersection that serves the VTA route 22 bus line and Mountain View Go C and D shuttles. The bus stop is shaded with a bench. The City of Mountain View's El Camino Real Streetscape Plan proposes to implement 'Bus Bulb' treatments at this bus stop. The 'Bus Bulb' treatment is proposed where the existing curb-to-curb distance and travel lane configuration provides sufficient space to allow for the curb and sidewalk to be extended or 'bulbed-out' by three feet. This allows the bus to pull over and merge into the bike lane, without entirely exiting the travel lane, which then allows the bus to merge back into the travel lane more easily. The additional walkway width that the bulb provides allows pedestrians to utilize a consistent eight-foot minimum walkway width despite the presence of additional VTA stop amenities as well as transit users waiting for the bus. Cyclists would need to stop behind buses that have pulled over, or merge into traffic to bypass or 'leapfrog over' the bus.

The project is expected to generate a small increase in transit demand, which could be accommodated by the available capacity of the bus service.

Parking Analysis

Vehicular Parking

Per state law, the proposed project is not subject to a minimum number of parking spaces. This parking analysis is conducted at the request of the city to determine whether on-street parking spaces are adequate, and whether shared parking agreements with adjacent properties would be feasible.

Parking Demand

Through empirical research, data have been collected that indicate the amount of parking demand that can be expected to be generated by many types of land uses. Parking demand rates from the Institute of Transportation Engineers (ITE) *Parking Generation Manual, 5th Edition* can be applied to predict the future parking demand resulting from a new development. The average peak parking demand rates for Affordable Housing (ITE Land Use 223) were applied to the project.

Based on the peak parking demand rates, it is estimated that 89 parking spaces are needed for the proposed project (see Table 9).

Table 9
Parking Demand for Project

Land Use	Size	Rate	Peak Parking Demand (Spaces)
Affordable Housing[1]			
Weekday (DU)	90 DU	0.99	89

Source: ITE Parking Generation Manual, 5th Edition
Notes:
[1] Rate of spaces per dwelling unit (DU) for Affordable Housing (Land Use Code 223).

The project proposes to provide 90 parking spaces on-site. Based on the estimated peak parking demand of 89 spaces, the parking provided on-site would be adequate.

Parking Supply

Parking occupancy counts were conducted in the vicinity of the proposed project to determine the supply and existing demand of on-street parking and nearby parking lots. The following areas (see Figure 15) were counted at 10:00 AM, 1:00 PM, and 12:00 AM on November 4, 2021.

Area 1: Entire Length of Distel Circle, west/south side

Area 2: Entire Length of Distel Circle, east/north side

Area 3: Palo Alto Medical Foundation Parking Lot (370 Distel Circle)

Area 4: Parking Lot at 325 Distel Circle

Area 5: Parking Area at 325 Distel Circle

The results of the parking occupancy counts are presented in Appendix G. Table 10 summarizes the peak parking demand of on-street parking spaces and nearby parking lots. Based on peak parking demand of the on-street parking, 87 surplus parking spaces are available on-street and at nearby parking lots during the day while over 200 spaces are available at night when residential parking demand is highest. Thus, there would be ample available parking along Distel Circle and withing the nearby surface parking lots to accommodate any overflow parking in excess of the on-site parking provided.

Table 10
Parking Supply

Area	No. of Spaces[1]	Occupied Spaces		
		10:00 AM	1:00 PM	12:00 AM
1	37	23	24	4
2	39	21	21	2
3	90	62	33	0
4	37	17	13	0
5	11	4	4	0
Total	**214**	**127**	**95**	**6**

Notes:
[1] Estimated number of spaces based on observations and counts of provided number of spaces.

Bicycle Parking

The Valley Transportation Authority (VTA) provides guidelines for bike parking in its publication Bike Technical Guidelines. Class I spaces are defined as spaces that protect the entire bike and its components from theft, such as in a secure designated room or a bike locker. Class II spaces provide an opportunity to secure at least one wheel and the frame using a lock, such as bike racks. For multi-family dwelling units, VTA recommends one Class I space per three dwelling units and one Class II space per 15 dwelling units. For the proposed project, this would equate to 30 Class I spaces and 6 Class II spaces. The project proposes 45 Class I spaces in the parking garage but does not propose any Class II spaces.

Recommendation: The project should add at least 6 Class II bicycle spaces.

Figure 15
Parking Occupancy Count Locations

Not to Scale

330 Distel Circle

Technical Appendices

Appendix A
VMT Analysis

Project Details

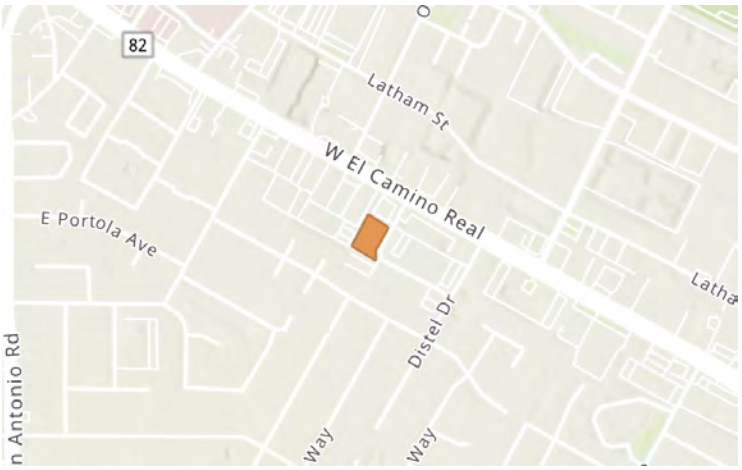
Timestamp of Analysis	July 14, 2022, 10:50:24 AM
Project Name	330 Distel Cir
Project Description	90 unit 100% affordable multi-family development project.

Project Location Map

Jurisdiction:

Los Altos

APN	TAZ
17004051	199



Analysis Details

Data Version	VTA Countywide Model December 2019
Analysis Methodology	TAZ
Baseline Year	2022

Project Land Use

Residential:

Single Family DU:

Multifamily DU:

Total DUs: 0

Non-Residential:

Office KSF:

Local Serving Retail KSF:

Industrial KSF:

Residential Affordability (percent of all units):

Extremely Low Income:	0 %
Very Low Income:	0 %
Low Income:	0 %

Parking:

Motor Vehicle Parking:

Bicycle Parking:

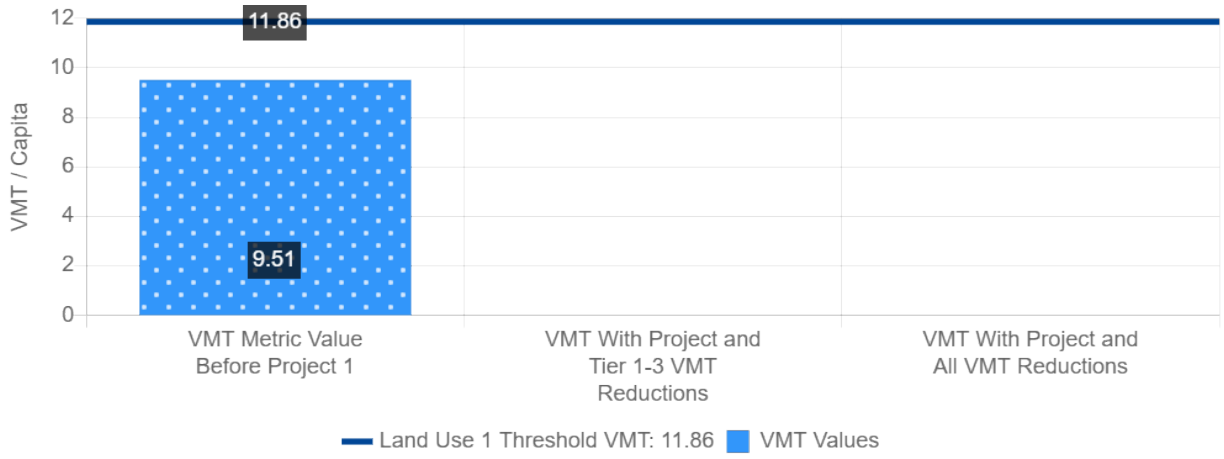
Proximity to Transit Screening

Inside a transit priority area? Yes (Pass)

Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Metric 1:	Home-based VMT per Capita
VMT Baseline Description 1:	Bay Area Regional Average
VMT Baseline Value 1:	13.95
VMT Threshold Description 1 / Threshold Value 1:	-15% / 11.86
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	9.51		
Low VMT Screening Analysis	Yes (Pass)		



Appendix B
Traffic Counts

Traffic Data Service

San Jose, CA
(408) 622-4787
tdsbay@cs.com

File Name : 25AM FINAL
Site Code : 00000025
Start Date : 10/10/2019
Page No : 1

Groups Printed- Vehicles

	EL CAMINO REAL Southbound					CESANO CT Westbound					EL CAMINO REAL Northbound					LOS ALTOS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	4	82	7	3	96	1	1	2	6	10	2	214	5	3	224	7	0	12	1	20	350
07:15 AM	5	105	7	0	117	2	0	1	3	6	8	306	8	1	323	6	0	7	2	15	461
07:30 AM	18	124	6	2	150	1	0	3	6	10	7	374	11	0	392	13	0	16	5	34	586
07:45 AM	31	138	12	10	191	1	2	2	4	9	3	366	28	5	402	21	0	30	5	56	658
Total	58	449	32	15	554	5	3	8	19	35	20	1260	52	9	1341	47	0	65	13	125	2055
08:00 AM	28	184	12	7	231	0	3	4	5	12	2	347	22	2	373	42	1	44	1	88	704
08:15 AM	37	200	11	11	259	2	4	5	3	14	1	335	41	1	378	42	1	45	1	89	740
08:30 AM	25	216	18	1	260	1	0	3	1	5	1	375	10	1	387	61	2	47	2	112	764
08:45 AM	20	204	8	2	234	1	0	5	5	11	1	334	7	1	343	28	0	20	0	48	636
Total	110	804	49	21	984	4	7	17	14	42	5	1391	80	5	1481	173	4	156	4	337	2844
Grand Total	168	1253	81	36	1538	9	10	25	33	77	25	2651	132	14	2822	220	4	221	17	462	4899
Apprch %	10.9	81.5	5.3	2.3		11.7	13	32.5	42.9		0.9	93.9	4.7	0.5		47.6	0.9	47.8	3.7		
Total %	3.4	25.6	1.7	0.7	31.4	0.2	0.2	0.5	0.7	1.6	0.5	54.1	2.7	0.3	57.6	4.5	0.1	4.5	0.3	9.4	

	EL CAMINO REAL Southbound				CESANO CT Westbound				EL CAMINO REAL Northbound				LOS ALTOS AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	31	138	12	181	1	2	2	5	**3**	366	28	**397**	21	0	30	51	634
08:00 AM	28	184	12	224	0	3	4	7	2	347	22	371	42	1	44	87	689
08:15 AM	**37**	200	11	248	**2**	**4**	**5**	**11**	1	335	**41**	377	42	1	45	88	724
08:30 AM	25	**216**	**18**	**259**	1	0	3	4	1	**375**	10	386	**61**	**2**	**47**	**110**	**759**
Total Volume	121	738	53	912	4	9	14	27	7	1423	101	1531	166	4	166	336	2806
% App. Total	13.3	80.9	5.8		14.8	33.3	51.9		0.5	92.9	6.6		49.4	1.2	49.4		
PHF	.818	.854	.736	.880	.500	.563	.700	.614	.583	.949	.616	.964	.680	.500	.883	.764	.924

Traffic Data Service

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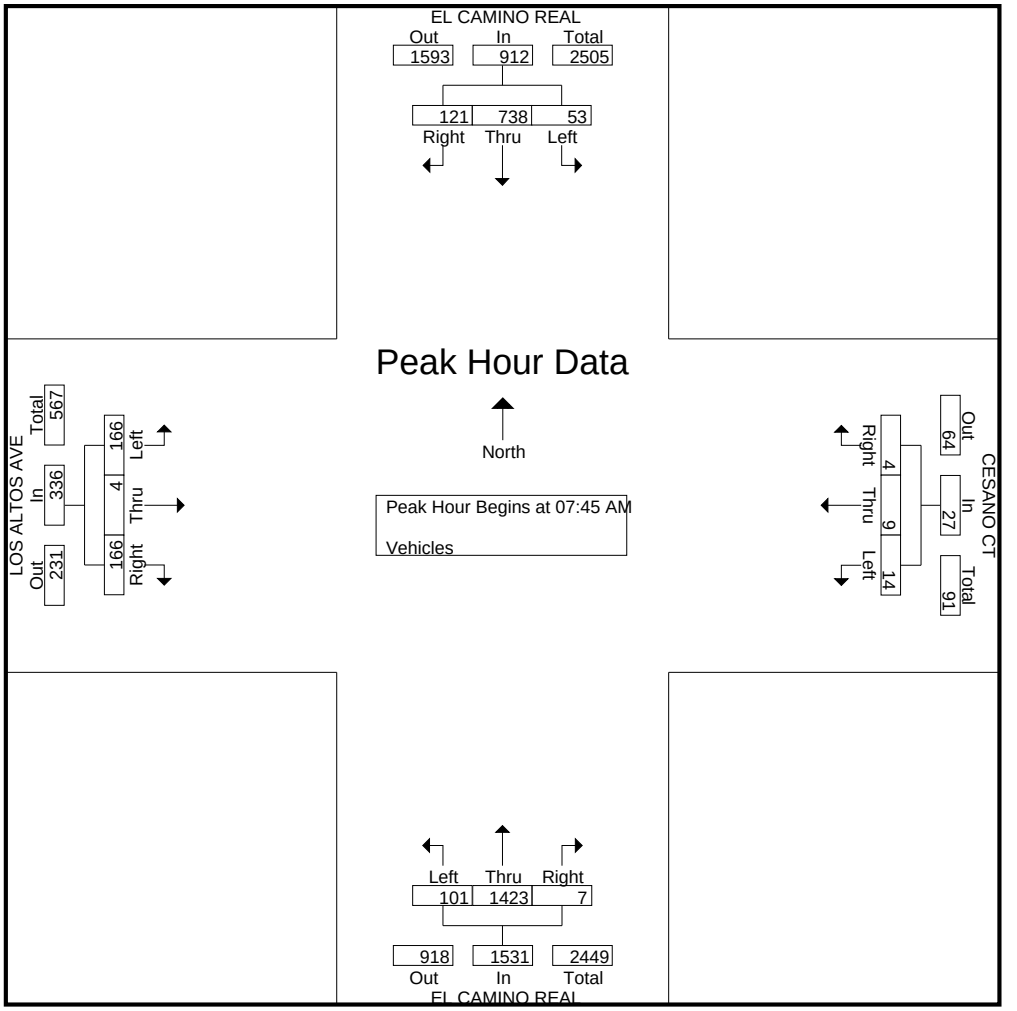
File Name : 25AM FINAL
Site Code : 00000025
Start Date : 10/10/2019
Page No : 2



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File Name : 25PM FINAL
Site Code : 00000025
Start Date : 10/10/2019
Page No : 1

Groups Printed- Vehicles

	EL CAMINO REAL Southbound					CESANO CT Westbound					EL CAMINO REAL Northbound					LOS ALTOS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
05:00 PM	44	450	7	3	504	1	0	2	2	5	2	270	17	1	290	11	0	35	8	54	853
05:15 PM	40	404	11	1	456	0	0	2	4	6	5	270	19	0	294	20	0	31	8	59	815
05:30 PM	43	405	12	0	460	5	2	3	3	13	3	267	25	2	297	17	2	26	3	48	818
05:45 PM	35	406	11	1	453	2	0	2	6	10	2	280	16	1	299	30	1	29	4	64	826
Total	162	1665	41	5	1873	8	2	9	15	34	12	1087	77	4	1180	78	3	121	23	225	3312
06:00 PM	43	440	10	4	497	6	0	4	3	13	3	273	11	2	289	17	1	28	3	49	848
06:15 PM	38	458	8	1	505	5	0	4	8	17	3	242	22	3	270	18	1	22	4	45	837
06:30 PM	27	407	11	1	446	2	0	4	6	12	0	209	14	14	237	17	0	21	15	53	748
06:45 PM	29	330	9	5	373	1	0	0	3	4	3	233	15	9	260	14	0	29	14	57	694
Total	137	1635	38	11	1821	14	0	12	20	46	9	957	62	28	1056	66	2	100	36	204	3127
Grand Total	299	3300	79	16	3694	22	2	21	35	80	21	2044	139	32	2236	144	5	221	59	429	6439
Apprch %	8.1	89.3	2.1	0.4		27.5	2.5	26.2	43.8		0.9	91.4	6.2	1.4		33.6	1.2	51.5	13.8		
Total %	4.6	51.3	1.2	0.2	57.4	0.3	0	0.3	0.5	1.2	0.3	31.7	2.2	0.5	34.7	2.2	0.1	3.4	0.9	6.7	

	EL CAMINO REAL Southbound				CESANO CT Westbound				EL CAMINO REAL Northbound				LOS ALTOS AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:30 PM																	
05:30 PM	**43**	405	**12**	460	5	**2**	3	**10**	**3**	267	**25**	295	17	**2**	26	45	810
05:45 PM	35	406	11	452	2	0	2	4	2	**280**	16	**298**	**30**	1	**29**	**60**	814
06:00 PM	43	440	10	493	**6**	0	**4**	10	3	273	11	287	17	1	28	46	**836**
06:15 PM	38	**458**	8	**504**	5	0	4	9	3	242	22	267	18	1	22	41	821
Total Volume	159	1709	41	1909	18	2	13	33	11	1062	74	1147	82	5	105	192	3281
% App. Total	8.3	89.5	2.1		54.5	6.1	39.4		1	92.6	6.5		42.7	2.6	54.7		
PHF	.924	.933	.854	.947	.750	.250	.813	.825	.917	.948	.740	.962	.683	.625	.905	.800	.981

Traffic Data Service

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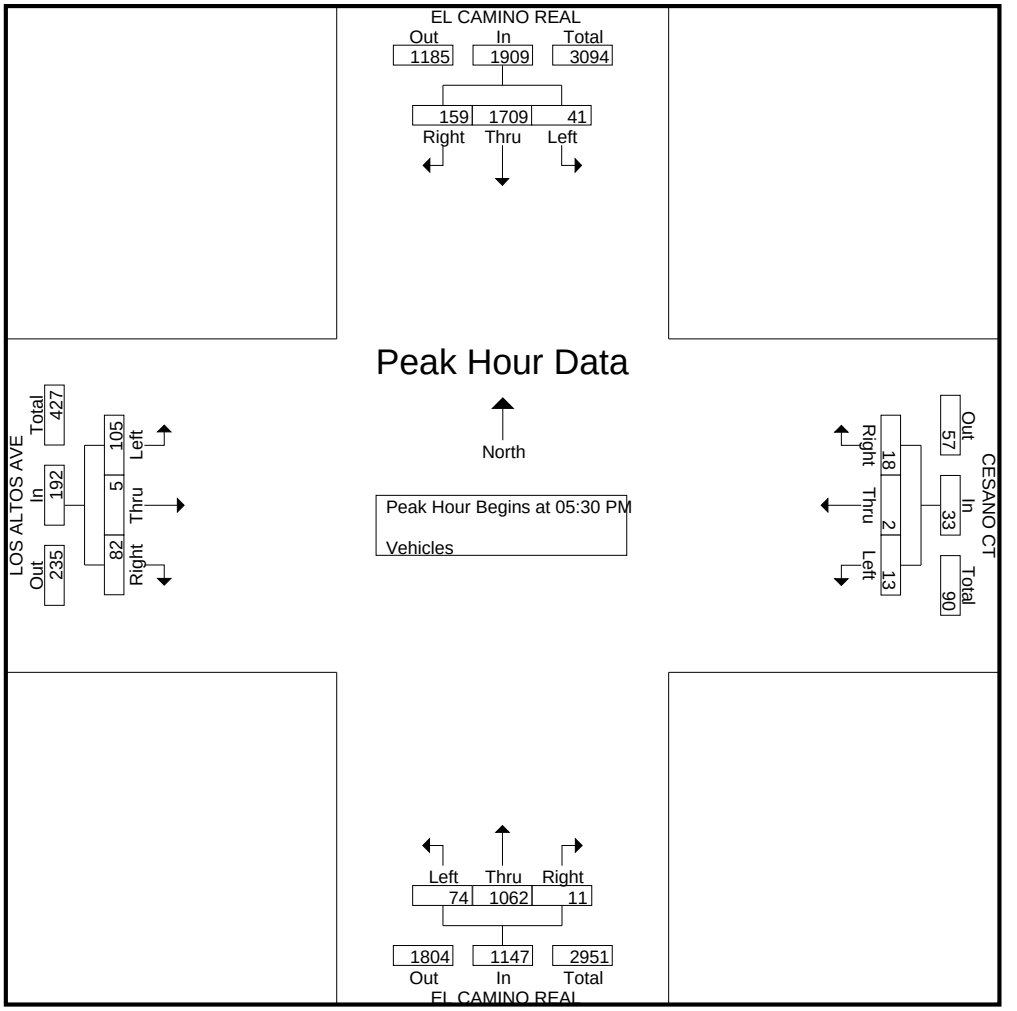
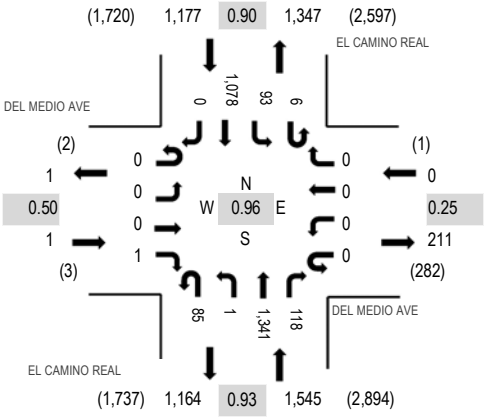
File Name : 25PM FINAL
Site Code : 00000025
Start Date : 10/10/2019
Page No : 2



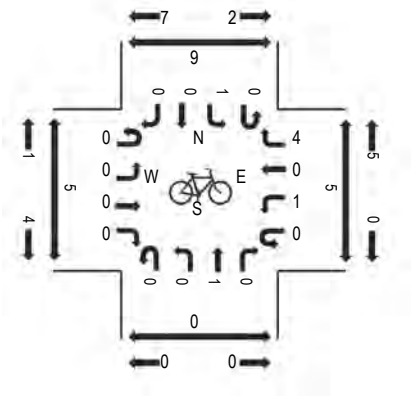
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 2 EL CAMINO REAL & DEL MEDIO AVE AM
Date: Wednesday, May 29, 2019
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

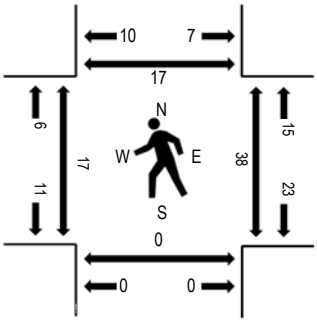
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DEL MEDIO AVE Eastbound				DEL MEDIO AVE Westbound				EL CAMINO REAL Northbound				EL CAMINO REAL Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	1	0	0	0	0	16	0	227	11	1	5	86	1	348	1,895	8	10	0	5
7:15 AM	0	0	0	0	0	0	0	0	13	0	296	7	2	6	96	0	420	2,179	2	3	0	1
7:30 AM	0	0	0	0	0	0	0	0	16	0	388	13	2	7	155	0	581	2,471	3	9	0	0
7:45 AM	0	1	0	0	0	1	0	0	17	0	330	15	3	7	172	0	546	2,582	6	13	0	4
8:00 AM	0	0	0	0	0	0	0	0	23	1	345	23	2	15	223	0	632	2,723	5	21	0	8
8:15 AM	0	0	0	0	0	0	0	0	25	0	339	21	0	26	301	0	712		1	10	0	2
8:30 AM	0	0	0	0	0	0	0	0	14	0	331	32	1	33	281	0	692		3	5	0	2
8:45 AM	0	0	0	1	0	0	0	0	23	0	326	42	3	19	273	0	687		8	2	0	5

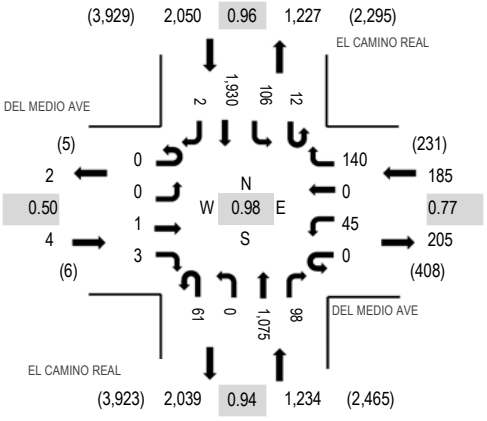
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0	12
Lights	0	0	0	1	0	0	0	0	85	1	1,302	97	6	92	1,036	0	2,620
Mediums	0	0	0	0	0	0	0	0	0	0	34	21	0	1	35	0	91
Total	0	0	0	1	0	0	0	0	85	1	1,341	118	6	93	1,078	0	2,723

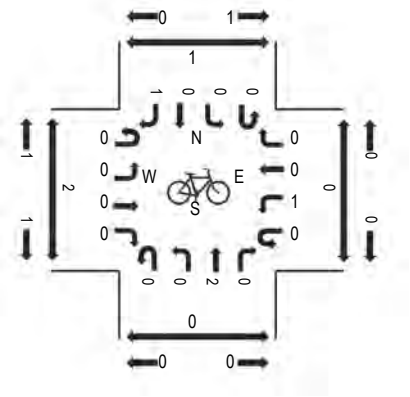
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 2 EL CAMINO REAL & DEL MEDIO AVE PM
Date: Wednesday, May 29, 2019
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

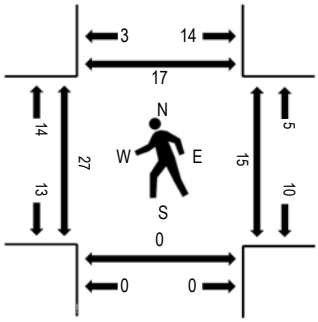
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DEL MEDIO AVE Eastbound				DEL MEDIO AVE Westbound				EL CAMINO REAL Northbound				EL CAMINO REAL Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	0	0	0	20	0	237	27	1	26	402	0	713	3,158	6	5	0	2
4:15 PM	0	0	0	0	0	0	0	0	24	1	263	33	2	26	423	0	772	3,316	8	10	0	8
4:30 PM	0	1	0	0	0	1	0	10	16	1	290	31	1	10	486	0	847	3,410	10	6	0	7
4:45 PM	0	0	0	1	0	13	0	22	24	0	241	23	0	27	474	1	826	3,409	8	2	0	3
5:00 PM	0	0	0	0	0	10	0	26	15	0	270	25	2	33	490	0	871	3,473	10	6	0	8
5:15 PM	0	0	0	0	0	15	0	45	12	0	299	19	3	19	454	0	866		2	3	0	1
5:30 PM	0	0	1	1	0	5	0	31	11	0	263	21	4	38	470	1	846		8	4	0	3
5:45 PM	0	0	0	2	0	15	0	38	23	0	243	33	3	16	516	1	890		7	2	0	5

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
Lights	0	0	1	3	0	45	0	138	61	0	1,052	97	12	104	1,911	2	3,426
Mediums	0	0	0	0	0	0	0	2	0	0	20	1	0	2	19	0	44
Total	0	0	1	3	0	45	0	140	61	0	1,075	98	12	106	1,930	2	3,473

Traffic Data Service

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File Name : 26AM FINAL
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Groups Printed- Vehicles

	EL CAMINO REAL Southbound					SAN ANTONIO RD Westbound					EL CAMINO REAL Northbound					N SAN ANTONIO RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	14	65	25	2	106	27	60	18	1	106	41	184	26	2	253	5	91	18	0	114	579
07:15 AM	11	84	29	2	126	51	107	28	4	190	40	248	40	2	330	5	108	24	2	139	785
07:30 AM	17	97	44	12	170	65	140	35	6	246	33	306	58	8	405	8	143	34	1	186	1007
07:45 AM	22	132	43	10	207	74	199	48	8	329	45	305	64	14	428	7	195	40	0	242	1206
Total	64	378	141	26	609	217	506	129	19	871	159	1043	188	26	1416	25	537	116	3	681	3577
08:00 AM	38	147	71	9	265	76	198	48	12	334	44	291	72	11	418	8	182	38	0	228	1245
08:15 AM	44	170	86	5	305	68	193	45	7	313	39	281	68	10	398	7	189	51	0	247	1263
08:30 AM	40	157	99	2	298	58	122	41	4	225	51	303	57	7	418	19	152	49	2	222	1163
08:45 AM	40	159	73	7	279	54	119	52	13	238	37	277	48	4	366	14	149	34	2	199	1082
Total	162	633	329	23	1147	256	632	186	36	1110	171	1152	245	32	1600	48	672	172	4	896	4753
Grand Total	226	1011	470	49	1756	473	1138	315	55	1981	330	2195	433	58	3016	73	1209	288	7	1577	8330
Apprch %	12.9	57.6	26.8	2.8		23.9	57.4	15.9	2.8		10.9	72.8	14.4	1.9		4.6	76.7	18.3	0.4		
Total %	2.7	12.1	5.6	0.6	21.1	5.7	13.7	3.8	0.7	23.8	4	26.4	5.2	0.7	36.2	0.9	14.5	3.5	0.1	18.9	

	EL CAMINO REAL Southbound				SAN ANTONIO RD Westbound				EL CAMINO REAL Northbound				N SAN ANTONIO RD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	22	132	43	197	74	**199**	**48**	321	45	**305**	64	**414**	7	**195**	40	242	1174
08:00 AM	38	147	71	256	**76**	198	48	**322**	44	291	**72**	407	8	182	38	228	1213
08:15 AM	**44**	**170**	86	**300**	68	193	45	306	39	281	68	388	7	189	**51**	**247**	**1241**
08:30 AM	40	157	**99**	296	58	122	41	221	**51**	303	57	411	**19**	152	49	220	1148
Total Volume	144	606	299	1049	276	712	182	1170	179	1180	261	1620	41	718	178	937	4776
% App. Total	13.7	57.8	28.5		23.6	60.9	15.6		11	72.8	16.1		4.4	76.6	19		
PHF	.818	.891	.755	.874	.908	.894	.948	.908	.877	.967	.906	.978	.539	.921	.873	.948	.962

Traffic Data Service

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File Name : 26AM FINAL
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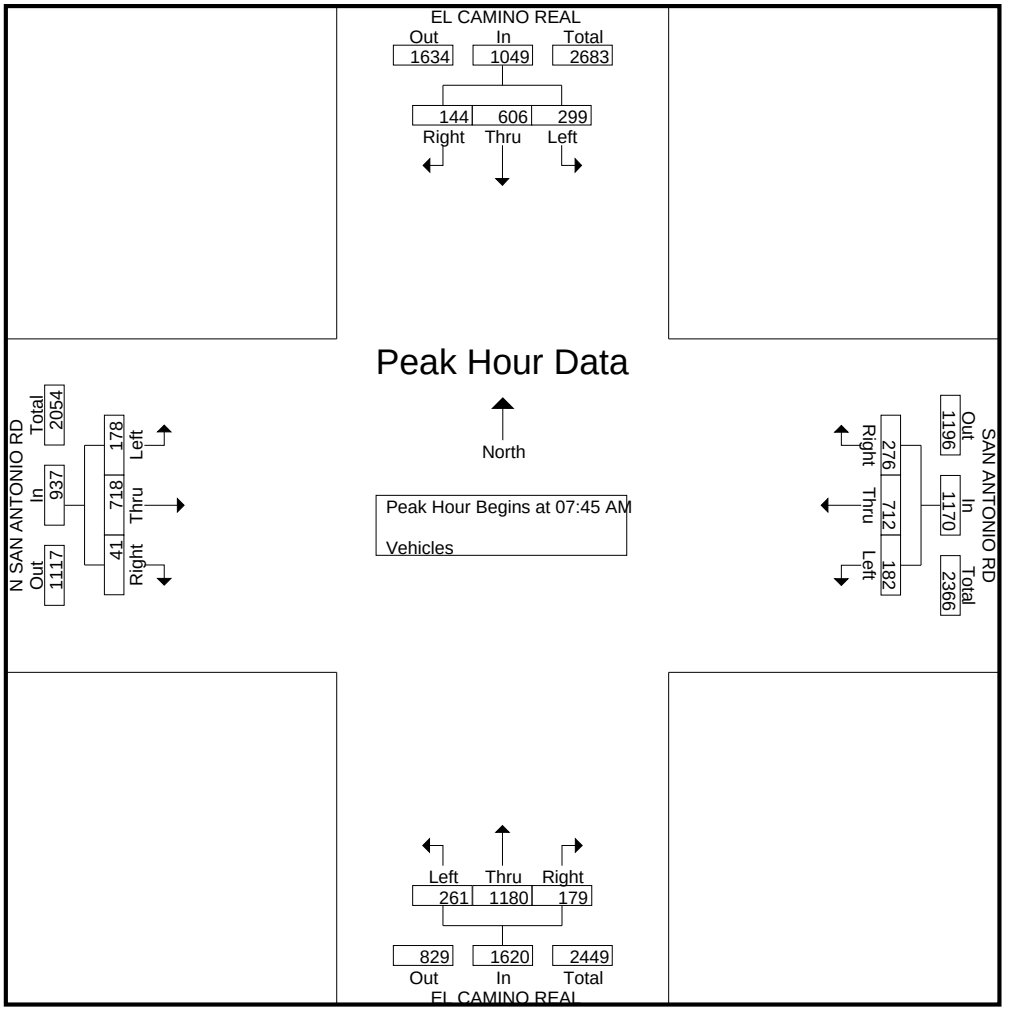

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File Name : 26PM FINAL
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Groups Printed- Vehicles

	EL CAMINO REAL Southbound					SAN ANTONIO RD Westbound					EL CAMINO REAL Northbound					N SAN ANTONIO RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
05:00 PM	43	385	105	4	537	37	156	79	7	279	32	199	93	10	334	17	105	58	1	181	1331
05:15 PM	47	317	99	8	471	44	144	80	9	277	32	197	93	12	334	21	122	55	2	200	1282
05:30 PM	60	350	98	10	518	32	155	83	14	284	28	205	86	5	324	27	113	51	1	192	1318
05:45 PM	62	315	134	8	519	34	164	59	11	268	33	185	87	18	323	21	109	43	0	173	1283
Total	212	1367	436	30	2045	147	619	301	41	1108	125	786	359	45	1315	86	449	207	4	746	5214
06:00 PM	49	313	87	8	457	42	196	91	9	338	36	202	78	21	337	23	115	60	3	201	1333
06:15 PM	46	367	94	11	518	29	155	85	12	281	39	183	60	14	296	12	107	38	0	157	1252
06:30 PM	42	307	84	11	444	25	136	69	16	246	34	182	87	20	323	6	107	29	0	142	1155
06:45 PM	36	259	75	10	380	30	142	77	25	274	32	189	95	20	336	21	88	35	2	146	1136
Total	173	1246	340	40	1799	126	629	322	62	1139	141	756	320	75	1292	62	417	162	5	646	4876
Grand Total	385	2613	776	70	3844	273	1248	623	103	2247	266	1542	679	120	2607	148	866	369	9	1392	10090
Apprch %	10	68	20.2	1.8		12.1	55.5	27.7	4.6		10.2	59.1	26	4.6		10.6	62.2	26.5	0.6		
Total %	3.8	25.9	7.7	0.7	38.1	2.7	12.4	6.2	1	22.3	2.6	15.3	6.7	1.2	25.8	1.5	8.6	3.7	0.1	13.8	

	EL CAMINO REAL Southbound				SAN ANTONIO RD Westbound				EL CAMINO REAL Northbound				N SAN ANTONIO RD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	43	**385**	105	**533**	37	156	79	**272**	32	199	**93**	**324**	17	105	**58**	180	**1309**
05:15 PM	47	317	99	463	**44**	144	80	268	32	197	93	322	21	**122**	55	**198**	1251
05:30 PM	60	350	98	508	32	155	**83**	270	28	**205**	86	319	**27**	113	51	191	1288
05:45 PM	**62**	315	**134**	511	34	**164**	59	257	**33**	185	87	305	21	109	43	173	1246
Total Volume	212	1367	436	2015	147	619	301	1067	125	786	359	1270	86	449	207	742	5094
% App. Total	10.5	67.8	21.6		13.8	58	28.2		9.8	61.9	28.3		11.6	60.5	27.9		
PHF	.855	.888	.813	.945	.835	.944	.907	.981	.947	.959	.965	.980	.796	.920	.892	.937	.973

Traffic Data Service

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File Name : 26PM FINAL
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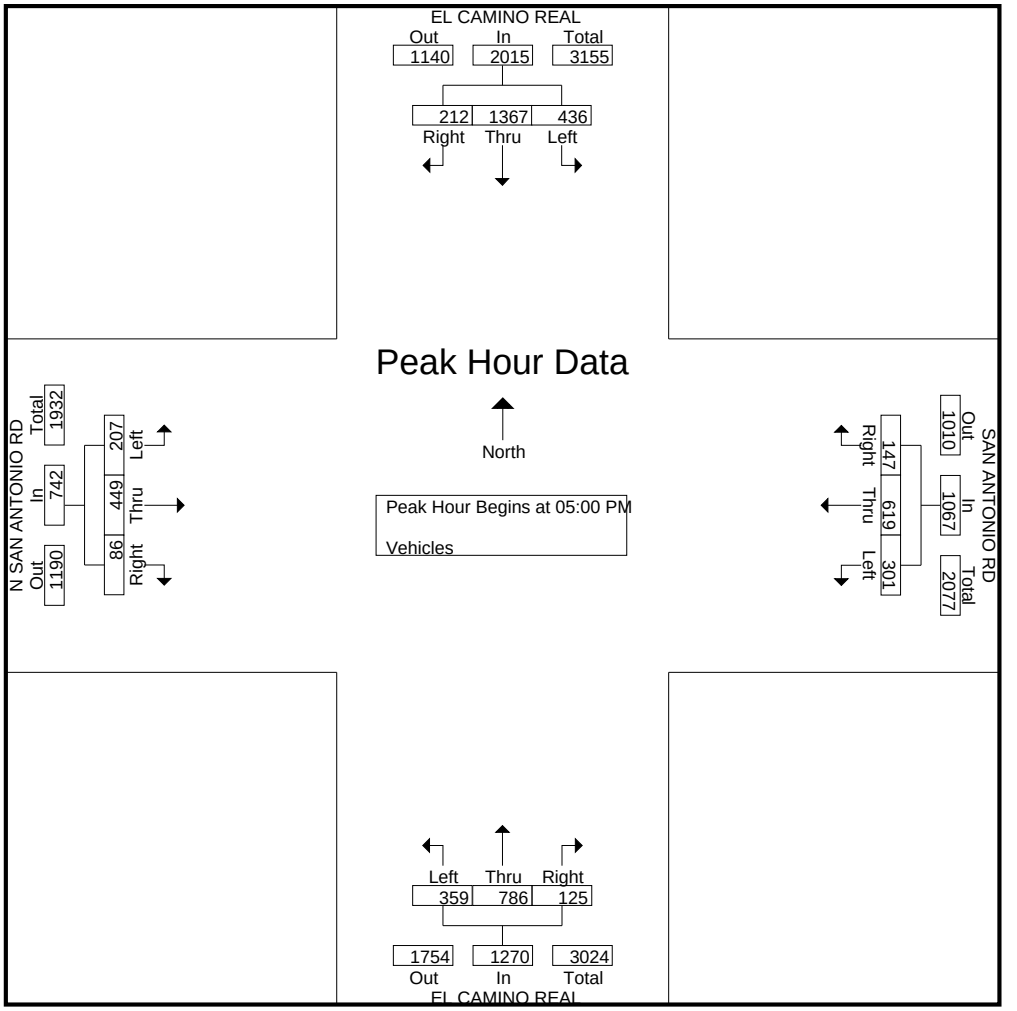
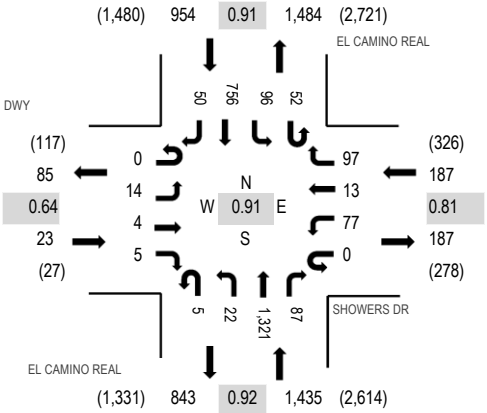


All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

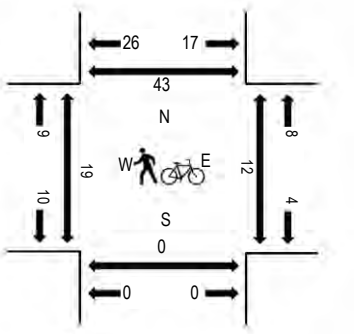
Location: 1 EL CAMINO REAL & SHOWERS DR AM
Date and Start Time: Thursday, April 12, 2018
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	DWY Eastbound				SHOWERS DR Westbound				EL CAMINO REAL Northbound				EL CAMINO REAL Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	2	0	9	1	15	0	2	192	15	12	4	86	1	339	1,848	0	2	0	0
7:15 AM	0	0	0	0	0	8	1	22	1	3	249	7	6	13	93	3	406	2,058	7	2	0	3
7:30 AM	0	0	0	0	0	15	3	28	1	3	362	12	10	9	110	1	554	2,299	4	2	0	3
7:45 AM	0	1	1	0	0	14	3	20	1	5	311	15	9	15	148	6	549	2,437	0	5	0	2
8:00 AM	0	0	0	0	0	15	2	22	2	2	286	14	9	20	165	12	549	2,599	5	2	0	3
8:15 AM	0	4	1	2	0	22	4	20	1	3	337	19	16	28	179	11	647		10	4	0	13
8:30 AM	0	5	0	2	0	17	2	25	0	7	346	27	12	23	216	10	692		2	1	0	13
8:45 AM	0	5	3	1	0	23	5	30	2	10	352	27	15	25	196	17	711		2	4	0	9

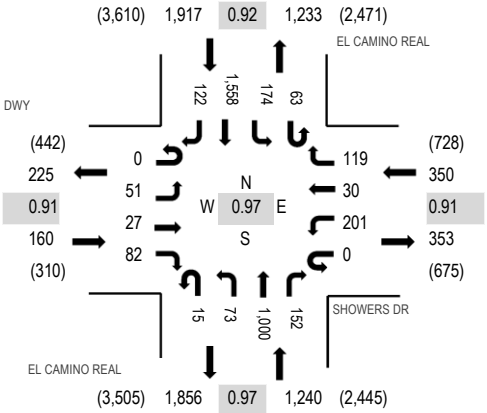
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	2	0	1	0	1	6	0	0	0	3	0	13
Lights	0	14	4	5	0	74	12	87	4	20	1,284	85	51	94	727	48	2,509
Mediums	0	0	0	0	0	1	1	9	1	1	31	2	1	2	26	2	77
Total	0	14	4	5	0	77	13	97	5	22	1,321	87	52	96	756	50	2,599

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

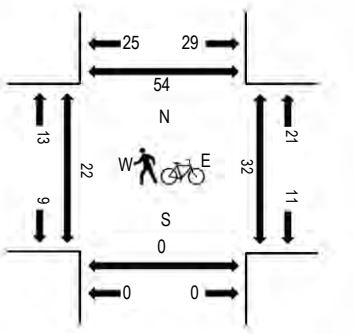
Location: 1 EL CAMINO REAL & SHOWERS DR PM
Date and Start Time: Thursday, April 12, 2018
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	DWY Eastbound				SHOWERS DR Westbound				EL CAMINO REAL Northbound				EL CAMINO REAL Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	12	5	10	0	58	9	29	2	15	235	39	22	35	340	16	827	3,475	2	7	0	4
4:15 PM	0	15	3	16	0	49	7	31	3	17	232	32	18	37	340	30	830	3,592	3	2	0	11
4:30 PM	0	11	8	18	0	40	7	29	6	18	251	38	13	47	423	39	948	3,667	3	9	0	14
4:45 PM	0	9	8	23	0	44	11	28	4	18	239	31	15	35	380	25	870	3,603	5	5	0	8
5:00 PM	0	16	6	20	0	60	7	34	4	16	268	38	19	49	384	23	944	3,618	10	10	0	10
5:15 PM	0	15	5	21	0	57	5	28	1	21	242	45	16	43	371	35	905		3	6	0	17
5:30 PM	0	18	6	23	0	55	4	30	4	22	234	48	22	45	337	36	884		1	10	0	8
5:45 PM	0	16	3	23	0	63	8	35	1	17	266	38	23	31	325	36	885		7	5	0	8

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	2	0	0	0	6	0	8
Lights	0	51	27	82	0	197	30	111	15	73	986	152	63	170	1,529	122	3,608
Mediums	0	0	0	0	0	4	0	8	0	0	12	0	0	4	23	0	51
Total	0	51	27	82	0	201	30	119	15	73	1,000	152	63	174	1,558	122	3,667

Traffic Data Service

San Jose, CA
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Groups Printed- Vehicles

	EL CAMINO REAL Southbound					DRIVEWAY Westbound					EL CAMINO REAL Northbound					JORDAN AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	4	79	0	2	85	0	0	0	0	0	2	266	8	0	276	9	0	0	5	14	375
07:15 AM	12	110	1	1	124	0	1	0	0	1	6	316	6	1	329	11	1	7	8	27	481
07:30 AM	18	119	2	2	141	1	2	0	3	6	4	399	11	2	416	12	1	5	3	21	584
07:45 AM	37	165	4	10	216	1	2	0	1	4	7	412	19	0	438	29	3	13	4	49	707
Total	71	473	7	15	566	2	5	0	4	11	19	1393	44	3	1459	61	5	25	20	111	2147
08:00 AM	22	215	2	1	240	2	2	0	2	6	3	412	14	4	433	24	4	20	2	50	729
08:15 AM	23	223	2	1	249	5	1	0	2	8	6	419	13	0	438	35	1	15	0	51	746
08:30 AM	17	256	1	1	275	0	1	0	0	1	13	443	8	4	468	21	2	12	5	40	784
08:45 AM	9	207	7	3	226	0	2	0	3	5	5	419	10	1	435	18	4	8	4	34	700
Total	71	901	12	6	990	7	6	0	7	20	27	1693	45	9	1774	98	11	55	11	175	2959
Grand Total	142	1374	19	21	1556	9	11	0	11	31	46	3086	89	12	3233	159	16	80	31	286	5106
Apprch %	9.1	88.3	1.2	1.3		29	35.5	0	35.5		1.4	95.5	2.8	0.4		55.6	5.6	28	10.8		
Total %	2.8	26.9	0.4	0.4	30.5	0.2	0.2	0	0.2	0.6	0.9	60.4	1.7	0.2	63.3	3.1	0.3	1.6	0.6	5.6	

	EL CAMINO REAL Southbound				DRIVEWAY Westbound				EL CAMINO REAL Northbound				JORDAN AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**37**	165	**4**	206	1	**2**	0	3	7	412	**19**	438	29	3	13	45	692
08:00 AM	22	215	2	239	2	2	0	4	3	412	14	429	24	**4**	**20**	48	720
08:15 AM	23	223	2	248	**5**	1	0	**6**	6	419	13	438	**35**	1	15	**51**	743
08:30 AM	17	**256**	1	**274**	0	1	0	1	**13**	**443**	8	**464**	21	2	12	35	**774**
Total Volume	99	859	9	967	8	6	0	14	29	1686	54	1769	109	10	60	179	2929
% App. Total	10.2	88.8	0.9		57.1	42.9	0		1.6	95.3	3.1		60.9	5.6	33.5		
PHF	.669	.839	.563	.882	.400	.750	.000	.583	.558	.951	.711	.953	.779	.625	.750	.877	.946

Traffic Data Service

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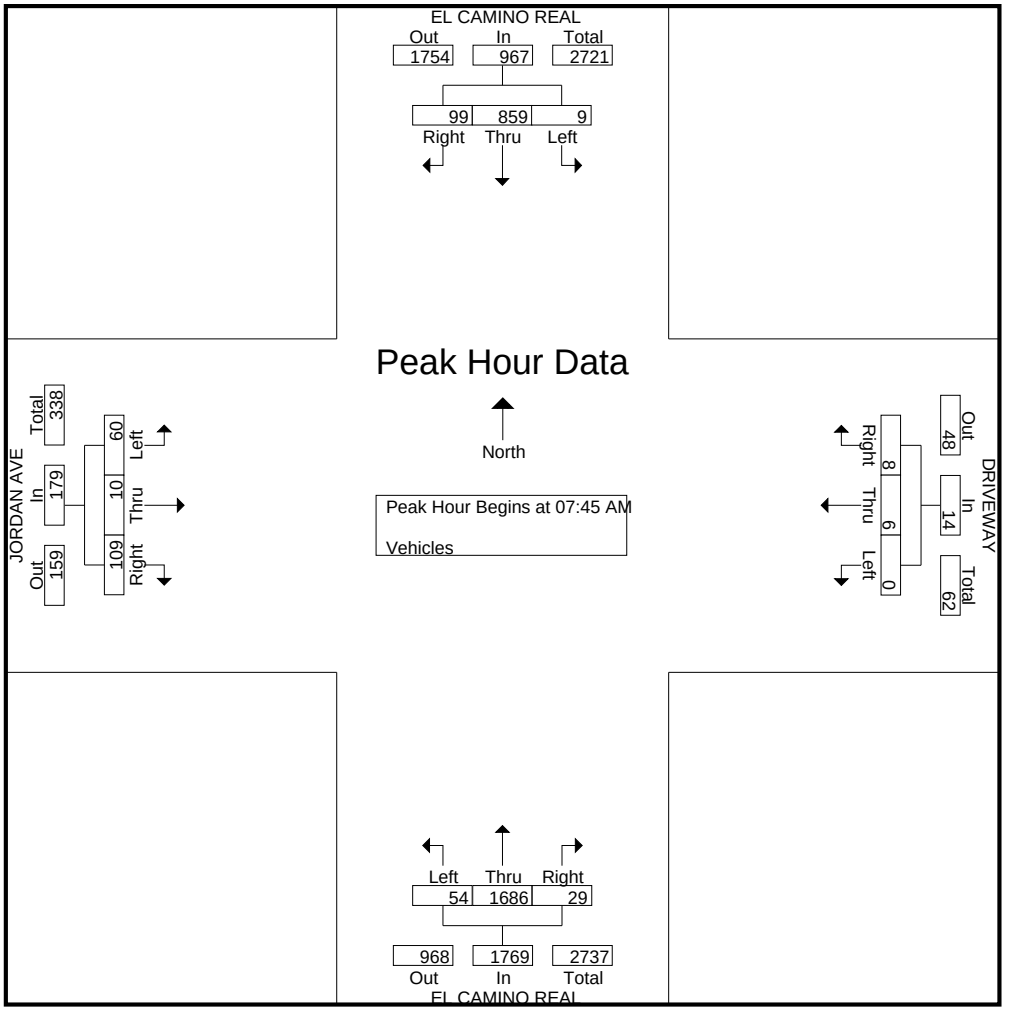

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File Name : 28PM FINAL
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Groups Printed- Vehicles

	EL CAMINO REAL Southbound					DRIVEWAY Westbound					EL CAMINO REAL Northbound					JORDAN AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
05:00 PM	16	431	7	1	455	5	1	3	1	10	2	318	14	1	335	15	0	16	5	36	836
05:15 PM	18	409	4	2	433	2	2	2	5	11	1	333	12	0	346	26	1	18	3	48	838
05:30 PM	25	479	7	0	511	2	0	0	6	8	0	291	17	1	309	16	0	17	9	42	870
05:45 PM	16	471	8	2	497	3	0	0	7	10	2	295	21	0	318	34	0	12	1	47	872
Total	75	1790	26	5	1896	12	3	5	19	39	5	1237	64	2	1308	91	1	63	18	173	3416
06:00 PM	30	407	6	0	443	2	1	1	7	11	0	301	21	0	322	24	0	13	6	43	819
06:15 PM	14	418	3	1	436	1	0	2	6	9	0	319	15	1	335	32	0	13	5	50	830
06:30 PM	8	438	5	1	452	1	0	0	14	15	0	281	19	3	303	9	0	11	4	24	794
06:45 PM	14	341	4	1	360	1	0	0	4	5	0	252	17	0	269	20	0	12	6	38	672
Total	66	1604	18	3	1691	5	1	3	31	40	0	1153	72	4	1229	85	0	49	21	155	3115
Grand Total	141	3394	44	8	3587	17	4	8	50	79	5	2390	136	6	2537	176	1	112	39	328	6531
Apprch %	3.9	94.6	1.2	0.2		21.5	5.1	10.1	63.3		0.2	94.2	5.4	0.2		53.7	0.3	34.1	11.9		
Total %	2.2	52	0.7	0.1	54.9	0.3	0.1	0.1	0.8	1.2	0.1	36.6	2.1	0.1	38.8	2.7	0	1.7	0.6	5	

	EL CAMINO REAL Southbound				DRIVEWAY Westbound				EL CAMINO REAL Northbound				JORDAN AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	16	431	7	454	**5**	1	**3**	**9**	**2**	318	14	334	15	0	16	31	828
05:15 PM	18	409	4	431	2	**2**	2	6	1	**333**	12	**346**	26	**1**	**18**	45	828
05:30 PM	**25**	**479**	7	**511**	2	0	0	2	0	291	17	308	16	0	17	33	854
05:45 PM	16	471	**8**	495	3	0	0	3	2	295	**21**	318	**34**	0	12	**46**	**862**
Total Volume	75	1790	26	1891	12	3	5	20	5	1237	64	1306	91	1	63	155	3372
% App. Total	4	94.7	1.4		60	15	25		0.4	94.7	4.9		58.7	0.6	40.6		
PHF	.750	.934	.813	.925	.600	.375	.417	.556	.625	.929	.762	.944	.669	.250	.875	.842	.978

Traffic Data Service

San Jose, CA
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File Name : 28PM FINAL
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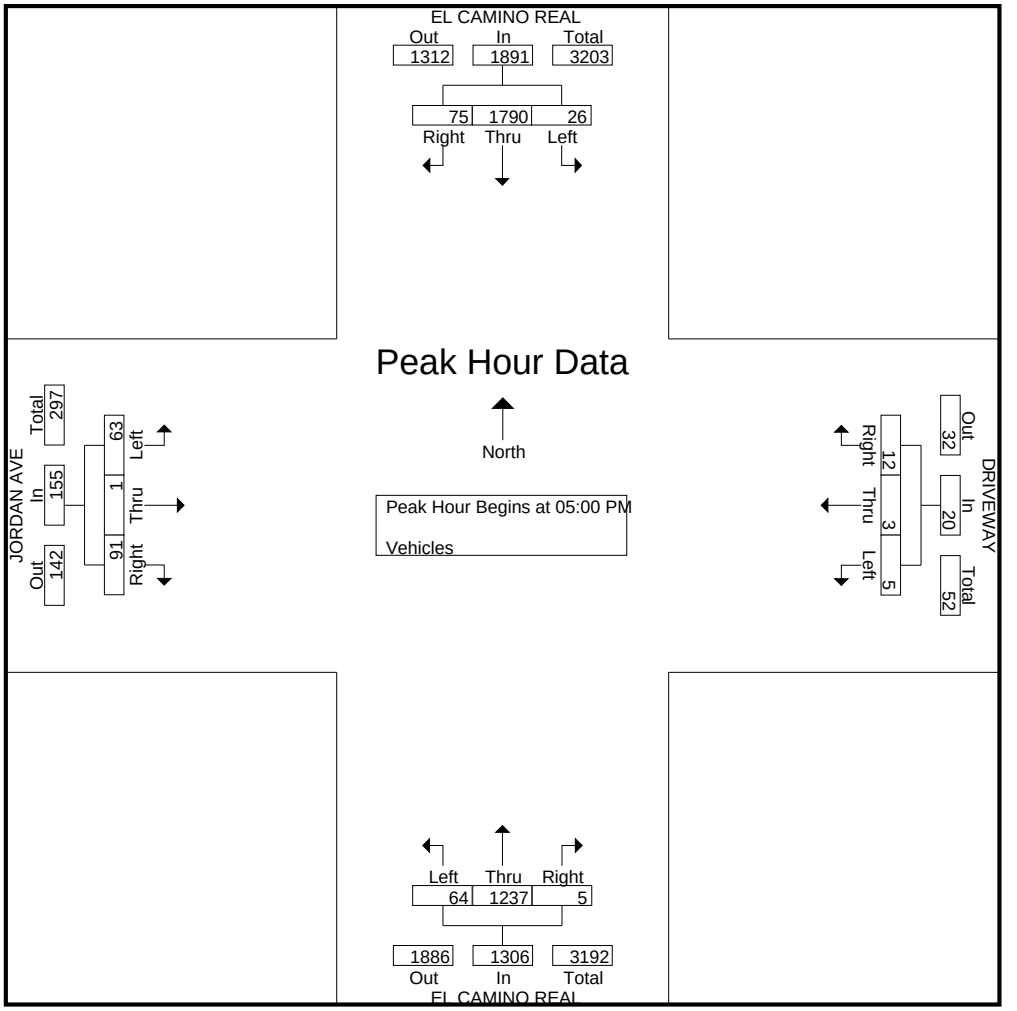
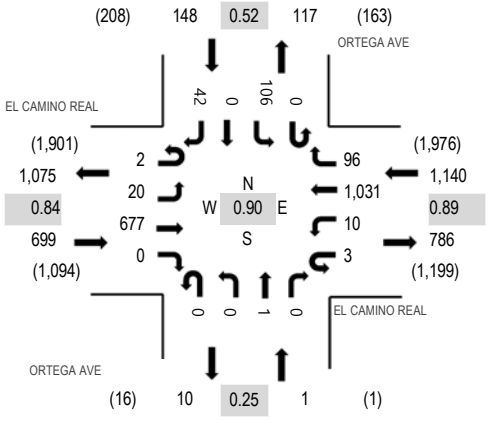


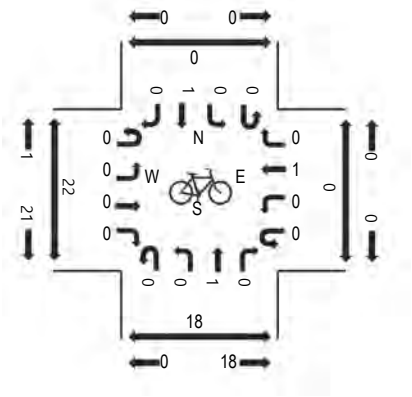
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 ORTEGA AVE & EL CAMINO REAL AM
Date: Tuesday, November 2, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

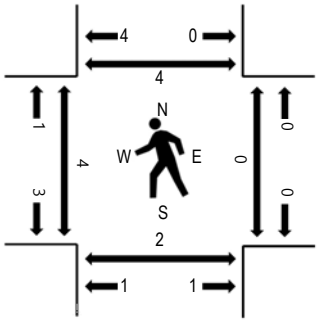
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	EL CAMINO REAL Eastbound				EL CAMINO REAL Westbound				ORTEGA AVE Northbound				ORTEGA AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	48	0	0	1	141	6	0	0	0	0	0	6	0	7	211	1,291	2	0	2	1
7:15 AM	0	2	83	0	1	0	186	13	0	0	0	0	0	5	0	5	295	1,543	0	0	0	0
7:30 AM	1	2	131	0	0	2	194	8	0	0	0	0	0	8	1	13	360	1,751	6	0	0	2
7:45 AM	1	1	124	0	0	1	271	12	0	0	0	0	0	7	1	7	425	1,942	3	0	1	0
8:00 AM	0	2	159	0	1	0	246	17	0	0	0	0	0	29	0	9	463	1,988	0	0	0	3
8:15 AM	1	2	174	0	0	3	237	14	0	0	0	0	0	51	0	21	503		2	0	0	0
8:30 AM	1	8	198	0	0	2	276	41	0	0	0	0	0	18	0	7	551		1	0	1	0
8:45 AM	0	8	146	0	2	5	272	24	0	0	1	0	0	8	0	5	471		1	0	1	1

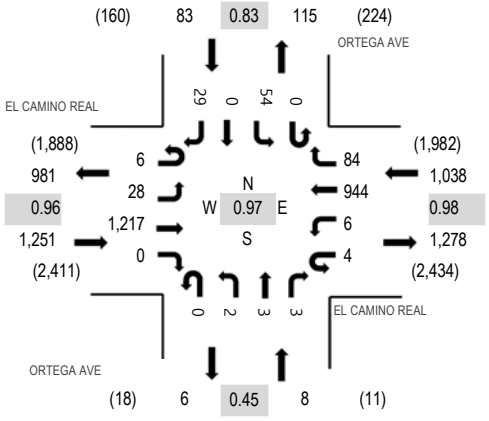
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lights	2	20	653	0	3	10	1,008	96	0	0	1	0	0	106	0	42	1,941
Mediums	0	0	20	0	0	0	23	0	0	0	0	0	0	0	0	0	43
Total	2	20	677	0	3	10	1,031	96	0	0	1	0	0	106	0	42	1,988

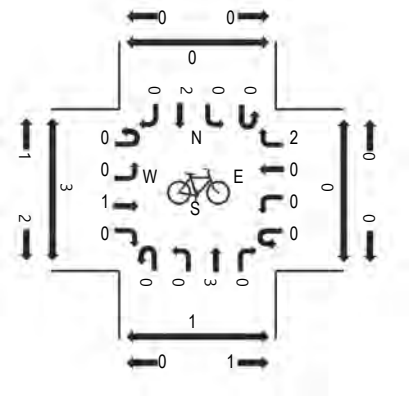
(303) 216-2439
www.alltrafficdata.net

Location: 1 ORTEGA AVE & EL CAMINO REAL PM
Date: Tuesday, November 2, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

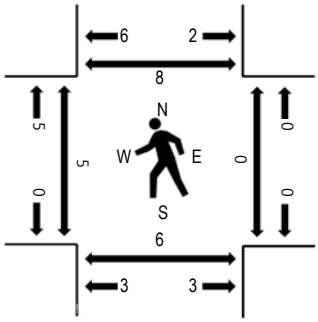
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	EL CAMINO REAL Eastbound				EL CAMINO REAL Westbound				ORTEGA AVE Northbound				ORTEGA AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	1	6	287	1	2	2	199	17	0	0	0	0	0	11	0	5	531	2,184	2	0	2	0
4:15 PM	3	6	275	1	1	0	218	10	0	0	0	0	0	13	0	7	534	2,246	1	0	0	0
4:30 PM	4	16	256	4	0	2	216	16	0	0	0	2	0	13	0	9	538	2,326	1	0	2	4
4:45 PM	2	12	285	1	0	0	235	26	0	1	0	0	0	11	1	7	581	2,371	0	0	0	1
5:00 PM	2	10	302	0	2	4	238	14	0	1	2	2	0	9	0	7	593	2,380	0	0	1	0
5:15 PM	2	8	315	0	1	0	241	24	0	0	0	1	0	16	0	6	614		2	0	0	3
5:30 PM	1	5	302	0	0	2	230	23	0	0	0	0	0	11	0	9	583		1	0	4	2
5:45 PM	1	5	298	0	1	0	235	23	0	1	1	0	0	18	0	7	590		2	0	1	3

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	6	28	1,201	0	4	6	933	84	0	2	3	3	0	53	0	29	2,352
Mediums	0	0	16	0	0	0	11	0	0	0	0	0	0	1	0	0	28
Total	6	28	1,217	0	4	6	944	84	0	2	3	3	0	54	0	29	2,380

Traffic Data Service

San Jose, CA
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Groups Printed- Vehicles

	EL CAMINO REAL Southbound					Westbound					EL CAMINO REAL Northbound					DISTEL DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	3	92	1	0	96	0	0	0	0	0	0	303	7	0	310	6	0	2	2	10	416
07:15 AM	4	107	1	0	112	0	0	0	0	0	0	354	20	6	380	18	0	6	3	27	519
07:30 AM	7	157	1	0	165	0	0	0	0	0	0	402	27	1	430	20	0	4	2	26	621
07:45 AM	48	195	0	4	247	0	0	0	0	0	0	480	31	9	520	60	0	17	3	80	847
Total	62	551	3	4	620	0	0	0	0	0	0	1539	85	16	1640	104	0	29	10	143	2403
08:00 AM	26	260	0	1	287	0	0	0	0	0	0	441	28	0	469	73	0	19	0	92	848
08:15 AM	12	310	4	0	326	0	0	0	0	0	0	410	16	0	426	36	0	13	1	50	802
08:30 AM	9	259	4	0	272	0	0	0	0	0	0	438	18	0	456	35	0	14	1	50	778
08:45 AM	1	250	7	0	258	0	0	0	0	0	0	409	18	1	428	33	0	13	1	47	733
Total	48	1079	15	1	1143	0	0	0	0	0	0	1698	80	1	1779	177	0	59	3	239	3161
Grand Total	110	1630	18	5	1763	0	0	0	0	0	0	3237	165	17	3419	281	0	88	13	382	5564
Apprch %	6.2	92.5	1	0.3		0	0	0	0		0	94.7	4.8	0.5		73.6	0	23	3.4		
Total %	2	29.3	0.3	0.1	31.7	0	0	0	0	0	0	58.2	3	0.3	61.4	5.1	0	1.6	0.2	6.9	

	EL CAMINO REAL Southbound				Westbound				EL CAMINO REAL Northbound				DISTEL DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**48**	195	0	243	0	0	0	0	0	**480**	**31**	**511**	60	0	17	77	831
08:00 AM	26	260	0	286	0	0	0	0	0	441	28	469	**73**	0	**19**	**92**	**847**
08:15 AM	12	**310**	**4**	**326**	0	0	0	0	0	410	16	426	36	0	13	49	801
08:30 AM	9	259	4	272	0	0	0	0	0	438	18	456	35	0	14	49	777
Total Volume	95	1024	8	1127	0	0	0	0	0	1769	93	1862	204	0	63	267	3256
% App. Total	8.4	90.9	0.7		0	0	0		0	95	5		76.4	0	23.6		
PHF	.495	.826	.500	.864	.000	.000	.000	.000	.000	.921	.750	.911	.699	.000	.829	.726	.961

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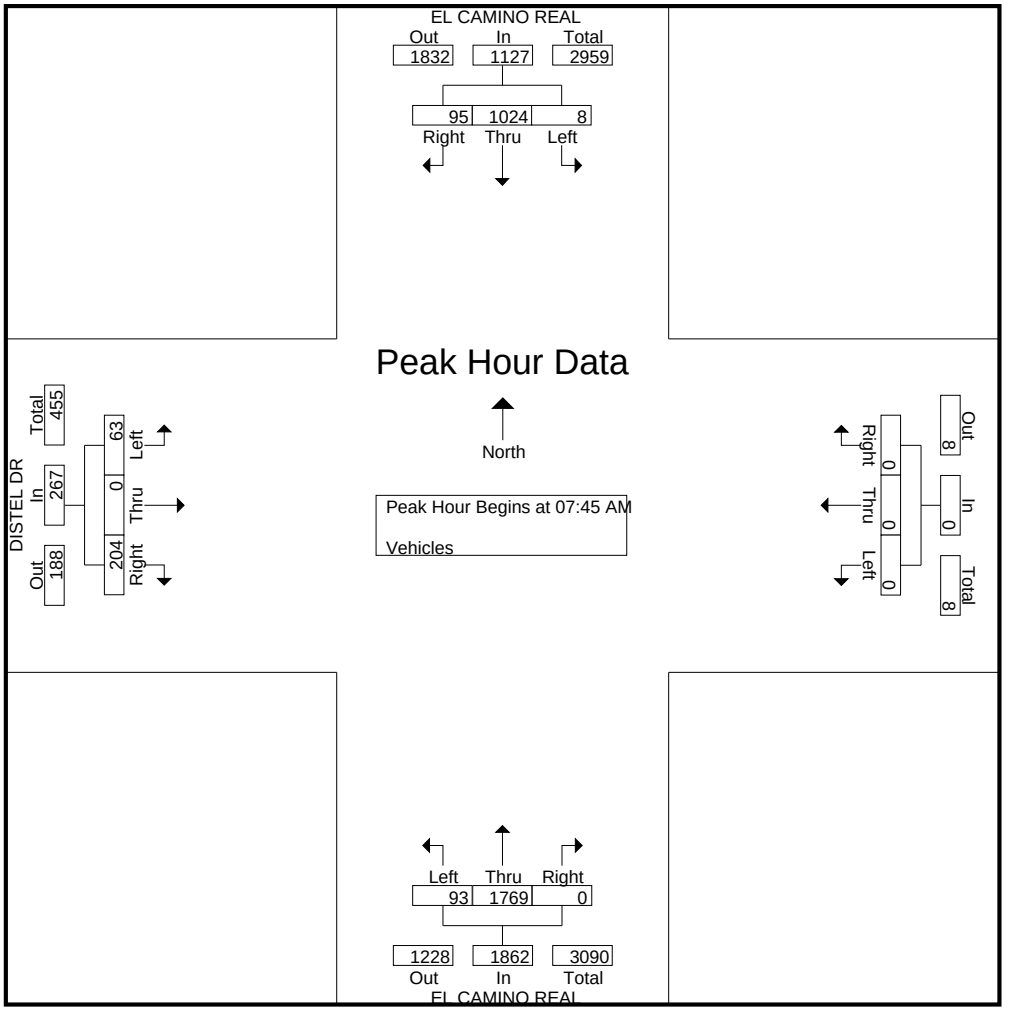

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File Name : 30PM FINAL
Site Code : 00000030
Start Date : 10/10/2019
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Groups Printed- Vehicles

	EL CAMINO REAL Southbound					Westbound					EL CAMINO REAL Northbound					DISTEL DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
05:00 PM	5	502	1	0	508	0	0	0	0	0	0	325	11	0	336	24	0	6	3	33	877
05:15 PM	9	477	4	0	490	0	0	0	0	0	0	331	15	0	346	25	0	11	3	39	875
05:30 PM	4	448	1	1	454	0	0	0	0	0	0	313	21	0	334	35	0	12	2	49	837
05:45 PM	3	423	0	0	426	0	0	0	0	0	0	335	21	1	357	15	0	13	4	32	815
Total	21	1850	6	1	1878	0	0	0	0	0	0	1304	68	1	1373	99	0	42	12	153	3404
06:00 PM	5	408	2	0	415	0	0	0	0	0	0	278	24	0	302	23	0	10	3	36	753
06:15 PM	6	435	4	0	445	0	0	0	0	0	0	301	10	0	311	31	0	9	3	43	799
06:30 PM	3	396	1	0	400	0	0	0	0	0	0	280	21	0	301	21	0	10	2	33	734
06:45 PM	6	359	0	0	365	0	0	0	0	0	0	304	10	1	315	23	0	4	3	30	710
Total	20	1598	7	0	1625	0	0	0	0	0	0	1163	65	1	1229	98	0	33	11	142	2996
Grand Total	41	3448	13	1	3503	0	0	0	0	0	0	2467	133	2	2602	197	0	75	23	295	6400
Apprch %	1.2	98.4	0.4	0		0	0	0	0		0	94.8	5.1	0.1		66.8	0	25.4	7.8		
Total %	0.6	53.9	0.2	0	54.7	0	0	0	0	0	0	38.5	2.1	0	40.7	3.1	0	1.2	0.4	4.6	

	EL CAMINO REAL Southbound				Westbound				EL CAMINO REAL Northbound				DISTEL DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	5	**502**	1	**508**	0	0	0	0	0	325	11	336	24	0	6	30	**874**
05:15 PM	**9**	477	**4**	490	0	0	0	0	0	331	15	346	25	0	11	36	872
05:30 PM	4	448	1	453	0	0	0	0	0	313	**21**	334	**35**	0	12	**47**	834
05:45 PM	3	423	0	426	0	0	0	0	0	**335**	21	**356**	15	0	**13**	28	810
Total Volume	21	1850	6	1877	0	0	0	0	0	1304	68	1372	99	0	42	141	3390
% App. Total	1.1	98.6	0.3		0	0	0		0	95	5		70.2	0	29.8		
PHF	.583	.921	.375	.924	.000	.000	.000	.000	.000	.973	.810	.963	.707	.000	.808	.750	.970

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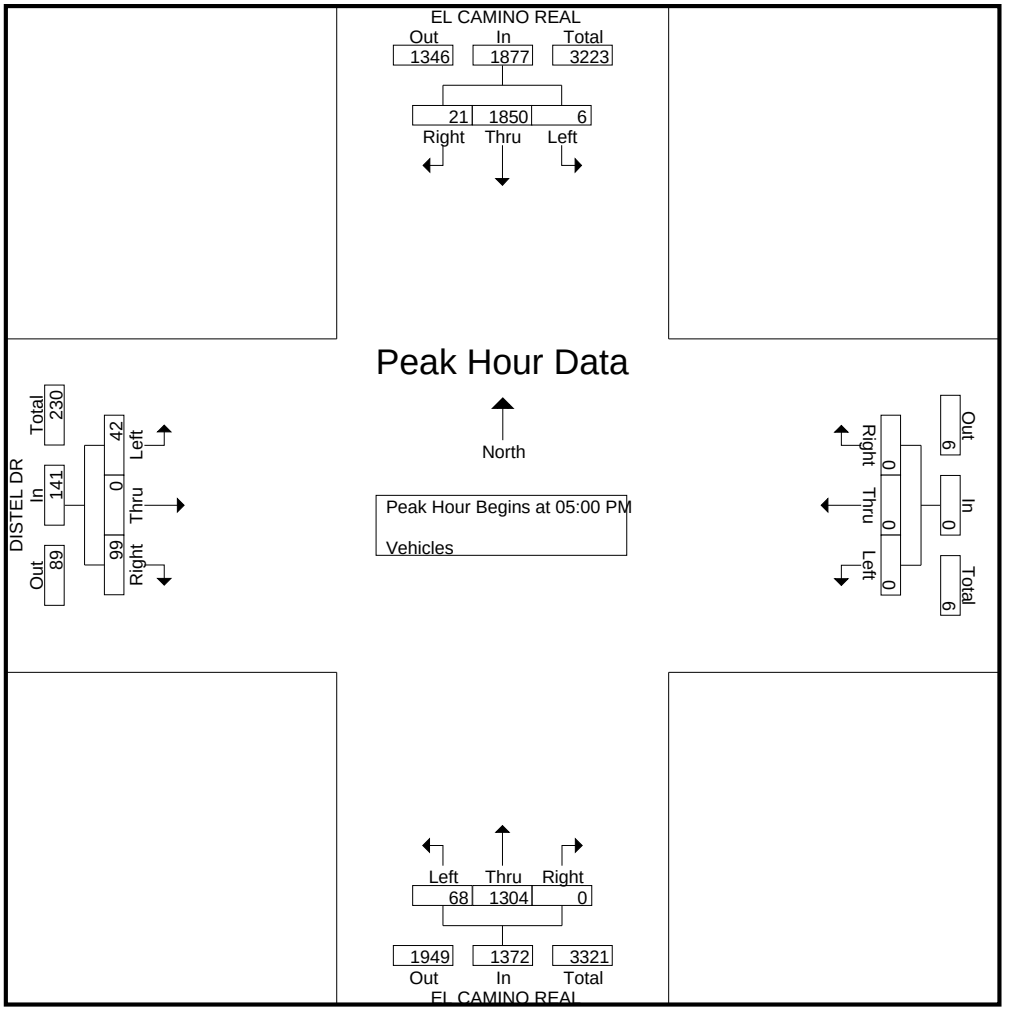

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File Name : 31AM FINAL
Site Code : 00000031
Start Date : 10/10/2019
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Groups Printed- Vehicles

	EL CAMINO REAL Southbound					RENGSTORFF AVE Westbound					EL CAMINO REAL Northbound					DRIVEWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	98	2	6	106	23	0	24	0	47	27	272	3	0	302	0	0	0	6	6	461
07:15 AM	0	122	7	7	136	34	0	47	1	82	36	323	1	0	360	0	0	0	5	5	583
07:30 AM	0	175	12	5	192	58	0	77	1	136	43	359	7	0	409	0	0	0	5	5	742
07:45 AM	0	227	44	22	293	78	0	96	1	175	44	425	11	0	480	0	0	0	5	5	953
Total	0	622	65	40	727	193	0	244	3	440	150	1379	22	0	1551	0	0	0	21	21	2739
08:00 AM	0	274	55	19	348	44	0	77	5	126	59	393	14	0	466	0	0	0	10	10	950
08:15 AM	0	327	25	5	357	27	0	73	1	101	46	385	17	1	449	0	0	0	5	5	912
08:30 AM	1	278	28	5	312	51	0	53	1	105	63	390	11	0	464	1	0	0	5	6	887
08:45 AM	0	272	18	8	298	33	0	61	3	97	62	374	10	0	446	0	0	0	5	5	846
Total	1	1151	126	37	1315	155	0	264	10	429	230	1542	52	1	1825	1	0	0	25	26	3595
Grand Total	1	1773	191	77	2042	348	0	508	13	869	380	2921	74	1	3376	1	0	0	46	47	6334
Apprch %	0	86.8	9.4	3.8		40	0	58.5	1.5		11.3	86.5	2.2	0		2.1	0	0	97.9		
Total %	0	28	3	1.2	32.2	5.5	0	8	0.2	13.7	6	46.1	1.2	0	53.3	0	0	0	0.7	0.7	

	EL CAMINO REAL Southbound				RENGSTORFF AVE Westbound				EL CAMINO REAL Northbound				DRIVEWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	227	44	271	**78**	0	**96**	**174**	44	**425**	11	**480**	0	0	0	0	**925**
08:00 AM	0	274	**55**	329	44	0	77	121	59	393	14	466	0	0	0	0	916
08:15 AM	0	**327**	25	**352**	27	0	73	100	46	385	**17**	448	0	0	0	0	900
08:30 AM	**1**	278	28	307	51	0	53	104	**63**	390	11	464	**1**	0	0	**1**	876
Total Volume	1	1106	152	1259	200	0	299	499	212	1593	53	1858	1	0	0	1	3617
% App. Total	0.1	87.8	12.1		40.1	0	59.9		11.4	85.7	2.9		100	0	0		
PHF	.250	.846	.691	.894	.641	.000	.779	.717	.841	.937	.779	.968	.250	.000	.000	.250	.978

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File Name : 31AM FINAL
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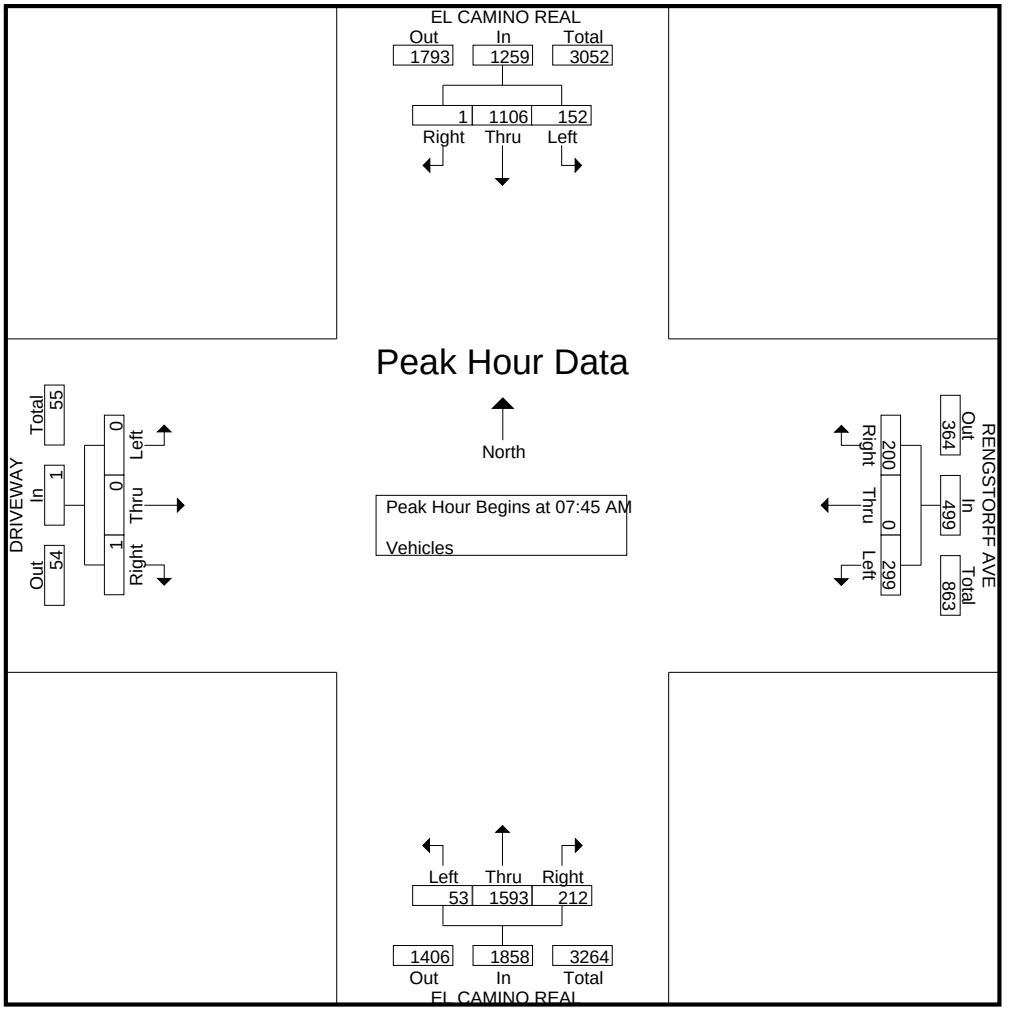

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File Name : 31PM FINAL
Site Code : 00000031
Start Date : 10/10/2019
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Groups Printed- Vehicles

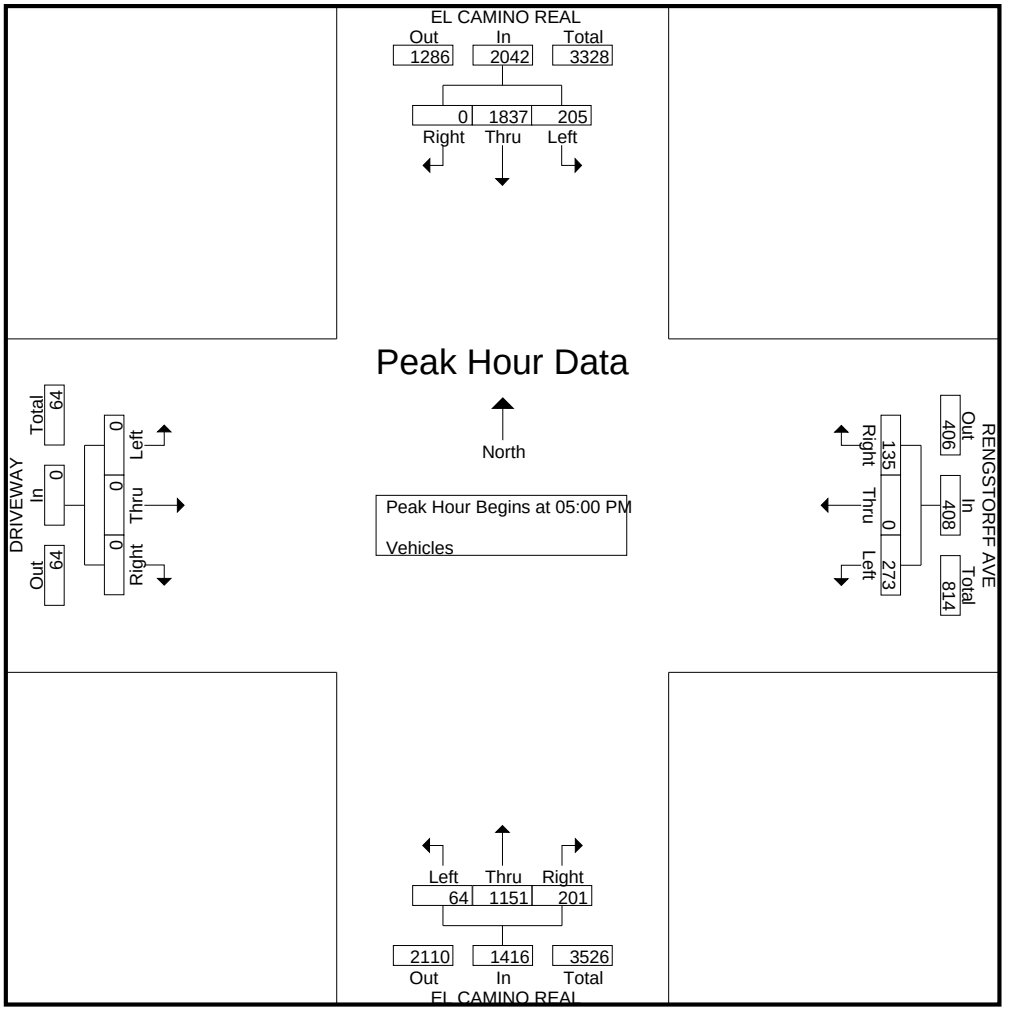
	EL CAMINO REAL Southbound					RENGSTORFF AVE Westbound					EL CAMINO REAL Northbound					DRIVEWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
05:00 PM	0	525	47	6	578	31	0	67	3	101	42	285	7	0	334	0	0	0	10	10	1023
05:15 PM	0	466	56	10	532	35	0	65	3	103	54	293	18	0	365	0	0	0	10	10	1010
05:30 PM	0	448	50	13	511	34	0	70	2	106	49	277	27	0	353	0	0	0	10	10	980
05:45 PM	0	398	52	4	454	35	0	71	4	110	56	296	12	0	364	0	0	0	4	4	932
Total	0	1837	205	33	2075	135	0	273	12	420	201	1151	64	0	1416	0	0	0	34	34	3945
06:00 PM	0	408	48	7	463	42	0	48	1	91	61	274	15	0	350	0	0	0	3	3	907
06:15 PM	0	454	48	5	507	33	0	70	3	106	55	279	32	0	366	0	0	0	8	8	987
06:30 PM	0	397	39	5	441	33	0	55	6	94	52	290	17	0	359	0	0	0	5	5	899
06:45 PM	0	379	43	5	427	36	0	65	2	103	48	300	14	0	362	0	0	0	7	7	899
Total	0	1638	178	22	1838	144	0	238	12	394	216	1143	78	0	1437	0	0	0	23	23	3692
Grand Total	0	3475	383	55	3913	279	0	511	24	814	417	2294	142	0	2853	0	0	0	57	57	7637
Apprch %	0	88.8	9.8	1.4		34.3	0	62.8	2.9		14.6	80.4	5	0		0	0	0	100		
Total %	0	45.5	5	0.7	51.2	3.7	0	6.7	0.3	10.7	5.5	30	1.9	0	37.4	0	0	0	0.7	0.7	

	EL CAMINO REAL Southbound				RENGSTORFF AVE Westbound				EL CAMINO REAL Northbound				DRIVEWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**525**	47	**572**	31	0	67	98	42	285	7	334	0	0	0	0	**1004**
05:15 PM	0	466	**56**	522	**35**	0	65	100	54	293	18	**365**	0	0	0	0	987
05:30 PM	0	448	50	498	34	0	70	104	49	277	**27**	353	0	0	0	0	955
05:45 PM	0	398	52	450	35	0	**71**	**106**	**56**	**296**	12	364	0	0	0	0	920
Total Volume	0	1837	205	2042	135	0	273	408	201	1151	64	1416	0	0	0	0	3866
% App. Total	0	90	10		33.1	0	66.9		14.2	81.3	4.5		0	0	0		
PHF	.000	.875	.915	.892	.964	.000	.961	.962	.897	.972	.593	.970	.000	.000	.000	.000	.963

Traffic Data Service

San Jose, CA
(408) 622-4787
tdsbay@cs.com

File Name : 31PM FINAL
Site Code : 00000031
Start Date : 10/10/2019
Page No : 2



Traffic Data Service

San Jose, CA
(408) 622-4787
tdsbay@cs.com

File Name : 1AM FINAL
Site Code : 00000001
Start Date : 10/10/2019
Page No : 1

Groups Printed- Vehicles

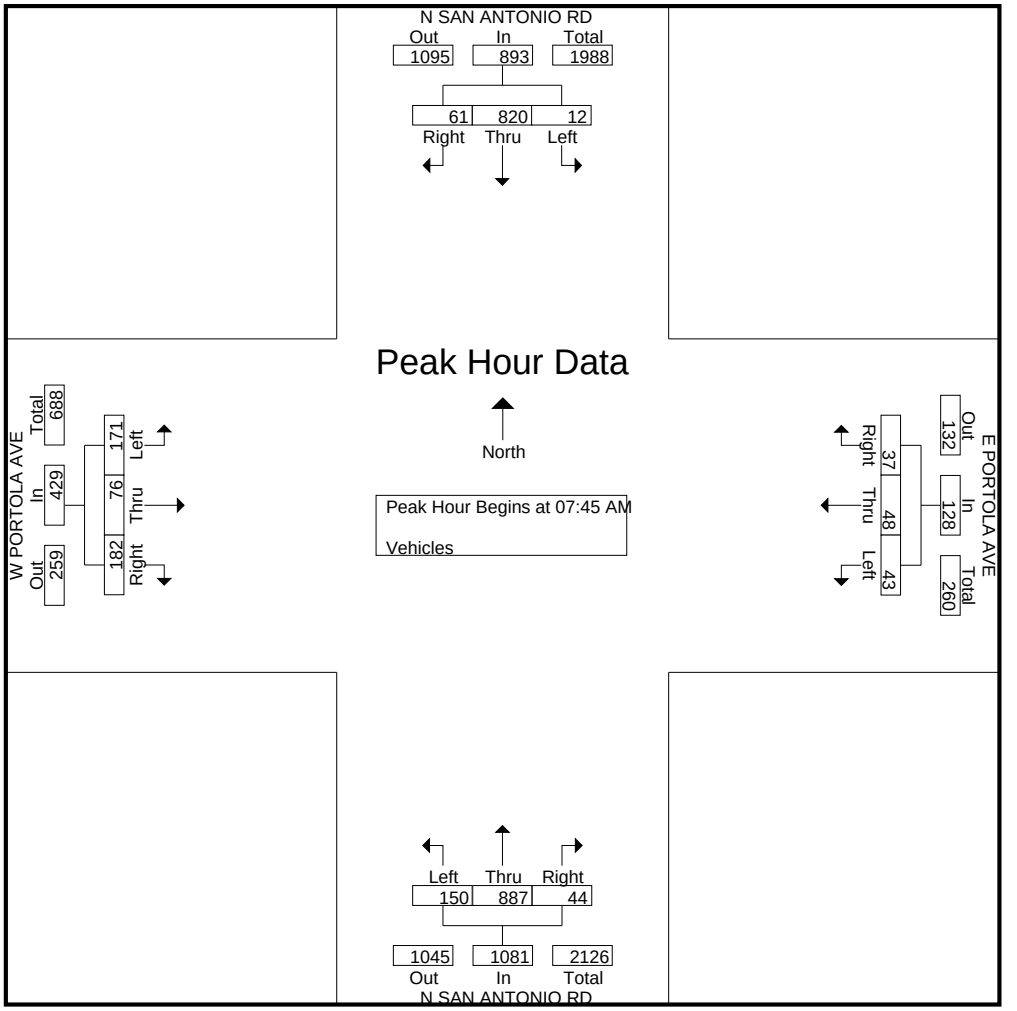
	N SAN ANTONIO RD Southbound					E PORTOLA AVE Westbound					N SAN ANTONIO RD Northbound					W PORTOLA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	4	91	0	0	95	3	2	2	2	9	2	86	38	4	130	17	2	18	1	38	272
07:15 AM	13	115	1	0	129	4	2	3	5	14	1	118	14	5	138	10	2	9	0	21	302
07:30 AM	7	179	1	0	187	3	6	6	6	21	5	160	35	26	226	11	5	16	9	41	475
07:45 AM	12	217	2	0	231	12	16	13	19	60	28	228	50	219	525	53	22	40	6	121	937
Total	36	602	4	0	642	22	26	24	32	104	36	592	137	254	1019	91	31	83	16	221	1986
08:00 AM	19	209	7	8	243	9	13	11	6	39	7	252	45	51	355	73	20	51	4	148	785
08:15 AM	21	208	2	1	232	11	16	13	6	46	7	178	47	43	275	30	19	49	4	102	655
08:30 AM	9	186	1	2	198	5	3	6	7	21	2	229	8	19	258	26	15	31	0	72	549
08:45 AM	4	164	3	1	172	7	1	5	5	18	0	179	2	1	182	5	4	13	0	22	394
Total	53	767	13	12	845	32	33	35	24	124	16	838	102	114	1070	134	58	144	8	344	2383
Grand Total	89	1369	17	12	1487	54	59	59	56	228	52	1430	239	368	2089	225	89	227	24	565	4369
Apprch %	6	92.1	1.1	0.8		23.7	25.9	25.9	24.6		2.5	68.5	11.4	17.6		39.8	15.8	40.2	4.2		
Total %	2	31.3	0.4	0.3	34	1.2	1.4	1.4	1.3	5.2	1.2	32.7	5.5	8.4	47.8	5.1	2	5.2	0.5	12.9	

	N SAN ANTONIO RD Southbound				E PORTOLA AVE Westbound				N SAN ANTONIO RD Northbound				W PORTOLA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	12	**217**	2	231	**12**	**16**	**13**	**41**	**28**	228	**50**	**306**	53	**22**	40	115	693
08:00 AM	19	209	**7**	**235**	9	13	11	33	7	**252**	45	304	**73**	20	**51**	**144**	**716**
08:15 AM	**21**	208	2	231	11	16	13	40	7	178	47	232	30	19	49	98	601
08:30 AM	9	186	1	196	5	3	6	14	2	229	8	239	26	15	31	72	521
Total Volume	61	820	12	893	37	48	43	128	44	887	150	1081	182	76	171	429	2531
% App. Total	6.8	91.8	1.3		28.9	37.5	33.6		4.1	82.1	13.9		42.4	17.7	39.9		
PHF	.726	.945	.429	.950	.771	.750	.827	.780	.393	.880	.750	.883	.623	.864	.838	.745	.884

Traffic Data Service

San Jose, CA
(408) 622-4787
tdsbay@cs.com

File Name : 1AM FINAL
Site Code : 00000001
Start Date : 10/10/2019
Page No : 2



Traffic Data Service

San Jose, CA
(408) 622-4787
tdsbay@cs.com

File Name : 1PM FINAL
Site Code : 00000001
Start Date : 10/10/2019
Page No : 1

Groups Printed- Vehicles

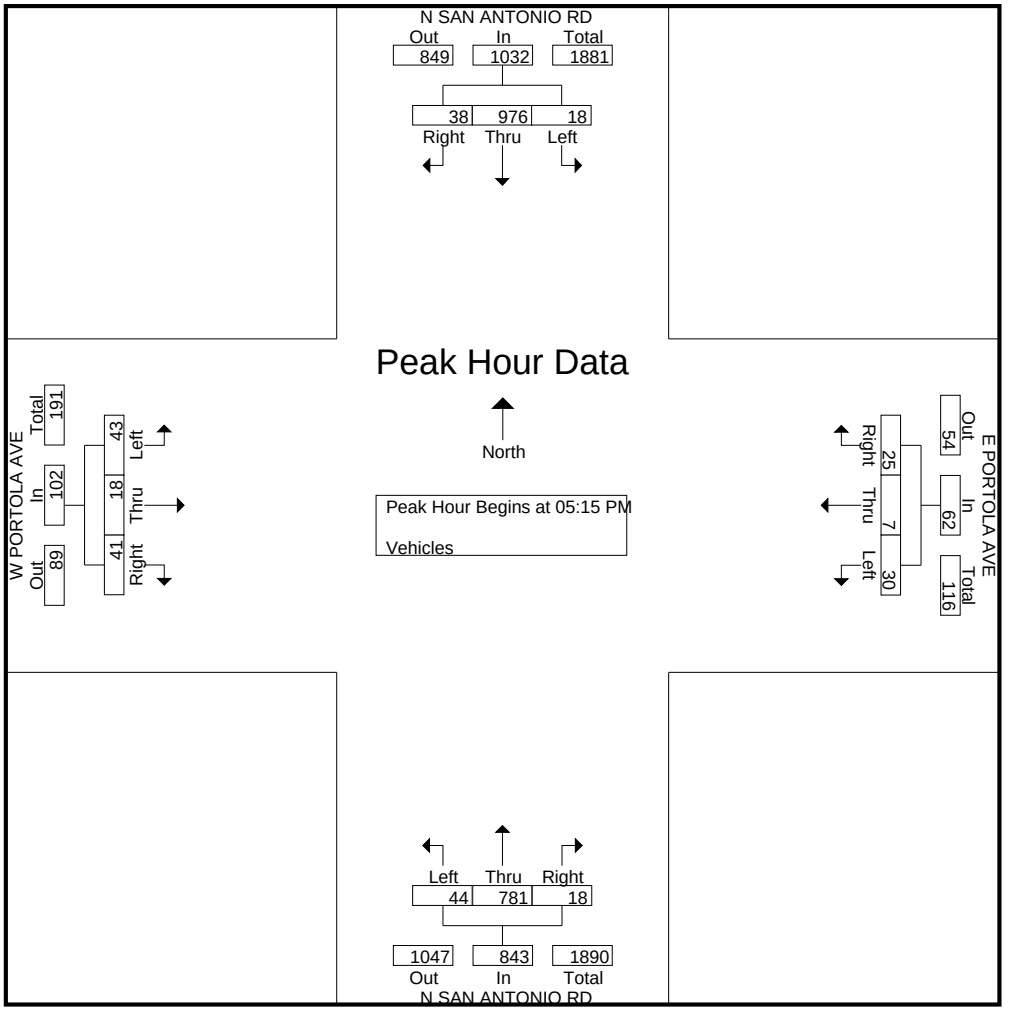
	N SAN ANTONIO RD Southbound					E PORTOLA AVE Westbound					N SAN ANTONIO RD Northbound					W PORTOLA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
05:00 PM	8	216	5	0	229	6	3	10	3	22	7	166	7	2	182	7	8	13	2	30	463
05:15 PM	8	217	6	0	231	6	2	6	2	16	6	211	16	3	236	11	3	7	1	22	505
05:30 PM	13	236	5	0	254	7	4	7	1	19	4	186	6	3	199	13	5	13	2	33	505
05:45 PM	5	262	4	3	274	8	0	8	3	19	5	182	12	0	199	10	4	13	0	27	519
Total	34	931	20	3	988	27	9	31	9	76	22	745	41	8	816	41	20	46	5	112	1992
06:00 PM	12	261	3	0	276	4	1	9	3	17	3	202	10	3	218	7	6	10	1	24	535
06:15 PM	3	211	6	1	221	4	3	5	2	14	3	174	7	1	185	7	2	7	3	19	439
06:30 PM	8	194	4	0	206	7	2	5	3	17	2	140	7	3	152	6	5	8	9	28	403
06:45 PM	12	205	4	0	221	13	4	7	5	29	3	140	13	2	158	7	3	11	1	22	430
Total	35	871	17	1	924	28	10	26	13	77	11	656	37	9	713	27	16	36	14	93	1807
Grand Total	69	1802	37	4	1912	55	19	57	22	153	33	1401	78	17	1529	68	36	82	19	205	3799
Apprch %	3.6	94.2	1.9	0.2		35.9	12.4	37.3	14.4		2.2	91.6	5.1	1.1		33.2	17.6	40	9.3		
Total %	1.8	47.4	1	0.1	50.3	1.4	0.5	1.5	0.6	4	0.9	36.9	2.1	0.4	40.2	1.8	0.9	2.2	0.5	5.4	

	N SAN ANTONIO RD Southbound				E PORTOLA AVE Westbound				N SAN ANTONIO RD Northbound				W PORTOLA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:15 PM																	
05:15 PM	8	217	**6**	231	6	2	6	14	**6**	**211**	**16**	**233**	11	3	7	21	499
05:30 PM	**13**	236	5	254	7	**4**	7	**18**	4	186	6	196	**13**	5	**13**	**31**	499
05:45 PM	5	**262**	4	271	**8**	0	8	16	5	182	12	199	10	4	13	27	513
06:00 PM	12	261	3	**276**	4	1	**9**	14	3	202	10	215	7	**6**	10	23	**528**
Total Volume	38	976	18	1032	25	7	30	62	18	781	44	843	41	18	43	102	2039
% App. Total	3.7	94.6	1.7		40.3	11.3	48.4		2.1	92.6	5.2		40.2	17.6	42.2		
PHF	.731	.931	.750	.935	.781	.438	.833	.861	.750	.925	.688	.905	.788	.750	.827	.823	.965

Traffic Data Service

San Jose, CA
(408) 622-4787
tdsbay@cs.com

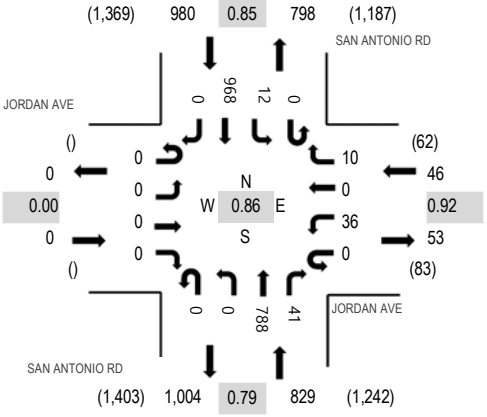
File Name : 1PM FINAL
Site Code : 00000001
Start Date : 10/10/2019
Page No : 2



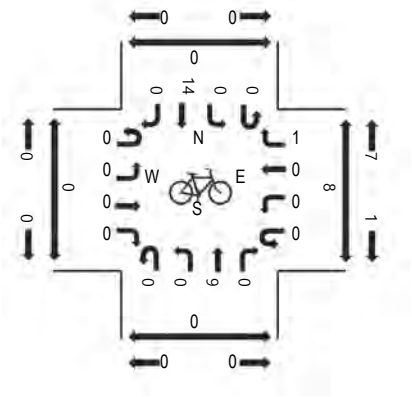
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 SAN ANTONIO RD & JORDAN AVE AM
Date: Tuesday, November 2, 2021
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

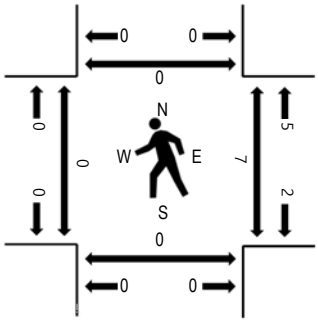
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	JORDAN AVE Eastbound				JORDAN AVE Westbound				SAN ANTONIO RD Northbound				SAN ANTONIO RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	1	0	0	0	0	73	6	0	0	76	0	156	877	0	1	0	0
7:15 AM	0	0	0	0	0	2	0	0	0	0	56	5	0	0	67	0	130	1,120	0	1	0	0
7:30 AM	0	0	0	0	0	2	0	0	0	0	99	5	0	0	93	0	199	1,530	0	0	2	0
7:45 AM	0	0	0	0	0	9	0	0	0	0	161	6	0	3	213	0	392	1,855	0	1	0	0
8:00 AM	0	0	0	0	0	6	0	6	0	0	147	11	0	2	227	0	399	1,796	0	2	0	0
8:15 AM	0	0	0	0	0	8	0	4	0	0	227	14	0	3	284	0	540		0	3	0	0
8:30 AM	0	0	0	0	0	13	0	0	0	0	253	10	0	4	244	0	524		0	1	0	0
8:45 AM	0	0	0	0	0	7	0	4	0	0	157	12	0	2	151	0	333		0	0	0	0

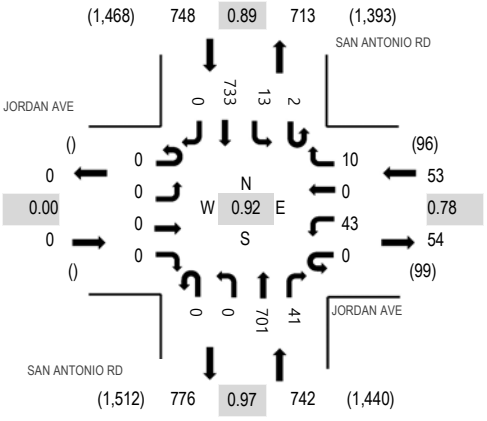
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Lights	0	0	0	0	0	35	0	9	0	0	776	41	0	12	947	0	1,820
Mediums	0	0	0	0	0	1	0	1	0	0	11	0	0	0	21	0	34
Total	0	0	0	0	0	36	0	10	0	0	788	41	0	12	968	0	1,855

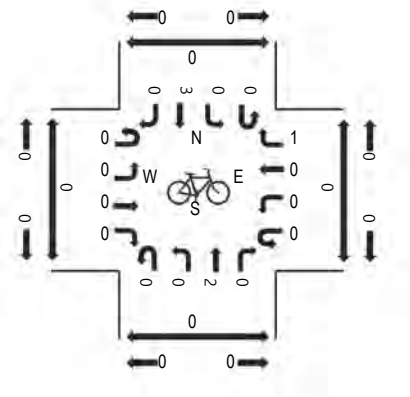
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 SAN ANTONIO RD & JORDAN AVE PM
Date: Tuesday, November 2, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

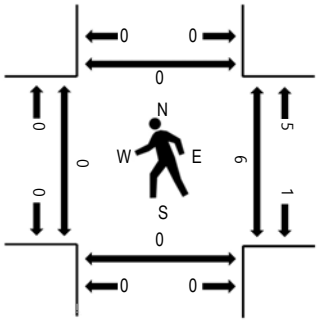
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	JORDAN AVE Eastbound				JORDAN AVE Westbound				SAN ANTONIO RD Northbound				SAN ANTONIO RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	7	0	2	0	0	173	6	0	4	157	0	349	1,472	0	2	0	0
4:15 PM	0	0	0	0	0	15	0	1	0	0	169	15	0	2	175	0	377	1,543	0	1	0	0
4:30 PM	0	0	0	0	0	8	0	2	0	0	183	8	0	0	171	0	372	1,516	0	2	0	0
4:45 PM	0	0	0	0	0	5	0	5	0	0	174	8	0	4	178	0	374	1,518	0	2	0	0
5:00 PM	0	0	0	0	0	15	0	2	0	0	175	10	2	7	209	0	420	1,532	0	1	0	0
5:15 PM	0	0	0	0	0	7	0	1	0	0	168	9	0	3	162	0	350		0	2	0	0
5:30 PM	0	0	0	0	0	8	0	4	0	0	163	5	1	4	189	0	374		0	1	0	0
5:45 PM	0	0	0	0	0	9	0	5	0	0	163	11	0	3	197	0	388		0	0	0	0

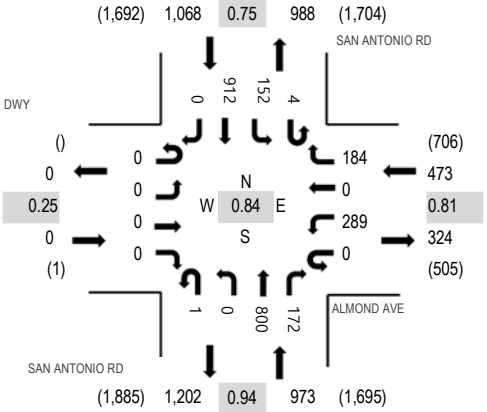
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	43	0	10	0	0	698	41	2	13	729	0	1,536
Mediums	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	7
Total	0	0	0	0	0	43	0	10	0	0	701	41	2	13	733	0	1,543

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

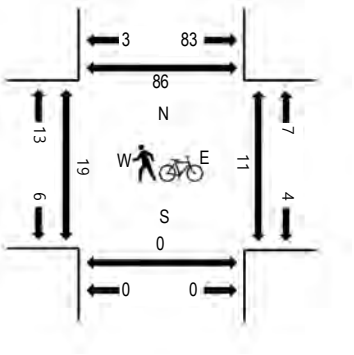
Location: 3 SAN ANTONIO RD & ALMOND AVE AM
Date: Tuesday, September 18, 2018
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	DWY Eastbound				ALMOND AVE Westbound				SAN ANTONIO RD Northbound				SAN ANTONIO RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	22	0	12	0	0	97	17	1	12	77	0	238	1,667	6	0	0	4
7:15 AM	0	0	0	0	0	31	0	10	0	0	111	21	0	27	116	0	316	2,181	5	1	0	1
7:30 AM	0	0	0	0	0	26	0	41	0	0	189	40	2	26	133	0	457	2,430	4	2	0	17
7:45 AM	0	0	0	0	0	76	0	58	1	0	191	68	1	58	203	0	656	2,514	15	2	0	26
8:00 AM	0	0	0	0	0	82	0	64	0	0	185	66	0	58	297	0	752	2,427	1	3	0	5
8:15 AM	0	0	0	0	0	63	0	33	0	0	212	15	0	29	213	0	565		1	4	0	1
8:30 AM	0	0	0	0	0	68	0	29	0	0	212	23	3	7	199	0	541		1	0	0	3
8:45 AM	0	1	0	0	0	65	0	26	1	0	224	22	2	16	212	0	569		3	0	0	1
9:00 AM																						
9:15 AM																						
9:30 AM																						
9:45 AM																						

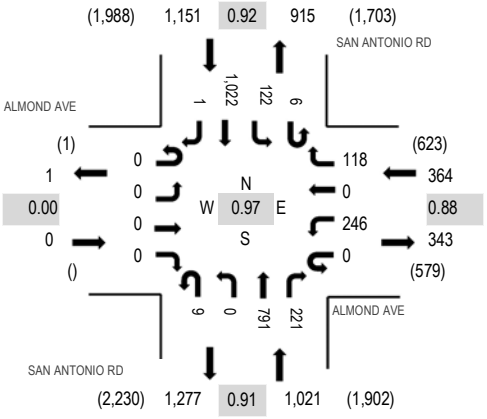
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	10
Lights	0	0	0	0	0	285	0	182	1	0	782	172	4	152	887	0	2,465
Mediums	0	0	0	0	0	4	0	2	0	0	13	0	0	0	20	0	39
Total	0	0	0	0	0	289	0	184	1	0	800	172	4	152	912	0	2,514

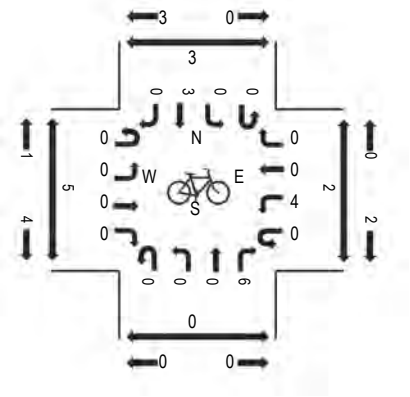
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 1 SAN ANTONIO RD & ALMOND AVE PM
Date: Friday, November 8, 2019
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

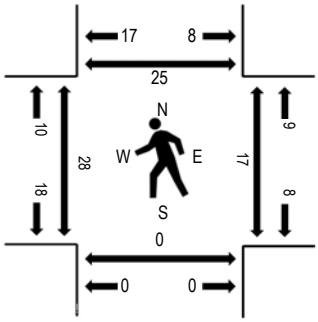
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ALMOND AVE Eastbound				ALMOND AVE Westbound				SAN ANTONIO RD Northbound				SAN ANTONIO RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
5:00 PM	0	0	0	0	0	51	0	13	2	0	203	47	1	39	272	0	628	2,536	15	8	0	13
5:15 PM	0	0	0	0	0	59	0	32	3	0	163	47	2	34	266	0	606	2,449	10	5	0	6
5:30 PM	0	0	0	0	0	71	0	29	2	0	220	58	2	21	245	0	648	2,338	1	2	0	2
5:45 PM	0	0	0	0	0	65	0	44	2	0	205	69	1	28	239	1	654	2,185	2	2	0	4
6:00 PM	0	0	0	0	0	56	0	28	2	0	172	44	1	25	213	0	541	1,977	7	4	0	4
6:15 PM	0	0	0	0	0	45	0	14	0	0	191	43	4	18	180	0	495		18	2	0	22
6:30 PM	0	0	0	0	0	43	0	17	1	0	178	48	1	9	198	0	495		2	0	0	0
6:45 PM	0	0	0	0	0	44	0	12	0	0	168	34	2	15	171	0	446		0	0	0	0

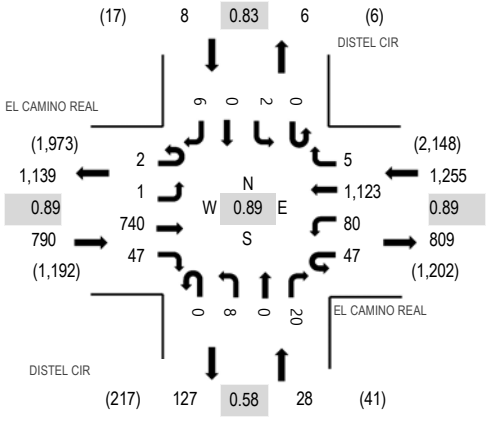
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	246	0	118	9	0	783	221	6	121	1,019	1	2,524
Mediums	0	0	0	0	0	0	0	0	0	0	8	0	0	1	3	0	12
Total	0	0	0	0	0	246	0	118	9	0	791	221	6	122	1,022	1	2,536

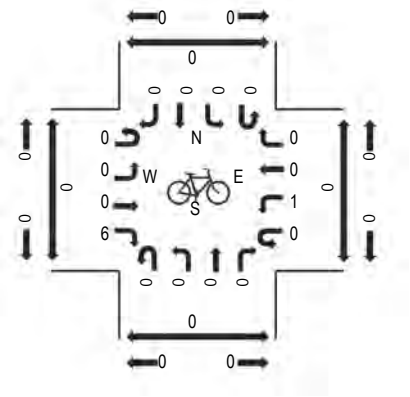
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 DISTEL CIR & EL CAMINO REAL AM
Date: Tuesday, November 2, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

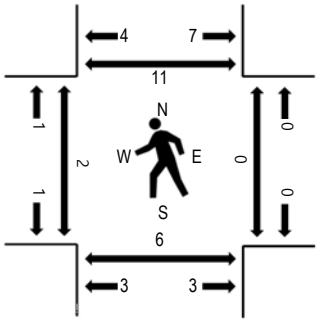
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	EL CAMINO REAL Eastbound				EL CAMINO REAL Westbound				DISTEL CIR Northbound				DISTEL CIR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	1	0	54	1	1	12	144	0	0	1	0	0	0	1	0	2	217	1,317	0	0	1	2
7:15 AM	1	0	80	5	4	26	195	0	0	2	0	2	0	0	0	1	316	1,581	0	0	1	0
7:30 AM	2	0	124	10	1	10	195	0	0	3	0	0	0	1	0	1	347	1,777	0	0	0	2
7:45 AM	0	0	114	10	6	16	283	0	0	2	0	3	0	2	0	1	437	2,014	1	0	1	1
8:00 AM	0	0	182	12	4	17	259	0	0	2	0	3	0	1	0	1	481	2,081	1	0	0	1
8:15 AM	0	1	200	14	13	29	247	1	0	2	0	2	0	0	0	3	512		0	0	2	3
8:30 AM	2	0	204	15	16	21	313	1	0	3	0	9	0	0	0	0	584		0	0	1	4
8:45 AM	0	0	154	6	14	13	304	3	0	1	0	6	0	1	0	2	504		1	0	3	3

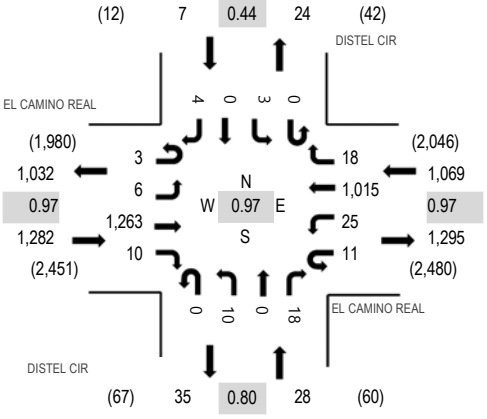
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lights	2	1	716	46	47	80	1,100	5	0	7	0	17	0	2	0	6	2,029
Mediums	0	0	20	1	0	0	23	0	0	1	0	3	0	0	0	0	48
Total	2	1	740	47	47	80	1,123	5	0	8	0	20	0	2	0	6	2,081

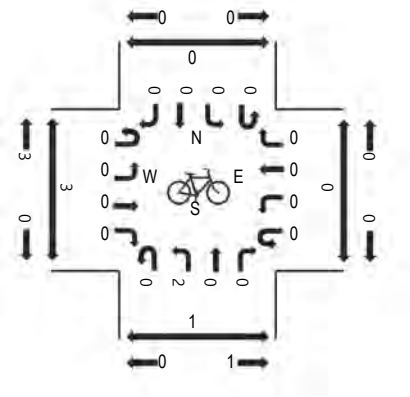
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 DISTEL CIR & EL CAMINO REAL PM
Date: Tuesday, November 2, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

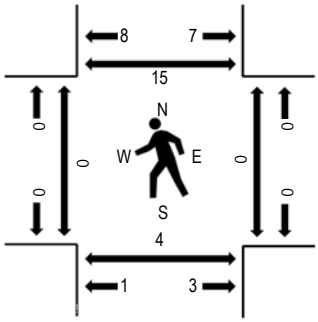
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	EL CAMINO REAL Eastbound				EL CAMINO REAL Westbound				DISTEL CIR Northbound				DISTEL CIR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	2	2	300	3	2	2	221	4	0	3	0	6	0	0	0	3	548	2,183	2	0	0	2
4:15 PM	1	0	288	2	4	6	221	5	0	1	0	3	0	0	0	0	531	2,224	2	0	1	0
4:30 PM	1	0	268	1	2	6	231	0	0	3	0	7	0	0	0	2	521	2,307	1	0	2	2
4:45 PM	1	4	292	4	6	8	256	3	0	2	0	7	0	0	0	0	583	2,374	1	0	0	3
5:00 PM	0	1	307	7	4	4	253	1	0	4	0	7	0	0	0	1	589	2,386	0	0	1	1
5:15 PM	0	1	330	1	2	4	264	6	0	3	0	2	0	0	0	1	614		0	0	1	4
5:30 PM	1	1	309	1	2	4	251	6	0	3	0	6	0	3	0	1	588		0	0	2	6
5:45 PM	2	3	317	1	3	13	247	5	0	0	0	3	0	0	0	1	595		0	0	0	4

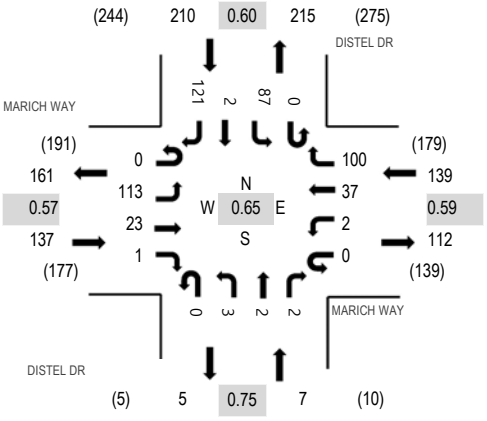
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	3	6	1,245	10	11	25	1,003	18	0	10	0	18	0	3	0	4	2,356
Mediums	0	0	17	0	0	0	12	0	0	0	0	0	0	0	0	0	29
Total	3	6	1,263	10	11	25	1,015	18	0	10	0	18	0	3	0	4	2,386

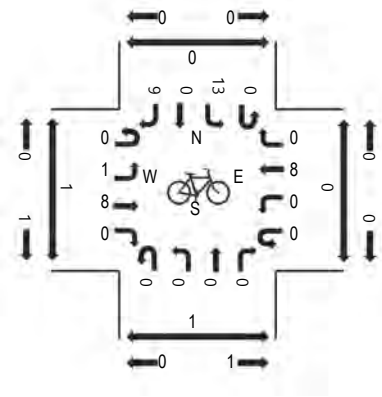
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 DISTEL DR & MARICH WAY AM
Date: Tuesday, November 2, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

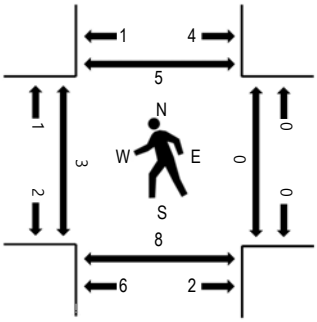
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARICH WAY Eastbound				MARICH WAY Westbound				DISTEL DR Northbound				DISTEL DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	4	0	0	0	0	2	1	0	0	0	0	1	0	0	2	10	117	0	0	1	0
7:15 AM	0	7	2	0	0	0	1	5	0	0	1	0	0	5	0	5	26	191	0	0	3	0
7:30 AM	0	5	2	0	0	0	6	12	0	0	0	0	0	5	0	5	35	335	0	0	0	0
7:45 AM	0	12	8	0	0	0	2	11	0	0	1	1	0	4	0	7	46	491	1	0	1	1
8:00 AM	0	13	6	1	0	1	9	11	0	2	0	0	0	20	1	20	84	493	0	0	0	0
8:15 AM	0	30	11	0	0	0	12	27	0	1	0	1	0	33	1	54	170		2	0	2	2
8:30 AM	0	58	6	0	0	1	12	46	0	0	2	1	0	29	0	36	191		0	0	1	2
8:45 AM	0	12	0	0	0	0	4	16	0	0	0	0	0	5	0	11	48		1	0	5	1

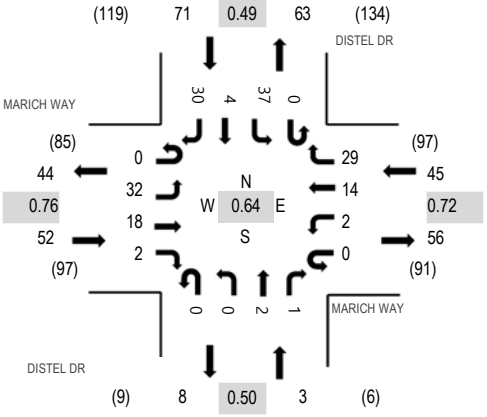
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	113	23	1	0	2	37	100	0	3	2	2	0	87	2	120	492
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	113	23	1	0	2	37	100	0	3	2	2	0	87	2	121	493

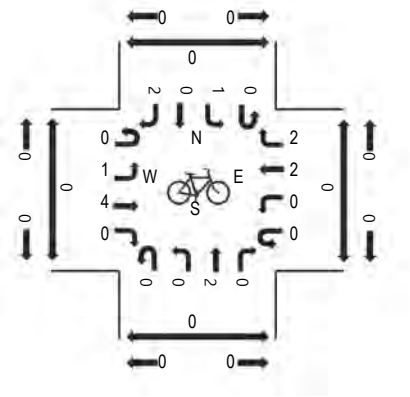
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 DISTEL DR & MARICH WAY PM
Date: Tuesday, November 2, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

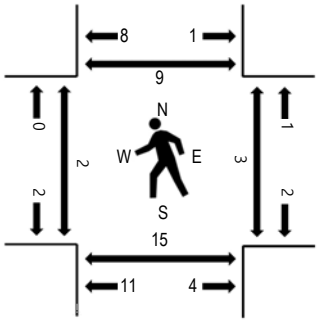
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARICH WAY Eastbound				MARICH WAY Westbound				DISTEL DR Northbound				DISTEL DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	16	3	0	0	0	6	12	0	0	0	0	0	8	0	4	49	148	0	0	2	1
4:15 PM	0	8	4	0	0	0	2	6	0	0	0	0	0	5	0	8	33	133	2	0	2	0
4:30 PM	0	6	2	0	0	0	4	7	0	0	1	0	0	7	1	6	34	133	0	0	7	1
4:45 PM	0	4	2	0	0	0	5	10	0	0	1	1	0	3	0	6	32	136	0	0	5	1
5:00 PM	0	6	3	1	0	1	6	5	0	0	0	0	0	8	1	3	34	171	2	0	3	1
5:15 PM	0	7	4	0	0	0	4	8	0	0	0	1	0	6	1	2	33		0	1	3	2
5:30 PM	0	11	3	0	0	0	1	7	0	0	1	0	0	7	0	7	37		0	2	5	4
5:45 PM	0	8	8	1	0	1	3	9	0	0	1	0	0	16	2	18	67		0	0	4	2

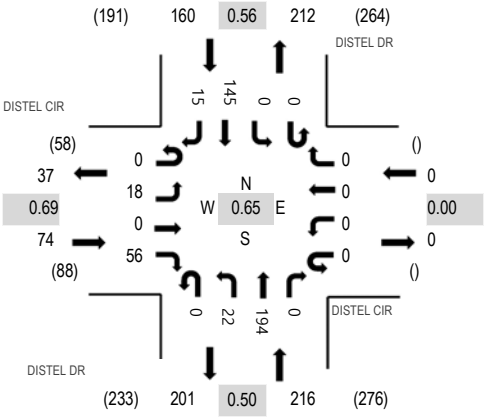
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	32	18	2	0	2	14	29	0	0	2	1	0	37	4	30	171
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	32	18	2	0	2	14	29	0	0	2	1	0	37	4	30	171

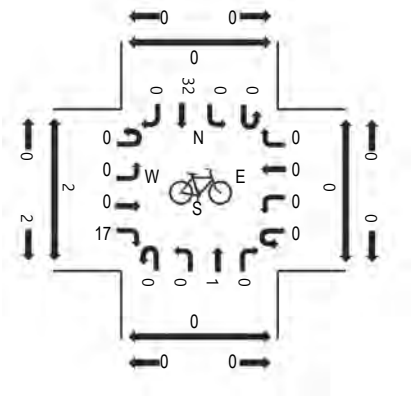
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 DISTEL DR & DISTEL CIR AM
Date: Tuesday, November 2, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

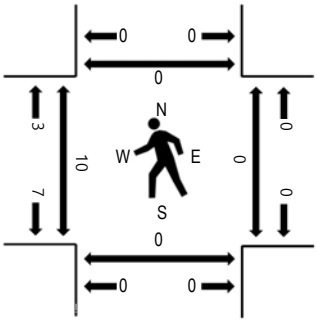
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DISTEL CIR Eastbound				DISTEL CIR Westbound				DISTEL DR Northbound				DISTEL DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	1	0	2	0	0	0	0	0	1	5	0	0	0	0	0	9	105	2	0	0	0
7:15 AM	0	0	0	6	0	0	0	0	0	3	10	0	0	0	5	2	26	163	0	0	0	0
7:30 AM	0	1	0	1	0	0	0	0	0	2	15	0	0	0	8	4	31	290	0	0	0	0
7:45 AM	0	0	0	3	0	0	0	0	0	4	20	0	0	0	7	5	39	432	1	0	0	1
8:00 AM	0	3	0	7	0	0	0	0	0	4	20	0	0	0	30	3	67	450	2	0	0	0
8:15 AM	0	3	0	24	0	0	0	0	0	5	50	0	0	0	67	4	153		5	0	0	0
8:30 AM	0	5	0	20	0	0	0	0	0	9	100	0	0	0	35	4	173		0	0	0	0
8:45 AM	0	7	0	5	0	0	0	0	0	4	24	0	0	0	13	4	57		3	0	0	0

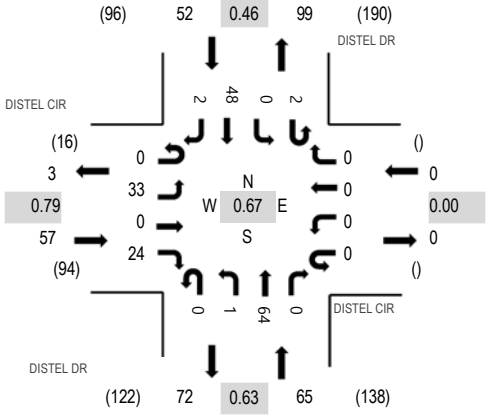
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	17	0	56	0	0	0	0	0	22	194	0	0	0	144	13	446
Mediums	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4
Total	0	18	0	56	0	0	0	0	0	22	194	0	0	0	145	15	450

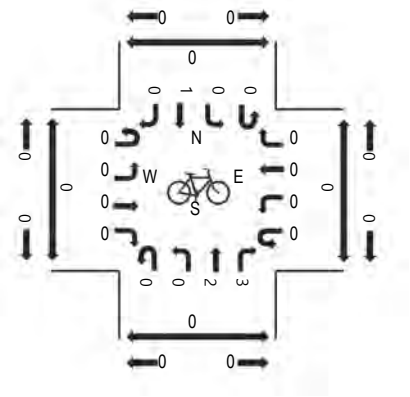
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 DISTEL DR & DISTEL CIR PM
Date: Tuesday, November 2, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

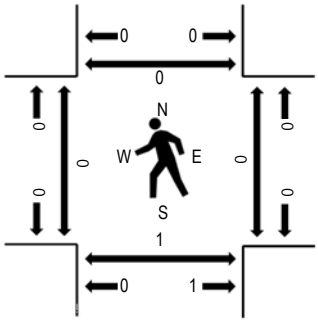
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DISTEL CIR Eastbound				DISTEL CIR Westbound				DISTEL DR Northbound				DISTEL DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	8	0	3	0	0	0	0	0	3	26	0	0	0	11	3	54	154	1	0	0	0
4:15 PM	0	3	0	1	0	0	0	0	0	1	13	0	0	0	9	2	29	135	0	0	0	0
4:30 PM	0	7	0	5	0	0	0	0	0	2	13	0	0	0	10	2	39	138	0	0	0	0
4:45 PM	0	5	0	5	0	0	0	0	0	0	15	0	1	0	6	0	32	141	0	0	1	0
5:00 PM	0	11	0	5	0	0	0	0	0	0	12	0	0	0	7	0	35	174	0	0	1	0
5:15 PM	0	7	0	3	0	0	0	0	0	0	15	0	0	0	7	0	32		0	0	0	0
5:30 PM	0	8	0	5	0	0	0	0	0	1	18	0	1	0	8	1	42		0	0	0	0
5:45 PM	0	7	0	11	0	0	0	0	0	0	19	0	1	0	26	1	65		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	33	0	24	0	0	0	0	0	1	64	0	2	0	48	2	174
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	33	0	24	0	0	0	0	0	1	64	0	2	0	48	2	174

Appendix C
Turning Movement Volumes

Intersection Number: 1
Software Node Number: 25
Intersection Name: Los Altos Avenue & El Camino Real
Peak Hour: AM
Date of Analysis: 03/07/22
Count Date: 10/10/19
Scenario: 330 Distel Circle TA

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	4	9	14	7	1423	101	166	4	166	121	738	53	2806
Project Trips	0	0	0	0	3	0	0	0	0	0	-1	0	2
Existing + Project	4	9	14	7	1426	101	166	4	166	121	737	53	
Approved Project Trips	0	0	0	0	76	0	0	0	0	0	40	0	116
Background Conditions	4	9	14	7	1499	101	166	4	166	121	778	53	2922
Background + Project	4	9	14	7	1502	101	166	4	166	121	777	53	2924
Approved + Pending Project Trips	0	0	0	0	92	0	-1	0	1	0	100	0	192
Cumulative no Proj Conditions (incl 1% Growth rate)	5	11	17	8	1771	119	195	5	197	143	971	63	3505
Cumulative + Project Conditions	5	11	17	8	1774	119	195	5	197	143	970	63	3507

Intersection Number: 2
Software Node Number: 45
Intersection Name: Del Medio Avenue & El Camino Real
Peak Hour: AM
Date of Analysis: 03/07/22
Count Date: 05/29/19
Scenario: 330 Distel Circle TA

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	0	0	118	1341	86	1	0	0	0	1078	99	2723
Project Trips	0	0	0	0	3	0	0	0	0	0	-1	0	2
Existing + Project	0	0	0	118	1344	86	1	0	0	0	1077	99	
Approved Project Trips	0	0	0	0	76	0	0	0	0	0	33	7	116
Background Conditions	0	0	0	118	1417	86	1	0	0	0	1111	106	2839
Background + Project	0	0	0	118	1420	86	1	0	0	0	1110	106	2841
Background + Project Check	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
Approved + Pending Project Trips	0	0	0	0	88	0	0	0	0	0	96	7	191
Cumulative no Proj Conditions (incl 1% Growth rate)	0	0	0	139	1670	101	1	0	0	0	1368	124	3403
Cumulative + Project Conditions	0	0	0	139	1673	101	1	0	0	0	1367	124	3405

Intersection Number: 3
Software Node Number: 26
Intersection Name: San Antonio Road & El Camino Real
Peak Hour: AM
Date of Analysis: 03/07/22
Count Date: 10/10/19
Scenario: 330 Distel Circle TA

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	276	712	182	179	1180	261	41	718	178	144	606	299	4776
Project Trips	0	0	-1	2	3	2	-2	0	0	0	-1	0	3
Existing + Project	276	712	181	181	1183	263	39	718	178	144	605	299	
Approved Project Trips	21	20	0	0	56	4	0	8	-1	0	33	0	141
Background Conditions	297	732	182	179	1236	265	41	726	177	144	639	299	4917
Background + Project	297	732	181	181	1239	267	39	726	177	144	638	299	4920
Approved + Pending Project Trips	29	27	17	51	58	4	12	48	1	5	53	38	343
Cumulative no Proj Conditions (incl 1% Growth rate)	355	867	232	262	1450	312	60	895	211	175	768	391	5978
Cumulative + Project Conditions	355	867	231	264	1453	314	58	895	211	175	767	391	5981

Intersection Number: 4
Software Node Number: 51
Intersection Name: Showers Drive & El Camino Real
Peak Hour: AM
Count Date: 04/12/18
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	97	13	77	87	1321	27	5	4	14	50	756	148	2599
Project Trips	0	0	0	0	7	0	0	0	0	0	-4	0	3
Existing + Project	97	13	77	87	1328	27	5	4	14	50	752	148	
Approved Project Trips	0	0	0	0	59	0	0	0	0	0	32	0	91
Background Conditions	97	13	77	87	1380	27	5	4	14	50	788	148	2690
Background + Project	97	13	77	87	1387	27	5	4	14	50	784	148	2693
Approved + Pending Project Trips	0	0	12	0	112	0	0	0	0	0	81	0	205
Cumulative no Proj Conditions (incl 1% Growth rate)	114	15	103	103	1671	32	6	5	17	59	973	175	3273
Cumulative + Project Conditions	114	15	103	103	1678	32	6	5	17	59	969	175	3276

Intersection Number: 5
Software Node Number: 28
Intersection Name: Jordan Avenue & El Camino Real
Peak Hour: AM
Count Date: 10/22/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	8	6	0	29	1686	54	109	10	60	99	859	9	2929
Project Trips	0	0	0	0	7	2	-1	0	0	0	-4	0	4
Existing + Project	8	6	0	29	1693	56	108	10	60	99	855	9	
Approved Project Trips	0	0	0	0	49	1	2	0	3	1	37	0	93
Background Conditions	8	6	0	29	1735	55	111	10	63	100	896	9	3022
Background + Project	8	6	0	29	1742	57	110	10	63	100	892	9	3026
Approved + Pending Project Trips	0	0	0	15	99	1	7	3	6	1	56	0	188
Cumulative no Proj Conditions (incl 1% Growth rate)	9	7	0	49	2088	65	136	15	77	118	1070	11	3645
Cumulative + Project Conditions	9	7	0	49	2095	67	135	15	77	118	1066	11	3649

Intersection Number: 6
Software Node Number: 113
Intersection Name: Ortega Avenue & El Camino Real
Peak Hour: AM
Count Date: 11/02/21
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	59	0	150	136	1458	18	0	1	0	0	957	31	2810
Project Trips	0	0	0	0	9	0	0	0	0	0	-5	0	4
Existing + Project	59	0	150	136	1467	18	0	1	0	0	952	31	
Approved Project Trips	0	0	28	6	50	0	0	0	0	0	39	0	123
Background Conditions	59	0	178	142	1508	18	0	1	0	0	996	31	2933
Background + Project	59	0	178	142	1517	18	0	1	0	0	991	31	2937
Approved + Pending Project Trips	0	0	28	6	115	0	0	0	0	0	63	0	212
Cumulative no Proj Conditions (incl 1% Growth rate)	70	0	205	166	1835	21	0	1	0	0	1192	37	3527
Cumulative + Project Conditions	70	0	205	166	1844	21	0	1	0	0	1187	37	3531

Intersection Number: 7
Software Node Number: 30
Intersection Name: Distel Drive & El Camino Real
Peak Hour: AM
Count Date: 10/10/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	0	0	0	1769	93	204	0	63	95	1024	8	3256
Project Trips	0	0	0	0	0	-2	5	0	3	0	3	0	9
Existing + Project	0	0	0	0	1769	91	209	0	66	95	1027	8	
Approved Project Trips	0	0	0	0	56	6	3	0	0	0	54	0	119
Background Conditions	0	0	0	0	1825	99	207	0	63	95	1078	8	3375
Background + Project	0	0	0	0	1825	97	212	0	66	95	1081	8	3384
Approved + Pending Project Trips	0	0	0	0	121	6	3	0	0	0	78	0	208
Cumulative no Proj Conditions (incl 1% Growth rate)	0	0	0	0	2208	116	244	0	74	112	1286	9	4049
Cumulative + Project Conditions	0	0	0	0	2208	114	249	0	77	112	1289	9	4058

Intersection Number: 8
Software Node Number: 31
Intersection Name: Rengstorff Avenue & El Camino Real
Peak Hour: AM
Count Date: 10/10/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	200	0	299	212	1593	53	1	0	0	1	1106	152	3617
Project Trips	-1	0	0	0	-2	0	0	0	0	0	4	3	4
Existing + Project	199	0	299	212	1591	53	1	0	0	1	1110	155	
Approved Project Trips	15	3	3	11	24	9	33	10	23	7	48	2	188
Background Conditions	215	3	302	223	1617	62	34	10	23	8	1154	154	3805
Background + Project	214	3	302	223	1615	62	34	10	23	8	1158	157	3809
Approved + Pending Project Trips	15	3	3	11	89	9	33	10	23	7	62	12	277
Cumulative no Proj Conditions (incl 1% Growth rate)	251	3	356	261	1969	72	34	10	23	8	1367	191	4545
Cumulative + Project Conditions	250	3	356	261	1967	72	34	10	23	8	1371	194	4549

Intersection Number: 9
Software Node Number: 1
Intersection Name: San Antonio Road & Portola Avenue
Peak Hour: AM
Count Date: 10/10/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	61	820	12	37	48	43	44	887	150	182	76	171	2531
Project Trips	0	2	0	0	0	0	0	-2	0	0	0	0	0
Existing + Project	61	822	12	37	48	43	44	885	150	182	76	171	
Approved Project Trips	0	24	0	-1	0	0	0	8	0	0	0	0	31
Background Conditions	61	844	12	36	48	43	44	895	150	182	76	171	2562
Background + Project	61	846	12	36	48	43	44	893	150	182	76	171	2562
Approved + Pending Project Trips	0	36	0	-1	0	0	0	62	0	0	0	0	97
Cumulative no Proj Conditions (incl 1% Growth rate)	72	1004	14	43	57	51	52	1109	177	215	90	202	3086
Cumulative + Project Conditions	72	1006	14	43	57	51	52	1107	177	215	90	202	3086

Intersection Number: 10
Software Node Number: 128
Intersection Name: San Antonio Road & Jordan Avenue
Peak Hour: AM
Count Date: 11/02/21
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	1369	17	14	0	51	58	1114	0	0	0	0	2623
Project Trips	0	4	0	0	0	0	0	-3	0	0	0	0	1
Existing + Project	0	1373	17	14	0	51	58	1111	0	0	0	0	
Approved Project Trips	0	26	0	0	0	0	0	8	0	0	0	0	34
Background Conditions	0	1395	17	14	0	51	58	1122	0	0	0	0	2657
Background + Project	0	1399	17	14	0	51	58	1119	0	0	0	0	2658
Approved + Pending Project Trips	0	39	0	0	0	0	0	62	0	0	0	0	101
Cumulative no Proj Conditions (incl 1% Growth rate)	0	1654	20	17	0	60	68	1377	0	0	0	0	3196
Cumulative + Project Conditions	0	1658	20	17	0	60	68	1374	0	0	0	0	3197

Intersection Number: 11
Software Node Number: 2
Intersection Name: San Antonio Road & Almond Avenue
Peak Hour: AM
Count Date: 10/15/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	981	172	195	0	279	161	847	0	0	0	0	2635
Project Trips	0	4	0	0	0	0	0	-3	0	0	0	0	1
Existing + Project	0	985	172	195	0	279	161	844	0	0	0	0	
Approved Project Trips	7	19	0	0	0	3	2	6	0	0	0	2	39
Background Conditions	7	1000	172	195	0	282	163	853	0	0	0	2	2674
Background + Project	7	1004	172	195	0	282	163	850	0	0	0	2	2675
Approved + Pending Project Trips	10	29	0	0	0	6	3	44	1	4	0	18	115
Cumulative no Proj Conditions (incl 1% Growth rate)	10	1187	203	230	0	335	193	1043	1	4	0	18	3224
Cumulative + Project Conditions	10	1191	203	230	0	335	193	1040	1	4	0	18	3225

Intersection Number: 12
Software Node Number: 29
Intersection Name: Distel Circle & El Camino Real
Peak Hour: AM
Count Date: 10/10/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	1	0	1	2	1684	130	12	0	4	45	1043	6	2928
Project Trips	0	0	0	0	3	0	3	0	7	-5	0	0	8
Existing + Project	1	0	1	2	1687	130	15	0	11	40	1043	6	
Approved Project Trips	0	0	0	0	56	0	0	0	0	0	54	0	110
Background Conditions	1	0	1	2	1740	130	12	0	4	45	1097	6	3038
Background + Project	1	0	1	2	1743	130	15	0	11	40	1097	6	3046
Approved + Pending Project Trips	0	0	0	0	121	0	0	0	0	0	78	0	199
Cumulative no Proj Conditions (incl 1% Growth rate)	1	0	1	2	2108	153	14	0	5	53	1309	7	3653
Cumulative + Project Conditions	1	0	1	2	2111	153	17	0	12	48	1309	7	3661

Intersection Number: 13
Software Node Number: 116
Intersection Name: Distel Drive & Marich Way
Peak Hour: AM
Count Date: 11/02/21
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	171	3	123	141	52	3	3	3	4	1	33	160	697
Project Trips	2	0	2	1	0	0	0	0	0	0	0	-1	4
Existing + Project	173	3	125	142	52	3	3	3	4	1	33	159	
Approved Project Trips	3	0	3	2	0	0	0	0	0	0	0	1	9
Background Conditions	174	3	126	143	52	3	3	3	4	1	33	161	706
Background + Project	176	3	128	144	52	3	3	3	4	1	33	160	710
Approved + Pending Project Trips	3	0	3	2	0	0	0	0	0	0	0	1	9
Cumulative no Proj Conditions (incl 1% Growth rate)	205	4	148	168	61	4	4	4	5	1	39	190	833
Cumulative + Project Conditions	207	4	150	169	61	4	4	4	5	1	39	189	837

Intersection Number: 14
Software Node Number: 115
Intersection Name: Distel Circle & Distel Drive
Peak Hour: AM
Count Date: 11/02/21
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	21	205	0	0	0	0	0	274	31	79	0	25	635
Project Trips	-2	0	0	0	0	0	0	0	0	4	0	7	9
Existing + Project	19	205	0	0	0	0	0	274	31	83	0	32	644
Approved Project Trips	0	6	0	0	0	0	0	3	0	0	0	0	9
Background Conditions	21	211	0	0	0	0	0	277	31	79	0	25	644
Background + Project	19	211	0	0	0	0	0	277	31	83	0	32	653
Approved + Pending Project Trips	0	6	0	0	0	0	0	3	0	0	0	0	9
Cumulative no Proj Conditions (incl 1% Growth rate)	25	248	0	0	0	0	0	326	37	93	0	30	759
Cumulative + Project Conditions	23	248	0	0	0	0	0	326	37	97	0	37	768

Intersection Number: 1
Software Node Number: 25
Intersection Name: Los Altos Avenue & El Camino Real
Peak Hour: PM
Date of Analysis: 03/07/22
Count Date: 10/10/19
Scenario: 330 Distel Circle TA

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	18	2	13	11	1062	74	82	5	105	159	1709	41	3281
Project Trips	0	0	0	0	1	0	0	0	0	0	5	0	6
Existing + Project	18	2	13	11	1063	74	82	5	105	159	1714	41	
Approved Project Trips	0	0	0	0	46	0	0	0	0	0	79	0	125
Background Conditions	18	2	13	11	1108	74	82	5	105	159	1788	41	3406
Background + Project	18	2	13	11	1109	74	82	5	105	159	1793	41	3412
Approved + Pending Project Trips	0	0	0	0	97	0	-1	0	5	0	94	0	195
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	21	2	15	13	1350	87	96	6	129	188	2111	48	4066
Cumulative + Project Conditions	21	2	15	13	1351	87	96	6	129	188	2116	48	4072

Intersection Number: 2
Software Node Number: 45
Intersection Name: Del Medio Avenue & El Camino Real
Peak Hour: PM
Date of Analysis: 03/07/22
Count Date: 05/29/19
Scenario: 330 Distel Circle TA

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	140	0	45	96	1075	61	3	1	0	2	1930	118	3471
Project Trips	0	0	0	0	1	0	0	0	0	0	5	0	6
Existing + Project	140	0	45	96	1076	61	3	1	0	2	1935	118	
Approved Project Trips	0	0	0	0	46	0	0	0	0	0	55	24	125
Background Conditions	140	0	45	96	1121	61	3	1	0	2	1985	142	3596
Background + Project	140	0	45	96	1122	61	3	1	0	2	1990	142	3602
Background + Project Check	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
Approved + Pending Project Trips	0	0	0	0	98	0	0	0	0	0	65	24	187
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	165	0	53	113	1367	72	4	1	0	2	2342	163	4282
Cumulative + Project Conditions	165	0	53	113	1368	72	4	1	0	2	2347	163	4288

Intersection Number: 3
Software Node Number: 26
Intersection Name: San Antonio Road & El Camino Real
Peak Hour: PM
Date of Analysis: 03/07/22
Count Date: 10/10/19
Scenario: 330 Distel Circle TA

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	147	619	301	125	786	359	86	449	207	212	1367	436	5094
Project Trips	0	0	2	0	1	0	1	0	0	0	5	0	9
Existing + Project	147	619	303	125	787	359	87	449	207	212	1372	436	
Approved Project Trips	15	15	0	0	31	1	-7	24	0	0	55	0	134
Background Conditions	162	634	301	125	817	360	79	473	207	212	1422	436	5228
Background + Project	162	634	303	125	818	360	80	473	207	212	1427	436	5237
Approved + Pending Project Trips	50	52	47	18	48	1	-5	34	0	1	54	10	310
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	223	782	402	166	975	425	96	564	244	251	1667	524	6319
Cumulative + Project Conditions	223	782	404	166	976	425	97	564	244	251	1672	524	6328

Intersection Number: 4
Software Node Number: 51
Intersection Name: Showers Drive & El Camino Real
Peak Hour: PM
Count Date: 04/12/18
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	119	30	201	152	1000	88	82	27	51	122	1558	237	3667
Project Trips	0	0	0	0	1	0	0	0	0	0	8	0	9
Existing + Project	119	30	201	152	1001	88	82	27	51	122	1566	237	
Approved Project Trips	0	0	0	0	32	0	0	0	0	0	46	0	78
Background Conditions	119	30	201	152	1032	88	82	27	51	122	1604	237	3745
Background + Project	119	30	201	152	1033	88	82	27	51	122	1612	237	3754
Approved + Pending Project Trips	0	0	0	0	67	0	0	0	0	0	94	0	161
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	140	35	237	179	1247	104	97	32	60	144	1932	280	4487
Cumulative + Project Conditions	140	35	237	179	1248	104	97	32	60	144	1940	280	4496

Intersection Number: 5
Software Node Number: 28
Intersection Name: Jordan Avenue & El Camino Real
Peak Hour: PM
Count Date: 10/22/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	12	3	5	5	1237	64	91	1	63	75	1790	26	3372
Project Trips	0	0	0	0	1	0	0	0	0	0	8	0	9
Existing + Project	12	3	5	5	1238	64	91	1	63	75	1798	26	
Approved Project Trips	0	0	0	0	31	-1	-2	0	-1	-12	49	0	64
Background Conditions	12	3	5	5	1268	63	89	1	62	63	1839	26	3436
Background + Project	12	3	5	5	1269	63	89	1	62	63	1847	26	3445
Approved + Pending Project Trips	0	0	0	0	50	4	22	0	15	-7	92	0	176
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	14	4	6	6	1510	80	129	1	89	82	2204	31	4156
Cumulative + Conditions	14	4	6	6	1511	80	129	1	89	82	2212	31	4165

Intersection Number: 6
Software Node Number: 113
Intersection Name: Ortega Avenue & El Camino Real
Peak Hour: PM
Count Date: 11/02/21
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	38	0	71	111	1248	13	4	4	3	0	1608	45	3145
Project Trips	0	0	0	0	1	0	0	0	0	0	8	0	9
Existing + Project	38	0	71	111	1249	13	4	4	3	0	1616	45	
Approved Project Trips	0	0	20	6	30	0	0	0	0	0	47	0	103
Background Conditions	38	0	91	117	1278	13	4	4	3	0	1655	45	3248
Background + Project	38	0	91	117	1279	13	4	4	3	0	1663	45	3257
Approved + Pending Project Trips	0	0	20	6	54	0	0	0	0	0	114	0	194
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	45	0	104	137	1527	15	5	5	4	0	2011	53	3906
Cumulative + Project Conditions	45	0	104	137	1528	15	5	5	4	0	2019	53	3915

Intersection Number: 7
Software Node Number: 30
Intersection Name: Distel Drive & El Camino Real
Peak Hour: PM
Count Date: 10/10/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	0	0	0	1304	68	99	0	42	21	1850	6	3390
Project Trips	0	0	0	0	6	6	1	0	0	0	1	0	14
Existing + Project	0	0	0	0	1310	74	100	0	42	21	1851	6	
Approved Project Trips	0	0	0	0	36	4	6	0	0	0	54	0	100
Background Conditions	0	0	0	0	1340	72	105	0	42	21	1904	6	3490
Background + Project	0	0	0	0	1346	78	106	0	42	21	1905	6	3504
Approved + Pending Project Trips	0	0	0	0	60	4	6	0	0	0	121	0	191
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	0	0	0	0	1599	84	123	0	50	25	2304	7	4192
Cumulative + Project Conditions	0	0	0	0	1605	90	124	0	50	25	2305	7	4206

Intersection Number: 8
Software Node Number: 31
Intersection Name: Rengstorff Avenue & El Camino Real
Peak Hour: PM
Count Date: 10/10/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	135	0	273	201	1151	64	0	0	0	0	1837	205	3866
Project Trips	4	0	0	0	7	0	0	0	0	0	1	1	13
Existing + Project	139	0	273	201	1158	64	0	0	0	0	1838	206	
Approved Project Trips	12	14	3	37	10	24	15	8	18	30	26	4	201
Background Conditions	147	14	276	238	1161	88	15	8	18	30	1863	209	4067
Background + Project	151	14	276	238	1168	88	15	8	18	30	1864	210	4080
Approved + Pending Project Trips	13	14	3	37	33	24	15	8	18	30	81	16	292
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	172	14	325	274	1391	100	15	8	18	30	2249	258	4854
Cumulative + Project Conditions	176	14	325	274	1398	100	15	8	18	30	2250	259	4867

Intersection Number: 9
Software Node Number: 1
Intersection Name: San Antonio Road & Portola Avenue
Peak Hour: PM
Count Date: 10/10/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	38	976	18	25	7	30	18	781	44	41	18	43	2039
Project Trips	0	0	0	0	0	0	0	1	0	0	0	0	1
Existing + Project	38	976	18	25	7	30	18	782	44	41	18	43	
Approved Project Trips	0	16	0	0	0	0	0	17	0	0	0	0	33
Background Conditions	38	992	18	25	7	30	18	798	44	41	18	43	2072
Background + Project	38	992	18	25	7	30	18	799	44	41	18	43	2073
Approved + Pending Project Trips	0	54	0	0	0	0	0	29	0	0	0	0	83
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	45	1206	21	30	8	35	21	951	52	48	21	51	2489
Cumulative + Project Conditions	45	1206	21	30	8	35	21	952	52	48	21	51	2490

Intersection Number: 10
Software Node Number: 128
Intersection Name: San Antonio Road & Jordan Avenue
Peak Hour: PM
Count Date: 11/02/21
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	969	20	13	0	57	54	926	0	0	0	0	2039
Project Trips	0	0	0	0	0	0	0	1	0	0	0	0	1
Existing + Project	0	969	20	13	0	57	54	927	0	0	0	0	
Approved Project Trips	0	4	0	0	0	0	0	16	0	0	0	0	20
Background Conditions	0	973	20	13	0	57	54	942	0	0	0	0	2059
Background + Project	0	973	20	13	0	57	54	943	0	0	0	0	2060
Approved + Pending Project Trips	0	53	0	0	0	0	0	29	0	0	0	0	82
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	0	1196	24	15	0	67	64	1122	0	0	0	0	2488
Cumulative + Project Conditions	0	1196	24	15	0	67	64	1123	0	0	0	0	2489

Intersection Number: 11
Software Node Number: 2
Intersection Name: San Antonio Road & Almond Avenue
Peak Hour: PM
Count Date: 10/15/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	2	914	122	122	0	213	273	821	3	0	0	0	2470
Project Trips	0	0	0	0	0	0	0	1	0	0	0	0	1
Existing + Project	2	914	122	122	0	213	273	822	3	0	0	0	
Approved Project Trips	5	-1	0	0	0	0	0	8	0	0	0	8	20
Background Conditions	7	913	122	122	0	213	273	829	3	0	0	8	2490
Background + Project	7	913	122	122	0	213	273	830	3	0	0	8	2491
Approved + Pending Project Trips	20	33	0	0	0	-3	2	17	4	2	0	12	87
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	22	1112	144	144	0	248	324	986	8	2	0	12	3002
Cumulative + Project Conditions	22	1112	144	144	0	248	324	987	8	2	0	12	3003

Intersection Number: 12
Software Node Number: 29
Intersection Name: Distel Circle & El Camino Real
Peak Hour: PM
Count Date: 10/10/19
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	0	1	0	1337	34	29	0	9	13	1587	14	3024
Project Trips	0	0	0	0	0	6	1	0	1	8	0	0	16
Existing + Project	0	0	1	0	1337	40	30	0	10	21	1587	14	
Approved Project Trips	0	0	0	0	36	0	0	0	0	0	54	0	90
Background Conditions	0	0	1	0	1373	34	29	0	9	13	1641	14	3114
Background + Project	0	0	1	0	1373	40	30	0	10	21	1641	14	3130
Approved + Pending Project Trips	0	0	0	0	60	0	0	0	0	0	121	0	181
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	0	0	1	0	1638	40	34	0	11	15	1994	17	3750
Cumulative + Project Conditions	0	0	1	0	1638	46	35	0	12	23	1994	17	3766

Intersection Number: 13
Software Node Number: 116
Intersection Name: Distel Drive & Marich Way
Peak Hour: PM
Count Date: 11/02/21
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	40	5	49	38	19	3	1	3	0	3	24	42	227
Project Trips	0	0	0	0	0	0	0	0	0	0	0	1	1
Existing + Project	40	5	49	38	19	3	1	3	0	3	24	43	
Approved Project Trips	2	0	2	3	0	0	0	0	0	0	0	3	10
Background Conditions	42	5	51	41	19	3	1	3	0	3	24	45	237
Background + Project	42	5	51	41	19	3	1	3	0	3	24	46	238
Approved + Pending Project Trips	2	0	2	3	0	0	0	0	0	0	0	3	10
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	49	6	60	48	22	4	1	4	0	4	28	53	279
Cumulative + Project Conditions	49	6	60	48	22	4	1	4	0	4	28	54	280

Intersection Number: 14
Software Node Number: 115
Intersection Name: Distel Circle & Distel Drive
Peak Hour: PM
Count Date: 11/02/21
Scenario: 330 Distel Circle TA
Date of Analysis: 03/07/22

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	3	63	0	0	0	0	0	85	1	32	0	44	228
Project Trips	6	0	0	0	0	0	0	0	1	0	0	1	8
Existing + Project	9	63	0	0	0	0	0	85	2	32	0	45	
Approved Project Trips	0	4	0	0	0	0	0	6	0	0	0	0	10
Background Conditions	3	67	0	0	0	0	0	91	1	32	0	44	238
Background + Project	9	67	0	0	0	0	0	91	2	32	0	45	246
Approved + Pending Project Trips	0	4	0	0	0	0	0	6	0	0	0	0	10
Cumulative no Proj Conditions (incl 1% Annual Growth rate)	4	78	0	0	0	0	0	106	1	38	0	52	279
Cumulative + Project Conditions	10	78	0	0	0	0	0	106	2	38	0	53	287

Appendix D
Level of Service Calculations

Vistro File: \...\330 Distel Circle Vistro AM.vistro
Report File: \...\Existing AM_rev.pdf

Scenario 1 Existing AM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.675	19.5	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	SB Left	0.646	18.8	B
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	SEB Left	0.496	20.9	C
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Left	0.643	62.6	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.460	19.0	B
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	SWB Left	0.040	152.3	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	SEB Left	0.520	28.2	C
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NEB Right	0.511	50.2	D
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	NEB Right	0.357	43.8	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NEB Left	0.446	49.7	D
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	NWB Left	0.481	47.0	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.052	13.4	B
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.007	18.4	C
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.812	164.7	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	19.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.675

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	150	887	44	12	820	61	171	76	182	43	48	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	887	44	12	820	61	171	76	182	43	48	37
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	222	11	3	205	15	43	19	46	11	12	9
Total Analysis Volume [veh/h]	150	887	44	12	820	61	171	76	182	43	48	37
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	7	23	23	1	18	18	21	21	21
g / C, Green / Cycle	0.11	0.39	0.39	0.02	0.29	0.29	0.35	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.25	0.01	0.24	0.24	0.25	0.11	0.18
s, saturation flow rate [veh/h]	1781	1870	1839	1781	1870	1825	984	1589	716
c, Capacity [veh/h]	199	728	716	27	547	534	443	551	328
d1, Uniform Delay [s]	25.99	15.02	15.02	29.43	19.80	19.80	16.98	14.52	15.14
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.74	0.97	0.98	10.88	3.01	3.08	1.10	0.35	0.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.65	0.65	0.44	0.81	0.81	0.56	0.33	0.39
d, Delay for Lane Group [s/veh]	31.73	15.99	16.01	40.31	22.81	22.88	18.09	14.87	15.89
Lane Group LOS	C	B	B	D	C	C	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.24	4.64	4.57	0.24	5.55	5.43	2.87	1.75	1.18
50th-Percentile Queue Length [ft/ln]	55.92	115.98	114.18	6.08	138.73	135.69	71.63	43.74	29.40
95th-Percentile Queue Length [veh/ln]	4.03	8.17	8.07	0.44	9.41	9.25	5.16	3.15	2.12
95th-Percentile Queue Length [ft/ln]	100.66	204.30	201.80	10.94	235.32	231.21	128.93	78.72	52.92

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Movement, Approach, & Intersection Results

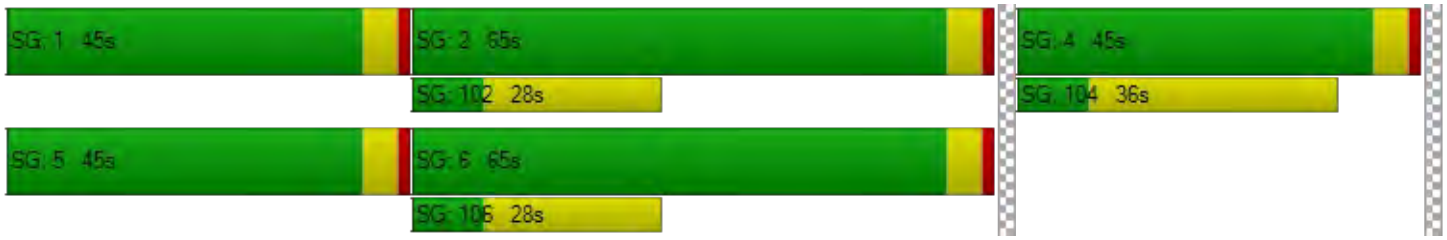
d_M, Delay for Movement [s/veh]	31.73	16.00	16.01	40.31	22.84	22.88	18.09	18.09	14.87	15.89	15.89	15.89
Movement LOS	C	B	B	D	C	C	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	18.18			23.08			16.72			15.89		
Approach LOS	B			C			B			B		
d_I, Intersection Delay [s/veh]	19.55											
Intersection LOS	B											
Intersection V/C	0.675											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.25	0.00	19.25	19.25
l_p,int, Pedestrian LOS Score for Intersection	2.821	0.000	2.102	1.818
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1997	1997	1331	1331
d_b, Bicycle Delay [s]	0.00	0.00	3.36	3.36
l_b,int, Bicycle LOS Score for Intersection	2.451	2.296	2.267	1.771
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.646

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	0	847	161	172	981	0	0	0	0	279	0	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	847	161	172	981	0	0	0	0	279	0	195
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	212	40	43	245	0	0	0	0	70	0	49
Total Analysis Volume [veh/h]	0	847	161	172	981	0	0	0	0	279	0	195
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	72	72	72	72	72	72	72	72	72
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	31	31	9	40	40	17	17	17
g / C, Green / Cycle	0.00	0.43	0.43	0.13	0.55	0.55	0.24	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.00	0.28	0.28	0.10	0.26	0.26	0.00	0.19	0.12
s, saturation flow rate [veh/h]	1781	1870	1767	1781	1870	1870	1870	1457	1589
c, Capacity [veh/h]	0	801	757	224	1036	1036	493	445	376
d1, Uniform Delay [s]	0.00	16.20	16.20	30.35	9.66	9.66	0.00	25.59	23.81
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	3.17	3.35	7.68	1.22	1.22	0.00	2.06	1.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.65	0.65	0.77	0.47	0.47	0.00	0.63	0.52
d, Delay for Lane Group [s/veh]	0.00	19.37	19.55	38.03	10.89	10.89	0.00	27.66	25.38
Lane Group LOS	A	B	B	D	B	B	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.00	6.62	6.29	3.19	4.18	4.18	0.00	4.48	2.90
50th-Percentile Queue Length [ft/ln]	0.00	165.46	157.35	79.87	104.45	104.45	0.00	111.99	72.43
95th-Percentile Queue Length [veh/ln]	0.00	10.84	10.41	5.75	7.52	7.52	0.00	7.95	5.22
95th-Percentile Queue Length [ft/ln]	0.00	270.93	260.21	143.77	188.01	188.01	0.00	198.77	130.38

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Movement, Approach, & Intersection Results

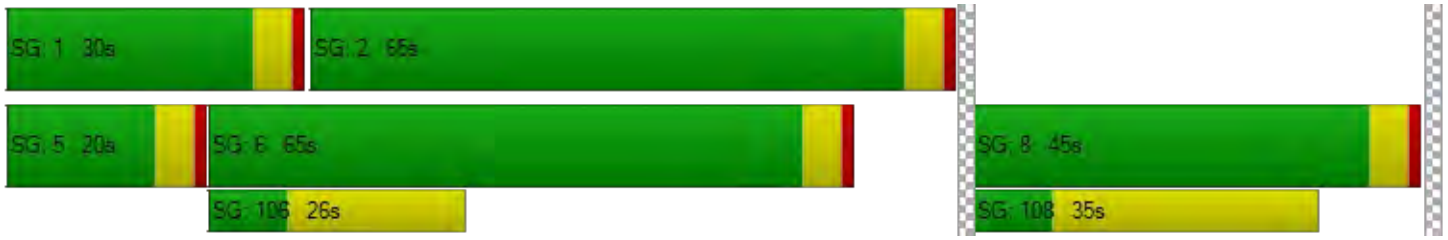
d_M, Delay for Movement [s/veh]	0.00	19.44	19.55	38.03	10.89	10.89	0.00	0.00	0.00	27.66	27.66	25.38
Movement LOS	A	B	B	D	B	B	A	A	A	C	C	C
d_A, Approach Delay [s/veh]	19.46			14.94			0.00			26.72		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	18.79											
Intersection LOS	B											
Intersection V/C	0.646											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	24.79	24.79	40.96
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.785	1.701	2.209
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1677	1677	1118	1118
d_b, Bicycle Delay [s]	0.93	0.93	6.96	6.96
l_b,int, Bicycle LOS Score for Intersection	2.391	2.511	1.560	2.342
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	166	4	166	14	9	4	101	1423	7	53	738	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	166	4	166	14	9	4	101	1423	7	53	738	121
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	1	42	4	2	1	25	356	2	13	185	30
Total Analysis Volume [veh/h]	166	4	166	14	9	4	101	1423	7	53	738	121
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	128.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	40	0	20	40	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	29	29	29	10	103	103	6	99	99
g / C, Green / Cycle	0.19	0.19	0.19	0.07	0.69	0.69	0.04	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.17	0.10	0.17	0.06	0.26	0.26	0.03	0.16	0.16
s, saturation flow rate [veh/h]	984	1589	159	1781	3560	1865	1781	3560	1739
c, Capacity [veh/h]	234	301	67	124	2448	1282	74	2348	1147
d1, Uniform Delay [s]	59.55	55.00	52.26	68.81	9.94	9.94	71.00	10.37	10.39
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.26	1.57	3.91	12.03	0.46	0.87	12.11	0.25	0.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.55	0.40	0.81	0.38	0.38	0.72	0.24	0.25
d, Delay for Lane Group [s/veh]	63.81	56.57	56.18	80.84	10.40	10.81	83.12	10.62	10.91
Lane Group LOS	E	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.62	5.85	0.92	4.23	6.48	6.94	2.26	3.89	3.93
50th-Percentile Queue Length [ft/ln]	165.50	146.31	23.11	105.79	161.99	173.41	56.51	97.20	98.18
95th-Percentile Queue Length [veh/ln]	10.84	9.82	1.66	7.61	10.65	11.26	4.07	7.00	7.07
95th-Percentile Queue Length [ft/ln]	270.99	245.49	41.60	190.13	266.35	281.39	101.72	174.96	176.73

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.81	63.81	56.57	56.18	56.18	56.18	80.84	10.54	10.81	83.12	10.68	10.91
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	60.23			56.18			15.18			14.92		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	20.88											
Intersection LOS	C											
Intersection V/C	0.496											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.153	1.771	3.022	3.246
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.33	64.49
l_b,int, Bicycle LOS Score for Intersection	2.114	1.604	2.402	2.061
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	62.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.643

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	178	718	41	182	712	276	261	1180	179	299	606	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	178	718	41	182	712	276	261	1180	179	299	606	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	180	10	46	178	69	65	295	45	75	152	36
Total Analysis Volume [veh/h]	178	718	41	182	712	276	261	1180	179	299	606	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	153.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	27	56	0	27	56	0	30	63	0	34	67	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	22	51	51	22	51	51	25	58	58	29	62	62
g / C, Green / Cycle	0.12	0.29	0.29	0.12	0.29	0.29	0.14	0.32	0.32	0.16	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.05	0.20	0.20	0.05	0.20	0.17	0.08	0.26	0.26	0.09	0.14	0.14
s, saturation flow rate [veh/h]	3459	1870	1835	3459	3560	1589	3459	3560	1747	3459	3560	1693
c, Capacity [veh/h]	430	534	524	430	1017	454	488	1155	567	555	1234	587
d1, Uniform Delay [s]	72.74	57.78	57.78	72.83	57.42	55.59	71.81	55.21	55.22	69.42	44.80	44.85
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.92	8.05	8.20	3.03	4.02	5.95	4.16	5.51	10.71	3.72	1.01	2.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.72	0.72	0.42	0.70	0.61	0.53	0.79	0.79	0.54	0.41	0.41
d, Delay for Lane Group [s/veh]	75.65	65.83	65.97	75.85	61.44	61.54	75.97	60.72	65.94	73.14	45.81	47.00
Lane Group LOS	E	E	E	E	E	E	E	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.99	16.91	16.61	4.09	15.08	11.64	5.90	19.67	20.14	6.65	8.91	8.73
50th-Percentile Queue Length [ft/ln]	99.75	422.68	415.24	102.18	376.97	291.06	147.61	491.73	503.44	166.15	222.79	218.32
95th-Percentile Queue Length [veh/ln]	7.18	23.65	23.29	7.36	21.45	17.24	9.89	26.94	27.50	10.87	13.81	13.58
95th-Percentile Queue Length [ft/ln]	179.56	591.26	582.34	183.93	536.18	430.96	247.24	673.57	687.43	271.85	345.19	339.48

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Movement, Approach, & Intersection Results

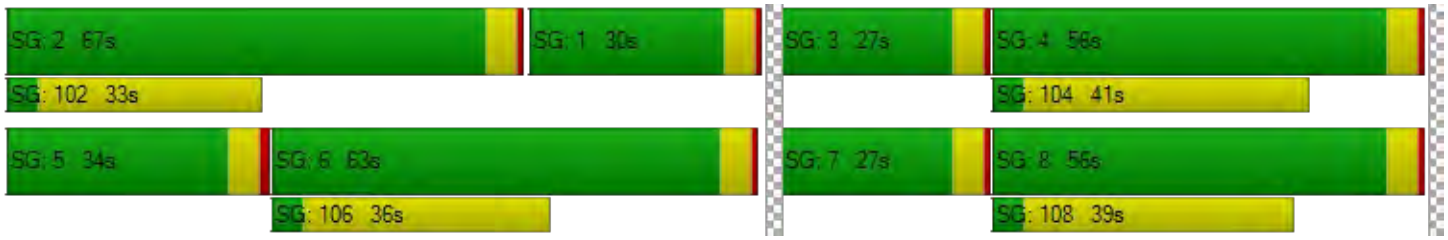
d_M, Delay for Movement [s/veh]	75.65	65.89	65.97	75.85	61.44	61.54	75.97	61.90	65.94	73.14	46.00	47.00
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	67.75			63.71			64.62			53.87		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	62.65											
Intersection LOS	E											
Intersection V/C	0.643											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	82.18	82.18	82.18	82.18
l_p,int, Pedestrian LOS Score for Intersection	2.962	3.096	3.108	3.141
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	571	571	649	693
d_b, Bicycle Delay [s]	45.94	45.94	41.07	38.42
l_b,int, Bicycle LOS Score for Intersection	2.333	2.525	2.451	2.137
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.460

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	60	10	109	0	6	8	54	1686	29	9	859	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	10	109	0	6	8	54	1686	29	9	859	99
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	3	27	0	2	2	14	422	7	2	215	25
Total Analysis Volume [veh/h]	60	10	109	0	6	8	54	1686	29	9	859	99
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	179.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	19	128	0	11	120	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	15	124	124	7	116	116
g / C, Green / Cycle	0.20	0.20	0.09	0.69	0.69	0.04	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate	0.12	0.01	0.03	0.32	0.32	0.01	0.18	0.18
s, saturation flow rate [veh/h]	1549	1699	1781	3560	1854	1781	3560	1773
c, Capacity [veh/h]	343	367	151	2451	1276	72	2293	1142
d1, Uniform Delay [s]	64.17	57.44	77.71	12.79	12.80	83.27	13.91	13.92
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.56	0.19	6.45	0.62	1.20	3.52	0.30	0.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.04	0.36	0.46	0.46	0.12	0.28	0.28
d, Delay for Lane Group [s/veh]	69.73	57.63	84.16	13.42	13.99	86.78	14.21	14.54
Lane Group LOS	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.03	0.55	2.65	10.50	11.15	0.48	5.81	5.93
50th-Percentile Queue Length [ft/ln]	200.77	13.75	66.14	262.61	278.70	11.91	145.26	148.16
95th-Percentile Queue Length [veh/ln]	12.68	0.99	4.76	15.82	16.62	0.86	9.76	9.92
95th-Percentile Queue Length [ft/ln]	316.96	24.76	119.06	395.49	415.59	21.44	244.08	247.97

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.73	69.73	69.73	57.63	57.63	57.63	84.16	13.61	13.99	86.78	14.29	14.54
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	69.73			57.63			15.77			14.99		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	19.01											
Intersection LOS	B											
Intersection V/C	0.460											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	81.23	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.885	1.763	3.072	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	409	409	1377	1288
d_b, Bicycle Delay [s]	56.96	56.96	8.74	11.41
l_b,int, Bicycle LOS Score for Intersection	1.855	1.583	2.533	2.091
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	152.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.040

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	4	0	12	1	0	1	130	1684	2	6	1043	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	12	1	0	1	130	1684	2	6	1043	45
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	3	0	0	0	33	421	1	2	261	11
Total Analysis Volume [veh/h]	4	0	12	1	0	1	130	1684	2	6	1043	45
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.00	0.03	0.04	0.00	0.00	0.37	0.02	0.00	0.03	0.01	0.00
d_M, Delay for Movement [s/veh]	91.56	464.77	17.42	152.34	479.83	22.22	20.90	0.00	0.00	25.68	0.00	0.00
Movement LOS	F	F	C	F	F	C	C	A	A	D	A	A
95th-Percentile Queue Length [veh/ln]	0.40	0.40	0.40	0.13	0.13	0.13	1.64	0.00	0.00	0.10	0.00	0.00
95th-Percentile Queue Length [ft/ln]	10.05	10.05	10.05	3.35	3.35	3.35	40.97	0.00	0.00	2.57	0.00	0.00
d_A, Approach Delay [s/veh]	35.95			87.28			1.50			0.14		
Approach LOS	E			F			A			A		
d_I, Intersection Delay [s/veh]	1.24											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	28.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	0	204	0	0	0	93	1769	0	8	1024	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	0	204	0	0	0	93	1769	0	8	1024	95
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	51	0	0	0	23	442	0	2	256	24
Total Analysis Volume [veh/h]	63	0	204	0	0	0	93	1769	0	8	1024	95
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	78.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	49	49	0	0	0	0	43	122	0	9	88	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	180		180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	45		39	118	118	5	84	84
g / C, Green / Cycle	0.25		0.22	0.66	0.66	0.03	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.16		0.05	0.33	0.33	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1631		1781	3560	1870	1781	3560	1790
c, Capacity [veh/h]	410		389	2332	1225	52	1660	834
d1, Uniform Delay [s]	60.27		58.02	15.89	15.89	85.16	32.43	32.45
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.78		1.45	0.76	1.44	6.08	0.88	1.75
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65		0.24	0.50	0.50	0.15	0.45	0.45
d, Delay for Lane Group [s/veh]	68.05		59.47	16.65	17.33	91.24	33.31	34.20
Lane Group LOS	E		E	B	B	F	C	C
Critical Lane Group	Yes		No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.98		3.69	12.41	13.27	0.45	11.29	11.59
50th-Percentile Queue Length [ft/ln]	299.61		92.16	310.19	331.65	11.34	282.37	289.74
95th-Percentile Queue Length [veh/ln]	17.66		6.64	18.18	19.24	0.82	16.81	17.17
95th-Percentile Queue Length [ft/ln]	441.54		165.88	454.62	480.98	20.41	420.16	429.32

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Movement, Approach, & Intersection Results

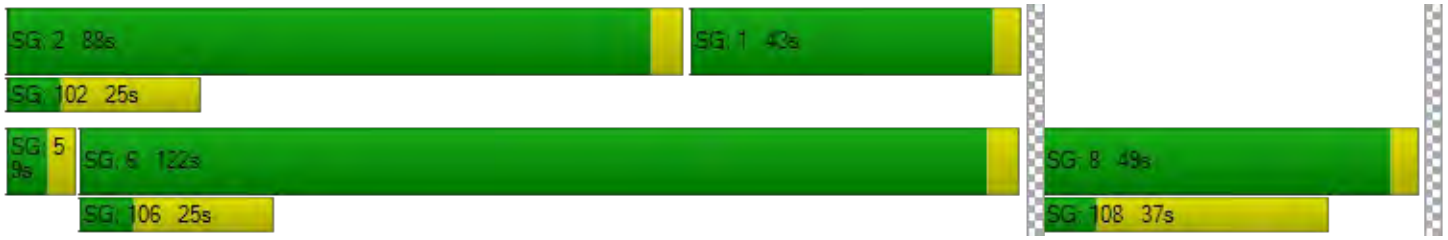
d_M, Delay for Movement [s/veh]	68.05	68.05	68.05	0.00	0.00	0.00	59.47	16.88	17.33	91.24	33.55	34.20
Movement LOS	E	E	E				E	B	B	F	C	C
d_A, Approach Delay [s/veh]	68.05			0.00			19.01			34.02		
Approach LOS	E			A			B			C		
d_I, Intersection Delay [s/veh]	28.23											
Intersection LOS	C											
Intersection V/C	0.520											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	79.34	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.932	1.751	3.129	3.107
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	503	0	1310	932
d_b, Bicycle Delay [s]	50.40	90.00	10.71	25.65
l_b,int, Bicycle LOS Score for Intersection	2.000	1.560	2.584	2.179
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	50.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.511

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	299	0	200	53	1593	212	152	1106	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	299	0	200	53	1593	212	152	1106	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	75	0	50	13	398	53	38	277	0
Total Analysis Volume [veh/h]	0	0	1	299	0	200	53	1593	212	152	1106	1
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	21	0	0	51	0	27	79	0	29	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	17	47	47	47	23	75	75	25	77	77
g / C, Green / Cycle	0.10	0.26	0.26	0.26	0.13	0.42	0.42	0.14	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.08	0.13	0.03	0.34	0.34	0.04	0.20	0.20
s, saturation flow rate [veh/h]	1589	1781	1781	1589	1781	3560	1760	3459	3560	1869
c, Capacity [veh/h]	153	468	468	418	231	1482	732	486	1521	799
d1, Uniform Delay [s]	73.58	53.40	53.40	55.96	70.30	46.40	46.51	69.53	37.09	37.09
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.08	1.79	1.79	3.89	2.32	5.02	9.84	1.68	1.08	2.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.32	0.32	0.48	0.23	0.81	0.82	0.31	0.48	0.48
d, Delay for Lane Group [s/veh]	73.66	55.19	55.19	59.85	72.62	51.42	56.35	71.21	38.16	39.13
Lane Group LOS	E	E	E	E	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.05	5.82	5.82	8.28	2.36	24.82	25.68	3.28	11.87	12.67
50th-Percentile Queue Length [ft/ln]	1.16	145.38	145.38	206.93	58.90	620.55	641.97	82.05	296.64	316.81
95th-Percentile Queue Length [veh/ln]	0.08	9.77	9.77	13.00	4.24	32.99	33.99	5.91	17.51	18.51
95th-Percentile Queue Length [ft/ln]	2.08	244.25	244.25	324.88	106.02	824.82	849.74	147.68	437.87	462.76

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Movement, Approach, & Intersection Results

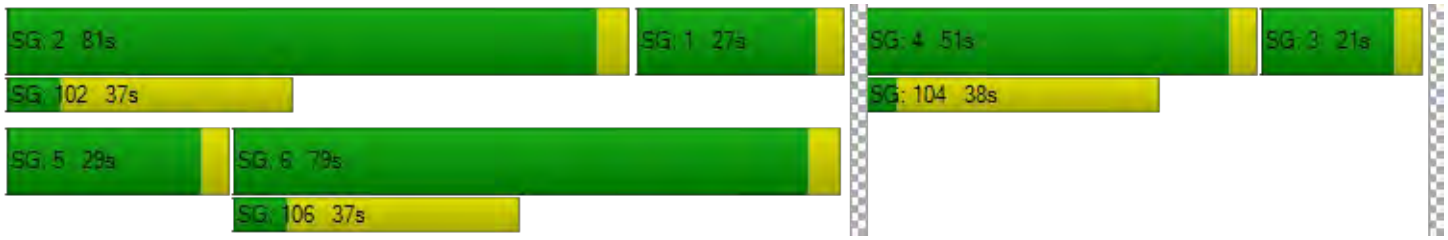
d_M, Delay for Movement [s/veh]	73.66	73.66	73.66	55.19	55.19	59.85	72.62	52.62	56.35	71.21	38.50	39.13
Movement LOS	E	E	E	E	E	E	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	73.66			57.06			53.62			42.45		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	50.21											
Intersection LOS	D											
Intersection V/C	0.511											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	82.18
l_p,int, Pedestrian LOS Score for Intersection	1.761	2.473	0.000	3.194
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	192	526	832	854
d_b, Bicycle Delay [s]	73.53	48.91	30.68	29.53
l_b,int, Bicycle LOS Score for Intersection	1.561	2.383	2.582	2.252
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	43.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.357

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	0	0	0	86	1341	118	99	1078	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	0	0	0	86	1341	118	99	1078	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	22	335	30	25	270	0
Total Analysis Volume [veh/h]	0	0	1	0	0	0	86	1341	118	99	1078	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	108.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	28	60	0	29	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	24	55	55	25	56	56
g / C, Green / Cycle	0.10	0.25	0.25	0.16	0.37	0.37	0.16	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.00	0.05	0.27	0.27	0.06	0.20	0.20
s, saturation flow rate [veh/h]	1589	1781	1870	1781	3560	1794	1781	3560	1870
c, Capacity [veh/h]	158	450	472	279	1315	662	291	1339	703
d1, Uniform Delay [s]	60.88	0.00	0.00	56.05	41.00	41.01	55.59	36.44	36.44
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.00	0.00	2.85	3.73	7.21	3.16	1.49	2.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.00	0.00	0.31	0.74	0.74	0.34	0.53	0.53
d, Delay for Lane Group [s/veh]	60.95	0.00	0.00	58.90	44.74	48.22	58.75	37.93	39.26
Lane Group LOS	E	A	A	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	3.14	16.28	17.05	3.61	10.47	11.26
50th-Percentile Queue Length [ft/ln]	0.96	0.00	0.00	78.39	407.02	426.13	90.18	261.75	281.45
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.00	5.64	22.90	23.82	6.49	15.78	16.76
95th-Percentile Queue Length [ft/ln]	1.73	0.00	0.00	141.09	572.45	595.41	162.33	394.41	419.02

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Movement, Approach, & Intersection Results

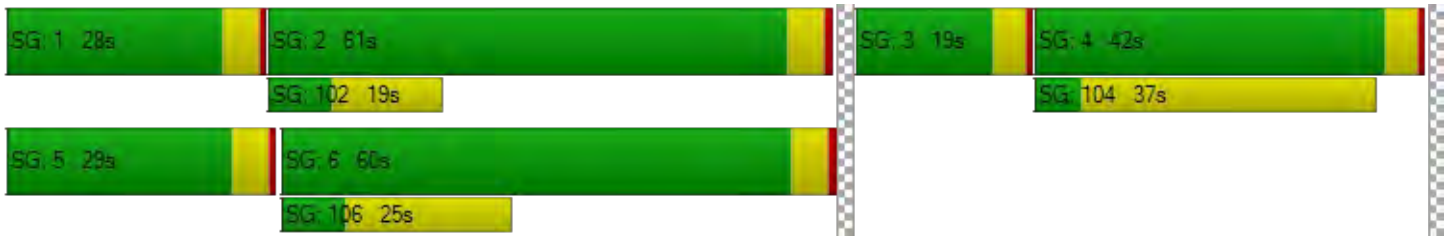
d_M, Delay for Movement [s/veh]	60.95	60.95	60.95	0.00	0.00	0.00	58.90	45.70	48.22	58.75	38.39	39.26
Movement LOS	E	E	E	A	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	60.95			0.00			46.63			40.10		
Approach LOS	E			A			D			D		
d_I, Intersection Delay [s/veh]	43.81											
Intersection LOS	D											
Intersection V/C	0.357											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.760	2.023	0.000	2.970
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	752
d_b, Bicycle Delay [s]	60.84	41.89	29.83	29.20
l_b,int, Bicycle LOS Score for Intersection	1.561	1.560	2.409	2.207
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	49.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.446

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	14	4	5	77	13	97	27	1321	87	148	756	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	4	5	77	13	97	27	1321	87	148	756	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	1	19	3	24	7	330	22	37	189	13
Total Analysis Volume [veh/h]	14	4	5	77	13	97	27	1321	87	148	756	50
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	168.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	28	0	0	42	0	29	70	0	40	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	24	24	38	38	38	25	66	66	36	77	77
g / C, Green / Cycle	0.13	0.13	0.21	0.21	0.21	0.14	0.36	0.36	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.03	0.03	0.06	0.02	0.26	0.26	0.08	0.15	0.15
s, saturation flow rate [veh/h]	1800	1589	1781	1806	1589	1781	3560	1811	1781	3560	1811
c, Capacity [veh/h]	238	210	375	380	335	245	1298	660	359	1515	771
d1, Uniform Delay [s]	68.46	67.99	57.54	57.53	59.74	67.94	49.27	49.27	62.56	34.93	34.96
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.62	0.21	0.65	0.64	2.18	0.90	3.46	6.64	3.47	0.64	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.02	0.12	0.12	0.29	0.11	0.72	0.72	0.41	0.35	0.35
d, Delay for Lane Group [s/veh]	69.08	68.20	58.19	58.17	61.92	68.84	52.73	55.90	66.03	35.58	36.23
Lane Group LOS	E	E	E	E	E	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.79	0.22	1.75	1.76	3.98	1.16	18.75	19.66	6.29	8.17	8.49
50th-Percentile Queue Length [ft/ln]	19.74	5.47	43.73	44.09	99.56	28.96	468.77	491.55	157.17	204.31	212.14
95th-Percentile Queue Length [veh/ln]	1.42	0.39	3.15	3.17	7.17	2.08	25.85	26.93	10.40	12.86	13.26
95th-Percentile Queue Length [ft/ln]	35.53	9.84	78.72	79.35	179.21	52.12	646.31	673.36	259.97	321.52	331.58

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.08	69.08	68.20	58.18	58.17	61.92	68.84	53.66	55.90	66.03	35.77	36.23
Movement LOS	E	E	E	E	E	E	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	68.88			60.12			54.08			40.49		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	49.66											
Intersection LOS	D											
Intersection V/C	0.446											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	81.23
l_p,int, Pedestrian LOS Score for Intersection	1.991	2.268	0.000	3.015
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	421	729	851
d_b, Bicycle Delay [s]	67.77	56.09	36.35	29.70
l_b,int, Bicycle LOS Score for Intersection	1.598	1.868	2.349	2.084
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	47.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.481

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	0	150	0	59	18	1458	136	31	957	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	0	150	0	59	18	1458	136	31	957	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	38	0	15	5	365	34	8	239	0
Total Analysis Volume [veh/h]	0	1	0	150	0	59	18	1458	136	31	957	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	66	0	0	66	0	37	76	0	38	77	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	62	62	33	72	72	34	73	73
g / C, Green / Cycle	0.34	0.34	0.18	0.40	0.40	0.19	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.01	0.30	0.30	0.02	0.18	0.18
s, saturation flow rate [veh/h]	1870	1472	1781	3560	1789	1781	3560	1870
c, Capacity [veh/h]	664	541	327	1424	716	336	1444	758
d1, Uniform Delay [s]	38.70	44.80	60.64	46.15	46.16	60.26	38.61	38.61
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.07	0.32	3.58	6.93	0.54	0.95	1.81
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.39	0.06	0.74	0.75	0.09	0.43	0.43
d, Delay for Lane Group [s/veh]	38.70	46.87	60.96	49.72	53.09	60.80	39.56	40.42
Lane Group LOS	D	D	E	D	D	E	D	D
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	7.57	0.72	21.02	21.81	1.23	10.33	11.03
50th-Percentile Queue Length [ft/ln]	0.77	189.27	17.88	525.46	545.21	30.80	258.15	275.68
95th-Percentile Queue Length [veh/ln]	0.06	12.08	1.29	28.54	29.47	2.22	15.60	16.47
95th-Percentile Queue Length [ft/ln]	1.38	302.08	32.18	713.43	736.67	55.44	389.91	411.83

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	38.70	38.70	38.70	46.87	46.87	46.87	60.96	50.64	53.09	60.80	39.86	40.42
Movement LOS	D	D	D	D	D	D	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	38.70			46.87			50.96			40.51		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	46.98											
Intersection LOS	D											
Intersection V/C	0.481											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	62.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	38.68	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.757	1.931	3.253	3.034
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	689	800	811
d_b, Bicycle Delay [s]	38.68	38.68	32.40	31.80
l_b,int, Bicycle LOS Score for Intersection	1.561	1.904	2.446	2.103
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	13.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.052

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	31	274	205	21	25	79
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	274	205	21	25	79
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	69	51	5	6	20
Total Analysis Volume [veh/h]	31	274	205	21	25	79
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.05	0.10
d_M, Delay for Movement [s/veh]	7.75	0.00	0.00	0.00	13.36	10.25
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.52	0.52
95th-Percentile Queue Length [ft/ln]	1.77	1.77	0.00	0.00	12.91	12.91
d_A, Approach Delay [s/veh]	0.79		0.00		11.00	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.18					
Intersection LOS	B					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	4	3	3	123	3	171	3	52	141	160	33	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	3	3	123	3	171	3	52	141	160	33	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	31	1	43	1	13	35	40	8	0
Total Analysis Volume [veh/h]	4	3	3	123	3	171	3	52	141	160	33	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.28	0.01	0.18	0.00	0.00	0.00	0.12	0.00	0.00
d_M, Delay for Movement [s/veh]	16.48	14.47	8.66	18.04	18.37	13.79	7.29	0.00	0.00	7.95	0.00	0.00
Movement LOS	C	B	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	2.50	2.50	2.50	0.01	0.01	0.01	0.39	0.39	0.39
95th-Percentile Queue Length [ft/ln]	1.77	1.77	1.77	62.47	62.47	62.47	0.14	0.14	0.14	9.81	9.81	9.81
d_A, Approach Delay [s/veh]	13.53			15.59			0.11			6.56		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	8.70											
Intersection LOS	C											

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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	164.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.812

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	1114	58	17	1369	51	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1114	58	17	1369	51	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	279	15	4	342	13	4
Total Analysis Volume [veh/h]	1114	58	17	1369	51	14
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.81	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	11.26	0.00	164.71	115.32
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.00	4.24	4.24
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.22	0.00	105.96	105.96
d_A, Approach Delay [s/veh]	0.00		0.14		154.08	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.89					
Intersection LOS	F					

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Report File: \...\Existing AM_rev.pdf

Scenario 1 Existing AM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	150	887	44	12	820	61	171	76	182	43	48	37	2531

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	0	847	161	172	981	0	0	0	0	279	0	195	2635

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	166	4	166	14	9	4	101	1423	7	53	738	121	2806

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	178	718	41	182	712	276	261	1180	179	299	606	144	4776

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	60	10	109	0	6	8	54	1686	29	9	859	99	2929

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	4	0	12	1	0	1	130	1684	2	6	1043	45	2928

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	63	0	204	0	93	1769	0	8	1024	95	3256

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	0	0	1	299	0	200	53	1593	212	152	1106	1	3617

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	0	1	0	0	0	86	1341	118	99	1078	0	2723

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	14	4	5	77	13	97	27	1321	87	148	756	50	2599

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	0	1	0	150	0	59	18	1458	136	31	957	0	2810

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	31	274	205	21	25	79	635

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	4	3	3	123	3	171	3	52	141	160	33	1	697

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	1114	58	17	1369	51	14	2623

Vistro File: \...\330 Distel Circle Vistro PM.vistro
Report File: \...\Existing PM.pdf

Scenario 1 Existing PM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.504	10.2	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	NB Left	0.603	15.5	B
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	NWB Left	0.564	15.5	B
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Left	0.770	61.3	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.517	35.2	D
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	NEB Left	0.235	114.4	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	NWB Left	0.499	37.4	D
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NWB Left	0.459	42.1	D
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	NWB Left	0.522	48.3	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NWB Left	0.533	53.8	D
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	NWB Left	0.401	40.1	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.052	9.7	A
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.007	10.5	B
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.503	63.6	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	10.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.504

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	44	781	18	18	976	38	43	18	41	30	7	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	781	18	18	976	38	43	18	41	30	7	25
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	195	5	5	244	10	11	5	10	8	2	6
Total Analysis Volume [veh/h]	44	781	18	18	976	38	43	18	41	30	7	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	34	34	34	34	34	34	34	34	34
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	2	13	13	1	13	13	4	4	4
g / C, Green / Cycle	0.05	0.40	0.40	0.02	0.37	0.37	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.02	0.21	0.21	0.01	0.27	0.27	0.03	0.03	0.07
s, saturation flow rate [veh/h]	1781	1870	1855	1781	1870	1845	1812	1589	869
c, Capacity [veh/h]	91	750	744	42	699	690	418	207	272
d1, Uniform Delay [s]	15.57	7.70	7.70	16.24	9.10	9.10	13.19	13.10	13.45
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.89	0.59	0.60	6.60	1.49	1.51	0.16	0.46	0.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.53	0.53	0.42	0.73	0.73	0.15	0.20	0.23
d, Delay for Lane Group [s/veh]	19.46	8.29	8.30	22.84	10.59	10.61	13.35	13.56	13.87
Lane Group LOS	B	A	A	C	B	B	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.36	1.40	1.39	0.19	2.22	2.20	0.36	0.26	0.37
50th-Percentile Queue Length [ft/ln]	8.97	34.99	34.74	4.68	55.55	54.92	9.09	6.42	9.23
95th-Percentile Queue Length [veh/ln]	0.65	2.52	2.50	0.34	4.00	3.95	0.65	0.46	0.66
95th-Percentile Queue Length [ft/ln]	16.15	62.98	62.53	8.43	100.00	98.86	16.36	11.56	16.61

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Movement, Approach, & Intersection Results

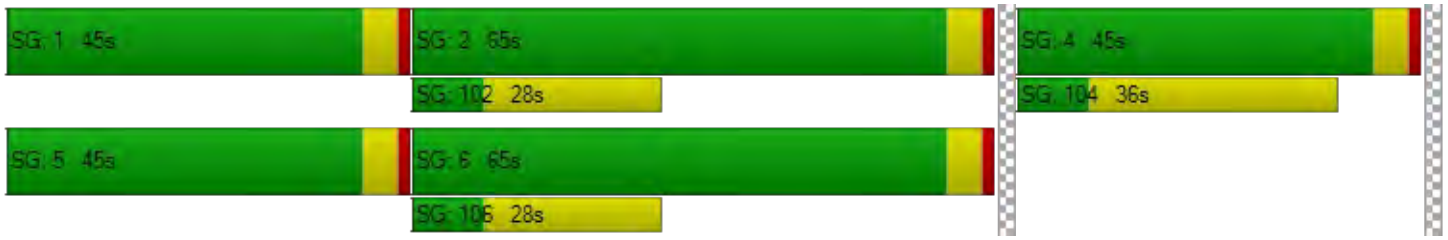
d_M, Delay for Movement [s/veh]	19.46	8.30	8.30	22.84	10.60	10.61	13.35	13.35	13.56	13.87	13.87	13.87
Movement LOS	B	A	A	C	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	8.88			10.81			13.43			13.87		
Approach LOS	A			B			B			B		
d_I, Intersection Delay [s/veh]	10.24											
Intersection LOS	B											
Intersection V/C	0.504											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	6.97	0.00	6.97	6.97
l_p,int, Pedestrian LOS Score for Intersection	2.708	0.000	1.927	1.707
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	3564	3564	2376	2376
d_b, Bicycle Delay [s]	10.29	10.29	0.59	0.59
l_b,int, Bicycle LOS Score for Intersection	2.255	2.411	1.728	1.662
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	3	821	273	122	914	2	0	0	0	213	0	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	821	273	122	914	2	0	0	0	213	0	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	205	68	31	229	1	0	0	0	53	0	31
Total Analysis Volume [veh/h]	3	821	273	122	914	2	0	0	0	213	0	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	32	32	6	37	37	12	12	12
g / C, Green / Cycle	0.00	0.49	0.49	0.09	0.58	0.58	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.00	0.31	0.31	0.07	0.25	0.25	0.00	0.14	0.08
s, saturation flow rate [veh/h]	1781	1870	1712	1781	1870	1869	1791	1473	1589
c, Capacity [veh/h]	3	912	835	165	1082	1081	393	389	299
d1, Uniform Delay [s]	32.35	12.25	12.26	28.65	7.63	7.63	0.00	24.73	23.13
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	273.05	2.56	2.80	8.86	0.96	0.96	0.00	1.72	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.97	0.63	0.63	0.74	0.42	0.42	0.00	0.55	0.41
d, Delay for Lane Group [s/veh]	305.40	14.81	15.06	37.50	8.59	8.59	0.00	26.44	24.39
Lane Group LOS	F	B	B	D	A	A	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.28	5.65	5.24	2.13	3.00	2.99	0.00	3.09	1.65
50th-Percentile Queue Length [ft/ln]	6.98	141.33	131.04	53.34	74.91	74.86	0.00	77.14	41.30
95th-Percentile Queue Length [veh/ln]	0.50	9.55	9.00	3.84	5.39	5.39	0.00	5.55	2.97
95th-Percentile Queue Length [ft/ln]	12.56	238.81	224.91	96.02	134.84	134.74	0.00	138.84	74.33

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Movement, Approach, & Intersection Results

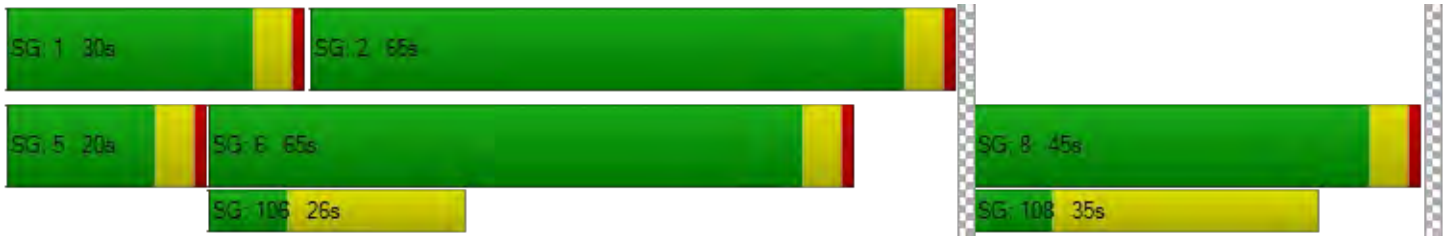
d_M, Delay for Movement [s/veh]	305.40	14.89	15.06	37.50	8.59	8.59	0.00	0.00	0.00	26.44	26.44	24.39
Movement LOS	F	B	B	D	A	A	A	A	A	C	C	C
d_A, Approach Delay [s/veh]	15.72			11.98			0.00			25.70		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	15.50											
Intersection LOS	B											
Intersection V/C	0.603											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.45	21.45	37.53
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.731	1.696	2.180
Crosswalk LOS	F	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1856	1856	1237	1237
d_b, Bicycle Delay [s]	0.17	0.17	4.71	4.71
l_b,int, Bicycle LOS Score for Intersection	2.465	2.416	1.560	2.112
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.564

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	105	5	82	13	2	18	74	1062	11	41	1709	159
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	5	82	13	2	18	74	1062	11	41	1709	159
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	1	21	3	1	5	19	266	3	10	427	40
Total Analysis Volume [veh/h]	105	5	82	13	2	18	74	1062	11	41	1709	159
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	116.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	30	0	20	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	23	23	23	8	109	109	6	107	107
g / C, Green / Cycle	0.15	0.15	0.15	0.05	0.73	0.73	0.04	0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.14	0.05	0.12	0.04	0.20	0.20	0.02	0.35	0.35
s, saturation flow rate [veh/h]	793	1589	265	1781	3560	1860	1781	3560	1790
c, Capacity [veh/h]	169	245	74	94	2585	1351	68	2533	1273
d1, Uniform Delay [s]	62.19	56.55	55.98	70.19	7.02	7.02	71.01	9.59	9.61
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.14	0.79	4.09	13.30	0.26	0.50	8.28	0.68	1.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.33	0.44	0.79	0.27	0.27	0.60	0.49	0.49
d, Delay for Lane Group [s/veh]	66.34	57.34	60.08	83.49	7.28	7.52	79.29	10.27	10.97
Lane Group LOS	E	E	E	F	A	A	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.32	2.85	1.18	3.15	3.75	4.01	1.71	8.75	9.09
50th-Percentile Queue Length [ft/ln]	108.09	71.25	29.51	78.87	93.69	100.16	42.69	218.71	227.25
95th-Percentile Queue Length [veh/ln]	7.73	5.13	2.12	5.68	6.75	7.21	3.07	13.60	14.03
95th-Percentile Queue Length [ft/ln]	193.34	128.24	53.12	141.96	168.64	180.28	76.85	339.98	350.86

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.34	66.34	57.34	60.08	60.08	60.08	83.49	7.36	7.52	79.29	10.46	10.97
Movement LOS	E	E	E	E	E	E	F	A	A	E	B	B
d_A, Approach Delay [s/veh]	62.49			60.08			12.27			11.98		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	15.52											
Intersection LOS	B											
Intersection V/C	0.564											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.107	1.771	3.102	3.254
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.34	64.50
l_b,int, Bicycle LOS Score for Intersection	1.876	1.614	2.190	2.610
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	61.3
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.770

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	207	449	86	301	619	147	359	786	125	436	1367	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	207	449	86	301	619	147	359	786	125	436	1367	212
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	112	22	75	155	37	90	197	31	109	342	53
Total Analysis Volume [veh/h]	207	449	86	301	619	147	359	786	125	436	1367	212
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	45.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	20	44	0	23	47	0	25	49	0	34	58	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	15	39	39	18	42	42	20	44	44	29	53	53
g / C, Green / Cycle	0.10	0.26	0.26	0.12	0.28	0.28	0.14	0.30	0.30	0.19	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.07	0.16	0.16	0.10	0.19	0.10	0.12	0.19	0.19	0.14	0.33	0.33
s, saturation flow rate [veh/h]	3113	1683	1590	3113	3204	1431	3113	3204	1568	3113	3204	1571
c, Capacity [veh/h]	320	442	418	382	906	404	423	949	464	600	1141	559
d1, Uniform Delay [s]	64.69	48.73	48.76	63.91	47.83	43.01	63.29	45.94	45.95	56.85	46.40	46.62
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.76	6.44	6.85	15.15	4.17	2.52	18.65	3.37	6.78	7.53	13.91	24.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.62	0.62	0.79	0.68	0.36	0.85	0.64	0.65	0.73	0.93	0.93
d, Delay for Lane Group [s/veh]	74.45	55.16	55.61	79.06	52.00	45.53	81.93	49.31	52.73	64.38	60.31	71.59
Lane Group LOS	E	E	E	E	D	D	F	D	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.23	9.85	9.39	6.38	10.80	4.67	7.77	10.35	10.58	8.37	20.89	22.47
50th-Percentile Queue Length [ft/ln]	105.84	246.33	234.76	159.39	269.91	116.76	194.24	258.82	264.53	209.16	522.32	561.66
95th-Percentile Queue Length [veh/ln]	7.61	15.00	14.42	10.52	16.19	8.21	12.34	15.63	15.92	13.11	28.39	30.24
95th-Percentile Queue Length [ft/ln]	190.20	375.03	360.40	262.91	404.63	205.36	308.52	390.75	397.90	327.75	709.73	755.99

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Movement, Approach, & Intersection Results

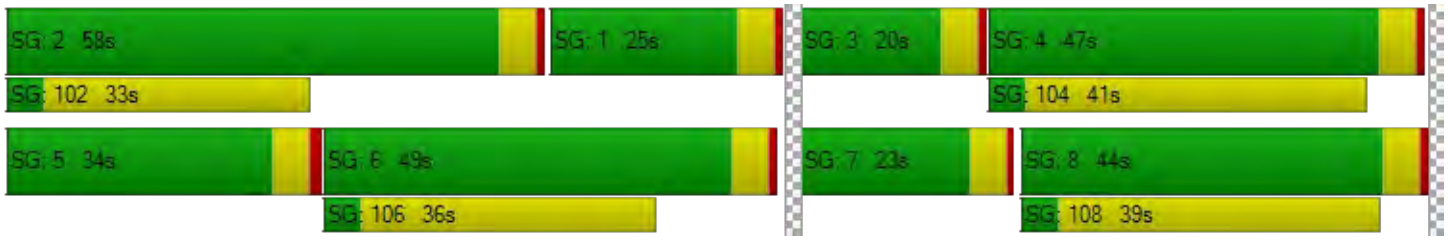
d_M, Delay for Movement [s/veh]	74.45	55.34	55.61	79.06	52.00	45.53	81.93	50.07	52.73	64.38	62.88	71.59
Movement LOS	E	E	E	E	D	D	F	D	D	E	E	E
d_A, Approach Delay [s/veh]	60.70			58.74			59.34			64.12		
Approach LOS	E			E			E			E		
d_I, Intersection Delay [s/veh]	61.30											
Intersection LOS	E											
Intersection V/C	0.770											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	67.21	67.21	67.21	67.21
l_p,int, Pedestrian LOS Score for Intersection	2.934	3.047	3.181	3.200
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	525	565	592	712
d_b, Bicycle Delay [s]	40.77	38.59	37.17	31.11
l_b,int, Bicycle LOS Score for Intersection	2.172	2.440	2.258	2.668
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	35.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.517

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	1	91	5	3	12	64	1237	5	26	1790	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	1	91	5	3	12	64	1237	5	26	1790	75
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	23	1	1	3	16	309	1	7	448	19
Total Analysis Volume [veh/h]	63	1	91	5	3	12	64	1237	5	26	1790	75
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	95.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	33	68	0	31	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	140	140	140	140	140	140	140	140
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	29	64	64	27	62	62
g / C, Green / Cycle	0.26	0.26	0.21	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.04	0.23	0.23	0.01	0.35	0.35
s, saturation flow rate [veh/h]	1525	1580	1781	3560	1866	1781	3560	1832
c, Capacity [veh/h]	437	448	373	1625	852	347	1574	810
d1, Uniform Delay [s]	42.10	38.49	45.40	26.82	26.82	46.03	33.29	33.32
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.25	0.19	1.00	1.11	2.11	0.42	3.94	7.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.04	0.17	0.50	0.50	0.07	0.78	0.78
d, Delay for Lane Group [s/veh]	44.35	38.68	46.40	27.93	28.93	46.45	37.23	40.78
Lane Group LOS	D	D	D	C	C	D	D	D
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.75	0.56	1.94	9.78	10.48	0.78	18.34	19.71
50th-Percentile Queue Length [ft/ln]	118.64	13.97	48.46	244.40	262.09	19.61	458.44	492.74
95th-Percentile Queue Length [veh/ln]	8.32	1.01	3.49	14.90	15.79	1.41	25.36	26.99
95th-Percentile Queue Length [ft/ln]	207.95	25.15	87.22	372.59	394.85	35.30	634.01	674.76

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.35	44.35	44.35	38.68	38.68	38.68	46.40	28.27	28.93	46.45	38.34	40.78
Movement LOS	D	D	D	D	D	D	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	44.35			38.68			29.16			38.55		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	35.18											
Intersection LOS	D											
Intersection V/C	0.517											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	59.43	59.43	61.29	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.857	1.749	3.142	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	526	913	884
d_b, Bicycle Delay [s]	38.04	38.04	20.68	21.78
l_b,int, Bicycle LOS Score for Intersection	1.815	1.593	2.278	2.600
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	114.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.235

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	9	0	29	1	0	0	34	1337	0	14	1587	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	0	29	1	0	0	34	1337	0	14	1587	13
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	7	0	0	0	9	334	0	4	397	3
Total Analysis Volume [veh/h]	9	0	29	1	0	0	34	1337	0	14	1587	13
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.23	0.00	0.10	0.02	0.00	0.00	0.17	0.01	0.00	0.05	0.02	0.00
d_M, Delay for Movement [s/veh]	114.36	377.69	33.29	90.44	367.72	17.46	26.82	0.00	0.00	19.16	0.00	0.00
Movement LOS	F	F	D	F	F	C	D	A	A	C	A	A
95th-Percentile Queue Length [veh/ln]	1.34	1.34	1.34	0.07	0.07	0.07	0.60	0.00	0.00	0.16	0.00	0.00
95th-Percentile Queue Length [ft/ln]	33.44	33.44	33.44	1.76	1.76	1.76	15.04	0.00	0.00	4.11	0.00	0.00
d_A, Approach Delay [s/veh]	52.49			90.44			0.67			0.17		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	1.08											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	37.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.499

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	42	0	99	0	0	0	68	1304	0	6	1850	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	0	99	0	0	0	68	1304	0	6	1850	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	25	0	0	0	17	326	0	2	463	5
Total Analysis Volume [veh/h]	42	0	99	0	0	0	68	1304	0	6	1850	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	134.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	44	44	0	0	0	0	36	73	0	33	70	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	150		150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	40		32	69	69	29	66	66
g / C, Green / Cycle	0.27		0.22	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.09		0.04	0.24	0.24	0.00	0.35	0.35
s, saturation flow rate [veh/h]	1642		1781	3560	1870	1781	3560	1859
c, Capacity [veh/h]	441		383	1635	859	348	1564	817
d1, Uniform Delay [s]	43.88		48.01	28.85	28.85	48.73	36.00	36.01
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.90		1.01	1.20	2.27	0.09	4.05	7.51
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.32		0.18	0.52	0.52	0.02	0.79	0.79
d, Delay for Lane Group [s/veh]	45.79		49.02	30.05	31.12	48.82	40.05	43.52
Lane Group LOS	D		D	C	C	D	D	D
Critical Lane Group	Yes		Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.52		2.20	11.20	12.02	0.19	19.88	21.56
50th-Percentile Queue Length [ft/ln]	113.09		54.98	279.90	300.41	4.80	497.04	539.10
95th-Percentile Queue Length [veh/ln]	8.01		3.96	16.68	17.70	0.35	27.19	29.18
95th-Percentile Queue Length [ft/ln]	200.29		98.96	417.08	442.53	8.64	679.86	729.49

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.79	45.79	45.79	0.00	0.00	0.00	49.02	30.42	31.12	48.82	41.22	43.52
Movement LOS	D	D	D				D	C	C	D	D	D
d_A, Approach Delay [s/veh]	45.79			0.00			31.34			41.27		
Approach LOS	D			A			C			D		
d_I, Intersection Delay [s/veh]	37.44											
Intersection LOS	D											
Intersection V/C	0.499											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	64.40	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.833	1.742	3.158	3.142
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	537	0	919	879
d_b, Bicycle Delay [s]	40.11	75.00	21.92	23.58
l_b,int, Bicycle LOS Score for Intersection	1.792	1.560	2.314	2.592
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	42.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.459

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	0	273	0	135	64	1151	201	205	1837	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	273	0	135	64	1151	201	205	1837	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	68	0	34	16	288	50	51	459	0
Total Analysis Volume [veh/h]	0	0	0	273	0	135	64	1151	201	205	1837	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	132.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	9	0	0	42	0	31	66	0	33	68	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	5	38	38	38	27	62	62	29	64	64
g / C, Green / Cycle	0.04	0.26	0.26	0.26	0.18	0.41	0.41	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.08	0.08	0.04	0.26	0.26	0.06	0.34	0.34
s, saturation flow rate [veh/h]	1870	1781	1781	1589	1781	3560	1731	3459	3560	1870
c, Capacity [veh/h]	66	455	455	406	324	1469	714	676	1517	797
d1, Uniform Delay [s]	0.00	45.04	45.04	45.45	52.05	34.75	34.75	51.62	37.34	37.34
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	1.69	1.69	2.19	1.36	1.97	4.00	1.16	4.37	8.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.30	0.30	0.33	0.20	0.62	0.62	0.30	0.79	0.79
d, Delay for Lane Group [s/veh]	0.00	46.73	46.73	47.64	53.42	36.72	38.75	52.78	41.71	45.36
Lane Group LOS	A	D	D	D	D	D	D	D	D	D
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.00	4.41	4.41	4.43	2.18	13.45	13.49	3.42	19.86	21.66
50th-Percentile Queue Length [ft/ln]	0.00	110.18	110.18	110.82	54.47	336.30	337.15	85.57	496.39	541.60
95th-Percentile Queue Length [veh/ln]	0.00	7.85	7.85	7.89	3.92	19.47	19.51	6.16	27.16	29.30
95th-Percentile Queue Length [ft/ln]	0.00	196.25	196.25	197.14	98.04	486.68	487.72	154.02	679.08	732.44

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Movement, Approach, & Intersection Results

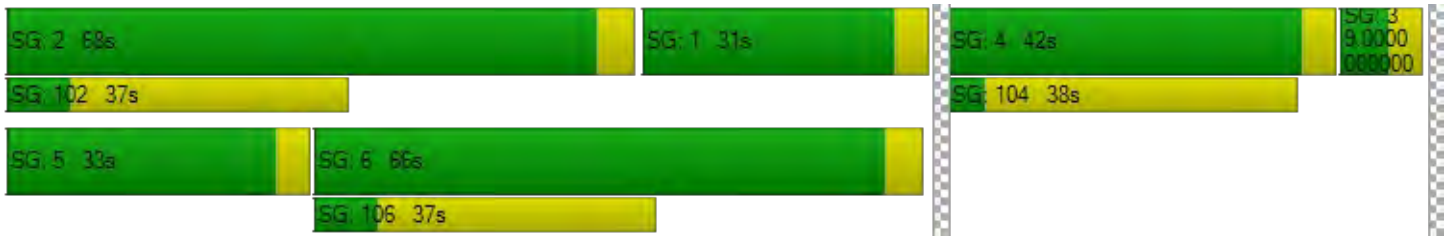
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	46.73	46.73	47.64	53.42	37.15	38.75	52.78	42.97	45.36
Movement LOS	A	A	A	D	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	0.00			47.03			38.11			43.95		
Approach LOS	A			D			D			D		
d_I, Intersection Delay [s/veh]	42.14											
Intersection LOS	D											
Intersection V/C	0.459											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	67.21
l_p,int, Pedestrian LOS Score for Intersection	1.755	2.456	0.000	3.225
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	71	511	825	852
d_b, Bicycle Delay [s]	69.79	41.59	25.87	24.71
l_b,int, Bicycle LOS Score for Intersection	1.560	2.233	2.338	2.683
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	48.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.522

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	3	45	0	140	61	1075	96	118	1930	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	3	45	0	140	61	1075	96	118	1930	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	11	0	35	15	269	24	30	483	1
Total Analysis Volume [veh/h]	0	1	3	45	0	140	61	1075	96	118	1930	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	105.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	24	60	0	29	65	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	20	55	55	25	60	60
g / C, Green / Cycle	0.10	0.25	0.25	0.13	0.37	0.37	0.16	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.09	0.03	0.22	0.22	0.07	0.36	0.36
s, saturation flow rate [veh/h]	1651	1781	1589	1781	3560	1793	1781	3560	1869
c, Capacity [veh/h]	164	450	402	232	1315	662	291	1434	753
d1, Uniform Delay [s]	60.99	42.97	45.93	58.78	38.18	38.19	56.23	41.54	41.54
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	0.44	2.38	2.76	1.97	3.87	4.16	8.24	14.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.10	0.35	0.26	0.59	0.59	0.41	0.88	0.88
d, Delay for Lane Group [s/veh]	61.26	43.42	48.31	61.54	40.15	42.06	60.39	49.78	55.83
Lane Group LOS	E	D	D	E	D	D	E	D	E
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.15	1.37	4.64	2.28	12.02	12.46	4.38	23.28	25.71
50th-Percentile Queue Length [ft/ln]	3.85	34.26	115.95	57.12	300.38	311.62	109.43	581.98	642.66
95th-Percentile Queue Length [veh/ln]	0.28	2.47	8.17	4.11	17.70	18.25	7.81	31.19	34.02
95th-Percentile Queue Length [ft/ln]	6.93	61.67	204.24	102.82	442.50	456.37	195.20	779.80	850.54

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Movement, Approach, & Intersection Results

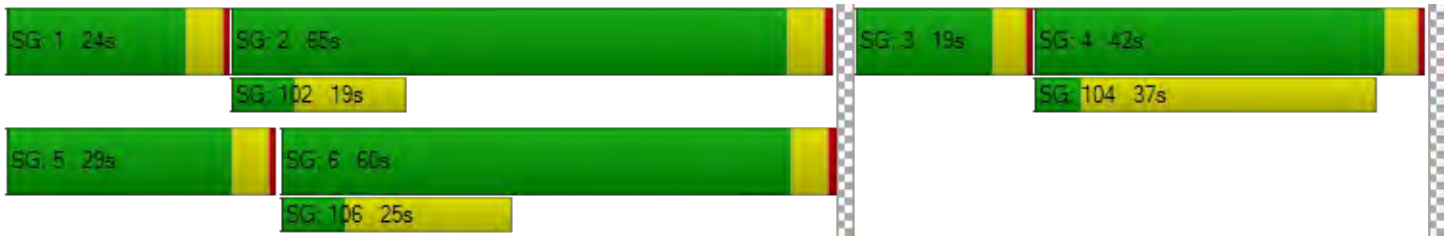
d_M, Delay for Movement [s/veh]	61.26	61.26	61.26	43.42	48.31	48.31	61.54	40.67	42.06	60.39	51.86	55.83
Movement LOS	E	E	E	D	D	D	E	D	D	E	D	E
d_A, Approach Delay [s/veh]	61.26			47.12			41.82			52.35		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	48.35											
Intersection LOS	D											
Intersection V/C	0.522											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.756	2.073	0.000	3.074
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	805
d_b, Bicycle Delay [s]	60.84	41.89	29.83	26.76
l_b,int, Bicycle LOS Score for Intersection	1.566	1.865	2.237	2.687
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	53.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	51	27	82	201	30	119	88	1000	152	237	1558	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	27	82	201	30	119	88	1000	152	237	1558	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	7	21	50	8	30	22	250	38	59	390	31
Total Analysis Volume [veh/h]	51	27	82	201	30	119	88	1000	152	237	1558	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	63.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	25	0	0	42	0	23	48	0	35	60	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	21	21	38	38	38	19	44	44	31	56	56
g / C, Green / Cycle	0.14	0.14	0.25	0.25	0.25	0.13	0.29	0.29	0.21	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.04	0.05	0.06	0.06	0.07	0.05	0.22	0.22	0.13	0.31	0.31
s, saturation flow rate [veh/h]	1811	1589	1781	1803	1589	1781	3560	1747	1781	3560	1801
c, Capacity [veh/h]	251	220	450	456	402	223	1035	508	372	1320	668
d1, Uniform Delay [s]	58.15	58.67	44.78	44.77	45.28	60.36	48.19	48.21	54.18	43.23	43.31
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.20	4.76	1.37	1.35	1.88	5.15	4.91	9.68	8.12	6.75	12.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.37	0.26	0.25	0.30	0.39	0.75	0.75	0.64	0.84	0.85
d, Delay for Lane Group [s/veh]	61.34	63.43	46.14	46.12	47.15	65.51	53.10	57.89	62.30	49.98	55.94
Lane Group LOS	E	E	D	D	D	E	D	E	E	D	E
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.97	3.20	3.64	3.68	3.84	3.41	13.75	14.19	9.00	19.98	21.41
50th-Percentile Queue Length [ft/ln]	74.21	80.08	90.98	91.96	96.09	85.13	343.75	354.66	225.05	499.41	535.18
95th-Percentile Queue Length [veh/ln]	5.34	5.77	6.55	6.62	6.92	6.13	19.83	20.36	13.92	27.31	29.00
95th-Percentile Queue Length [ft/ln]	133.58	144.15	163.76	165.53	172.97	153.24	495.78	509.09	348.06	682.66	724.88

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Movement, Approach, & Intersection Results

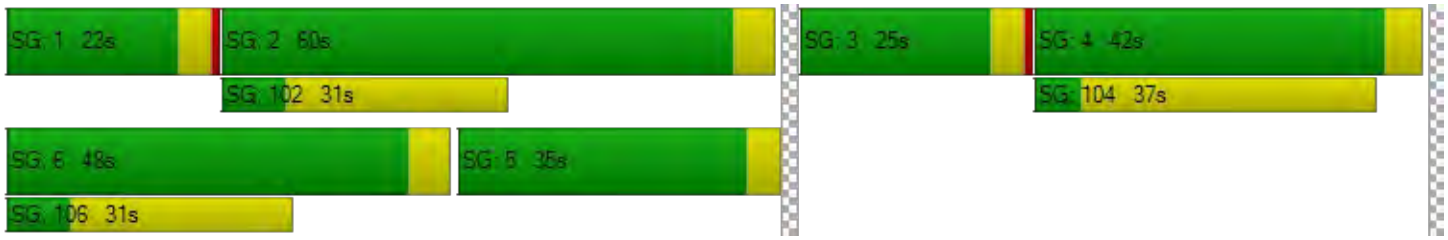
d_M, Delay for Movement [s/veh]	61.34	61.34	63.43	46.13	46.12	47.15	65.51	54.19	57.89	62.30	51.68	55.94
Movement LOS	E	E	E	D	D	D	E	D	E	E	D	E
d_A, Approach Delay [s/veh]	62.41			46.48			55.45			53.26		
Approach LOS	E			D			E			D		
d_I, Intersection Delay [s/veh]	53.75											
Intersection LOS	D											
Intersection V/C	0.533											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	2.030	2.342	0.000	3.121
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	277	505	581	741
d_b, Bicycle Delay [s]	55.64	41.89	37.74	29.70
l_b,int, Bicycle LOS Score for Intersection	1.824	2.137	2.242	2.614
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	40.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.401

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	3	4	4	71	0	38	13	1248	111	45	1608	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	4	4	71	0	38	13	1248	111	45	1608	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	18	0	10	3	312	28	11	402	0
Total Analysis Volume [veh/h]	3	4	4	71	0	38	13	1248	111	45	1608	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	83.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	45	0	0	45	0	39	64	0	41	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	41	35	60	60	37	62	62
g / C, Green / Cycle	0.27	0.27	0.23	0.40	0.40	0.25	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.01	0.25	0.25	0.03	0.30	0.30
s, saturation flow rate [veh/h]	1648	1487	1781	3560	1793	1781	3560	1870
c, Capacity [veh/h]	481	446	416	1424	717	439	1472	773
d1, Uniform Delay [s]	39.85	42.41	44.41	36.19	36.19	43.67	36.67	36.67
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.09	1.30	0.14	2.17	4.25	0.47	3.02	5.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.24	0.03	0.63	0.63	0.10	0.72	0.72
d, Delay for Lane Group [s/veh]	39.94	43.71	44.55	38.35	40.44	44.13	39.69	42.31
Lane Group LOS	D	D	D	D	D	D	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.31	3.37	0.39	13.69	14.20	1.36	16.59	17.99
50th-Percentile Queue Length [ft/ln]	7.87	84.18	9.84	342.15	355.02	34.06	414.84	449.80
95th-Percentile Queue Length [veh/ln]	0.57	6.06	0.71	19.75	20.38	2.45	23.27	24.95
95th-Percentile Queue Length [ft/ln]	14.17	151.53	17.72	493.83	509.53	61.31	581.86	623.71

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Movement, Approach, & Intersection Results

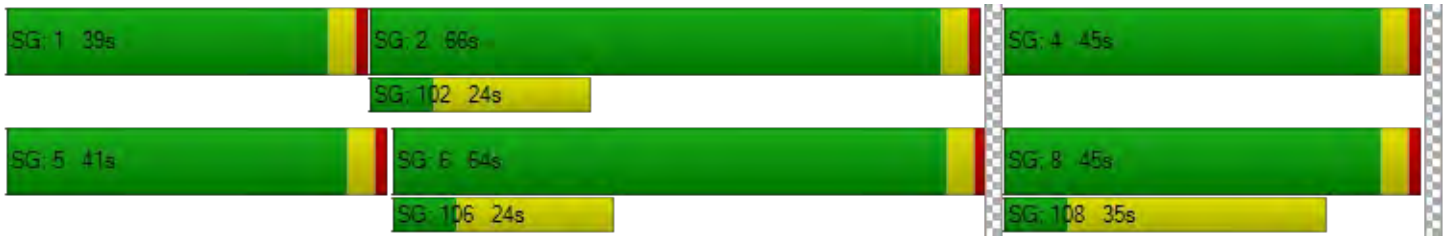
d_M, Delay for Movement [s/veh]	39.94	39.94	39.94	43.71	43.71	43.71	44.55	38.93	40.44	44.13	40.59	42.31
Movement LOS	D	D	D	D	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	39.94			43.71			39.10			40.69		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	40.10											
Intersection LOS	D											
Intersection V/C	0.401											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	41.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	39.60	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.751	1.870	3.196	3.101
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	547	547	800	827
d_b, Bicycle Delay [s]	39.60	39.60	27.00	25.81
l_b,int, Bicycle LOS Score for Intersection	1.578	1.739	2.314	2.469
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.052

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	1	85	63	3	44	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	85	63	3	44	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	21	16	1	11	8
Total Analysis Volume [veh/h]	1	85	63	3	44	32
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.03
d_M, Delay for Movement [s/veh]	7.35	0.00	0.00	0.00	9.66	8.97
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.28	0.28
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.00	0.00	6.90	6.90
d_A, Approach Delay [s/veh]	0.09		0.00		9.37	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.15					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	0	3	1	49	5	40	3	19	38	42	24	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	1	49	5	40	3	19	38	42	24	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	12	1	10	1	5	10	11	6	1
Total Analysis Volume [veh/h]	0	3	1	49	5	40	3	19	38	42	24	3
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.06	0.01	0.04	0.00	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	9.92	10.17	8.45	10.06	10.53	8.98	7.27	0.00	0.00	7.39	0.00	0.00
Movement LOS	A	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.36	0.36	0.36	0.01	0.01	0.01	0.08	0.08	0.08
95th-Percentile Queue Length [ft/ln]	0.40	0.40	0.40	9.02	9.02	9.02	0.14	0.14	0.14	2.09	2.09	2.09
d_A, Approach Delay [s/veh]	9.74			9.62			0.36			4.50		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	5.62											
Intersection LOS	B											

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Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	63.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.503

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	926	54	20	969	57	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	926	54	20	969	57	13
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	232	14	5	242	14	3
Total Analysis Volume [veh/h]	926	54	20	969	57	13
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.50	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	10.29	0.00	63.64	38.76
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.00	2.53	2.53
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.20	0.00	63.29	63.29
d_A, Approach Delay [s/veh]	0.00		0.21		59.02	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	2.13					
Intersection LOS	F					

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Vistro File: \...\330 Distel Circle Vistro PM.vistro
Report File: \...\Existing PM.pdf

Scenario 1 Existing PM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	44	781	18	18	976	38	43	18	41	30	7	25	2039

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	3	821	273	122	914	2	0	0	0	213	0	122	2470

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	105	5	82	13	2	18	74	1062	11	41	1709	159	3281

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	207	449	86	301	619	147	359	786	125	436	1367	212	5094

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	63	1	91	5	3	12	64	1237	5	26	1790	75	3372

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	9	0	29	1	0	0	34	1337	0	14	1587	13	3024

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	42	0	99	0	68	1304	0	6	1850	21	3390

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	0	0	0	273	0	135	64	1151	201	205	1837	0	3866

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	1	3	45	0	140	61	1075	96	118	1930	2	3471

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	51	27	82	201	30	119	88	1000	152	237	1558	122	3667

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	3	4	4	71	0	38	13	1248	111	45	1608	0	3145

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	1	85	63	3	44	32	228

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	0	3	1	49	5	40	3	19	38	42	24	3	227

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	926	54	20	969	57	13	2039

Vistro File: \...\330 Distel Circle Vistro AM.vistro
Report File: \...\Existing + Project AM.pdf

Scenario 2 Existing Plus Project AM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.675	19.5	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	SB Left	0.646	18.8	B
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	SEB Left	0.496	20.9	C
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Left	0.643	62.7	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.461	19.0	B
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	SWB Left	0.040	153.8	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	SEB Left	0.525	28.4	C
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NEB Right	0.511	50.2	D
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	NEB Right	0.358	43.8	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NEB Left	0.447	49.8	D
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	NWB Left	0.483	47.1	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.066	13.5	B
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.007	18.5	C
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.811	164.2	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	19.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.675

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	150	887	44	12	820	61	171	76	182	43	48	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	-2	0	0	2	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	885	44	12	822	61	171	76	182	43	48	37
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	221	11	3	206	15	43	19	46	11	12	9
Total Analysis Volume [veh/h]	150	885	44	12	822	61	171	76	182	43	48	37
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	7	23	23	1	18	18	21	21	21
g / C, Green / Cycle	0.11	0.39	0.39	0.02	0.29	0.29	0.35	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.25	0.01	0.24	0.24	0.25	0.11	0.18
s, saturation flow rate [veh/h]	1781	1870	1839	1781	1870	1825	984	1589	715
c, Capacity [veh/h]	198	728	716	27	548	535	442	551	327
d1, Uniform Delay [s]	25.96	14.98	14.99	29.40	19.77	19.77	16.98	14.52	15.14
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.78	0.96	0.98	10.93	3.02	3.10	1.11	0.35	0.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.64	0.64	0.44	0.82	0.82	0.56	0.33	0.39
d, Delay for Lane Group [s/veh]	31.74	15.94	15.96	40.32	22.79	22.87	18.09	14.87	15.90
Lane Group LOS	C	B	B	D	C	C	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.24	4.62	4.55	0.24	5.56	5.44	2.86	1.75	1.18
50th-Percentile Queue Length [ft/ln]	55.94	115.47	113.67	6.08	138.98	135.93	71.62	43.73	29.40
95th-Percentile Queue Length [veh/ln]	4.03	8.14	8.04	0.44	9.43	9.26	5.16	3.15	2.12
95th-Percentile Queue Length [ft/ln]	100.69	203.59	201.09	10.94	235.65	231.54	128.92	78.72	52.93

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Movement, Approach, & Intersection Results

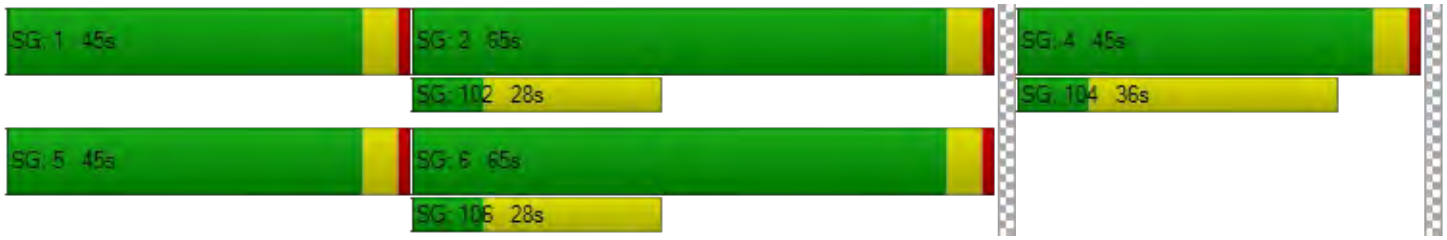
d_M, Delay for Movement [s/veh]	31.74	15.95	15.96	40.32	22.83	22.87	18.09	18.09	14.87	15.90	15.90	15.90
Movement LOS	C	B	B	D	C	C	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	18.15			23.06			16.73			15.90		
Approach LOS	B			C			B			B		
d_I, Intersection Delay [s/veh]	19.53											
Intersection LOS	B											
Intersection V/C	0.675											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.23	0.00	19.23	19.23
l_p,int, Pedestrian LOS Score for Intersection	2.821	0.000	2.102	1.817
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1998	1998	1332	1332
d_b, Bicycle Delay [s]	0.00	0.00	3.35	3.35
l_b,int, Bicycle LOS Score for Intersection	2.450	2.298	2.267	1.771
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.646

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	0	847	161	172	981	0	0	0	0	279	0	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	-3	0	0	4	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	844	161	172	985	0	0	0	0	279	0	195
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	211	40	43	246	0	0	0	0	70	0	49
Total Analysis Volume [veh/h]	0	844	161	172	985	0	0	0	0	279	0	195
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	71	71	71	71	71	71	71	71	71
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	31	31	9	39	39	17	17	17
g / C, Green / Cycle	0.00	0.43	0.43	0.13	0.55	0.55	0.24	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.00	0.28	0.28	0.10	0.26	0.26	0.00	0.19	0.12
s, saturation flow rate [veh/h]	1781	1870	1767	1781	1870	1870	1870	1458	1589
c, Capacity [veh/h]	0	800	756	224	1035	1035	493	446	376
d1, Uniform Delay [s]	0.00	16.18	16.18	30.26	9.68	9.68	0.00	25.52	23.74
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	3.17	3.35	7.67	1.24	1.24	0.00	2.05	1.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.65	0.65	0.77	0.48	0.48	0.00	0.63	0.52
d, Delay for Lane Group [s/veh]	0.00	19.34	19.53	37.93	10.92	10.92	0.00	27.57	25.31
Lane Group LOS	A	B	B	D	B	B	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.00	6.58	6.26	3.19	4.20	4.20	0.00	4.46	2.89
50th-Percentile Queue Length [ft/ln]	0.00	164.52	156.44	79.63	104.89	104.89	0.00	111.60	72.19
95th-Percentile Queue Length [veh/ln]	0.00	10.79	10.36	5.73	7.55	7.55	0.00	7.93	5.20
95th-Percentile Queue Length [ft/ln]	0.00	269.70	259.00	143.33	188.81	188.81	0.00	198.23	129.94

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Movement, Approach, & Intersection Results

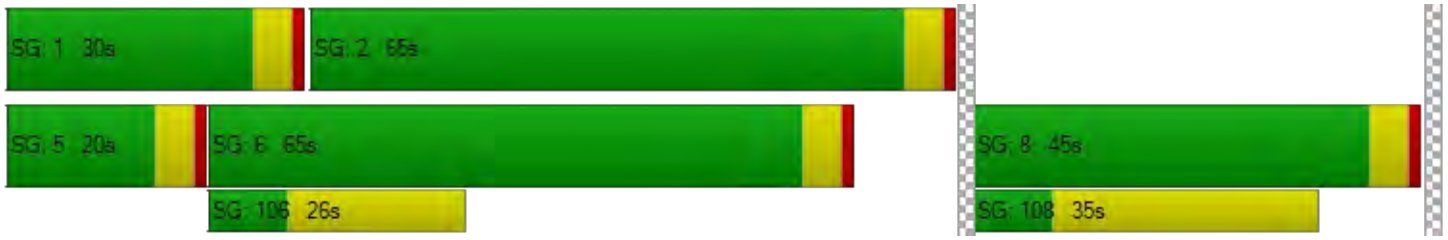
d_M, Delay for Movement [s/veh]	0.00	19.42	19.53	37.93	10.92	10.92	0.00	0.00	0.00	27.57	27.57	25.31
Movement LOS	A	B	B	D	B	B	A	A	A	C	C	C
d_A, Approach Delay [s/veh]	19.43			14.93			0.00			26.64		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	18.75											
Intersection LOS	B											
Intersection V/C	0.646											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	24.69	24.69	40.86
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.785	1.701	2.209
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1681	1681	1121	1121
d_b, Bicycle Delay [s]	0.91	0.91	6.89	6.89
l_b,int, Bicycle LOS Score for Intersection	2.389	2.514	1.560	2.342
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	166	4	166	14	9	4	101	1423	7	53	738	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	3	0	0	-1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	166	4	166	14	9	4	101	1426	7	53	737	121
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	1	42	4	2	1	25	357	2	13	184	30
Total Analysis Volume [veh/h]	166	4	166	14	9	4	101	1426	7	53	737	121
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	128.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	40	0	20	40	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	29	29	29	10	103	103	6	99	99
g / C, Green / Cycle	0.19	0.19	0.19	0.07	0.69	0.69	0.04	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.17	0.10	0.17	0.06	0.26	0.26	0.03	0.16	0.16
s, saturation flow rate [veh/h]	984	1589	159	1781	3560	1865	1781	3560	1739
c, Capacity [veh/h]	234	301	67	124	2448	1282	74	2348	1147
d1, Uniform Delay [s]	59.55	55.00	52.26	68.81	9.95	9.95	71.00	10.37	10.39
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.26	1.57	3.91	12.03	0.46	0.87	12.11	0.25	0.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.55	0.40	0.81	0.38	0.38	0.72	0.24	0.25
d, Delay for Lane Group [s/veh]	63.81	56.57	56.18	80.84	10.41	10.82	83.12	10.62	10.90
Lane Group LOS	E	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.62	5.85	0.92	4.23	6.50	6.96	2.26	3.88	3.92
50th-Percentile Queue Length [ft/ln]	165.50	146.31	23.11	105.79	162.45	173.91	56.51	97.07	98.05
95th-Percentile Queue Length [veh/ln]	10.84	9.82	1.66	7.61	10.68	11.28	4.07	6.99	7.06
95th-Percentile Queue Length [ft/ln]	270.99	245.49	41.60	190.13	266.96	282.05	101.72	174.72	176.48

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.81	63.81	56.57	56.18	56.18	56.18	80.84	10.55	10.82	83.12	10.68	10.90
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	60.23			56.18			15.18			14.93		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	20.88											
Intersection LOS	C											
Intersection V/C	0.496											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.153	1.771	3.022	3.246
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.33	64.49
l_b,int, Bicycle LOS Score for Intersection	2.114	1.604	2.403	2.061
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	62.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.643

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	178	718	41	182	712	276	261	1180	179	299	606	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	-2	-1	0	0	2	3	2	0	-1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	178	718	39	181	712	276	263	1183	181	299	605	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	180	10	45	178	69	66	296	45	75	151	36
Total Analysis Volume [veh/h]	178	718	39	181	712	276	263	1183	181	299	605	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	153.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	27	56	0	27	56	0	30	63	0	34	67	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	22	51	51	22	51	51	25	58	58	29	62	62
g / C, Green / Cycle	0.12	0.29	0.29	0.12	0.29	0.29	0.14	0.32	0.32	0.16	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.05	0.20	0.20	0.05	0.20	0.17	0.08	0.26	0.26	0.09	0.14	0.14
s, saturation flow rate [veh/h]	3459	1870	1836	3459	3560	1589	3459	3560	1746	3459	3560	1693
c, Capacity [veh/h]	430	534	524	430	1017	454	488	1155	566	555	1234	587
d1, Uniform Delay [s]	72.74	57.73	57.73	72.80	57.42	55.59	71.86	55.28	55.30	69.42	44.79	44.84
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.92	7.97	8.11	3.00	4.02	5.95	4.22	5.60	10.89	3.72	1.01	2.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.72	0.72	0.42	0.70	0.61	0.54	0.79	0.79	0.54	0.41	0.41
d, Delay for Lane Group [s/veh]	75.65	65.70	65.84	75.80	61.44	61.54	76.08	60.88	66.18	73.14	45.80	46.99
Lane Group LOS	E	E	E	E	E	E	E	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.99	16.83	16.55	4.06	15.08	11.64	5.96	19.78	20.25	6.65	8.90	8.72
50th-Percentile Queue Length [ft/ln]	99.75	420.87	413.81	101.57	376.97	291.06	148.89	494.51	506.29	166.15	222.45	217.97
95th-Percentile Queue Length [veh/ln]	7.18	23.56	23.22	7.31	21.45	17.24	9.96	27.07	27.63	10.87	13.79	13.56
95th-Percentile Queue Length [ft/ln]	179.56	589.10	580.61	182.83	536.18	430.96	248.95	676.86	690.79	271.85	344.75	339.03

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Movement, Approach, & Intersection Results

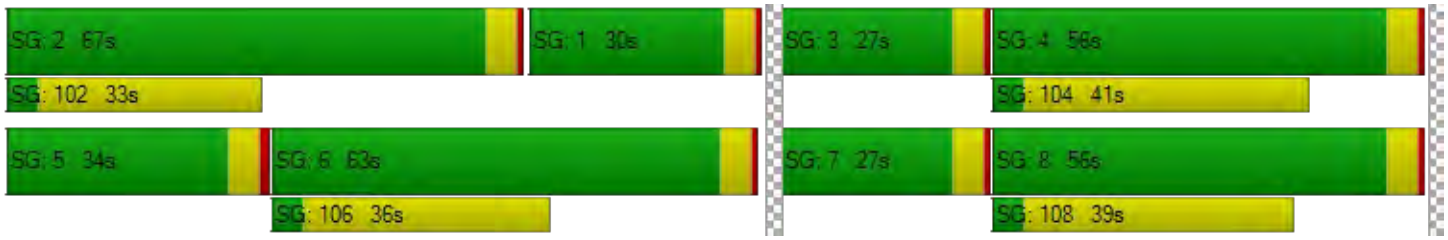
d_M, Delay for Movement [s/veh]	75.65	65.77	65.84	75.80	61.44	61.54	76.08	62.08	66.18	73.14	45.99	46.99
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	67.65			63.69			64.80			53.87		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	62.69											
Intersection LOS	E											
Intersection V/C	0.643											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	82.18	82.18	82.18	82.18
l_p,int, Pedestrian LOS Score for Intersection	2.962	3.096	3.108	3.141
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	571	571	649	693
d_b, Bicycle Delay [s]	45.94	45.94	41.07	38.42
l_b,int, Bicycle LOS Score for Intersection	2.331	2.524	2.454	2.136
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	60	10	109	0	6	8	54	1686	29	9	859	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	-1	0	0	0	2	7	0	0	-4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	10	108	0	6	8	56	1693	29	9	855	99
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	3	27	0	2	2	14	423	7	2	214	25
Total Analysis Volume [veh/h]	60	10	108	0	6	8	56	1693	29	9	855	99
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	179.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	19	128	0	11	120	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	15	124	124	7	116	116
g / C, Green / Cycle	0.20	0.20	0.09	0.69	0.69	0.04	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate	0.11	0.01	0.03	0.32	0.32	0.01	0.18	0.18
s, saturation flow rate [veh/h]	1549	1699	1781	3560	1854	1781	3560	1773
c, Capacity [veh/h]	343	367	151	2451	1276	72	2293	1141
d1, Uniform Delay [s]	64.13	57.44	77.80	12.82	12.82	83.27	13.89	13.91
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.50	0.19	6.82	0.63	1.21	3.52	0.30	0.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.04	0.37	0.46	0.46	0.12	0.28	0.28
d, Delay for Lane Group [s/veh]	69.63	57.63	84.61	13.45	14.03	86.78	14.19	14.52
Lane Group LOS	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.98	0.55	2.75	10.57	11.22	0.48	5.78	5.90
50th-Percentile Queue Length [ft/ln]	199.45	13.75	68.80	264.18	280.39	11.91	144.52	147.40
95th-Percentile Queue Length [veh/ln]	12.61	0.99	4.95	15.90	16.71	0.86	9.72	9.88
95th-Percentile Queue Length [ft/ln]	315.25	24.76	123.84	397.46	417.70	21.44	243.10	246.95

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.63	69.63	69.63	57.63	57.63	57.63	84.61	13.64	14.03	86.78	14.28	14.52
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	69.63			57.63			15.88			14.98		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	19.05											
Intersection LOS	B											
Intersection V/C	0.461											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	81.23	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.885	1.763	3.073	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	409	409	1377	1288
d_b, Bicycle Delay [s]	56.96	56.96	8.74	11.41
l_b,int, Bicycle LOS Score for Intersection	1.853	1.583	2.538	2.089
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	153.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.040

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	4	0	12	1	0	1	130	1684	2	6	1043	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	3	0	0	0	0	3	0	0	0	-5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	0	15	1	0	1	130	1687	2	6	1043	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	4	0	0	0	33	422	1	2	261	10
Total Analysis Volume [veh/h]	11	0	15	1	0	1	130	1687	2	6	1043	40
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.00	0.04	0.04	0.00	0.00	0.36	0.02	0.00	0.03	0.01	0.00
d_M, Delay for Movement [s/veh]	102.93	475.41	29.09	153.79	477.01	22.32	20.76	0.00	0.00	25.76	0.00	0.00
Movement LOS	F	F	D	F	F	C	C	A	A	D	A	A
95th-Percentile Queue Length [veh/ln]	1.07	1.07	1.07	0.14	0.14	0.14	1.63	0.00	0.00	0.10	0.00	0.00
95th-Percentile Queue Length [ft/ln]	26.79	26.79	26.79	3.38	3.38	3.38	40.65	0.00	0.00	2.58	0.00	0.00
d_A, Approach Delay [s/veh]	60.33			88.05			1.48			0.14		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	1.57											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.525

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	0	204	0	0	0	93	1769	0	8	1024	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	5	0	0	0	-2	0	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	0	209	0	0	0	91	1769	0	8	1027	95
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	52	0	0	0	23	442	0	2	257	24
Total Analysis Volume [veh/h]	66	0	209	0	0	0	91	1769	0	8	1027	95
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	78.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	49	49	0	0	0	0	43	122	0	9	88	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	180		180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	45		39	118	118	5	84	84
g / C, Green / Cycle	0.25		0.22	0.66	0.66	0.03	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.17		0.05	0.33	0.33	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1632		1781	3560	1870	1781	3560	1790
c, Capacity [veh/h]	411		389	2332	1225	52	1660	834
d1, Uniform Delay [s]	60.62		57.95	15.89	15.89	85.16	32.45	32.47
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.41		1.41	0.76	1.44	6.08	0.88	1.76
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67		0.23	0.50	0.50	0.15	0.45	0.45
d, Delay for Lane Group [s/veh]	69.03		59.36	16.65	17.33	91.24	33.34	34.23
Lane Group LOS	E		E	B	B	F	C	C
Critical Lane Group	Yes		No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.46		3.60	12.41	13.27	0.45	11.33	11.63
50th-Percentile Queue Length [ft/ln]	311.40		90.05	310.19	331.65	11.34	283.33	290.74
95th-Percentile Queue Length [veh/ln]	18.24		6.48	18.18	19.24	0.82	16.85	17.22
95th-Percentile Queue Length [ft/ln]	456.10		162.09	454.62	480.98	20.41	421.35	430.56

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Movement, Approach, & Intersection Results

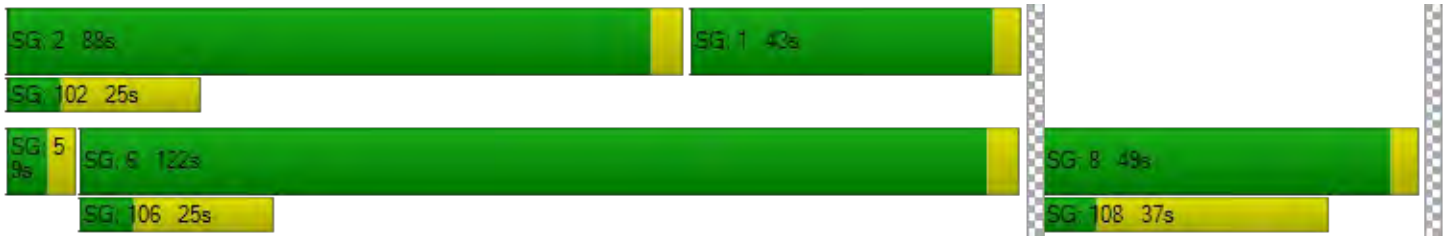
d_M, Delay for Movement [s/veh]	69.03	69.03	69.03	0.00	0.00	0.00	59.36	16.88	17.33	91.24	33.58	34.23
Movement LOS	E	E	E				E	B	B	F	C	C
d_A, Approach Delay [s/veh]	69.03			0.00			18.96			34.04		
Approach LOS	E			A			B			C		
d_I, Intersection Delay [s/veh]	28.40											
Intersection LOS	C											
Intersection V/C	0.525											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	79.34	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.935	1.751	3.130	3.108
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	503	0	1310	932
d_b, Bicycle Delay [s]	50.40	90.00	10.71	25.65
l_b,int, Bicycle LOS Score for Intersection	2.013	1.560	2.583	2.181
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	50.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.511

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	299	0	200	53	1593	212	152	1106	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	-1	0	-2	0	3	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	299	0	199	53	1591	212	155	1110	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	75	0	50	13	398	53	39	278	0
Total Analysis Volume [veh/h]	0	0	1	299	0	199	53	1591	212	155	1110	1
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	21	0	0	51	0	27	79	0	29	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	17	47	47	47	23	75	75	25	77	77
g / C, Green / Cycle	0.10	0.26	0.26	0.26	0.13	0.42	0.42	0.14	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.08	0.13	0.03	0.34	0.34	0.04	0.20	0.20
s, saturation flow rate [veh/h]	1589	1781	1781	1589	1781	3560	1760	3459	3560	1869
c, Capacity [veh/h]	153	468	468	418	231	1482	732	486	1521	799
d1, Uniform Delay [s]	73.58	53.40	53.40	55.92	70.30	46.38	46.48	69.60	37.12	37.12
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.08	1.79	1.79	3.86	2.32	4.99	9.79	1.72	1.08	2.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.32	0.32	0.48	0.23	0.81	0.82	0.32	0.48	0.48
d, Delay for Lane Group [s/veh]	73.66	55.19	55.19	59.77	72.62	51.37	56.28	71.32	38.21	39.18
Lane Group LOS	E	E	E	E	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.05	5.82	5.82	8.23	2.36	24.78	25.63	3.35	11.92	12.73
50th-Percentile Queue Length [ft/ln]	1.16	145.38	145.38	205.70	58.90	619.46	640.68	83.76	298.00	318.27
95th-Percentile Queue Length [veh/ln]	0.08	9.77	9.77	12.93	4.24	32.94	33.93	6.03	17.58	18.58
95th-Percentile Queue Length [ft/ln]	2.08	244.25	244.25	323.31	106.02	823.55	848.24	150.78	439.56	464.56

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Movement, Approach, & Intersection Results

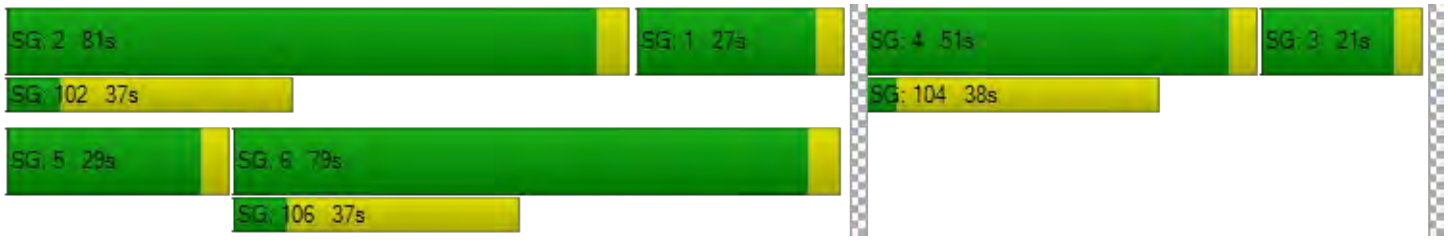
d_M, Delay for Movement [s/veh]	73.66	73.66	73.66	55.19	55.19	59.77	72.62	52.56	56.28	71.32	38.54	39.18
Movement LOS	E	E	E	E	E	E	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	73.66			57.02			53.56			42.55		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	50.19											
Intersection LOS	D											
Intersection V/C	0.511											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	82.18
l_p,int, Pedestrian LOS Score for Intersection	1.761	2.473	0.000	3.194
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	192	526	832	854
d_b, Bicycle Delay [s]	73.53	48.91	30.68	29.53
l_b,int, Bicycle LOS Score for Intersection	1.561	2.381	2.580	2.256
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	43.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.358

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	0	0	0	86	1341	118	99	1078	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	3	0	0	-1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	0	0	0	86	1344	118	99	1077	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	22	336	30	25	269	0
Total Analysis Volume [veh/h]	0	0	1	0	0	0	86	1344	118	99	1077	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	108.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	28	60	0	29	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	24	55	55	25	56	56
g / C, Green / Cycle	0.10	0.25	0.25	0.16	0.37	0.37	0.16	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.00	0.05	0.27	0.27	0.06	0.20	0.20
s, saturation flow rate [veh/h]	1589	1781	1870	1781	3560	1794	1781	3560	1870
c, Capacity [veh/h]	158	450	472	279	1315	662	291	1339	703
d1, Uniform Delay [s]	60.88	0.00	0.00	56.05	41.03	41.04	55.59	36.43	36.43
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.00	0.00	2.85	3.76	7.26	3.16	1.49	2.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.00	0.00	0.31	0.74	0.74	0.34	0.53	0.53
d, Delay for Lane Group [s/veh]	60.95	0.00	0.00	58.90	44.80	48.30	58.75	37.92	39.25
Lane Group LOS	E	A	A	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	3.14	16.33	17.10	3.61	10.46	11.24
50th-Percentile Queue Length [ft/ln]	0.96	0.00	0.00	78.39	408.23	427.50	90.18	261.44	281.11
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.00	5.64	22.96	23.88	6.49	15.76	16.74
95th-Percentile Queue Length [ft/ln]	1.73	0.00	0.00	141.09	573.90	597.04	162.33	394.03	418.60

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Movement, Approach, & Intersection Results

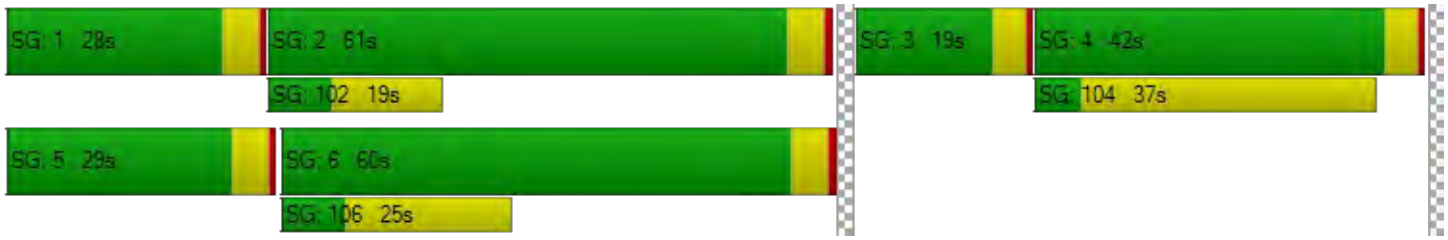
d_M, Delay for Movement [s/veh]	60.95	60.95	60.95	0.00	0.00	0.00	58.90	45.76	48.30	58.75	38.38	39.25
Movement LOS	E	E	E	A	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	60.95			0.00			46.69			40.09		
Approach LOS	E			A			D			D		
d_I, Intersection Delay [s/veh]	43.85											
Intersection LOS	D											
Intersection V/C	0.358											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.760	2.023	0.000	2.970
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	752
d_b, Bicycle Delay [s]	60.84	41.89	29.83	29.20
l_b,int, Bicycle LOS Score for Intersection	1.561	1.560	2.411	2.206
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	49.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.447

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	14	4	5	77	13	97	27	1321	87	148	756	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	-4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	4	5	77	13	97	27	1328	87	148	752	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	1	19	3	24	7	332	22	37	188	13
Total Analysis Volume [veh/h]	14	4	5	77	13	97	27	1328	87	148	752	50
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	168.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	28	0	0	42	0	29	70	0	40	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	24	24	38	38	38	25	66	66	36	77	77
g / C, Green / Cycle	0.13	0.13	0.21	0.21	0.21	0.14	0.36	0.36	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.03	0.03	0.06	0.02	0.26	0.26	0.08	0.15	0.15
s, saturation flow rate [veh/h]	1800	1589	1781	1806	1589	1781	3560	1812	1781	3560	1811
c, Capacity [veh/h]	238	210	375	380	335	245	1298	660	359	1515	771
d1, Uniform Delay [s]	68.46	67.99	57.54	57.53	59.74	67.94	49.35	49.35	62.56	34.90	34.93
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.62	0.21	0.65	0.64	2.18	0.90	3.52	6.74	3.47	0.64	1.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.02	0.12	0.12	0.29	0.11	0.72	0.72	0.41	0.35	0.35
d, Delay for Lane Group [s/veh]	69.08	68.20	58.19	58.17	61.92	68.84	52.87	56.10	66.03	35.54	36.19
Lane Group LOS	E	E	E	E	E	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.79	0.22	1.75	1.76	3.98	1.16	18.88	19.81	6.29	8.12	8.44
50th-Percentile Queue Length [ft/ln]	19.74	5.47	43.73	44.09	99.56	28.96	472.06	495.20	157.17	203.12	210.89
95th-Percentile Queue Length [veh/ln]	1.42	0.39	3.15	3.17	7.17	2.08	26.01	27.11	10.40	12.80	13.20
95th-Percentile Queue Length [ft/ln]	35.53	9.84	78.72	79.35	179.21	52.12	650.22	677.67	259.97	319.98	329.97

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.08	69.08	68.20	58.18	58.17	61.92	68.84	53.82	56.10	66.03	35.73	36.19
Movement LOS	E	E	E	E	E	E	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	68.88			60.12			54.24			40.48		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	49.76											
Intersection LOS	D											
Intersection V/C	0.447											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	81.23
l_p,int, Pedestrian LOS Score for Intersection	1.991	2.268	0.000	3.016
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	421	729	851
d_b, Bicycle Delay [s]	67.77	56.09	36.35	29.70
l_b,int, Bicycle LOS Score for Intersection	1.598	1.868	2.353	2.082
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	47.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.483

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	0	150	0	59	18	1458	136	31	957	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	9	0	0	-5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	0	150	0	59	18	1467	136	31	952	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	38	0	15	5	367	34	8	238	0
Total Analysis Volume [veh/h]	0	1	0	150	0	59	18	1467	136	31	952	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	66	0	0	66	0	37	76	0	38	77	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	62	62	33	72	72	34	73	73
g / C, Green / Cycle	0.34	0.34	0.18	0.40	0.40	0.19	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.01	0.30	0.30	0.02	0.18	0.18
s, saturation flow rate [veh/h]	1870	1472	1781	3560	1790	1781	3560	1870
c, Capacity [veh/h]	664	541	327	1424	716	336	1444	758
d1, Uniform Delay [s]	38.70	44.80	60.64	46.26	46.27	60.26	38.56	38.56
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.07	0.32	3.65	7.07	0.54	0.95	1.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.39	0.06	0.75	0.75	0.09	0.43	0.43
d, Delay for Lane Group [s/veh]	38.70	46.87	60.96	49.91	53.34	60.80	39.51	40.36
Lane Group LOS	D	D	E	D	D	E	D	D
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	7.57	0.72	21.19	22.00	1.23	10.26	10.96
50th-Percentile Queue Length [ft/ln]	0.77	189.27	17.88	529.85	550.11	30.80	256.51	273.91
95th-Percentile Queue Length [veh/ln]	0.06	12.08	1.29	28.74	29.70	2.22	15.51	16.38
95th-Percentile Queue Length [ft/ln]	1.38	302.08	32.18	718.60	742.44	55.44	387.84	409.62

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	38.70	38.70	38.70	46.87	46.87	46.87	60.96	50.84	53.34	60.80	39.80	40.36
Movement LOS	D	D	D	D	D	D	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	38.70			46.87			51.17			40.46		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	47.10											
Intersection LOS	D											
Intersection V/C	0.483											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	62.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	38.68	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.757	1.931	3.254	3.034
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	689	800	811
d_b, Bicycle Delay [s]	38.68	38.68	32.40	31.80
l_b,int, Bicycle LOS Score for Intersection	1.561	1.904	2.451	2.100
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	13.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.066

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	31	274	205	21	25	79
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	-2	7	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	274	205	19	32	83
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	69	51	5	8	21
Total Analysis Volume [veh/h]	31	274	205	19	32	83
Pedestrian Volume [ped/h]	0		0		0	

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.07	0.10
d_M, Delay for Movement [s/veh]	7.74	0.00	0.00	0.00	13.51	10.41
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.60	0.60
95th-Percentile Queue Length [ft/ln]	1.77	1.77	0.00	0.00	14.90	14.90
d_A, Approach Delay [s/veh]	0.79		0.00		11.27	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.38					
Intersection LOS	B					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	18.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	4	3	3	123	3	171	3	52	141	160	33	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	2	0	0	1	-1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	3	3	125	3	173	3	52	142	159	33	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	31	1	43	1	13	36	40	8	0
Total Analysis Volume [veh/h]	4	3	3	125	3	173	3	52	142	159	33	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.28	0.01	0.19	0.00	0.00	0.00	0.12	0.00	0.00
d_M, Delay for Movement [s/veh]	16.50	14.45	8.66	18.12	18.46	13.90	7.29	0.00	0.00	7.95	0.00	0.00
Movement LOS	C	B	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	2.55	2.55	2.55	0.01	0.01	0.01	0.39	0.39	0.39
95th-Percentile Queue Length [ft/ln]	1.78	1.78	1.78	63.86	63.86	63.86	0.14	0.14	0.14	9.75	9.75	9.75
d_A, Approach Delay [s/veh]	13.53			15.70			0.11			6.55		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	8.77											
Intersection LOS	C											

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Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	164.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.811

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	1114	58	17	1369	51	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	-3	0	0	4	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1111	58	17	1373	51	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	278	15	4	343	13	4
Total Analysis Volume [veh/h]	1111	58	17	1373	51	14
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.81	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	11.25	0.00	164.18	114.86
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.00	4.23	4.23
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.21	0.00	105.79	105.79
d_A, Approach Delay [s/veh]	0.00		0.14		153.55	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.88					
Intersection LOS	F					

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Report File: \...\Existing + Project AM.pdf

Scenario 2 Existing Plus Project AM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	150	885	44	12	822	61	171	76	182	43	48	37	2531

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	0	844	161	172	985	0	0	0	0	279	0	195	2636

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	166	4	166	14	9	4	101	1426	7	53	737	121	2808

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	178	718	39	181	712	276	263	1183	181	299	605	144	4779

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	60	10	108	0	6	8	56	1693	29	9	855	99	2933

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	11	0	15	1	0	1	130	1687	2	6	1043	40	2936

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	66	0	209	0	91	1769	0	8	1027	95	3265

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	0	0	1	299	0	199	53	1591	212	155	1110	1	3621

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	0	1	0	0	0	86	1344	118	99	1077	0	2725

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	14	4	5	77	13	97	27	1328	87	148	752	50	2602

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	0	1	0	150	0	59	18	1467	136	31	952	0	2814

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	31	274	205	19	32	83	644

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	4	3	3	125	3	173	3	52	142	159	33	1	701

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	1111	58	17	1373	51	14	2624

Vistro File: \...\330 Distel Circle Vistro PM.vistro
Report File: \...\Existing + Project PM.pdf

Scenario 2 Existing + Project PM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.504	10.2	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	NB Left	0.603	15.5	B
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	NWB Left	0.565	15.5	B
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Left	0.772	61.5	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.519	35.3	D
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	NEB Left	0.275	123.7	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	NWB Left	0.504	37.5	D
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NWB Left	0.462	42.2	D
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	NWB Left	0.523	48.5	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NWB Left	0.534	53.9	D
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	NWB Left	0.402	40.2	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.054	9.7	A
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.007	10.6	B
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.503	63.8	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	10.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.504

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	44	781	18	18	976	38	43	18	41	30	7	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	782	18	18	976	38	43	18	41	30	7	25
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	196	5	5	244	10	11	5	10	8	2	6
Total Analysis Volume [veh/h]	44	782	18	18	976	38	43	18	41	30	7	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	34	34	34	34	34	34	34	34	34
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	2	13	13	1	13	13	4	4	4
g / C, Green / Cycle	0.05	0.40	0.40	0.02	0.37	0.37	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.02	0.21	0.21	0.01	0.27	0.27	0.03	0.03	0.07
s, saturation flow rate [veh/h]	1781	1870	1855	1781	1870	1845	1812	1589	869
c, Capacity [veh/h]	91	750	744	42	699	690	418	207	272
d1, Uniform Delay [s]	15.57	7.70	7.70	16.24	9.10	9.10	13.19	13.10	13.45
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.89	0.60	0.60	6.60	1.49	1.51	0.16	0.46	0.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.54	0.54	0.42	0.73	0.73	0.15	0.20	0.23
d, Delay for Lane Group [s/veh]	19.46	8.30	8.30	22.84	10.59	10.61	13.35	13.56	13.87
Lane Group LOS	B	A	A	C	B	B	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.36	1.40	1.39	0.19	2.22	2.20	0.36	0.26	0.37
50th-Percentile Queue Length [ft/ln]	8.97	35.05	34.80	4.68	55.55	54.92	9.09	6.42	9.23
95th-Percentile Queue Length [veh/ln]	0.65	2.52	2.51	0.34	4.00	3.95	0.65	0.46	0.66
95th-Percentile Queue Length [ft/ln]	16.15	63.08	62.64	8.43	100.00	98.86	16.36	11.56	16.61

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Movement, Approach, & Intersection Results

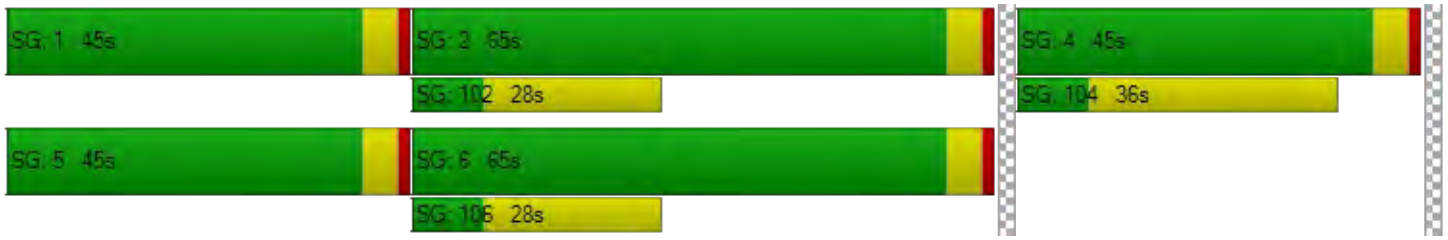
d_M, Delay for Movement [s/veh]	19.46	8.30	8.30	22.84	10.60	10.61	13.35	13.35	13.56	13.87	13.87	13.87
Movement LOS	B	A	A	C	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	8.88			10.81			13.43			13.87		
Approach LOS	A			B			B			B		
d_I, Intersection Delay [s/veh]	10.24											
Intersection LOS	B											
Intersection V/C	0.504											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	6.97	0.00	6.97	6.97
l_p,int, Pedestrian LOS Score for Intersection	2.708	0.000	1.927	1.707
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	3564	3564	2376	2376
d_b, Bicycle Delay [s]	10.29	10.29	0.59	0.59
l_b,int, Bicycle LOS Score for Intersection	2.256	2.411	1.728	1.662
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	3	821	273	122	914	2	0	0	0	213	0	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	822	273	122	914	2	0	0	0	213	0	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	206	68	31	229	1	0	0	0	53	0	31
Total Analysis Volume [veh/h]	3	822	273	122	914	2	0	0	0	213	0	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	32	32	6	37	37	12	12	12
g / C, Green / Cycle	0.00	0.49	0.49	0.09	0.58	0.58	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.00	0.31	0.31	0.07	0.25	0.25	0.00	0.14	0.08
s, saturation flow rate [veh/h]	1781	1870	1712	1781	1870	1869	1791	1473	1589
c, Capacity [veh/h]	3	912	835	165	1082	1081	393	388	299
d1, Uniform Delay [s]	32.38	12.25	12.26	28.67	7.63	7.63	0.00	24.75	23.15
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	273.04	2.56	2.80	8.86	0.96	0.96	0.00	1.72	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.97	0.63	0.63	0.74	0.42	0.42	0.00	0.55	0.41
d, Delay for Lane Group [s/veh]	305.43	14.81	15.06	37.53	8.58	8.58	0.00	26.47	24.41
Lane Group LOS	F	B	B	D	A	A	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.28	5.66	5.25	2.14	3.00	3.00	0.00	3.09	1.65
50th-Percentile Queue Length [ft/ln]	6.98	141.57	131.28	53.39	74.94	74.89	0.00	77.22	41.34
95th-Percentile Queue Length [veh/ln]	0.50	9.57	9.01	3.84	5.40	5.39	0.00	5.56	2.98
95th-Percentile Queue Length [ft/ln]	12.56	239.14	225.24	96.10	134.89	134.80	0.00	139.00	74.41

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Movement, Approach, & Intersection Results

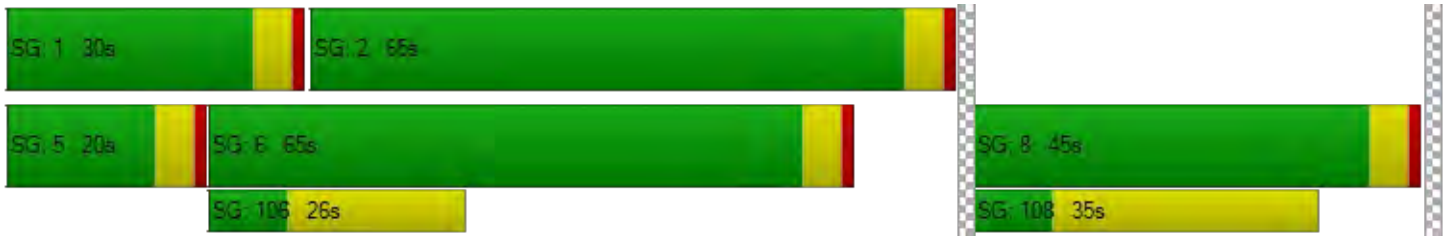
d_M, Delay for Movement [s/veh]	305.43	14.89	15.06	37.53	8.58	8.58	0.00	0.00	0.00	26.47	26.47	24.41
Movement LOS	F	B	B	D	A	A	A	A	A	C	C	C
d_A, Approach Delay [s/veh]	15.73			11.99			0.00			25.72		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	15.51											
Intersection LOS	B											
Intersection V/C	0.603											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.47	21.47	37.56
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.731	1.696	2.180
Crosswalk LOS	F	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1854	1854	1236	1236
d_b, Bicycle Delay [s]	0.17	0.17	4.72	4.72
l_b,int, Bicycle LOS Score for Intersection	2.465	2.416	1.560	2.112
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.565

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	105	5	82	13	2	18	74	1062	11	41	1709	159
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	1	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	5	82	13	2	18	74	1063	11	41	1714	159
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	1	21	3	1	5	19	266	3	10	429	40
Total Analysis Volume [veh/h]	105	5	82	13	2	18	74	1063	11	41	1714	159
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	116.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	30	0	20	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	23	23	23	8	109	109	6	107	107
g / C, Green / Cycle	0.15	0.15	0.15	0.05	0.73	0.73	0.04	0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.14	0.05	0.12	0.04	0.20	0.20	0.02	0.35	0.35
s, saturation flow rate [veh/h]	793	1589	265	1781	3560	1860	1781	3560	1790
c, Capacity [veh/h]	169	245	74	94	2585	1351	68	2533	1273
d1, Uniform Delay [s]	62.19	56.55	55.98	70.19	7.02	7.02	71.01	9.60	9.63
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.14	0.79	4.09	13.30	0.26	0.50	8.28	0.68	1.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.33	0.44	0.79	0.27	0.27	0.60	0.49	0.49
d, Delay for Lane Group [s/veh]	66.34	57.34	60.08	83.49	7.28	7.52	79.29	10.29	10.99
Lane Group LOS	E	E	E	F	A	A	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.32	2.85	1.18	3.15	3.75	4.01	1.71	8.78	9.13
50th-Percentile Queue Length [ft/ln]	108.09	71.25	29.51	78.87	93.80	100.27	42.69	219.59	228.23
95th-Percentile Queue Length [veh/ln]	7.73	5.13	2.12	5.68	6.75	7.22	3.07	13.64	14.08
95th-Percentile Queue Length [ft/ln]	193.34	128.24	53.12	141.96	168.83	180.49	76.85	341.10	352.11

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.34	66.34	57.34	60.08	60.08	60.08	83.49	7.36	7.52	79.29	10.48	10.99
Movement LOS	E	E	E	E	E	E	F	A	A	E	B	B
d_A, Approach Delay [s/veh]	62.49			60.08			12.27			12.00		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	15.53											
Intersection LOS	B											
Intersection V/C	0.565											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.107	1.771	3.103	3.255
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.34	64.50
l_b,int, Bicycle LOS Score for Intersection	1.876	1.614	2.191	2.612
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	61.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.772

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	207	449	86	301	619	147	359	786	125	436	1367	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	1	2	0	0	0	1	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	207	449	87	303	619	147	359	787	125	436	1372	212
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	112	22	76	155	37	90	197	31	109	343	53
Total Analysis Volume [veh/h]	207	449	87	303	619	147	359	787	125	436	1372	212
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	45.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	20	44	0	23	47	0	25	49	0	34	58	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	15	39	39	18	42	42	20	44	44	29	53	53
g / C, Green / Cycle	0.10	0.26	0.26	0.12	0.28	0.28	0.14	0.30	0.30	0.19	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.07	0.16	0.16	0.10	0.19	0.10	0.12	0.19	0.19	0.14	0.33	0.33
s, saturation flow rate [veh/h]	3113	1683	1589	3113	3204	1431	3113	3204	1568	3113	3204	1571
c, Capacity [veh/h]	320	442	417	382	906	404	423	949	464	600	1141	559
d1, Uniform Delay [s]	64.69	48.75	48.78	63.95	47.83	43.01	63.29	45.95	45.96	56.85	46.47	46.70
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.76	6.47	6.89	15.53	4.17	2.52	18.65	3.38	6.79	7.53	14.24	25.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.62	0.62	0.79	0.68	0.36	0.85	0.65	0.65	0.73	0.93	0.94
d, Delay for Lane Group [s/veh]	74.45	55.22	55.67	79.48	52.00	45.53	81.93	49.33	52.76	64.38	60.71	72.15
Lane Group LOS	E	E	E	E	D	D	F	D	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.23	9.88	9.41	6.44	10.80	4.67	7.77	10.37	10.60	8.37	21.03	22.63
50th-Percentile Queue Length [ft/ln]	105.84	247.02	235.30	160.92	269.91	116.76	194.24	259.19	264.93	209.16	525.74	565.87
95th-Percentile Queue Length [veh/ln]	7.61	15.04	14.44	10.60	16.19	8.21	12.34	15.65	15.94	13.11	28.55	30.44
95th-Percentile Queue Length [ft/ln]	190.20	375.90	361.08	264.94	404.63	205.36	308.52	391.20	398.40	327.75	713.76	760.93

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Movement, Approach, & Intersection Results

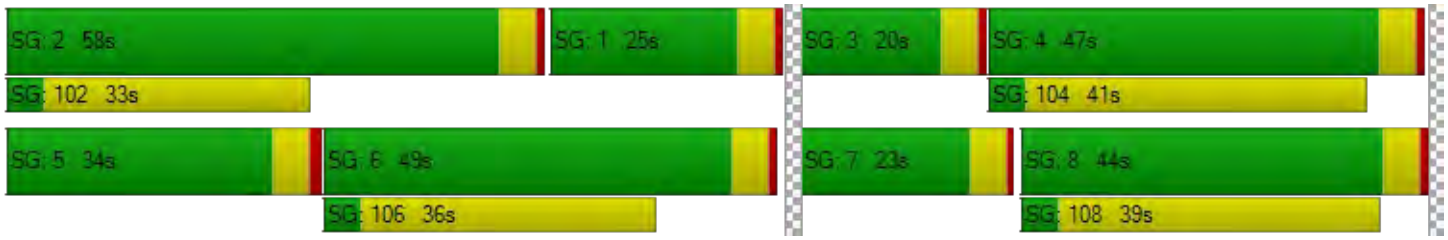
d_M, Delay for Movement [s/veh]	74.45	55.39	55.67	79.48	52.00	45.53	81.93	50.09	52.76	64.38	63.31	72.15
Movement LOS	E	E	E	E	D	D	F	D	D	E	E	E
d_A, Approach Delay [s/veh]	60.73			58.90			59.35			64.47		
Approach LOS	E			E			E			E		
d_I, Intersection Delay [s/veh]	61.48											
Intersection LOS	E											
Intersection V/C	0.772											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	67.21	67.21	67.21	67.21
l_p,int, Pedestrian LOS Score for Intersection	2.934	3.047	3.183	3.201
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	525	565	592	712
d_b, Bicycle Delay [s]	40.77	38.59	37.17	31.11
l_b,int, Bicycle LOS Score for Intersection	2.173	2.442	2.259	2.671
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	35.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.519

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	1	91	5	3	12	64	1237	5	26	1790	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	1	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	1	91	5	3	12	64	1238	5	26	1798	75
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	23	1	1	3	16	310	1	7	450	19
Total Analysis Volume [veh/h]	63	1	91	5	3	12	64	1238	5	26	1798	75
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	95.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	33	68	0	31	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	140	140	140	140	140	140	140	140
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	29	64	64	27	62	62
g / C, Green / Cycle	0.26	0.26	0.21	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.04	0.23	0.23	0.01	0.35	0.35
s, saturation flow rate [veh/h]	1525	1580	1781	3560	1866	1781	3560	1832
c, Capacity [veh/h]	437	448	373	1625	852	347	1574	810
d1, Uniform Delay [s]	42.10	38.49	45.40	26.83	26.83	46.03	33.37	33.40
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.25	0.19	1.00	1.11	2.11	0.42	4.01	7.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.04	0.17	0.50	0.50	0.07	0.79	0.79
d, Delay for Lane Group [s/veh]	44.35	38.68	46.40	27.94	28.94	46.45	37.38	40.99
Lane Group LOS	D	D	D	C	C	D	D	D
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.75	0.56	1.94	9.79	10.50	0.78	18.47	19.86
50th-Percentile Queue Length [ft/ln]	118.64	13.97	48.46	244.65	262.38	19.61	461.67	496.49
95th-Percentile Queue Length [veh/ln]	8.32	1.01	3.49	14.92	15.81	1.41	25.51	27.17
95th-Percentile Queue Length [ft/ln]	207.95	25.15	87.22	372.91	395.20	35.30	637.86	679.20

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.35	44.35	44.35	38.68	38.68	38.68	46.40	28.28	28.94	46.45	38.51	40.99
Movement LOS	D	D	D	D	D	D	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	44.35			38.68			29.17			38.71		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	35.28											
Intersection LOS	D											
Intersection V/C	0.519											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	59.43	59.43	61.29	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.857	1.749	3.144	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	526	913	884
d_b, Bicycle Delay [s]	38.04	38.04	20.68	21.78
l_b,int, Bicycle LOS Score for Intersection	1.815	1.593	2.278	2.604
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	123.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.275

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	9	0	29	1	0	0	34	1337	0	14	1587	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	1	0	0	0	6	0	0	0	0	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	30	1	0	0	40	1337	0	14	1587	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	8	0	0	0	10	334	0	4	397	5
Total Analysis Volume [veh/h]	10	0	30	1	0	0	40	1337	0	14	1587	21
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.27	0.00	0.11	0.02	0.00	0.00	0.20	0.01	0.00	0.05	0.02	0.00
d_M, Delay for Movement [s/veh]	123.68	405.55	37.69	95.00	394.07	17.67	27.88	0.00	0.00	19.16	0.00	0.00
Movement LOS	F	F	E	F	F	C	D	A	A	C	A	A
95th-Percentile Queue Length [veh/ln]	1.55	1.55	1.55	0.07	0.07	0.07	0.74	0.00	0.00	0.16	0.00	0.00
95th-Percentile Queue Length [ft/ln]	38.87	38.87	38.87	1.85	1.85	1.85	18.43	0.00	0.00	4.11	0.00	0.00
d_A, Approach Delay [s/veh]	59.18			95.00			0.81			0.17		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	1.27											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	37.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.504

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	42	0	99	0	0	0	68	1304	0	6	1850	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	1	0	0	0	6	6	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	0	100	0	0	0	74	1310	0	6	1851	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	25	0	0	0	19	328	0	2	463	5
Total Analysis Volume [veh/h]	42	0	100	0	0	0	74	1310	0	6	1851	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	134.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	44	44	0	0	0	0	36	73	0	33	70	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	150		150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	40		32	69	69	29	66	66
g / C, Green / Cycle	0.27		0.22	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.09		0.04	0.24	0.24	0.00	0.35	0.35
s, saturation flow rate [veh/h]	1642		1781	3560	1870	1781	3560	1859
c, Capacity [veh/h]	441		383	1635	859	348	1564	817
d1, Uniform Delay [s]	43.91		48.18	28.89	28.89	48.73	36.01	36.02
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.93		1.12	1.21	2.29	0.09	4.06	7.53
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.32		0.19	0.53	0.53	0.02	0.79	0.79
d, Delay for Lane Group [s/veh]	45.84		49.30	30.10	31.19	48.82	40.07	43.55
Lane Group LOS	D		D	C	C	D	D	D
Critical Lane Group	Yes		Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.56		2.40	11.26	12.09	0.19	19.90	21.58
50th-Percentile Queue Length [ft/ln]	113.99		60.08	281.62	302.27	4.80	497.48	539.60
95th-Percentile Queue Length [veh/ln]	8.06		4.33	16.77	17.79	0.35	27.22	29.20
95th-Percentile Queue Length [ft/ln]	201.53		108.15	419.22	444.84	8.64	680.38	730.08

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.84	45.84	45.84	0.00	0.00	0.00	49.30	30.48	31.19	48.82	41.24	43.55
Movement LOS	D	D	D				D	C	C	D	D	D
d_A, Approach Delay [s/veh]	45.84			0.00			31.48			41.29		
Approach LOS	D			A			C			D		
d_I, Intersection Delay [s/veh]	37.49											
Intersection LOS	D											
Intersection V/C	0.504											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	64.40	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.835	1.742	3.160	3.143
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	537	0	919	879
d_b, Bicycle Delay [s]	40.11	75.00	21.92	23.58
l_b,int, Bicycle LOS Score for Intersection	1.794	1.560	2.321	2.593
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	42.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.462

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	0	273	0	135	64	1151	201	205	1837	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	4	0	7	0	1	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	273	0	139	64	1158	201	206	1838	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	68	0	35	16	290	50	52	460	0
Total Analysis Volume [veh/h]	0	0	0	273	0	139	64	1158	201	206	1838	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	132.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	9	0	0	42	0	31	66	0	33	68	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	5	38	38	38	27	62	62	29	64	64
g / C, Green / Cycle	0.04	0.26	0.26	0.26	0.18	0.41	0.41	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.08	0.09	0.04	0.26	0.26	0.06	0.34	0.34
s, saturation flow rate [veh/h]	1870	1781	1781	1589	1781	3560	1732	3459	3560	1870
c, Capacity [veh/h]	66	455	455	406	324	1469	715	676	1517	797
d1, Uniform Delay [s]	0.00	45.04	45.04	45.58	52.05	34.81	34.81	51.64	37.35	37.35
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	1.69	1.69	2.29	1.36	1.99	4.05	1.16	4.38	8.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.30	0.30	0.34	0.20	0.62	0.62	0.30	0.79	0.79
d, Delay for Lane Group [s/veh]	0.00	46.73	46.73	47.87	53.42	36.81	38.86	52.80	41.73	45.39
Lane Group LOS	A	D	D	D	D	D	D	D	D	D
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.00	4.41	4.41	4.58	2.18	13.55	13.59	3.44	19.87	21.68
50th-Percentile Queue Length [ft/ln]	0.00	110.18	110.18	114.49	54.47	338.65	339.68	86.02	496.83	542.11
95th-Percentile Queue Length [veh/ln]	0.00	7.85	7.85	8.09	3.92	19.58	19.63	6.19	27.18	29.32
95th-Percentile Queue Length [ft/ln]	0.00	196.25	196.25	202.23	98.04	489.55	490.81	154.83	679.61	733.04

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Movement, Approach, & Intersection Results

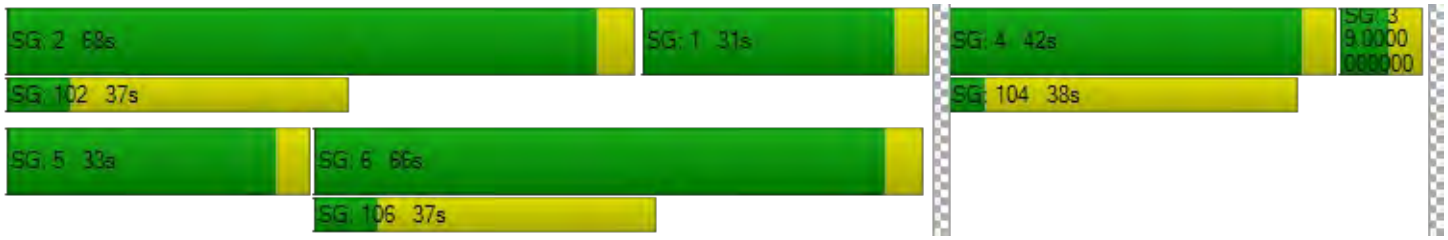
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	46.73	46.73	47.87	53.42	37.24	38.86	52.80	42.99	45.39
Movement LOS	A	A	A	D	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	0.00			47.11			38.20			43.98		
Approach LOS	A			D			D			D		
d_I, Intersection Delay [s/veh]	42.19											
Intersection LOS	D											
Intersection V/C	0.462											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	67.21
l_p,int, Pedestrian LOS Score for Intersection	1.755	2.457	0.000	3.227
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	71	511	825	852
d_b, Bicycle Delay [s]	69.79	41.59	25.87	24.71
l_b,int, Bicycle LOS Score for Intersection	1.560	2.239	2.342	2.684
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	48.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	3	45	0	140	61	1075	96	118	1930	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	1	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	3	45	0	140	61	1076	96	118	1935	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	11	0	35	15	269	24	30	484	1
Total Analysis Volume [veh/h]	0	1	3	45	0	140	61	1076	96	118	1935	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	105.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	24	60	0	29	65	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	20	55	55	25	60	60
g / C, Green / Cycle	0.10	0.25	0.25	0.13	0.37	0.37	0.16	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.09	0.03	0.22	0.22	0.07	0.36	0.36
s, saturation flow rate [veh/h]	1651	1781	1589	1781	3560	1793	1781	3560	1869
c, Capacity [veh/h]	164	450	402	232	1315	662	291	1434	753
d1, Uniform Delay [s]	60.99	42.97	45.93	58.78	38.19	38.20	56.23	41.60	41.60
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	0.44	2.38	2.76	1.97	3.88	4.16	8.38	14.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.10	0.35	0.26	0.59	0.59	0.41	0.89	0.89
d, Delay for Lane Group [s/veh]	61.26	43.42	48.31	61.54	40.16	42.08	60.39	49.99	56.10
Lane Group LOS	E	D	D	E	D	D	E	D	E
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.15	1.37	4.64	2.28	12.03	12.48	4.38	23.40	25.84
50th-Percentile Queue Length [ft/ln]	3.85	34.26	115.95	57.12	300.71	311.98	109.43	584.88	646.07
95th-Percentile Queue Length [veh/ln]	0.28	2.47	8.17	4.11	17.72	18.27	7.81	31.33	34.18
95th-Percentile Queue Length [ft/ln]	6.93	61.67	204.24	102.82	442.91	456.81	195.20	783.19	854.50

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Movement, Approach, & Intersection Results

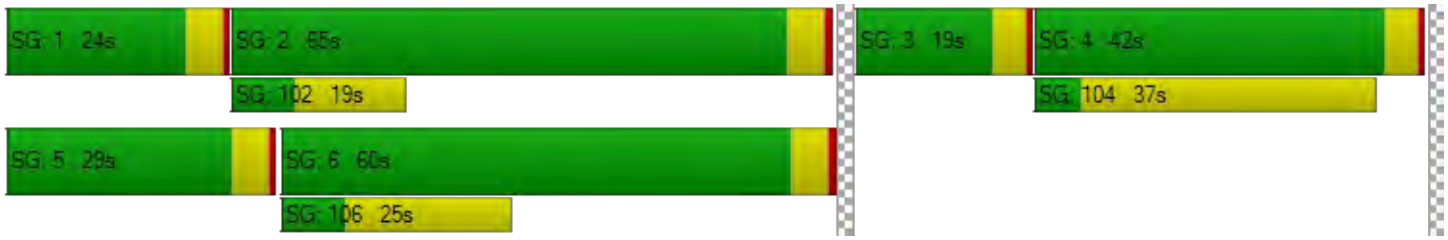
d_M, Delay for Movement [s/veh]	61.26	61.26	61.26	43.42	48.31	48.31	61.54	40.69	42.08	60.39	52.09	56.10
Movement LOS	E	E	E	D	D	D	E	D	D	E	D	E
d_A, Approach Delay [s/veh]	61.26			47.12			41.83			52.57		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	48.48											
Intersection LOS	D											
Intersection V/C	0.523											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.756	2.073	0.000	3.075
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	805
d_b, Bicycle Delay [s]	60.84	41.89	29.83	26.76
l_b,int, Bicycle LOS Score for Intersection	1.566	1.865	2.238	2.690
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	53.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.534

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	51	27	82	201	30	119	88	1000	152	237	1558	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	1	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	27	82	201	30	119	88	1001	152	237	1566	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	7	21	50	8	30	22	250	38	59	392	31
Total Analysis Volume [veh/h]	51	27	82	201	30	119	88	1001	152	237	1566	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	63.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	25	0	0	42	0	23	48	0	35	60	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	21	21	38	38	38	19	44	44	31	56	56
g / C, Green / Cycle	0.14	0.14	0.25	0.25	0.25	0.13	0.29	0.29	0.21	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.04	0.05	0.06	0.06	0.07	0.05	0.22	0.22	0.13	0.31	0.32
s, saturation flow rate [veh/h]	1811	1589	1781	1803	1589	1781	3560	1747	1781	3560	1802
c, Capacity [veh/h]	251	220	450	456	402	223	1035	508	372	1320	668
d1, Uniform Delay [s]	58.15	58.67	44.78	44.77	45.28	60.36	48.20	48.22	54.18	43.33	43.40
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.20	4.76	1.37	1.35	1.88	5.15	4.92	9.70	8.12	6.92	12.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.37	0.26	0.25	0.30	0.39	0.75	0.75	0.64	0.85	0.85
d, Delay for Lane Group [s/veh]	61.34	63.43	46.14	46.12	47.15	65.51	53.13	57.93	62.30	50.25	56.34
Lane Group LOS	E	E	D	D	D	E	D	E	E	D	E
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.97	3.20	3.64	3.68	3.84	3.41	13.77	14.20	9.00	20.14	21.60
50th-Percentile Queue Length [ft/ln]	74.21	80.08	90.98	91.96	96.09	85.13	344.16	355.12	225.05	503.40	539.99
95th-Percentile Queue Length [veh/ln]	5.34	5.77	6.55	6.62	6.92	6.13	19.85	20.39	13.92	27.50	29.22
95th-Percentile Queue Length [ft/ln]	133.58	144.15	163.76	165.53	172.97	153.24	496.29	509.65	348.06	687.39	730.54

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Movement, Approach, & Intersection Results

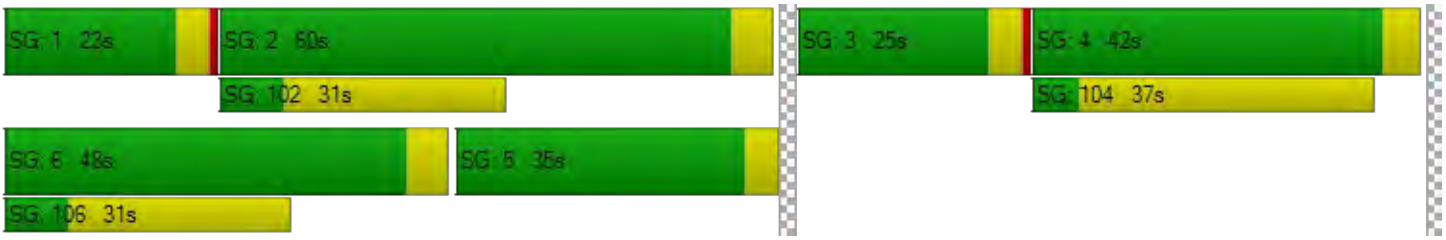
d_M, Delay for Movement [s/veh]	61.34	61.34	63.43	46.13	46.12	47.15	65.51	54.22	57.93	62.30	51.98	56.34
Movement LOS	E	E	E	D	D	D	E	D	E	E	D	E
d_A, Approach Delay [s/veh]	62.41			46.48			55.48			53.53		
Approach LOS	E			D			E			D		
d_I, Intersection Delay [s/veh]	53.90											
Intersection LOS	D											
Intersection V/C	0.534											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	2.030	2.342	0.000	3.122
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	277	505	581	741
d_b, Bicycle Delay [s]	55.64	41.89	37.74	29.70
l_b,int, Bicycle LOS Score for Intersection	1.824	2.137	2.242	2.618
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	40.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.402

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	3	4	4	71	0	38	13	1248	111	45	1608	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	1	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	4	4	71	0	38	13	1249	111	45	1616	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	18	0	10	3	312	28	11	404	0
Total Analysis Volume [veh/h]	3	4	4	71	0	38	13	1249	111	45	1616	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	83.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	45	0	0	45	0	39	64	0	41	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	41	35	60	60	37	62	62
g / C, Green / Cycle	0.27	0.27	0.23	0.40	0.40	0.25	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.01	0.25	0.25	0.03	0.30	0.30
s, saturation flow rate [veh/h]	1648	1487	1781	3560	1793	1781	3560	1870
c, Capacity [veh/h]	481	446	416	1424	717	439	1472	773
d1, Uniform Delay [s]	39.85	42.41	44.41	36.19	36.20	43.67	36.75	36.75
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.09	1.30	0.14	2.17	4.26	0.47	3.07	5.73
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.24	0.03	0.64	0.64	0.10	0.72	0.72
d, Delay for Lane Group [s/veh]	39.94	43.71	44.55	38.37	40.46	44.13	39.82	42.48
Lane Group LOS	D	D	D	D	D	D	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.31	3.37	0.39	13.70	14.22	1.36	16.72	18.13
50th-Percentile Queue Length [ft/ln]	7.87	84.18	9.84	342.49	355.40	34.06	417.93	453.27
95th-Percentile Queue Length [veh/ln]	0.57	6.06	0.71	19.77	20.40	2.45	23.42	25.11
95th-Percentile Queue Length [ft/ln]	14.17	151.53	17.72	494.25	509.98	61.31	585.57	627.85

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Movement, Approach, & Intersection Results

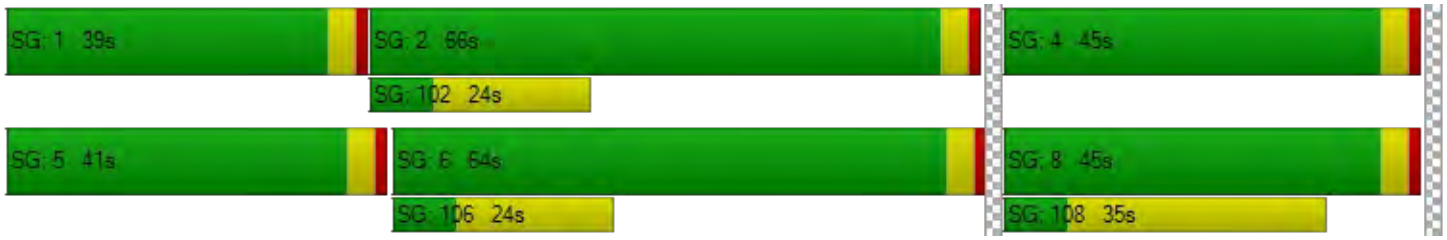
d_M, Delay for Movement [s/veh]	39.94	39.94	39.94	43.71	43.71	43.71	44.55	38.94	40.46	44.13	40.73	42.48
Movement LOS	D	D	D	D	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	39.94			43.71			39.12			40.83		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	40.18											
Intersection LOS	D											
Intersection V/C	0.402											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	41.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	39.60	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.751	1.870	3.198	3.102
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	547	547	800	827
d_b, Bicycle Delay [s]	39.60	39.60	27.00	25.81
l_b,int, Bicycle LOS Score for Intersection	1.578	1.739	2.315	2.473
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.054

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	1	85	63	3	44	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	6	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	85	63	9	45	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	21	16	2	11	8
Total Analysis Volume [veh/h]	2	85	63	9	45	32
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.03
d_M, Delay for Movement [s/veh]	7.36	0.00	0.00	0.00	9.70	8.99
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.28	0.28
95th-Percentile Queue Length [ft/ln]	0.10	0.10	0.00	0.00	7.05	7.05
d_A, Approach Delay [s/veh]	0.17		0.00		9.40	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.13					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	0	3	1	49	5	40	3	19	38	42	24	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	1	49	5	40	3	19	38	43	24	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	12	1	10	1	5	10	11	6	1
Total Analysis Volume [veh/h]	0	3	1	49	5	40	3	19	38	43	24	3
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.06	0.01	0.04	0.00	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	9.94	10.19	8.45	10.08	10.55	8.98	7.27	0.00	0.00	7.39	0.00	0.00
Movement LOS	A	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.36	0.36	0.36	0.01	0.01	0.01	0.09	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.40	0.40	0.40	9.05	9.05	9.05	0.14	0.14	0.14	2.14	2.14	2.14
d_A, Approach Delay [s/veh]	9.75			9.64			0.36			4.54		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	5.63											
Intersection LOS	B											

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Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	63.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.503

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	926	54	20	969	57	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	927	54	20	969	57	13
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	232	14	5	242	14	3
Total Analysis Volume [veh/h]	927	54	20	969	57	13
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.50	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	10.30	0.00	63.79	38.87
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.00	2.54	2.54
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.21	0.00	63.41	63.41
d_A, Approach Delay [s/veh]	0.00		0.21		59.17	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	2.13					
Intersection LOS	F					

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Report File: \...\Existing + Project PM.pdf

Scenario 2 Existing + Project PM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	44	782	18	18	976	38	43	18	41	30	7	25	2040

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	3	822	273	122	914	2	0	0	0	213	0	122	2471

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	105	5	82	13	2	18	74	1063	11	41	1714	159	3287

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	207	449	87	303	619	147	359	787	125	436	1372	212	5103

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	63	1	91	5	3	12	64	1238	5	26	1798	75	3381

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	10	0	30	1	0	0	40	1337	0	14	1587	21	3040

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	42	0	100	0	74	1310	0	6	1851	21	3404

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	0	0	0	273	0	139	64	1158	201	206	1838	0	3879

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	1	3	45	0	140	61	1076	96	118	1935	2	3477

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	51	27	82	201	30	119	88	1001	152	237	1566	122	3676

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	3	4	4	71	0	38	13	1249	111	45	1616	0	3154

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	2	85	63	9	45	32	236

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	0	3	1	49	5	40	3	19	38	43	24	3	228

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	927	54	20	969	57	13	2040

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Report File: \...\Near-Term AM.pdf

Scenario 3 Near-Term AM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.680	19.8	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	SB Left	0.616	18.4	B
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	SEB Left	0.511	20.6	C
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Left	0.656	63.5	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.474	19.2	B
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	SWB Left	0.046	175.4	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	SEB Left	0.533	28.6	C
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NEB Right	0.567	51.6	D
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	NEB Right	0.377	45.0	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NEB Left	0.458	50.5	D
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	NWB Left	0.513	48.0	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.053	13.5	B
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.007	18.7	C
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.839	175.5	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	19.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	150	887	44	12	820	61	171	76	182	43	48	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	0	0	24	0	0	0	0	0	0	-1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	895	44	12	844	61	171	76	182	43	48	36
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	224	11	3	211	15	43	19	46	11	12	9
Total Analysis Volume [veh/h]	150	895	44	12	844	61	171	76	182	43	48	36
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	61	61	61	61	61	61	61	61	61
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	7	24	24	1	18	18	21	21	21
g / C, Green / Cycle	0.11	0.39	0.39	0.02	0.30	0.30	0.35	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.25	0.01	0.24	0.24	0.25	0.11	0.18
s, saturation flow rate [veh/h]	1781	1870	1839	1781	1870	1826	982	1589	702
c, Capacity [veh/h]	198	738	726	27	558	545	439	550	321
d1, Uniform Delay [s]	26.51	15.08	15.08	30.01	20.02	20.02	17.38	14.84	15.49
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.79	0.94	0.95	10.94	3.06	3.13	1.13	0.35	0.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.64	0.64	0.44	0.82	0.82	0.56	0.33	0.40
d, Delay for Lane Group [s/veh]	32.30	16.01	16.03	40.95	23.08	23.15	18.51	15.19	16.28
Lane Group LOS	C	B	B	D	C	C	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.29	4.75	4.68	0.25	5.83	5.70	2.95	1.80	1.20
50th-Percentile Queue Length [ft/ln]	57.19	118.81	116.98	6.18	145.69	142.55	73.66	44.91	29.98
95th-Percentile Queue Length [veh/ln]	4.12	8.33	8.23	0.45	9.79	9.62	5.30	3.23	2.16
95th-Percentile Queue Length [ft/ln]	102.94	208.19	205.67	11.13	244.67	240.46	132.59	80.85	53.97

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Movement, Approach, & Intersection Results

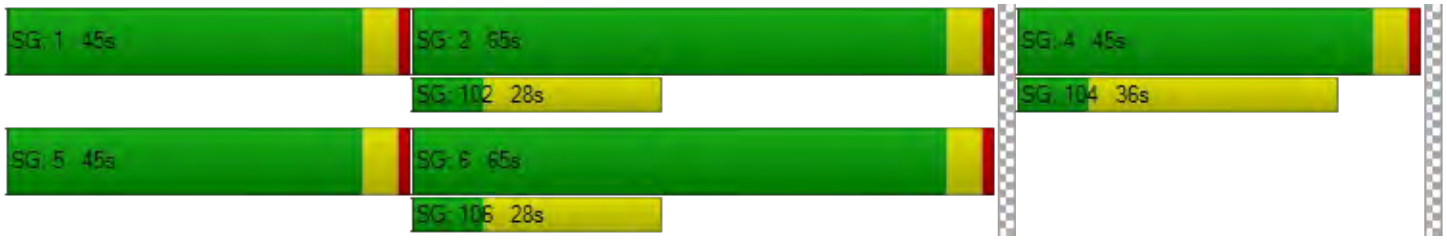
d_M, Delay for Movement [s/veh]	32.30	16.02	16.03	40.95	23.11	23.15	18.51	18.51	15.19	16.28	16.28	16.28
Movement LOS	C	B	B	D	C	C	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	18.26			23.35			17.11			16.28		
Approach LOS	B			C			B			B		
d_I, Intersection Delay [s/veh]	19.79											
Intersection LOS	B											
Intersection V/C	0.680											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.81	0.00	19.81	19.81
l_p,int, Pedestrian LOS Score for Intersection	2.829	0.000	2.104	1.818
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1958	1958	1306	1306
d_b, Bicycle Delay [s]	0.01	0.01	3.69	3.69
l_b,int, Bicycle LOS Score for Intersection	2.458	2.316	2.267	1.769
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	0	847	161	172	981	0	0	0	0	279	0	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	2	0	19	7	2	0	0	3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	853	163	172	1000	7	2	0	0	282	0	195
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	213	41	43	250	2	1	0	0	71	0	49
Total Analysis Volume [veh/h]	0	853	163	172	1000	7	2	0	0	282	0	195
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	71	71	71	71	71	71	71	71	71
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	31	31	9	40	40	16	16	16
g / C, Green / Cycle	0.00	0.43	0.43	0.13	0.56	0.56	0.23	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.00	0.28	0.28	0.10	0.27	0.27	0.01	0.16	0.12
s, saturation flow rate [veh/h]	1781	1870	1767	1781	1870	1865	350	1738	1589
c, Capacity [veh/h]	0	810	765	224	1045	1043	182	501	366
d1, Uniform Delay [s]	0.00	15.84	15.84	30.06	9.46	9.46	31.66	25.03	24.02
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	3.11	3.29	7.63	1.25	1.26	0.03	1.41	1.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.64	0.64	0.77	0.48	0.48	0.01	0.56	0.53
d, Delay for Lane Group [s/veh]	0.00	18.95	19.13	37.69	10.72	10.72	31.69	26.45	25.74
Lane Group LOS	A	B	B	D	B	B	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.00	6.54	6.22	3.16	4.22	4.21	0.03	4.32	2.91
50th-Percentile Queue Length [ft/ln]	0.00	163.55	155.51	79.07	105.46	105.24	0.86	107.90	72.68
95th-Percentile Queue Length [veh/ln]	0.00	10.74	10.31	5.69	7.59	7.57	0.06	7.72	5.23
95th-Percentile Queue Length [ft/ln]	0.00	268.41	257.77	142.33	189.67	189.36	1.55	193.07	130.82

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Movement, Approach, & Intersection Results

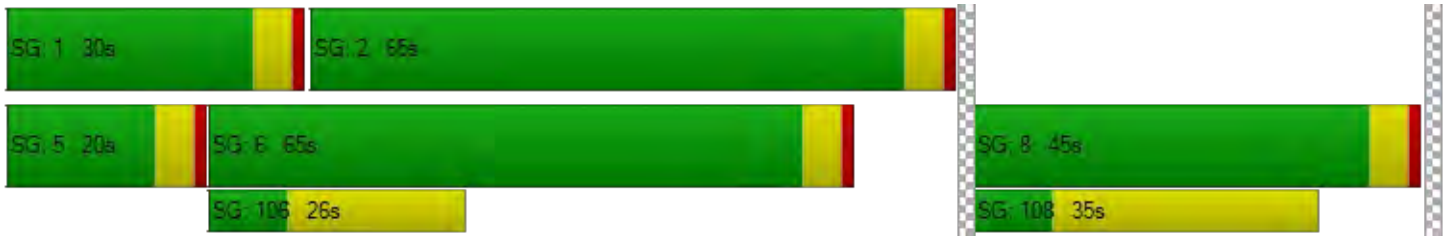
d_M, Delay for Movement [s/veh]	0.00	19.02	19.13	37.69	10.72	10.72	31.69	31.69	31.69	26.45	26.45	25.74
Movement LOS	A	B	B	D	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	19.04			14.65			31.69			26.16		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	18.39											
Intersection LOS	B											
Intersection V/C	0.616											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	24.49	24.49	40.65
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.795	1.703	2.210
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1692	1692	1128	1128
d_b, Bicycle Delay [s]	0.84	0.84	6.75	6.75
l_b,int, Bicycle LOS Score for Intersection	2.398	2.532	1.563	2.347
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.511

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	166	4	166	14	9	4	101	1423	7	53	738	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	76	0	0	40	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	166	4	166	14	9	4	101	1499	7	53	778	121
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	1	42	4	2	1	25	375	2	13	195	30
Total Analysis Volume [veh/h]	166	4	166	14	9	4	101	1499	7	53	778	121
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	128.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	40	0	20	40	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	29	29	29	10	103	103	6	99	99
g / C, Green / Cycle	0.19	0.19	0.19	0.07	0.69	0.69	0.04	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.17	0.10	0.17	0.06	0.28	0.28	0.03	0.17	0.17
s, saturation flow rate [veh/h]	984	1589	159	1781	3560	1866	1781	3560	1745
c, Capacity [veh/h]	234	301	67	124	2448	1283	74	2348	1151
d1, Uniform Delay [s]	59.55	55.00	52.26	68.81	10.13	10.13	71.00	10.47	10.48
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.26	1.57	3.91	12.03	0.50	0.95	12.11	0.26	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.55	0.40	0.81	0.40	0.40	0.72	0.26	0.26
d, Delay for Lane Group [s/veh]	63.81	56.57	56.18	80.84	10.63	11.08	83.12	10.73	11.03
Lane Group LOS	E	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.62	5.85	0.92	4.23	6.96	7.45	2.26	4.10	4.15
50th-Percentile Queue Length [ft/ln]	165.50	146.31	23.11	105.79	173.95	186.30	56.51	102.60	103.76
95th-Percentile Queue Length [veh/ln]	10.84	9.82	1.66	7.61	11.28	11.93	4.07	7.39	7.47
95th-Percentile Queue Length [ft/ln]	270.99	245.49	41.60	190.13	282.10	298.22	101.72	184.68	186.77

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.81	63.81	56.57	56.18	56.18	56.18	80.84	10.78	11.08	83.12	10.80	11.03
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	60.23			56.18			15.19			14.85		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	20.64											
Intersection LOS	C											
Intersection V/C	0.511											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.153	1.771	3.040	3.264
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.33	64.49
l_b,int, Bicycle LOS Score for Intersection	2.114	1.604	2.443	2.083
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	63.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	178	718	41	182	712	276	261	1180	179	299	606	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	-1	8	0	0	20	21	4	56	0	0	33	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	177	726	41	182	732	297	265	1236	179	299	639	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	182	10	46	183	74	66	309	45	75	160	36
Total Analysis Volume [veh/h]	177	726	41	182	732	297	265	1236	179	299	639	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	153.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	27	56	0	27	56	0	30	63	0	34	67	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	22	51	51	22	51	51	25	58	58	29	62	62
g / C, Green / Cycle	0.12	0.29	0.29	0.12	0.29	0.29	0.14	0.32	0.32	0.16	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.05	0.21	0.21	0.05	0.21	0.19	0.08	0.27	0.27	0.09	0.15	0.15
s, saturation flow rate [veh/h]	3459	1870	1835	3459	3560	1589	3459	3560	1752	3459	3560	1700
c, Capacity [veh/h]	430	534	524	430	1017	454	488	1155	568	555	1234	589
d1, Uniform Delay [s]	72.72	57.93	57.93	72.83	57.83	56.50	71.90	55.98	56.01	69.42	45.12	45.17
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.89	8.32	8.47	3.03	4.40	7.18	4.29	6.59	12.62	3.72	1.09	2.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.72	0.72	0.42	0.72	0.65	0.54	0.82	0.82	0.54	0.43	0.43
d, Delay for Lane Group [s/veh]	75.60	66.26	66.41	75.85	62.23	63.67	76.19	62.57	68.63	73.14	46.21	47.46
Lane Group LOS	E	E	E	E	E	E	E	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.97	17.15	16.86	4.09	15.65	12.82	6.01	20.87	21.52	6.65	9.37	9.20
50th-Percentile Queue Length [ft/ln]	99.15	428.87	421.41	102.18	391.15	320.40	150.17	521.70	538.05	166.15	234.17	230.12
95th-Percentile Queue Length [veh/ln]	7.14	23.95	23.59	7.36	22.13	18.69	10.03	28.36	29.13	10.87	14.39	14.18
95th-Percentile Queue Length [ft/ln]	178.47	598.69	589.74	183.93	553.32	467.18	250.66	708.99	728.26	271.85	359.65	354.51

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Movement, Approach, & Intersection Results

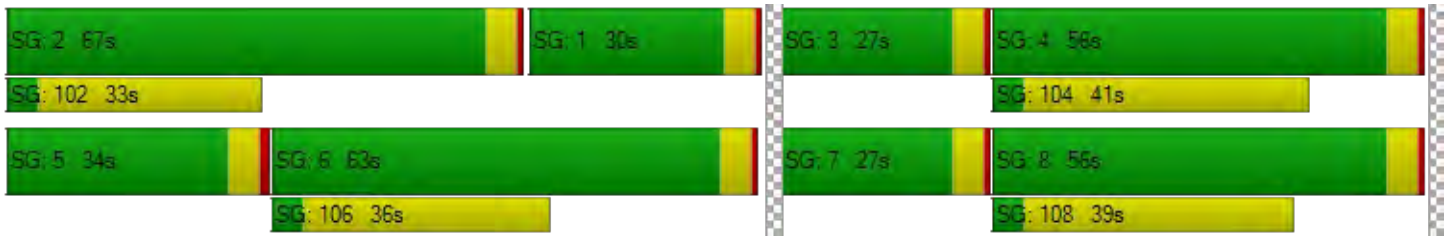
d_M, Delay for Movement [s/veh]	75.60	66.33	66.41	75.85	62.23	63.67	76.19	63.98	68.63	73.14	46.42	47.46
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	68.07			64.63			66.40			53.94		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	63.54											
Intersection LOS	E											
Intersection V/C	0.656											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	82.18	82.18	82.18	82.18
l_p,int, Pedestrian LOS Score for Intersection	2.967	3.103	3.121	3.157
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	571	571	649	693
d_b, Bicycle Delay [s]	45.94	45.94	41.07	38.42
l_b,int, Bicycle LOS Score for Intersection	2.338	2.559	2.484	2.155
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	19.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.474

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	60	10	109	0	6	8	54	1686	29	9	859	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	2	0	0	0	1	49	0	0	37	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	10	111	0	6	8	55	1735	29	9	896	100
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	3	28	0	2	2	14	434	7	2	224	25
Total Analysis Volume [veh/h]	63	10	111	0	6	8	55	1735	29	9	896	100
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	179.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	19	128	0	11	120	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	15	124	124	7	116	116
g / C, Green / Cycle	0.20	0.20	0.09	0.69	0.69	0.04	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate	0.12	0.01	0.03	0.33	0.33	0.01	0.19	0.19
s, saturation flow rate [veh/h]	1547	1699	1781	3560	1854	1781	3560	1776
c, Capacity [veh/h]	343	367	151	2451	1276	72	2293	1143
d1, Uniform Delay [s]	64.42	57.44	77.75	12.97	12.97	83.27	14.03	14.04
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.89	0.19	6.63	0.66	1.26	3.52	0.32	0.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.54	0.04	0.36	0.47	0.47	0.12	0.29	0.29
d, Delay for Lane Group [s/veh]	70.32	57.63	84.38	13.62	14.23	86.78	14.35	14.69
Lane Group LOS	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.30	0.55	2.70	10.95	11.63	0.48	6.09	6.22
50th-Percentile Queue Length [ft/ln]	207.55	13.75	67.47	273.75	290.70	11.91	152.32	155.42
95th-Percentile Queue Length [veh/ln]	13.03	0.99	4.86	16.38	17.22	0.86	10.14	10.31
95th-Percentile Queue Length [ft/ln]	325.68	24.76	121.44	409.42	430.50	21.44	253.53	257.65

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	70.32	70.32	70.32	57.63	57.63	57.63	84.38	13.82	14.23	86.78	14.44	14.69
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	70.32			57.63			15.96			15.11		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	19.18											
Intersection LOS	B											
Intersection V/C	0.474											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	81.23	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.888	1.763	3.087	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	409	409	1377	1288
d_b, Bicycle Delay [s]	56.96	56.96	8.74	11.41
I_b,int, Bicycle LOS Score for Intersection	1.863	1.583	2.560	2.112
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	175.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.046

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	4	0	12	1	0	1	130	1684	2	6	1043	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	56	0	0	54	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	12	1	0	1	130	1740	2	6	1097	45
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	3	0	0	0	33	435	1	2	274	11
Total Analysis Volume [veh/h]	4	0	12	1	0	1	130	1740	2	6	1097	45
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.00	0.03	0.05	0.00	0.00	0.39	0.02	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	104.79	570.76	18.80	175.42	589.50	23.93	22.48	0.00	0.00	27.12	0.00	0.00
Movement LOS	F	F	C	F	F	C	C	A	A	D	A	A
95th-Percentile Queue Length [veh/ln]	0.46	0.46	0.46	0.15	0.15	0.15	1.79	0.00	0.00	0.11	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.38	11.38	11.38	3.82	3.82	3.82	44.66	0.00	0.00	2.75	0.00	0.00
d_A, Approach Delay [s/veh]	40.30			99.68			1.56			0.14		
Approach LOS	E			F			A			A		
d_I, Intersection Delay [s/veh]	1.29											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	28.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	0	204	0	0	0	93	1769	0	8	1024	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	3	0	0	0	6	56	0	0	54	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	0	207	0	0	0	99	1825	0	8	1078	95
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	52	0	0	0	25	456	0	2	270	24
Total Analysis Volume [veh/h]	63	0	207	0	0	0	99	1825	0	8	1078	95
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	78.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	49	49	0	0	0	0	43	122	0	9	88	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	180		180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	45		39	118	118	5	84	84
g / C, Green / Cycle	0.25		0.22	0.66	0.66	0.03	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.17		0.06	0.34	0.34	0.00	0.22	0.22
s, saturation flow rate [veh/h]	1630		1781	3560	1870	1781	3560	1794
c, Capacity [veh/h]	410		389	2332	1225	52	1660	836
d1, Uniform Delay [s]	60.40		58.23	16.13	16.13	85.16	32.85	32.86
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.02		1.57	0.81	1.54	6.08	0.96	1.90
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66		0.25	0.51	0.51	0.15	0.47	0.47
d, Delay for Lane Group [s/veh]	68.43		59.80	16.94	17.67	91.24	33.80	34.76
Lane Group LOS	E		E	B	B	F	C	C
Critical Lane Group	Yes		No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.16		3.94	13.00	13.91	0.45	11.99	12.32
50th-Percentile Queue Length [ft/ln]	304.05		98.52	325.09	347.67	11.34	299.80	308.07
95th-Percentile Queue Length [veh/ln]	17.88		7.09	18.92	20.02	0.82	17.67	18.08
95th-Percentile Queue Length [ft/ln]	447.03		177.34	472.94	500.56	20.41	441.78	452.00

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Movement, Approach, & Intersection Results

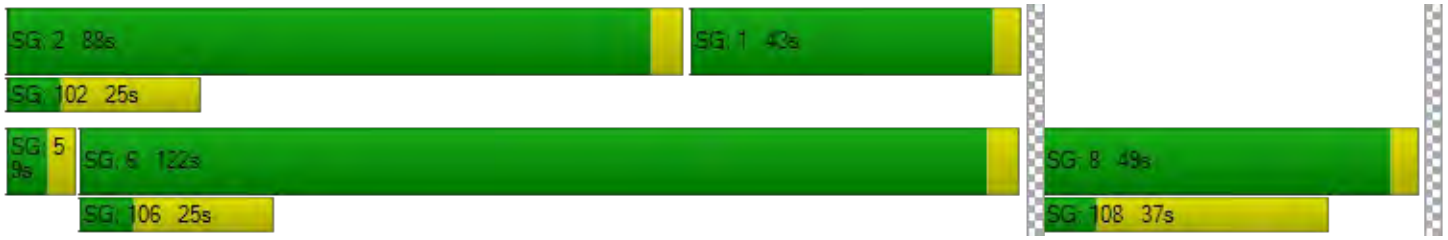
d_M, Delay for Movement [s/veh]	68.43	68.43	68.43	0.00	0.00	0.00	59.80	17.20	17.67	91.24	34.07	34.76
Movement LOS	E	E	E				E	B	B	F	C	C
d_A, Approach Delay [s/veh]	68.43			0.00			19.39			34.51		
Approach LOS	E			A			B			C		
d_I, Intersection Delay [s/veh]	28.60											
Intersection LOS	C											
Intersection V/C	0.533											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	79.34	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.936	1.751	3.148	3.125
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	503	0	1310	932
d_b, Bicycle Delay [s]	50.40	90.00	10.71	25.65
l_b,int, Bicycle LOS Score for Intersection	2.005	1.560	2.618	2.209
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	51.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.567

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	299	0	200	53	1593	212	152	1106	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	10	33	3	3	15	9	24	11	2	48	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	10	34	302	3	215	62	1617	223	154	1154	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	3	9	76	1	54	16	404	56	39	289	2
Total Analysis Volume [veh/h]	23	10	34	302	3	215	62	1617	223	154	1154	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	21	0	0	51	0	27	79	0	29	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	17	47	47	47	23	75	75	25	77	77
g / C, Green / Cycle	0.10	0.26	0.26	0.26	0.13	0.42	0.42	0.14	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.09	0.09	0.14	0.03	0.35	0.35	0.04	0.21	0.21
s, saturation flow rate [veh/h]	1690	1781	1783	1589	1781	3560	1757	3459	3560	1863
c, Capacity [veh/h]	162	468	468	418	231	1482	731	486	1521	796
d1, Uniform Delay [s]	76.57	53.49	53.49	56.57	70.67	46.87	47.01	69.58	37.58	37.58
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.57	1.85	1.84	4.48	2.85	5.54	10.85	1.71	1.18	2.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.33	0.33	0.51	0.27	0.83	0.83	0.32	0.50	0.50
d, Delay for Lane Group [s/veh]	84.14	55.34	55.34	61.05	73.52	52.41	57.87	71.28	38.76	39.83
Lane Group LOS	F	E	E	E	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.34	5.94	5.95	9.02	2.78	25.64	26.59	3.33	12.64	13.47
50th-Percentile Queue Length [ft/ln]	83.51	148.54	148.67	225.59	69.47	641.04	664.75	83.19	316.02	336.70
95th-Percentile Queue Length [veh/ln]	6.01	9.94	9.95	13.95	5.00	33.95	35.05	5.99	18.47	19.49
95th-Percentile Queue Length [ft/ln]	150.32	248.48	248.66	348.75	125.04	848.65	876.17	149.74	461.79	487.17

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Movement, Approach, & Intersection Results

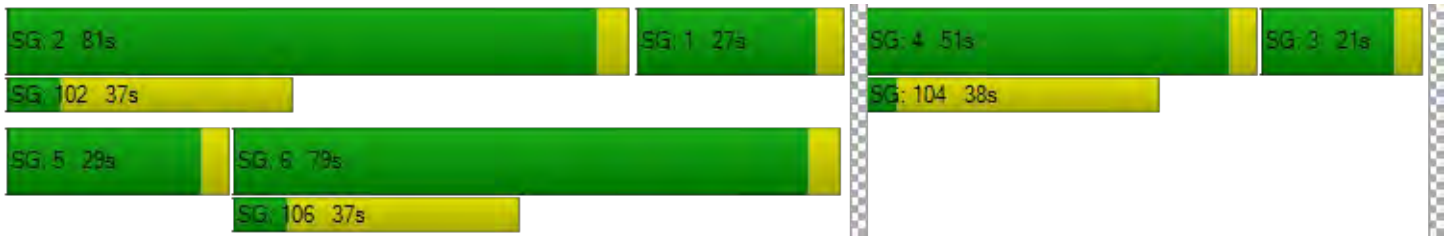
d_M, Delay for Movement [s/veh]	84.14	84.14	84.14	55.34	55.34	61.05	73.52	53.72	57.87	71.28	39.12	39.83
Movement LOS	F	F	F	E	E	E	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	84.14			57.70			54.85			42.89		
Approach LOS	F			E			D			D		
d_I, Intersection Delay [s/veh]	51.62											
Intersection LOS	D											
Intersection V/C	0.567											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	82.18
l_p,int, Pedestrian LOS Score for Intersection	1.782	2.480	0.000	3.210
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	192	526	832	854
d_b, Bicycle Delay [s]	73.53	48.91	30.68	29.53
l_b,int, Bicycle LOS Score for Intersection	1.670	2.418	2.606	2.283
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	45.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.377

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	0	0	0	86	1341	118	99	1078	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	76	0	7	33	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	0	0	0	86	1417	118	106	1111	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	22	354	30	27	278	0
Total Analysis Volume [veh/h]	0	0	1	0	0	0	86	1417	118	106	1111	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	108.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	28	60	0	29	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	24	55	55	25	56	56
g / C, Green / Cycle	0.10	0.25	0.25	0.16	0.37	0.37	0.16	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.00	0.05	0.29	0.29	0.06	0.20	0.20
s, saturation flow rate [veh/h]	1589	1781	1870	1781	3560	1797	1781	3560	1870
c, Capacity [veh/h]	158	450	472	279	1315	664	291	1339	703
d1, Uniform Delay [s]	60.88	0.00	0.00	56.05	41.81	41.81	55.82	36.71	36.71
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.00	0.00	2.85	4.53	8.65	3.50	1.59	3.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.00	0.00	0.31	0.78	0.78	0.36	0.54	0.54
d, Delay for Lane Group [s/veh]	60.95	0.00	0.00	58.90	46.33	50.46	59.33	38.31	39.73
Lane Group LOS	E	A	A	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	3.14	17.55	18.49	3.89	10.88	11.71
50th-Percentile Queue Length [ft/ln]	0.96	0.00	0.00	78.39	438.64	462.14	97.18	272.02	292.66
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.00	5.64	24.42	25.54	7.00	16.29	17.32
95th-Percentile Queue Length [ft/ln]	1.73	0.00	0.00	141.09	610.38	638.42	174.93	407.26	432.94

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Movement, Approach, & Intersection Results

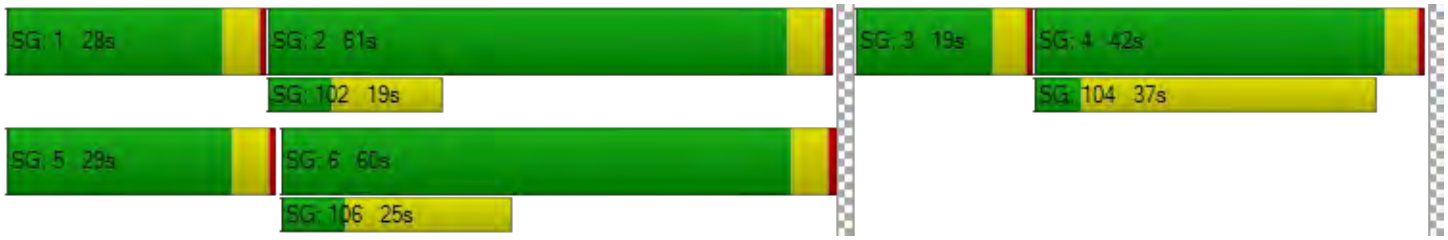
d_M, Delay for Movement [s/veh]	60.95	60.95	60.95	0.00	0.00	0.00	58.90	47.49	50.46	59.33	38.80	39.73
Movement LOS	E	E	E	A	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	60.95			0.00			48.31			40.58		
Approach LOS	E			A			D			D		
d_I, Intersection Delay [s/veh]	45.00											
Intersection LOS	D											
Intersection V/C	0.377											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.760	2.025	0.000	2.986
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	752
d_b, Bicycle Delay [s]	60.84	41.89	29.83	29.20
l_b,int, Bicycle LOS Score for Intersection	1.561	1.560	2.451	2.229
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	50.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.458

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	14	4	5	77	13	97	27	1321	87	148	756	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	59	0	0	32	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	4	5	77	13	97	27	1380	87	148	788	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	1	19	3	24	7	345	22	37	197	13
Total Analysis Volume [veh/h]	14	4	5	77	13	97	27	1380	87	148	788	50
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	168.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	28	0	0	42	0	29	70	0	40	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	24	24	38	38	38	25	66	66	36	77	77
g / C, Green / Cycle	0.13	0.13	0.21	0.21	0.21	0.14	0.36	0.36	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.03	0.03	0.06	0.02	0.27	0.27	0.08	0.16	0.16
s, saturation flow rate [veh/h]	1800	1589	1781	1806	1589	1781	3560	1814	1781	3560	1814
c, Capacity [veh/h]	238	210	375	380	335	245	1298	661	359	1515	772
d1, Uniform Delay [s]	68.46	67.99	57.54	57.53	59.74	67.94	50.00	50.00	62.56	35.18	35.20
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.62	0.21	0.65	0.64	2.18	0.90	4.00	7.61	3.47	0.68	1.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.02	0.12	0.12	0.29	0.11	0.75	0.75	0.41	0.37	0.37
d, Delay for Lane Group [s/veh]	69.08	68.20	58.19	58.17	61.92	68.84	54.00	57.62	66.03	35.86	36.55
Lane Group LOS	E	E	E	E	E	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.79	0.22	1.75	1.76	3.98	1.16	19.88	20.92	6.29	8.56	8.89
50th-Percentile Queue Length [ft/ln]	19.74	5.47	43.73	44.09	99.56	28.96	497.04	523.01	157.17	213.92	222.28
95th-Percentile Queue Length [veh/ln]	1.42	0.39	3.15	3.17	7.17	2.08	27.19	28.42	10.40	13.35	13.78
95th-Percentile Queue Length [ft/ln]	35.53	9.84	78.72	79.35	179.21	52.12	679.85	710.53	259.97	333.85	344.53

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.08	69.08	68.20	58.18	58.17	61.92	68.84	55.07	57.62	66.03	36.07	36.55
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	68.88			60.12			55.47			40.59		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	50.45											
Intersection LOS	D											
Intersection V/C	0.458											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	81.23
l_p,int, Pedestrian LOS Score for Intersection	1.991	2.268	0.000	3.030
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	421	729	851
d_b, Bicycle Delay [s]	67.77	56.09	36.35	29.70
l_b,int, Bicycle LOS Score for Intersection	1.598	1.868	2.381	2.102
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	48.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.513

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	0	150	0	59	18	1458	136	31	957	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	28	0	0	0	50	6	0	39	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	0	178	0	59	18	1508	142	31	996	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	45	0	15	5	377	36	8	249	0
Total Analysis Volume [veh/h]	0	1	0	178	0	59	18	1508	142	31	996	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	66	0	0	66	0	37	76	0	38	77	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	62	62	33	72	72	34	73	73
g / C, Green / Cycle	0.34	0.34	0.18	0.40	0.40	0.19	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.00	0.16	0.01	0.31	0.31	0.02	0.18	0.18
s, saturation flow rate [veh/h]	1870	1467	1781	3560	1789	1781	3560	1870
c, Capacity [veh/h]	664	540	327	1424	716	336	1444	758
d1, Uniform Delay [s]	38.70	45.84	60.64	46.85	46.86	60.26	38.95	38.95
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.58	0.32	4.09	7.89	0.54	1.02	1.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.44	0.06	0.77	0.77	0.09	0.45	0.45
d, Delay for Lane Group [s/veh]	38.70	48.41	60.96	50.94	54.76	60.80	39.97	40.89
Lane Group LOS	D	D	E	D	D	E	D	D
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	8.81	0.72	22.15	23.04	1.23	10.85	11.59
50th-Percentile Queue Length [ft/ln]	0.77	220.27	17.88	553.78	576.03	30.80	271.15	289.67
95th-Percentile Queue Length [veh/ln]	0.06	13.68	1.29	29.87	30.91	2.22	16.25	17.17
95th-Percentile Queue Length [ft/ln]	1.38	341.97	32.18	746.75	772.83	55.44	406.18	429.23

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	38.70	38.70	38.70	48.41	48.41	48.41	60.96	51.98	54.76	60.80	40.29	40.89
Movement LOS	D	D	D	D	D	D	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	38.70			48.41			52.31			40.91		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	48.00											
Intersection LOS	D											
Intersection V/C	0.513											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	62.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	38.68	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.757	1.948	3.313	3.048
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	689	800	811
d_b, Bicycle Delay [s]	38.68	38.68	32.40	31.80
l_b,int, Bicycle LOS Score for Intersection	1.561	1.951	2.477	2.124
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	13.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.053

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	31	274	205	21	25	79
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	6	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	277	211	21	25	79
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	69	53	5	6	20
Total Analysis Volume [veh/h]	31	277	211	21	25	79
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.05	0.10
d_M, Delay for Movement [s/veh]	7.76	0.00	0.00	0.00	13.47	10.30
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.52	0.52
95th-Percentile Queue Length [ft/ln]	1.78	1.78	0.00	0.00	13.05	13.05
d_A, Approach Delay [s/veh]	0.78		0.00		11.06	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.16					
Intersection LOS	B					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	18.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	4	3	3	123	3	171	3	52	141	160	33	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	3	0	3	0	0	2	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	3	3	126	3	174	3	52	143	161	33	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	32	1	44	1	13	36	40	8	0
Total Analysis Volume [veh/h]	4	3	3	126	3	174	3	52	143	161	33	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.29	0.01	0.19	0.00	0.00	0.00	0.12	0.00	0.00
d_M, Delay for Movement [s/veh]	16.62	14.53	8.66	18.34	18.67	14.05	7.29	0.00	0.00	7.96	0.00	0.00
Movement LOS	C	B	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	2.61	2.61	2.61	0.01	0.01	0.01	0.40	0.40	0.40
95th-Percentile Queue Length [ft/ln]	1.79	1.79	1.79	65.23	65.23	65.23	0.14	0.14	0.14	9.90	9.90	9.90
d_A, Approach Delay [s/veh]	13.61			15.88			0.11			6.57		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	8.85											
Intersection LOS	C											

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Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	175.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.839

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	1114	58	17	1369	51	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	0	26	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1122	58	17	1395	51	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	281	15	4	349	13	4
Total Analysis Volume [veh/h]	1122	58	17	1395	51	14
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.84	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	11.31	0.00	175.53	124.27
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.00	4.37	4.37
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.23	0.00	109.22	109.22
d_A, Approach Delay [s/veh]	0.00		0.14		164.49	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	4.10					
Intersection LOS	F					

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Report File: \...\Near-Term AM.pdf

Scenario 3 Near-Term AM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	150	895	44	12	844	61	171	76	182	43	48	36	2562

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	0	853	163	172	1000	7	2	0	0	282	0	195	2674

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	166	4	166	14	9	4	101	1499	7	53	778	121	2922

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	177	726	41	182	732	297	265	1236	179	299	639	144	4917

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	63	10	111	0	6	8	55	1735	29	9	896	100	3022

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	4	0	12	1	0	1	130	1740	2	6	1097	45	3038

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	63	0	207	0	99	1825	0	8	1078	95	3375

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	23	10	34	302	3	215	62	1617	223	154	1154	8	3805

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	0	1	0	0	0	86	1417	118	106	1111	0	2839

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	14	4	5	77	13	97	27	1380	87	148	788	50	2690

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	0	1	0	178	0	59	18	1508	142	31	996	0	2933

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	31	277	211	21	25	79	644

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	4	3	3	126	3	174	3	52	143	161	33	1	706

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	1122	58	17	1395	51	14	2657

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Report File: \...\Near-Term PM.pdf

Scenario 3 Near-Term PM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.507	10.3	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	NB Left	0.577	15.8	B
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	NWB Left	0.580	15.5	B
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Left	0.788	63.3	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.521	35.6	D
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	NEB Left	0.262	129.1	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	NWB Left	0.516	38.3	D
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NEB Left	0.516	44.1	D
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	SEB Left	0.533	50.2	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NWB Left	0.542	55.0	E
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	SWB Left	0.425	40.8	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.053	9.7	A
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.007	10.6	B
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.517	66.6	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.507

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	44	781	18	18	976	38	43	18	41	30	7	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	17	0	0	16	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	798	18	18	992	38	43	18	41	30	7	25
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	200	5	5	248	10	11	5	10	8	2	6
Total Analysis Volume [veh/h]	44	798	18	18	992	38	43	18	41	30	7	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	34	34	34	34	34	34	34	34	34
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	2	14	14	1	13	13	4	4	4
g / C, Green / Cycle	0.05	0.40	0.40	0.02	0.38	0.38	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.22	0.01	0.28	0.28	0.03	0.03	0.07
s, saturation flow rate [veh/h]	1781	1870	1855	1781	1870	1846	1812	1589	873
c, Capacity [veh/h]	91	758	752	42	707	697	416	207	271
d1, Uniform Delay [s]	15.70	7.70	7.70	16.37	9.11	9.11	13.31	13.21	13.57
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.91	0.60	0.61	6.61	1.50	1.52	0.16	0.47	0.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.54	0.54	0.42	0.73	0.73	0.15	0.20	0.23
d, Delay for Lane Group [s/veh]	19.61	8.31	8.31	22.99	10.61	10.63	13.47	13.68	13.99
Lane Group LOS	B	A	A	C	B	B	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.36	1.44	1.43	0.19	2.28	2.25	0.37	0.26	0.37
50th-Percentile Queue Length [ft/ln]	9.06	36.03	35.78	4.72	56.90	56.26	9.20	6.50	9.34
95th-Percentile Queue Length [veh/ln]	0.65	2.59	2.58	0.34	4.10	4.05	0.66	0.47	0.67
95th-Percentile Queue Length [ft/ln]	16.31	64.85	64.40	8.49	102.41	101.27	16.56	11.70	16.82

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Movement, Approach, & Intersection Results

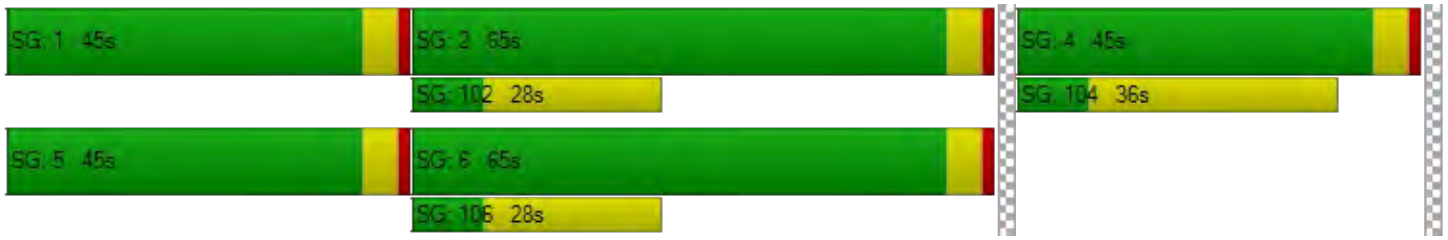
d_M, Delay for Movement [s/veh]	19.61	8.31	8.31	22.99	10.62	10.63	13.47	13.47	13.68	13.99	13.99	13.99
Movement LOS	B	A	A	C	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	8.89			10.83			13.55			13.99		
Approach LOS	A			B			B			B		
d_I, Intersection Delay [s/veh]	10.25											
Intersection LOS	B											
Intersection V/C	0.507											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	7.09	0.00	7.09	7.09
l_p,int, Pedestrian LOS Score for Intersection	2.716	0.000	1.928	1.707
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	3535	3535	2357	2357
d_b, Bicycle Delay [s]	10.00	10.00	0.54	0.54
l_b,int, Bicycle LOS Score for Intersection	2.269	2.424	1.728	1.662
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	15.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.577

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	3	821	273	122	914	2	0	0	0	213	0	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	0	0	-1	5	8	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	829	273	122	913	7	8	0	0	213	0	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	207	68	31	228	2	2	0	0	53	0	31
Total Analysis Volume [veh/h]	3	829	273	122	913	7	8	0	0	213	0	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	66	66	66	66	66	66	66	66	66
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	32	32	6	38	38	13	13	13
g / C, Green / Cycle	0.00	0.49	0.49	0.09	0.58	0.58	0.20	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.00	0.31	0.31	0.07	0.25	0.25	0.02	0.12	0.08
s, saturation flow rate [veh/h]	1781	1870	1713	1781	1870	1865	409	1742	1589
c, Capacity [veh/h]	3	908	832	165	1078	1075	189	450	312
d1, Uniform Delay [s]	33.14	12.68	12.69	29.36	7.91	7.91	29.71	24.37	23.24
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	267.31	2.64	2.89	8.96	0.98	0.98	0.13	1.10	1.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.96	0.63	0.63	0.74	0.43	0.43	0.04	0.47	0.39
d, Delay for Lane Group [s/veh]	300.45	15.32	15.58	38.31	8.88	8.89	29.84	25.48	24.38
Lane Group LOS	F	B	B	D	A	A	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.28	5.94	5.51	2.19	3.16	3.15	0.13	3.02	1.67
50th-Percentile Queue Length [ft/ln]	6.96	148.53	137.81	54.77	79.00	78.81	3.22	75.55	41.85
95th-Percentile Queue Length [veh/ln]	0.50	9.94	9.36	3.94	5.69	5.67	0.23	5.44	3.01
95th-Percentile Queue Length [ft/ln]	12.52	248.47	234.07	98.59	142.20	141.86	5.80	135.98	75.33

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Movement, Approach, & Intersection Results

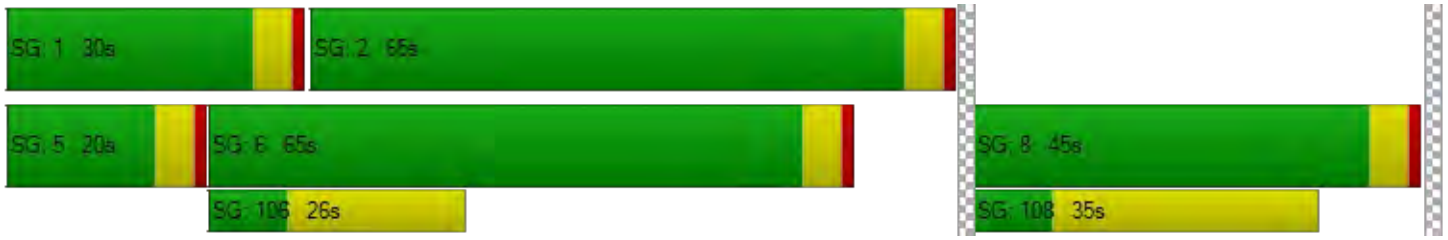
d_M, Delay for Movement [s/veh]	300.45	15.40	15.58	38.31	8.89	8.89	29.84	29.84	29.84	25.48	25.48	24.38
Movement LOS	F	B	B	D	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	16.22			12.33			29.84			25.08		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	15.83											
Intersection LOS	B											
Intersection V/C	0.577											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	22.22	22.22	38.33
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.748	1.701	2.181
Crosswalk LOS	F	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1811	1811	1207	1207
d_b, Bicycle Delay [s]	0.30	0.30	5.21	5.21
l_b,int, Bicycle LOS Score for Intersection	2.471	2.419	1.573	2.112
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	105	5	82	13	2	18	74	1062	11	41	1709	159
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	46	0	0	79	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	5	82	13	2	18	74	1108	11	41	1788	159
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	1	21	3	1	5	19	277	3	10	447	40
Total Analysis Volume [veh/h]	105	5	82	13	2	18	74	1108	11	41	1788	159
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	116.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	30	0	20	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	23	23	23	8	109	109	6	107	107
g / C, Green / Cycle	0.15	0.15	0.15	0.05	0.73	0.73	0.04	0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.14	0.05	0.12	0.04	0.21	0.21	0.02	0.36	0.36
s, saturation flow rate [veh/h]	793	1589	265	1781	3560	1861	1781	3560	1793
c, Capacity [veh/h]	169	245	74	94	2585	1351	68	2533	1276
d1, Uniform Delay [s]	62.19	56.55	55.98	70.19	7.09	7.09	71.01	9.81	9.84
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.14	0.79	4.09	13.30	0.28	0.53	8.28	0.74	1.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.33	0.44	0.79	0.28	0.28	0.60	0.51	0.51
d, Delay for Lane Group [s/veh]	66.34	57.34	60.08	83.49	7.37	7.62	79.29	10.55	11.31
Lane Group LOS	E	E	E	F	A	A	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.32	2.85	1.18	3.15	3.95	4.22	1.71	9.32	9.73
50th-Percentile Queue Length [ft/ln]	108.09	71.25	29.51	78.87	98.76	105.60	42.69	232.96	243.14
95th-Percentile Queue Length [veh/ln]	7.73	5.13	2.12	5.68	7.11	7.59	3.07	14.32	14.84
95th-Percentile Queue Length [ft/ln]	193.34	128.24	53.12	141.96	177.76	189.86	76.85	358.12	371.00

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.34	66.34	57.34	60.08	60.08	60.08	83.49	7.45	7.62	79.29	10.76	11.31
Movement LOS	E	E	E	E	E	E	F	A	A	E	B	B
d_A, Approach Delay [s/veh]	62.49			60.08			12.17			12.22		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	15.50											
Intersection LOS	B											
Intersection V/C	0.580											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.107	1.771	3.122	3.275
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.34	64.50
l_b,int, Bicycle LOS Score for Intersection	1.876	1.614	2.216	2.653
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	63.3
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.788

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	207	449	86	301	619	147	359	786	125	436	1367	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	-7	0	15	15	1	31	0	0	55	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	207	473	79	301	634	162	360	817	125	436	1422	212
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	118	20	75	159	41	90	204	31	109	356	53
Total Analysis Volume [veh/h]	207	473	79	301	634	162	360	817	125	436	1422	212
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	45.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	20	44	0	23	47	0	25	49	0	34	58	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	15	39	39	18	42	42	20	44	44	29	53	53
g / C, Green / Cycle	0.10	0.26	0.26	0.12	0.28	0.28	0.14	0.30	0.30	0.19	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.07	0.17	0.17	0.10	0.20	0.11	0.12	0.20	0.20	0.14	0.34	0.34
s, saturation flow rate [veh/h]	3113	1683	1600	3113	3204	1431	3113	3204	1571	3113	3204	1574
c, Capacity [veh/h]	320	442	420	382	906	404	423	949	465	600	1141	560
d1, Uniform Delay [s]	64.69	49.00	49.03	63.91	48.11	43.52	63.31	46.30	46.31	56.85	47.18	47.46
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.76	6.92	7.31	15.15	4.49	2.94	18.88	3.70	7.38	7.53	18.11	30.85
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.64	0.64	0.79	0.70	0.40	0.85	0.67	0.67	0.73	0.96	0.97
d, Delay for Lane Group [s/veh]	74.45	55.93	56.34	79.06	52.60	46.46	82.19	50.00	53.69	64.38	65.28	78.30
Lane Group LOS	E	E	E	E	D	D	F	D	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.23	10.23	9.80	6.38	11.15	5.22	7.80	10.81	11.08	8.37	22.51	24.43
50th-Percentile Queue Length [ft/ln]	105.84	255.73	244.92	159.39	278.67	130.57	195.11	270.19	277.10	209.16	562.64	610.87
95th-Percentile Queue Length [veh/ln]	7.61	15.47	14.93	10.52	16.62	8.97	12.39	16.20	16.54	13.11	30.29	32.54
95th-Percentile Queue Length [ft/ln]	190.20	386.86	373.25	262.91	415.56	224.26	309.64	404.97	413.60	327.75	757.15	813.53

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Movement, Approach, & Intersection Results

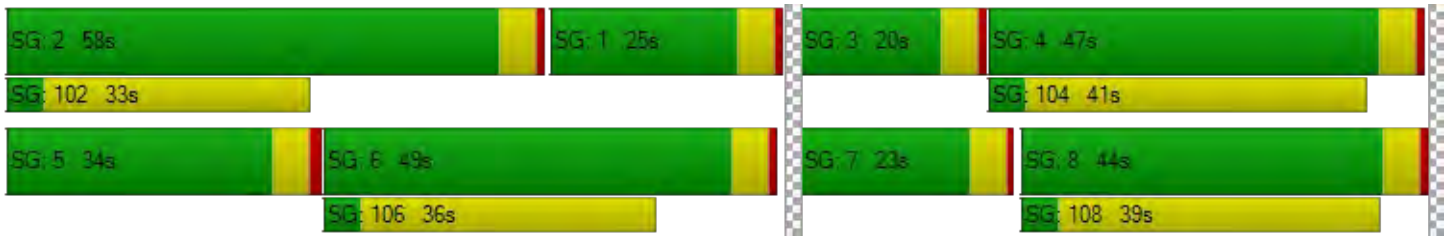
d_M, Delay for Movement [s/veh]	74.45	56.09	56.34	79.06	52.60	46.46	82.19	50.84	53.69	64.38	68.31	78.30
Movement LOS	E	E	E	E	D	D	F	D	D	E	E	E
d_A, Approach Delay [s/veh]	61.12			58.95			59.78			68.51		
Approach LOS	E			E			E			E		
d_I, Intersection Delay [s/veh]	63.26											
Intersection LOS	E											
Intersection V/C	0.788											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	67.21	67.21	67.21	67.21
l_p,int, Pedestrian LOS Score for Intersection	2.939	3.054	3.193	3.214
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	525	565	592	712
d_b, Bicycle Delay [s]	40.77	38.59	37.17	31.11
l_b,int, Bicycle LOS Score for Intersection	2.186	2.465	2.276	2.698
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	35.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	1	91	5	3	12	64	1237	5	26	1790	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	-1	0	-2	0	0	0	-1	31	0	0	49	-12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	1	89	5	3	12	63	1268	5	26	1839	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	22	1	1	3	16	317	1	7	460	16
Total Analysis Volume [veh/h]	62	1	89	5	3	12	63	1268	5	26	1839	63
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	95.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	33	68	0	31	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	140	140	140	140	140	140	140	140
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	29	64	64	27	62	62
g / C, Green / Cycle	0.26	0.26	0.21	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.04	0.23	0.23	0.01	0.35	0.35
s, saturation flow rate [veh/h]	1525	1583	1781	3560	1866	1781	3560	1838
c, Capacity [veh/h]	437	448	373	1625	852	347	1574	813
d1, Uniform Delay [s]	42.01	38.49	45.37	27.02	27.02	46.03	33.62	33.65
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.18	0.19	0.98	1.17	2.21	0.42	4.27	8.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.04	0.17	0.51	0.51	0.07	0.80	0.80
d, Delay for Lane Group [s/veh]	44.19	38.68	46.35	28.19	29.23	46.45	37.89	41.68
Lane Group LOS	D	D	D	C	C	D	D	D
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.64	0.56	1.91	10.10	10.83	0.78	18.91	20.43
50th-Percentile Queue Length [ft/ln]	116.03	13.97	47.66	252.47	270.87	19.61	472.79	510.69
95th-Percentile Queue Length [veh/ln]	8.17	1.01	3.43	15.31	16.23	1.41	26.04	27.84
95th-Percentile Queue Length [ft/ln]	204.36	25.15	85.80	382.77	405.83	35.30	651.09	696.00

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.19	44.19	44.19	38.68	38.68	38.68	46.35	28.54	29.23	46.45	39.10	41.68
Movement LOS	D	D	D	D	D	D	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	44.19			38.68			29.39			39.28		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	35.65											
Intersection LOS	D											
Intersection V/C	0.521											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	59.43	59.43	61.29	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.850	1.749	3.155	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	526	913	884
d_b, Bicycle Delay [s]	38.04	38.04	20.68	21.78
l_b,int, Bicycle LOS Score for Intersection	1.810	1.593	2.294	2.620
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	129.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.262

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	9	0	29	1	0	0	34	1337	0	14	1587	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	36	0	0	54	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	0	29	1	0	0	34	1373	0	14	1641	13
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	7	0	0	0	9	343	0	4	410	3
Total Analysis Volume [veh/h]	9	0	29	1	0	0	34	1373	0	14	1641	13
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.26	0.00	0.11	0.03	0.00	0.00	0.18	0.01	0.00	0.05	0.02	0.00
d_M, Delay for Movement [s/veh]	129.05	440.51	37.53	99.58	427.88	18.18	28.51	0.00	0.00	19.78	0.00	0.00
Movement LOS	F	F	E	F	F	C	D	A	A	C	A	A
95th-Percentile Queue Length [veh/ln]	1.49	1.49	1.49	0.08	0.08	0.08	0.65	0.00	0.00	0.17	0.00	0.00
95th-Percentile Queue Length [ft/ln]	37.14	37.14	37.14	1.94	1.94	1.94	16.14	0.00	0.00	4.29	0.00	0.00
d_A, Approach Delay [s/veh]	59.21			99.58			0.69			0.17		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	1.15											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	38.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.516

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	42	0	99	0	0	0	68	1304	0	6	1850	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	0	0	0	4	36	0	0	54	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	0	105	0	0	0	72	1340	0	6	1904	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	26	0	0	0	18	335	0	2	476	5
Total Analysis Volume [veh/h]	42	0	105	0	0	0	72	1340	0	6	1904	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	134.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	44	44	0	0	0	0	36	73	0	33	70	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	150		150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	40		32	69	69	29	66	66
g / C, Green / Cycle	0.27		0.22	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.09		0.04	0.25	0.25	0.00	0.36	0.36
s, saturation flow rate [veh/h]	1640		1781	3560	1870	1781	3560	1860
c, Capacity [veh/h]	441		383	1635	859	348	1564	817
d1, Uniform Delay [s]	44.06		48.12	29.11	29.11	48.73	36.56	36.57
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.03		1.08	1.27	2.40	0.09	4.61	8.48
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33		0.19	0.54	0.54	0.02	0.81	0.81
d, Delay for Lane Group [s/veh]	46.10		49.20	30.38	31.51	48.82	41.16	45.05
Lane Group LOS	D		D	C	C	D	D	D
Critical Lane Group	Yes		Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.74		2.33	11.61	12.47	0.19	20.85	22.68
50th-Percentile Queue Length [ft/ln]	118.50		58.37	290.31	311.71	4.80	521.26	566.94
95th-Percentile Queue Length [veh/ln]	8.31		4.20	17.20	18.26	0.35	28.34	30.49
95th-Percentile Queue Length [ft/ln]	207.76		105.07	430.02	456.49	8.64	708.47	762.19

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	46.10	46.10	46.10	0.00	0.00	0.00	49.20	30.77	31.51	48.82	42.47	45.05
Movement LOS	D	D	D				D	C	C	D	D	D
d_A, Approach Delay [s/veh]	46.10			0.00			31.71			42.52		
Approach LOS	D			A			C			D		
d_I, Intersection Delay [s/veh]	38.29											
Intersection LOS	D											
Intersection V/C	0.516											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	64.40	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.837	1.742	3.174	3.157
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	537	0	919	879
d_b, Bicycle Delay [s]	40.11	75.00	21.92	23.58
l_b,int, Bicycle LOS Score for Intersection	1.802	1.560	2.336	2.622
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	44.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.516

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	0	273	0	135	64	1151	201	205	1837	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	8	15	3	14	12	24	10	37	4	26	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	8	15	276	14	147	88	1161	238	209	1863	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	4	69	4	37	22	290	60	52	466	8
Total Analysis Volume [veh/h]	18	8	15	276	14	147	88	1161	238	209	1863	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	132.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	9	0	0	42	0	31	66	0	33	68	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	5	38	38	38	27	62	62	29	64	64
g / C, Green / Cycle	0.04	0.26	0.26	0.26	0.18	0.41	0.41	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.08	0.09	0.05	0.27	0.27	0.06	0.35	0.35
s, saturation flow rate [veh/h]	1721	1781	1789	1589	1781	3560	1712	3459	3560	1855
c, Capacity [veh/h]	61	455	457	406	324	1469	706	676	1517	790
d1, Uniform Delay [s]	71.50	45.27	45.27	45.83	52.79	35.22	35.22	51.68	37.98	38.01
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	46.50	1.84	1.83	2.50	2.06	2.18	4.47	1.19	5.09	9.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.32	0.32	0.36	0.27	0.64	0.64	0.31	0.82	0.82
d, Delay for Lane Group [s/veh]	118.00	47.10	47.09	48.32	54.85	37.39	39.68	52.87	43.07	47.40
Lane Group LOS	F	D	D	D	D	D	D	D	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.38	4.70	4.72	4.88	3.05	14.18	14.08	3.49	20.96	22.83
50th-Percentile Queue Length [ft/ln]	59.52	117.48	117.98	121.92	76.31	354.50	352.10	87.36	524.05	570.82
95th-Percentile Queue Length [veh/ln]	4.29	8.25	8.28	8.50	5.49	20.36	20.24	6.29	28.47	30.67
95th-Percentile Queue Length [ft/ln]	107.14	206.35	207.05	212.46	137.36	508.89	505.97	157.26	711.77	766.74

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Movement, Approach, & Intersection Results

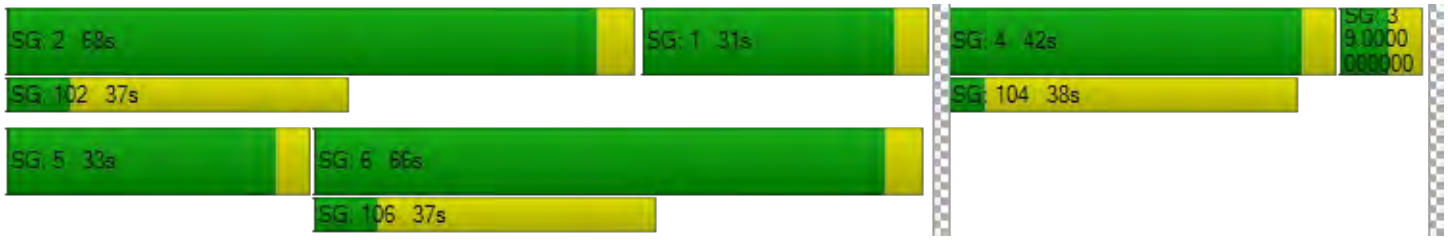
d_M, Delay for Movement [s/veh]	118.00	118.00	118.00	47.10	47.09	48.32	54.85	37.82	39.68	52.87	44.51	47.40
Movement LOS	F	F	F	D	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	118.00			47.51			39.13			45.38		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	44.06											
Intersection LOS	D											
Intersection V/C	0.516											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	67.21
l_p,int, Pedestrian LOS Score for Intersection	1.781	2.469	0.000	3.239
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	71	511	825	852
d_b, Bicycle Delay [s]	69.79	41.59	25.87	24.71
l_b,int, Bicycle LOS Score for Intersection	1.627	2.281	2.377	2.716
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	50.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	3	45	0	140	61	1075	96	118	1930	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	46	0	24	55	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	3	45	0	140	61	1121	96	142	1985	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	11	0	35	15	280	24	36	496	1
Total Analysis Volume [veh/h]	0	1	3	45	0	140	61	1121	96	142	1985	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	105.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	24	60	0	29	65	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	20	55	55	25	60	60
g / C, Green / Cycle	0.10	0.25	0.25	0.13	0.37	0.37	0.16	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.09	0.03	0.23	0.23	0.08	0.37	0.37
s, saturation flow rate [veh/h]	1651	1781	1589	1781	3560	1795	1781	3560	1869
c, Capacity [veh/h]	164	450	402	232	1315	663	291	1434	753
d1, Uniform Delay [s]	60.99	42.97	45.93	58.78	38.60	38.61	57.05	42.21	42.21
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	0.44	2.38	2.76	2.16	4.24	5.76	10.05	16.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.10	0.35	0.26	0.62	0.62	0.49	0.91	0.91
d, Delay for Lane Group [s/veh]	61.26	43.42	48.31	61.54	40.76	42.85	62.81	52.26	59.11
Lane Group LOS	E	D	D	E	D	D	E	D	E
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.15	1.37	4.64	2.28	12.64	13.14	5.40	24.61	27.27
50th-Percentile Queue Length [ft/ln]	3.85	34.26	115.95	57.12	315.92	328.45	134.98	615.28	681.86
95th-Percentile Queue Length [veh/ln]	0.28	2.47	8.17	4.11	18.47	19.08	9.21	32.75	35.84
95th-Percentile Queue Length [ft/ln]	6.93	61.67	204.24	102.82	461.67	477.06	230.25	818.68	895.98

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Movement, Approach, & Intersection Results

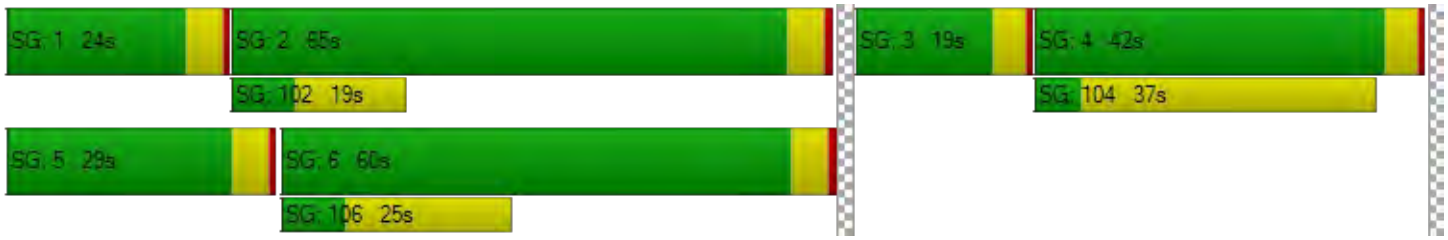
d_M, Delay for Movement [s/veh]	61.26	61.26	61.26	43.42	48.31	48.31	61.54	41.34	42.85	62.81	54.61	59.11
Movement LOS	E	E	E	D	D	D	E	D	D	E	D	E
d_A, Approach Delay [s/veh]	61.26			47.12			42.42			55.16		
Approach LOS	E			D			D			E		
d_I, Intersection Delay [s/veh]	50.23											
Intersection LOS	D											
Intersection V/C	0.533											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.756	2.079	0.000	3.092
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	805
d_b, Bicycle Delay [s]	60.84	41.89	29.83	26.76
l_b,int, Bicycle LOS Score for Intersection	1.566	1.865	2.263	2.731
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	55.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.542

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	51	27	82	201	30	119	88	1000	152	237	1558	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	32	0	0	46	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	27	82	201	30	119	88	1032	152	237	1604	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	7	21	50	8	30	22	258	38	59	401	31
Total Analysis Volume [veh/h]	51	27	82	201	30	119	88	1032	152	237	1604	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	63.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	25	0	0	42	0	21	48	0	35	60	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	21	21	38	38	38	17	44	44	31	56	56
g / C, Green / Cycle	0.14	0.14	0.25	0.25	0.25	0.11	0.29	0.29	0.21	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.04	0.05	0.06	0.06	0.07	0.05	0.22	0.22	0.13	0.32	0.32
s, saturation flow rate [veh/h]	1811	1589	1781	1803	1589	1781	3560	1750	1781	3560	1803
c, Capacity [veh/h]	251	220	450	456	402	199	1035	509	372	1320	668
d1, Uniform Delay [s]	58.15	58.67	44.78	44.77	45.28	62.21	48.56	48.57	54.18	43.77	43.86
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.20	4.76	1.37	1.35	1.88	6.93	5.44	10.61	8.12	7.85	14.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.37	0.26	0.25	0.30	0.44	0.77	0.77	0.64	0.87	0.87
d, Delay for Lane Group [s/veh]	61.34	63.43	46.14	46.12	47.15	69.15	54.00	59.19	62.30	51.62	58.36
Lane Group LOS	E	E	D	D	D	E	D	E	E	D	E
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.97	3.20	3.64	3.68	3.84	3.52	14.28	14.79	9.00	20.92	22.55
50th-Percentile Queue Length [ft/ln]	74.21	80.08	90.98	91.96	96.09	88.04	357.11	369.73	225.05	523.00	563.75
95th-Percentile Queue Length [veh/ln]	5.34	5.77	6.55	6.62	6.92	6.34	20.48	21.10	13.92	28.42	30.34
95th-Percentile Queue Length [ft/ln]	133.58	144.15	163.76	165.53	172.97	158.46	512.07	527.41	348.06	710.53	758.44

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Movement, Approach, & Intersection Results

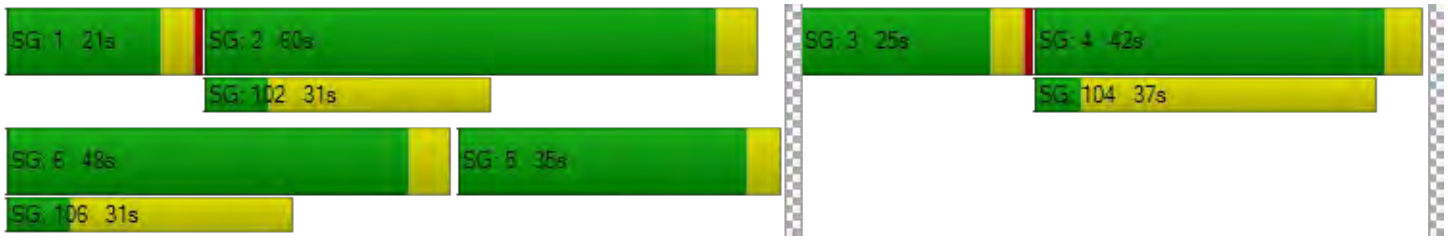
d_M, Delay for Movement [s/veh]	61.34	61.34	63.43	46.13	46.12	47.15	69.15	55.20	59.19	62.30	53.56	58.36
Movement LOS	E	E	E	D	D	D	E	E	E	E	D	E
d_A, Approach Delay [s/veh]	62.41			46.48			56.64			54.91		
Approach LOS	E			D			E			D		
d_I, Intersection Delay [s/veh]	55.03											
Intersection LOS	E											
Intersection V/C	0.542											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	2.030	2.342	0.000	3.134
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	277	505	581	741
d_b, Bicycle Delay [s]	55.64	41.89	37.74	29.70
l_b,int, Bicycle LOS Score for Intersection	1.824	2.137	2.259	2.639
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	40.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.425

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	3	4	4	71	0	38	13	1248	111	45	1608	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	20	0	0	0	30	6	0	47	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	4	4	91	0	38	13	1278	117	45	1655	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	23	0	10	3	320	29	11	414	0
Total Analysis Volume [veh/h]	3	4	4	91	0	38	13	1278	117	45	1655	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	83.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	45	0	0	45	0	39	64	0	41	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	41	35	60	60	37	62	62
g / C, Green / Cycle	0.27	0.27	0.23	0.40	0.40	0.25	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.01	0.09	0.01	0.26	0.26	0.03	0.30	0.30
s, saturation flow rate [veh/h]	1648	1479	1781	3560	1791	1781	3560	1870
c, Capacity [veh/h]	481	445	416	1424	716	439	1472	773
d1, Uniform Delay [s]	39.85	43.03	44.41	36.52	36.52	43.67	37.13	37.13
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.09	1.64	0.14	2.33	4.57	0.47	3.34	6.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.29	0.03	0.65	0.65	0.10	0.74	0.74
d, Delay for Lane Group [s/veh]	39.94	44.67	44.55	38.85	41.09	44.13	40.47	43.34
Lane Group LOS	D	D	D	D	D	D	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.31	4.06	0.39	14.20	14.73	1.36	17.33	18.82
50th-Percentile Queue Length [ft/ln]	7.87	101.39	9.84	355.02	368.29	34.06	433.27	470.53
95th-Percentile Queue Length [veh/ln]	0.57	7.30	0.71	20.38	21.03	2.45	24.16	25.94
95th-Percentile Queue Length [ft/ln]	14.17	182.50	17.72	509.53	525.66	61.31	603.96	648.41

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Movement, Approach, & Intersection Results

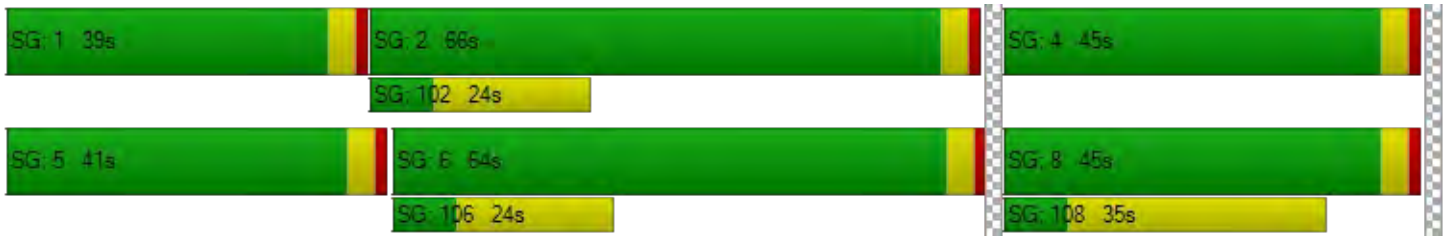
d_M, Delay for Movement [s/veh]	39.94	39.94	39.94	44.67	44.67	44.67	44.55	39.46	41.09	44.13	41.46	43.34
Movement LOS	D	D	D	D	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	39.94			44.67			39.65			41.53		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	40.83											
Intersection LOS	D											
Intersection V/C	0.425											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	41.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	39.60	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.751	1.883	3.241	3.113
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	547	547	800	827
d_b, Bicycle Delay [s]	39.60	39.60	27.00	25.81
l_b,int, Bicycle LOS Score for Intersection	1.578	1.772	2.334	2.495
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.053

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	1	85	63	3	44	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	4	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	91	67	3	44	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	23	17	1	11	8
Total Analysis Volume [veh/h]	1	91	67	3	44	32
Pedestrian Volume [ped/h]	0		0		0	

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.03
d_M, Delay for Movement [s/veh]	7.35	0.00	0.00	0.00	9.72	9.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.28	0.28
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.00	0.00	6.97	6.97
d_A, Approach Delay [s/veh]	0.08		0.00		9.41	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.04					
Intersection LOS	A					

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Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	0	3	1	49	5	40	3	19	38	42	24	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	2	0	0	3	3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	1	51	5	42	3	19	41	45	24	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	13	1	11	1	5	10	11	6	1
Total Analysis Volume [veh/h]	0	3	1	51	5	42	3	19	41	45	24	3
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.07	0.01	0.04	0.00	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	10.00	10.24	8.45	10.15	10.62	9.02	7.27	0.00	0.00	7.40	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.38	0.38	0.38	0.01	0.01	0.01	0.09	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.40	0.40	0.40	9.54	9.54	9.54	0.14	0.14	0.14	2.25	2.25	2.25
d_A, Approach Delay [s/veh]	9.80			9.69			0.35			4.63		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	5.67											
Intersection LOS	B											

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Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	66.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.517

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	926	54	20	969	57	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	0	0	4	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	942	54	20	973	57	13
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	236	14	5	243	14	3
Total Analysis Volume [veh/h]	942	54	20	973	57	13
Pedestrian Volume [ped/h]	0		0		0	

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.52	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	10.37	0.00	66.57	40.88
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.00	2.62	2.62
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.24	0.00	65.53	65.53
d_A, Approach Delay [s/veh]	0.00		0.21		61.80	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	2.20					
Intersection LOS	F					

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Vistro File: \...\330 Distel Circle Vistro PM.vistro
Report File: \...\Near-Term PM.pdf

Scenario 3 Near-Term PM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	44	798	18	18	992	38	43	18	41	30	7	25	2072

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	3	829	273	122	913	7	8	0	0	213	0	122	2490

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	105	5	82	13	2	18	74	1108	11	41	1788	159	3406

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	207	473	79	301	634	162	360	817	125	436	1422	212	5228

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	62	1	89	5	3	12	63	1268	5	26	1839	63	3436

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	9	0	29	1	0	0	34	1373	0	14	1641	13	3114

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	42	0	105	0	72	1340	0	6	1904	21	3490

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Version 2021 (SP 0-4)

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	18	8	15	276	14	147	88	1161	238	209	1863	30	4067

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	1	3	45	0	140	61	1121	96	142	1985	2	3596

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	51	27	82	201	30	119	88	1032	152	237	1604	122	3745

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	3	4	4	91	0	38	13	1278	117	45	1655	0	3248

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	1	91	67	3	44	32	238

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	0	3	1	51	5	42	3	19	41	45	24	3	237

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	942	54	20	973	57	13	2059

Vistro File: \...\330 Distel Circle Vistro AM.vistro
Report File: \...\Near-Term + Project AM.pdf

Scenario 4 Near-Term Plus Project AM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.681	19.8	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	SB Left	0.616	18.4	B
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	SEB Left	0.511	20.6	C
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Left	0.657	63.6	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.474	19.2	B
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	SWB Left	0.046	177.1	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	SEB Left	0.538	28.8	C
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NEB Right	0.567	51.6	D
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	NEB Right	0.377	45.0	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NEB Left	0.459	50.6	D
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	NWB Left	0.515	48.1	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.067	13.6	B
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.007	18.8	C
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.838	175.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	19.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.681

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	150	887	44	12	820	61	171	76	182	43	48	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	0	26	0	0	0	0	0	0	-1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	893	44	12	846	61	171	76	182	43	48	36
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	223	11	3	212	15	43	19	46	11	12	9
Total Analysis Volume [veh/h]	150	893	44	12	846	61	171	76	182	43	48	36
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	61	61	61	61	61	61	61	61	61
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	7	24	24	1	18	18	21	21	21
g / C, Green / Cycle	0.11	0.39	0.39	0.02	0.30	0.30	0.35	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.08	0.25	0.25	0.01	0.25	0.25	0.25	0.11	0.18
s, saturation flow rate [veh/h]	1781	1870	1839	1781	1870	1826	982	1589	701
c, Capacity [veh/h]	198	738	726	27	559	546	439	549	321
d1, Uniform Delay [s]	26.49	15.04	15.04	29.98	19.99	20.00	17.38	14.85	15.49
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.83	0.93	0.95	10.98	3.07	3.14	1.14	0.35	0.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.64	0.64	0.44	0.82	0.82	0.56	0.33	0.40
d, Delay for Lane Group [s/veh]	32.32	15.97	15.99	40.96	23.06	23.14	18.52	15.20	16.28
Lane Group LOS	C	B	B	D	C	C	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.29	4.73	4.66	0.25	5.84	5.71	2.95	1.80	1.20
50th-Percentile Queue Length [ft/ln]	57.20	118.29	116.46	6.18	145.95	142.81	73.66	44.91	29.99
95th-Percentile Queue Length [veh/ln]	4.12	8.30	8.20	0.45	9.80	9.63	5.30	3.23	2.16
95th-Percentile Queue Length [ft/ln]	102.97	207.48	204.95	11.13	245.01	240.80	132.58	80.85	53.97

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Movement, Approach, & Intersection Results

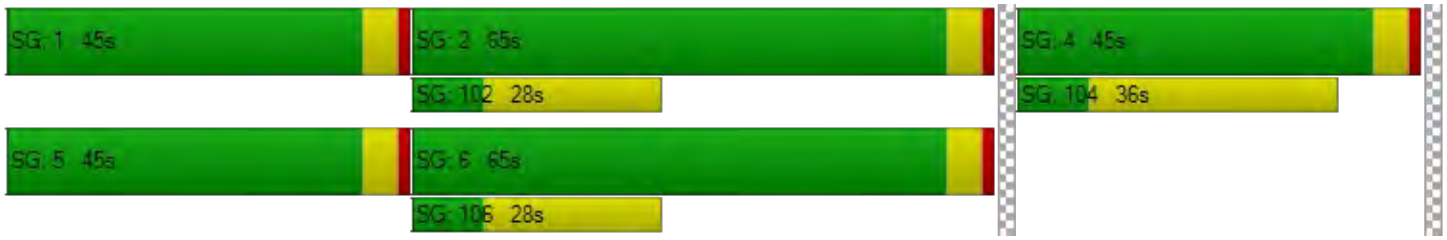
d_M, Delay for Movement [s/veh]	32.32	15.98	15.99	40.96	23.10	23.14	18.52	18.52	15.20	16.28	16.28	16.28
Movement LOS	C	B	B	D	C	C	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	18.23			23.33			17.11			16.28		
Approach LOS	B			C			B			B		
d_I, Intersection Delay [s/veh]	19.78											
Intersection LOS	B											
Intersection V/C	0.681											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.80	0.00	19.80	19.80
l_p,int, Pedestrian LOS Score for Intersection	2.829	0.000	2.104	1.818
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1960	1960	1306	1306
d_b, Bicycle Delay [s]	0.01	0.01	3.68	3.68
l_b,int, Bicycle LOS Score for Intersection	2.456	2.318	2.267	1.769
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	0	847	161	172	981	0	0	0	0	279	0	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	2	0	23	7	2	0	0	3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	850	163	172	1004	7	2	0	0	282	0	195
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	213	41	43	251	2	1	0	0	71	0	49
Total Analysis Volume [veh/h]	0	850	163	172	1004	7	2	0	0	282	0	195
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	71	71	71	71	71	71	71	71	71
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	31	31	9	39	39	16	16	16
g / C, Green / Cycle	0.00	0.43	0.43	0.13	0.56	0.56	0.23	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.00	0.28	0.28	0.10	0.27	0.27	0.01	0.16	0.12
s, saturation flow rate [veh/h]	1781	1870	1767	1781	1870	1865	351	1738	1589
c, Capacity [veh/h]	0	809	764	224	1044	1041	182	502	366
d1, Uniform Delay [s]	0.00	15.83	15.83	29.98	9.48	9.48	31.57	24.96	23.95
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	3.11	3.29	7.61	1.27	1.27	0.03	1.41	1.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.64	0.64	0.77	0.48	0.48	0.01	0.56	0.53
d, Delay for Lane Group [s/veh]	0.00	18.94	19.12	37.60	10.75	10.76	31.60	26.37	25.66
Lane Group LOS	A	B	B	D	B	B	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.00	6.51	6.19	3.15	4.24	4.23	0.03	4.30	2.90
50th-Percentile Queue Length [ft/ln]	0.00	162.68	154.66	78.85	105.94	105.72	0.86	107.54	72.44
95th-Percentile Queue Length [veh/ln]	0.00	10.69	10.27	5.68	7.61	7.60	0.06	7.70	5.22
95th-Percentile Queue Length [ft/ln]	0.00	267.27	256.64	141.92	190.34	190.03	1.55	192.57	130.39

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Movement, Approach, & Intersection Results

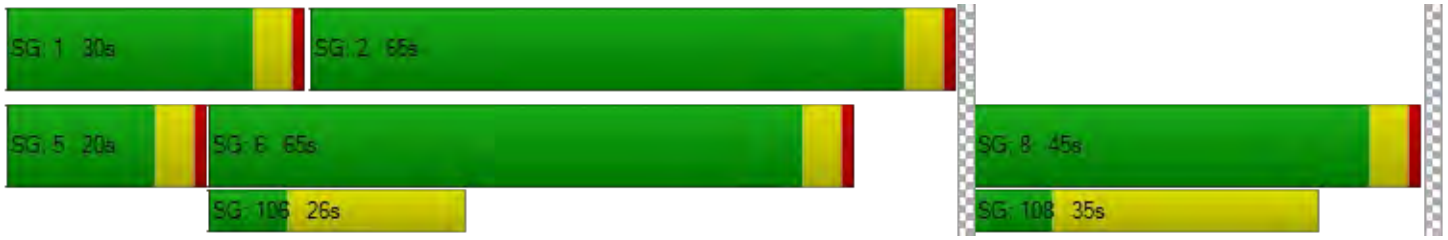
d_M, Delay for Movement [s/veh]	0.00	19.01	19.12	37.60	10.76	10.76	31.60	31.60	31.60	26.37	26.37	25.66
Movement LOS	A	B	B	D	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	19.02			14.66			31.60			26.08		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	18.36											
Intersection LOS	B											
Intersection V/C	0.616											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	24.40	24.40	40.56
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.795	1.702	2.210
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1696	1696	1131	1131
d_b, Bicycle Delay [s]	0.82	0.82	6.69	6.69
l_b,int, Bicycle LOS Score for Intersection	2.395	2.536	1.563	2.347
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.511

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Version 2021 (SP 0-4)

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	166	4	166	14	9	4	101	1423	7	53	738	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	79	0	0	39	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	166	4	166	14	9	4	101	1502	7	53	777	121
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	1	42	4	2	1	25	376	2	13	194	30
Total Analysis Volume [veh/h]	166	4	166	14	9	4	101	1502	7	53	777	121
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	128.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	40	0	20	40	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	29	29	29	10	103	103	6	99	99
g / C, Green / Cycle	0.19	0.19	0.19	0.07	0.69	0.69	0.04	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.17	0.10	0.17	0.06	0.28	0.28	0.03	0.17	0.17
s, saturation flow rate [veh/h]	984	1589	159	1781	3560	1866	1781	3560	1745
c, Capacity [veh/h]	234	301	67	124	2448	1283	74	2348	1150
d1, Uniform Delay [s]	59.55	55.00	52.26	68.81	10.14	10.14	71.00	10.46	10.48
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.26	1.57	3.91	12.03	0.50	0.95	12.11	0.26	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.55	0.40	0.81	0.40	0.40	0.72	0.26	0.26
d, Delay for Lane Group [s/veh]	63.81	56.57	56.18	80.84	10.64	11.09	83.12	10.73	11.02
Lane Group LOS	E	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.62	5.85	0.92	4.23	6.98	7.47	2.26	4.10	4.14
50th-Percentile Queue Length [ft/ln]	165.50	146.31	23.11	105.79	174.43	186.82	56.51	102.47	103.62
95th-Percentile Queue Length [veh/ln]	10.84	9.82	1.66	7.61	11.31	11.96	4.07	7.38	7.46
95th-Percentile Queue Length [ft/ln]	270.99	245.49	41.60	190.13	282.73	298.90	101.72	184.44	186.51

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.81	63.81	56.57	56.18	56.18	56.18	80.84	10.79	11.09	83.12	10.79	11.02
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	60.23			56.18			15.19			14.85		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	20.64											
Intersection LOS	C											
Intersection V/C	0.511											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.153	1.771	3.041	3.265
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.33	64.49
l_b,int, Bicycle LOS Score for Intersection	2.114	1.604	2.445	2.083
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	63.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.657

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	178	718	41	182	712	276	261	1180	179	299	606	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	-1	8	-2	-1	20	21	6	59	2	0	32	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	177	726	39	181	732	297	267	1239	181	299	638	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	182	10	45	183	74	67	310	45	75	160	36
Total Analysis Volume [veh/h]	177	726	39	181	732	297	267	1239	181	299	638	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	153.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	27	56	0	27	56	0	30	63	0	34	67	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	22	51	51	22	51	51	25	58	58	29	62	62
g / C, Green / Cycle	0.12	0.29	0.29	0.12	0.29	0.29	0.14	0.32	0.32	0.16	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.05	0.21	0.21	0.05	0.21	0.19	0.08	0.27	0.27	0.09	0.15	0.15
s, saturation flow rate [veh/h]	3459	1870	1837	3459	3560	1589	3459	3560	1751	3459	3560	1700
c, Capacity [veh/h]	430	534	524	430	1017	454	488	1155	568	555	1234	589
d1, Uniform Delay [s]	72.72	57.89	57.89	72.80	57.83	56.50	71.95	56.05	56.08	69.42	45.11	45.16
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.89	8.24	8.38	3.00	4.40	7.18	4.36	6.71	12.84	3.72	1.09	2.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.72	0.72	0.42	0.72	0.65	0.55	0.82	0.82	0.54	0.43	0.43
d, Delay for Lane Group [s/veh]	75.60	66.13	66.27	75.80	62.23	63.67	76.31	62.76	68.92	73.14	46.20	47.45
Lane Group LOS	E	E	E	E	E	E	E	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.97	17.08	16.80	4.06	15.65	12.82	6.06	20.99	21.65	6.65	9.35	9.19
50th-Percentile Queue Length [ft/ln]	99.15	427.04	419.95	101.57	391.15	320.40	151.46	524.65	541.15	166.15	233.82	229.76
95th-Percentile Queue Length [veh/ln]	7.14	23.86	23.52	7.31	22.13	18.69	10.09	28.50	29.28	10.87	14.37	14.16
95th-Percentile Queue Length [ft/ln]	178.47	596.50	587.99	182.83	553.32	467.18	252.37	712.48	731.90	271.85	359.21	354.06

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Movement, Approach, & Intersection Results

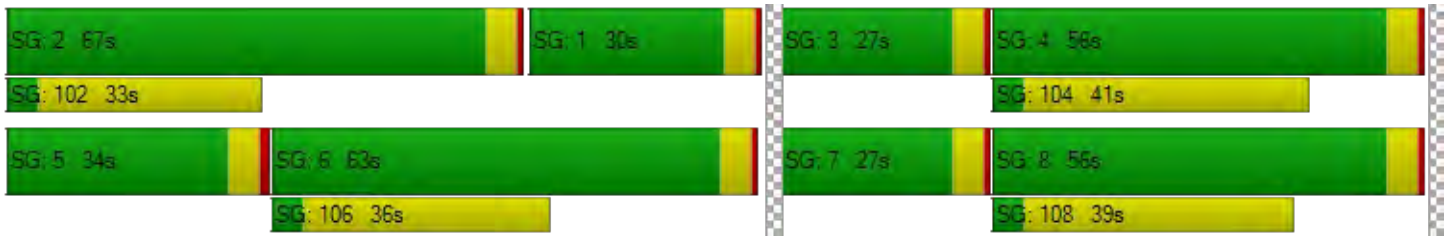
d_M, Delay for Movement [s/veh]	75.60	66.19	66.27	75.80	62.23	63.67	76.31	64.19	68.92	73.14	46.41	47.45
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	67.97			64.61			66.62			53.94		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	63.60											
Intersection LOS	E											
Intersection V/C	0.657											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	82.18	82.18	82.18	82.18
l_p,int, Pedestrian LOS Score for Intersection	2.967	3.103	3.121	3.157
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	571	571	649	693
d_b, Bicycle Delay [s]	45.94	45.94	41.07	38.42
l_b,int, Bicycle LOS Score for Intersection	2.337	2.558	2.487	2.154
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	19.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.474

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	60	10	109	0	6	8	54	1686	29	9	859	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	1	0	0	0	3	56	0	0	33	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	10	110	0	6	8	57	1742	29	9	892	100
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	3	28	0	2	2	14	436	7	2	223	25
Total Analysis Volume [veh/h]	63	10	110	0	6	8	57	1742	29	9	892	100
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	179.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	19	128	0	11	120	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	15	124	124	7	116	116
g / C, Green / Cycle	0.20	0.20	0.09	0.69	0.69	0.04	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate	0.12	0.01	0.03	0.33	0.33	0.01	0.19	0.19
s, saturation flow rate [veh/h]	1547	1699	1781	3560	1854	1781	3560	1775
c, Capacity [veh/h]	343	367	151	2451	1276	72	2293	1143
d1, Uniform Delay [s]	64.38	57.44	77.84	12.99	12.99	83.27	14.01	14.03
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.83	0.19	7.01	0.66	1.27	3.52	0.32	0.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.53	0.04	0.38	0.48	0.48	0.12	0.29	0.29
d, Delay for Lane Group [s/veh]	70.21	57.63	84.85	13.65	14.26	86.78	14.33	14.67
Lane Group LOS	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.25	0.55	2.81	11.01	11.70	0.48	6.06	6.19
50th-Percentile Queue Length [ft/ln]	206.21	13.75	70.14	275.36	292.44	11.91	151.58	154.65
95th-Percentile Queue Length [veh/ln]	12.96	0.99	5.05	16.46	17.31	0.86	10.10	10.26
95th-Percentile Queue Length [ft/ln]	323.96	24.76	126.24	411.44	432.67	21.44	252.53	256.62

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	70.21	70.21	70.21	57.63	57.63	57.63	84.85	13.86	14.26	86.78	14.42	14.67
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	70.21			57.63			16.08			15.10		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	19.22											
Intersection LOS	B											
Intersection V/C	0.474											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	81.23	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.888	1.763	3.087	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	409	409	1377	1288
d_b, Bicycle Delay [s]	56.96	56.96	8.74	11.41
l_b,int, Bicycle LOS Score for Intersection	1.862	1.583	2.565	2.110
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	177.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.046

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	4	0	12	1	0	1	130	1684	2	6	1043	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	3	0	0	0	0	59	0	0	54	-5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	0	15	1	0	1	130	1743	2	6	1097	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	4	0	0	0	33	436	1	2	274	10
Total Analysis Volume [veh/h]	11	0	15	1	0	1	130	1743	2	6	1097	40
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.29	0.00	0.04	0.05	0.00	0.00	0.39	0.02	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	120.21	585.10	34.59	177.12	585.84	24.05	22.32	0.00	0.00	27.20	0.00	0.00
Movement LOS	F	F	D	F	F	C	C	A	A	D	A	A
95th-Percentile Queue Length [veh/ln]	1.23	1.23	1.23	0.15	0.15	0.15	1.77	0.00	0.00	0.11	0.00	0.00
95th-Percentile Queue Length [ft/ln]	30.75	30.75	30.75	3.86	3.86	3.86	44.30	0.00	0.00	2.76	0.00	0.00
d_A, Approach Delay [s/veh]	70.81			100.59			1.55			0.14		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	1.68											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	28.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.538

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	0	204	0	0	0	93	1769	0	8	1024	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	8	0	0	0	4	56	0	0	57	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	0	212	0	0	0	97	1825	0	8	1081	95
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	53	0	0	0	24	456	0	2	270	24
Total Analysis Volume [veh/h]	66	0	212	0	0	0	97	1825	0	8	1081	95
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	78.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	49	49	0	0	0	0	43	122	0	9	88	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	180		180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	45		39	118	118	5	84	84
g / C, Green / Cycle	0.25		0.22	0.66	0.66	0.03	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.17		0.05	0.34	0.34	0.00	0.22	0.22
s, saturation flow rate [veh/h]	1631		1781	3560	1870	1781	3560	1794
c, Capacity [veh/h]	410		389	2332	1225	52	1660	836
d1, Uniform Delay [s]	60.76		58.16	16.13	16.13	85.16	32.87	32.88
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.68		1.53	0.81	1.54	6.08	0.96	1.91
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68		0.25	0.51	0.51	0.15	0.47	0.47
d, Delay for Lane Group [s/veh]	69.44		59.69	16.94	17.67	91.24	33.83	34.79
Lane Group LOS	E		E	B	B	F	C	C
Critical Lane Group	Yes		No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.64		3.86	13.00	13.91	0.45	12.03	12.36
50th-Percentile Queue Length [ft/ln]	315.95		96.39	325.09	347.67	11.34	300.78	309.11
95th-Percentile Queue Length [veh/ln]	18.47		6.94	18.92	20.02	0.82	17.72	18.13
95th-Percentile Queue Length [ft/ln]	461.71		173.51	472.94	500.56	20.41	443.00	453.27

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Movement, Approach, & Intersection Results

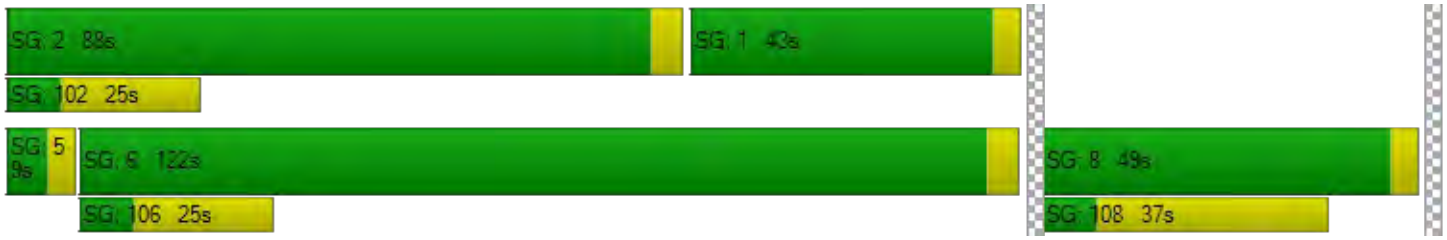
d_M, Delay for Movement [s/veh]	69.44	69.44	69.44	0.00	0.00	0.00	59.69	17.20	17.67	91.24	34.10	34.79
Movement LOS	E	E	E				E	B	B	F	C	C
d_A, Approach Delay [s/veh]	69.44			0.00			19.34			34.54		
Approach LOS	E			A			B			C		
d_I, Intersection Delay [s/veh]	28.77											
Intersection LOS	C											
Intersection V/C	0.538											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	79.34	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.938	1.751	3.149	3.126
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	503	0	1310	932
d_b, Bicycle Delay [s]	50.40	90.00	10.71	25.65
l_b,int, Bicycle LOS Score for Intersection	2.018	1.560	2.617	2.211
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	51.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.567

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	299	0	200	53	1593	212	152	1106	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	10	33	3	3	14	9	22	11	5	52	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	10	34	302	3	214	62	1615	223	157	1158	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	3	9	76	1	54	16	404	56	39	290	2
Total Analysis Volume [veh/h]	23	10	34	302	3	214	62	1615	223	157	1158	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	21	0	0	51	0	27	79	0	29	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	17	47	47	47	23	75	75	25	77	77
g / C, Green / Cycle	0.10	0.26	0.26	0.26	0.13	0.42	0.42	0.14	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.09	0.09	0.13	0.03	0.35	0.35	0.05	0.21	0.21
s, saturation flow rate [veh/h]	1690	1781	1783	1589	1781	3560	1757	3459	3560	1863
c, Capacity [veh/h]	162	468	468	418	231	1482	731	486	1521	796
d1, Uniform Delay [s]	76.57	53.49	53.49	56.52	70.67	46.85	46.99	69.64	37.61	37.61
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.57	1.85	1.84	4.44	2.85	5.51	10.80	1.76	1.19	2.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.33	0.33	0.51	0.27	0.83	0.83	0.32	0.50	0.50
d, Delay for Lane Group [s/veh]	84.14	55.34	55.34	60.96	73.52	52.35	57.78	71.40	38.80	39.88
Lane Group LOS	F	E	E	E	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.34	5.94	5.95	8.97	2.78	25.60	26.54	3.40	12.70	13.53
50th-Percentile Queue Length [ft/ln]	83.51	148.54	148.67	224.33	69.47	639.91	663.40	84.91	317.42	338.21
95th-Percentile Queue Length [veh/ln]	6.01	9.94	9.95	13.89	5.00	33.89	34.98	6.11	18.54	19.56
95th-Percentile Queue Length [ft/ln]	150.32	248.48	248.66	347.14	125.04	847.34	874.61	152.84	463.52	489.01

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Movement, Approach, & Intersection Results

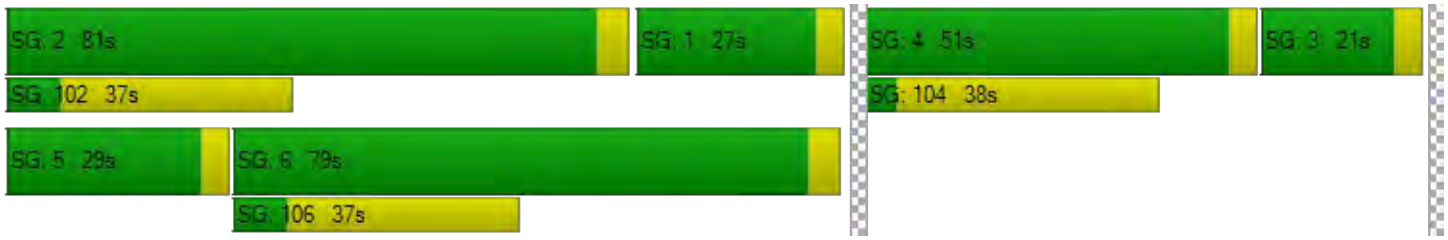
d_M, Delay for Movement [s/veh]	84.14	84.14	84.14	55.34	55.34	60.96	73.52	53.65	57.78	71.40	39.17	39.88
Movement LOS	F	F	F	E	E	E	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	84.14			57.66			54.79			43.00		
Approach LOS	F			E			D			D		
d_I, Intersection Delay [s/veh]	51.60											
Intersection LOS	D											
Intersection V/C	0.567											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	82.18
l_p,int, Pedestrian LOS Score for Intersection	1.782	2.480	0.000	3.211
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	192	526	832	854
d_b, Bicycle Delay [s]	73.53	48.91	30.68	29.53
l_b,int, Bicycle LOS Score for Intersection	1.670	2.416	2.605	2.287
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	45.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.377

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	0	0	0	86	1341	118	99	1078	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	79	0	7	32	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	0	0	0	86	1420	118	106	1110	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	22	355	30	27	278	0
Total Analysis Volume [veh/h]	0	0	1	0	0	0	86	1420	118	106	1110	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	108.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	28	60	0	29	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	24	55	55	25	56	56
g / C, Green / Cycle	0.10	0.25	0.25	0.16	0.37	0.37	0.16	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.00	0.05	0.29	0.29	0.06	0.20	0.20
s, saturation flow rate [veh/h]	1589	1781	1870	1781	3560	1797	1781	3560	1870
c, Capacity [veh/h]	158	450	472	279	1315	664	291	1339	703
d1, Uniform Delay [s]	60.88	0.00	0.00	56.05	41.84	41.85	55.82	36.71	36.71
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.00	0.00	2.85	4.56	8.71	3.50	1.59	3.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.00	0.00	0.31	0.78	0.78	0.36	0.54	0.54
d, Delay for Lane Group [s/veh]	60.95	0.00	0.00	58.90	46.40	50.56	59.33	38.30	39.71
Lane Group LOS	E	A	A	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	3.14	17.60	18.54	3.89	10.87	11.69
50th-Percentile Queue Length [ft/ln]	0.96	0.00	0.00	78.39	439.94	463.62	97.18	271.70	292.32
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.00	5.64	24.48	25.61	7.00	16.27	17.30
95th-Percentile Queue Length [ft/ln]	1.73	0.00	0.00	141.09	611.93	640.19	174.93	406.87	432.51

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Movement, Approach, & Intersection Results

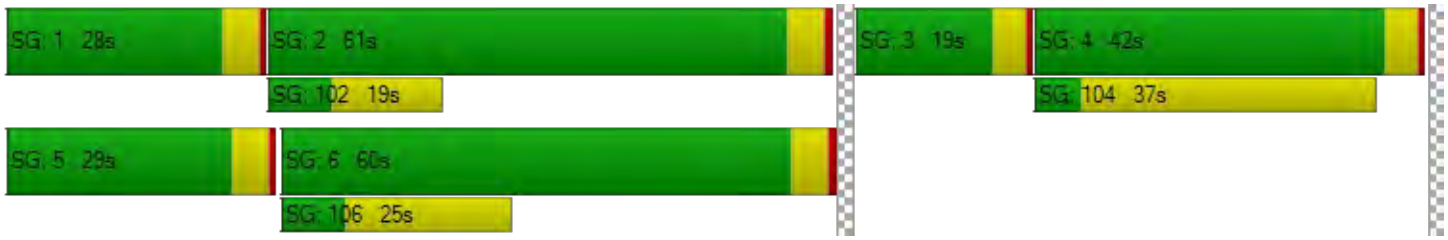
d_M, Delay for Movement [s/veh]	60.95	60.95	60.95	0.00	0.00	0.00	58.90	47.57	50.56	59.33	38.78	39.71
Movement LOS	E	E	E	A	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	60.95			0.00			48.39			40.57		
Approach LOS	E			A			D			D		
d_I, Intersection Delay [s/veh]	45.05											
Intersection LOS	D											
Intersection V/C	0.377											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.760	2.025	0.000	2.987
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	752
d_b, Bicycle Delay [s]	60.84	41.89	29.83	29.20
l_b,int, Bicycle LOS Score for Intersection	1.561	1.560	2.453	2.228
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	50.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.459

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	14	4	5	77	13	97	27	1321	87	148	756	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	66	0	0	28	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	4	5	77	13	97	27	1387	87	148	784	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	1	19	3	24	7	347	22	37	196	13
Total Analysis Volume [veh/h]	14	4	5	77	13	97	27	1387	87	148	784	50
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	168.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	28	0	0	42	0	29	70	0	40	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	24	24	38	38	38	25	66	66	36	77	77
g / C, Green / Cycle	0.13	0.13	0.21	0.21	0.21	0.14	0.36	0.36	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.03	0.03	0.06	0.02	0.27	0.27	0.08	0.16	0.16
s, saturation flow rate [veh/h]	1800	1589	1781	1806	1589	1781	3560	1814	1781	3560	1813
c, Capacity [veh/h]	238	210	375	380	335	245	1298	661	359	1515	772
d1, Uniform Delay [s]	68.46	67.99	57.54	57.53	59.74	67.94	50.09	50.09	62.56	35.15	35.17
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.62	0.21	0.65	0.64	2.18	0.90	4.07	7.74	3.47	0.68	1.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.02	0.12	0.12	0.29	0.11	0.75	0.75	0.41	0.36	0.37
d, Delay for Lane Group [s/veh]	69.08	68.20	58.19	58.17	61.92	68.84	54.16	57.83	66.03	35.83	36.51
Lane Group LOS	E	E	E	E	E	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.79	0.22	1.75	1.76	3.98	1.16	20.02	21.07	6.29	8.51	8.84
50th-Percentile Queue Length [ft/ln]	19.74	5.47	43.73	44.09	99.56	28.96	500.48	526.85	157.17	212.71	221.00
95th-Percentile Queue Length [veh/ln]	1.42	0.39	3.15	3.17	7.17	2.08	27.36	28.60	10.40	13.29	13.72
95th-Percentile Queue Length [ft/ln]	35.53	9.84	78.72	79.35	179.21	52.12	683.92	715.07	259.97	332.30	342.90

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.08	69.08	68.20	58.18	58.17	61.92	68.84	55.25	57.83	66.03	36.03	36.51
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	68.88			60.12			55.64			40.57		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	50.57											
Intersection LOS	D											
Intersection V/C	0.459											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	81.23
l_p,int, Pedestrian LOS Score for Intersection	1.991	2.268	0.000	3.031
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	421	729	851
d_b, Bicycle Delay [s]	67.77	56.09	36.35	29.70
l_b,int, Bicycle LOS Score for Intersection	1.598	1.868	2.385	2.100
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	48.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.515

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	0	150	0	59	18	1458	136	31	957	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	28	0	0	0	59	6	0	34	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	0	178	0	59	18	1517	142	31	991	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	45	0	15	5	379	36	8	248	0
Total Analysis Volume [veh/h]	0	1	0	178	0	59	18	1517	142	31	991	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	66	0	0	66	0	37	76	0	38	77	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	62	62	33	72	72	34	73	73
g / C, Green / Cycle	0.34	0.34	0.18	0.40	0.40	0.19	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.00	0.16	0.01	0.31	0.31	0.02	0.18	0.18
s, saturation flow rate [veh/h]	1870	1467	1781	3560	1789	1781	3560	1870
c, Capacity [veh/h]	664	540	327	1424	716	336	1444	758
d1, Uniform Delay [s]	38.70	45.84	60.64	46.96	46.98	60.26	38.90	38.90
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.58	0.32	4.18	8.06	0.54	1.02	1.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.44	0.06	0.78	0.78	0.09	0.45	0.45
d, Delay for Lane Group [s/veh]	38.70	48.41	60.96	51.14	55.04	60.80	39.92	40.83
Lane Group LOS	D	D	E	D	E	E	D	D
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	8.81	0.72	22.33	23.25	1.23	10.78	11.51
50th-Percentile Queue Length [ft/ln]	0.77	220.27	17.88	558.37	581.21	30.80	269.47	287.86
95th-Percentile Queue Length [veh/ln]	0.06	13.68	1.29	30.09	31.16	2.22	16.16	17.08
95th-Percentile Queue Length [ft/ln]	1.38	341.97	32.18	752.13	778.90	55.44	404.08	426.98

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	38.70	38.70	38.70	48.41	48.41	48.41	60.96	52.20	55.04	60.80	40.23	40.83
Movement LOS	D	D	D	D	D	D	E	D	E	E	D	D
d_A, Approach Delay [s/veh]	38.70			48.41			52.53			40.86		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	48.13											
Intersection LOS	D											
Intersection V/C	0.515											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	62.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	38.68	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.757	1.948	3.313	3.049
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	689	800	811
d_b, Bicycle Delay [s]	38.68	38.68	32.40	31.80
l_b,int, Bicycle LOS Score for Intersection	1.561	1.951	2.482	2.122
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	31	274	205	21	25	79
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	6	-2	7	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	277	211	19	32	83
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	69	53	5	8	21
Total Analysis Volume [veh/h]	31	277	211	19	32	83
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.07	0.10
d_M, Delay for Movement [s/veh]	7.75	0.00	0.00	0.00	13.62	10.46
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.60	0.60
95th-Percentile Queue Length [ft/ln]	1.78	1.78	0.00	0.00	15.07	15.07
d_A, Approach Delay [s/veh]	0.78		0.00		11.34	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.37					
Intersection LOS	B					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	4	3	3	123	3	171	3	52	141	160	33	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	5	0	5	0	0	3	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	3	3	128	3	176	3	52	144	160	33	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	32	1	44	1	13	36	40	8	0
Total Analysis Volume [veh/h]	4	3	3	128	3	176	3	52	144	160	33	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.29	0.01	0.19	0.00	0.00	0.00	0.12	0.00	0.00
d_M, Delay for Movement [s/veh]	16.64	14.51	8.66	18.43	18.76	14.17	7.29	0.00	0.00	7.96	0.00	0.00
Movement LOS	C	B	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	2.67	2.67	2.67	0.01	0.01	0.01	0.39	0.39	0.39
95th-Percentile Queue Length [ft/ln]	1.79	1.79	1.79	66.68	66.68	66.68	0.14	0.14	0.14	9.84	9.84	9.84
d_A, Approach Delay [s/veh]	13.61			15.99			0.11			6.56		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	8.93											
Intersection LOS	C											

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Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	175.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.838

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	1114	58	17	1369	51	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	30	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1119	58	17	1399	51	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	280	15	4	350	13	4
Total Analysis Volume [veh/h]	1119	58	17	1399	51	14
Pedestrian Volume [ped/h]	0		0		0	

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.84	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	11.29	0.00	174.95	123.78
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.00	4.36	4.36
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.23	0.00	109.05	109.05
d_A, Approach Delay [s/veh]	0.00		0.14		163.93	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	4.08					
Intersection LOS	F					

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Scenario 4 Near-Term Plus Project AM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	150	893	44	12	846	61	171	76	182	43	48	36	2562

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	0	850	163	172	1004	7	2	0	0	282	0	195	2675

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	166	4	166	14	9	4	101	1502	7	53	777	121	2924

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	177	726	39	181	732	297	267	1239	181	299	638	144	4920

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	63	10	110	0	6	8	57	1742	29	9	892	100	3026

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	11	0	15	1	0	1	130	1743	2	6	1097	40	3046

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	66	0	212	0	97	1825	0	8	1081	95	3384

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	23	10	34	302	3	214	62	1615	223	157	1158	8	3809

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	0	1	0	0	0	86	1420	118	106	1110	0	2841

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	14	4	5	77	13	97	27	1387	87	148	784	50	2693

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	0	1	0	178	0	59	18	1517	142	31	991	0	2937

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	31	277	211	19	32	83	653

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	4	3	3	128	3	176	3	52	144	160	33	1	710

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	1119	58	17	1399	51	14	2658

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Report File: \...\Near-Term + Project PM.pdf

Scenario 4 Near-Term + Project PM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.507	10.3	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	NB Left	0.577	15.8	B
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	NWB Left	0.581	15.5	B
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Left	0.791	63.5	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.523	35.8	D
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	NEB Left	0.307	140.6	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	NWB Left	0.521	38.3	D
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NEB Left	0.518	44.1	D
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	SEB Left	0.534	50.4	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NWB Left	0.544	55.2	E
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	SWB Left	0.426	40.9	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.055	9.8	A
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.007	10.6	B
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.518	66.7	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.507

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	44	781	18	18	976	38	43	18	41	30	7	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	18	0	0	16	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	799	18	18	992	38	43	18	41	30	7	25
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	200	5	5	248	10	11	5	10	8	2	6
Total Analysis Volume [veh/h]	44	799	18	18	992	38	43	18	41	30	7	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	34	34	34	34	34	34	34	34	34
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	2	14	14	1	13	13	4	4	4
g / C, Green / Cycle	0.05	0.40	0.40	0.02	0.38	0.38	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.22	0.01	0.28	0.28	0.03	0.03	0.07
s, saturation flow rate [veh/h]	1781	1870	1855	1781	1870	1846	1812	1589	873
c, Capacity [veh/h]	91	758	752	42	707	697	416	207	271
d1, Uniform Delay [s]	15.70	7.71	7.71	16.37	9.11	9.11	13.31	13.21	13.57
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.91	0.60	0.61	6.61	1.50	1.52	0.16	0.47	0.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.54	0.54	0.42	0.73	0.73	0.15	0.20	0.23
d, Delay for Lane Group [s/veh]	19.61	8.31	8.31	22.99	10.61	10.63	13.47	13.68	13.99
Lane Group LOS	B	A	A	C	B	B	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.36	1.44	1.43	0.19	2.28	2.25	0.37	0.26	0.37
50th-Percentile Queue Length [ft/ln]	9.06	36.09	35.84	4.72	56.90	56.26	9.20	6.50	9.34
95th-Percentile Queue Length [veh/ln]	0.65	2.60	2.58	0.34	4.10	4.05	0.66	0.47	0.67
95th-Percentile Queue Length [ft/ln]	16.31	64.96	64.51	8.49	102.41	101.27	16.56	11.70	16.82

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Movement, Approach, & Intersection Results

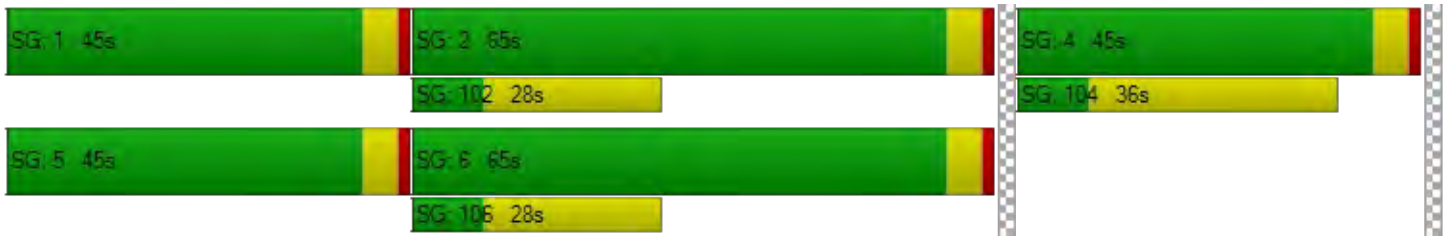
d_M, Delay for Movement [s/veh]	19.61	8.31	8.31	22.99	10.62	10.63	13.47	13.47	13.68	13.99	13.99	13.99
Movement LOS	B	A	A	C	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	8.89			10.83			13.55			13.99		
Approach LOS	A			B			B			B		
d_I, Intersection Delay [s/veh]	10.25											
Intersection LOS	B											
Intersection V/C	0.507											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	7.09	0.00	7.09	7.09
l_p,int, Pedestrian LOS Score for Intersection	2.716	0.000	1.928	1.707
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	3535	3535	2357	2357
d_b, Bicycle Delay [s]	10.00	10.00	0.54	0.54
l_b,int, Bicycle LOS Score for Intersection	2.270	2.424	1.728	1.662
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	15.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.577

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	3	821	273	122	914	2	0	0	0	213	0	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	0	0	-1	5	8	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	830	273	122	913	7	8	0	0	213	0	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	208	68	31	228	2	2	0	0	53	0	31
Total Analysis Volume [veh/h]	3	830	273	122	913	7	8	0	0	213	0	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	66	66	66	66	66	66	66	66	66
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	32	32	6	38	38	13	13	13
g / C, Green / Cycle	0.00	0.49	0.49	0.09	0.58	0.58	0.20	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.00	0.31	0.31	0.07	0.25	0.25	0.02	0.12	0.08
s, saturation flow rate [veh/h]	1781	1870	1714	1781	1870	1865	409	1742	1589
c, Capacity [veh/h]	3	909	833	165	1078	1075	189	450	311
d1, Uniform Delay [s]	33.16	12.68	12.69	29.38	7.90	7.90	29.74	24.40	23.26
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	267.31	2.64	2.89	8.96	0.98	0.98	0.13	1.10	1.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.96	0.63	0.63	0.74	0.43	0.43	0.04	0.47	0.39
d, Delay for Lane Group [s/veh]	300.48	15.33	15.59	38.34	8.88	8.88	29.87	25.50	24.41
Lane Group LOS	F	B	B	D	A	A	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.28	5.95	5.52	2.19	3.16	3.15	0.13	3.03	1.68
50th-Percentile Queue Length [ft/ln]	6.96	148.77	138.05	54.82	79.03	78.83	3.22	75.63	41.89
95th-Percentile Queue Length [veh/ln]	0.50	9.95	9.38	3.95	5.69	5.68	0.23	5.45	3.02
95th-Percentile Queue Length [ft/ln]	12.52	248.79	234.39	98.67	142.25	141.90	5.80	136.13	75.40

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Version 2021 (SP 0-4)

Movement, Approach, & Intersection Results

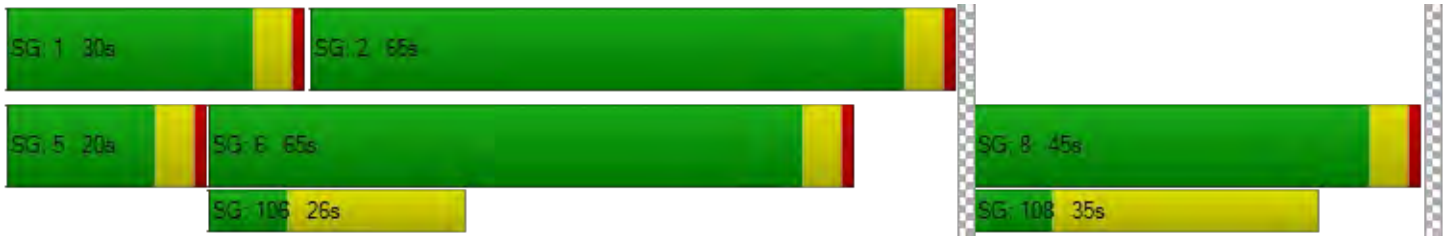
d_M, Delay for Movement [s/veh]	300.48	15.41	15.59	38.34	8.88	8.88	29.87	29.87	29.87	25.50	25.50	24.41
Movement LOS	F	B	B	D	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	16.22			12.33			29.87			25.10		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	15.83											
Intersection LOS	B											
Intersection V/C	0.577											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	22.25	22.25	38.35
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.748	1.701	2.181
Crosswalk LOS	F	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1809	1809	1206	1206
d_b, Bicycle Delay [s]	0.30	0.30	5.22	5.22
l_b,int, Bicycle LOS Score for Intersection	2.472	2.419	1.573	2.112
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.581

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	105	5	82	13	2	18	74	1062	11	41	1709	159
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	47	0	0	84	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	5	82	13	2	18	74	1109	11	41	1793	159
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	1	21	3	1	5	19	277	3	10	448	40
Total Analysis Volume [veh/h]	105	5	82	13	2	18	74	1109	11	41	1793	159
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	116.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	30	0	20	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	23	23	23	8	109	109	6	107	107
g / C, Green / Cycle	0.15	0.15	0.15	0.05	0.73	0.73	0.04	0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.14	0.05	0.12	0.04	0.21	0.21	0.02	0.36	0.37
s, saturation flow rate [veh/h]	793	1589	265	1781	3560	1861	1781	3560	1793
c, Capacity [veh/h]	169	245	74	94	2585	1351	68	2533	1276
d1, Uniform Delay [s]	62.19	56.55	55.98	70.19	7.09	7.09	71.01	9.82	9.85
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.14	0.79	4.09	13.30	0.28	0.53	8.28	0.74	1.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.33	0.44	0.79	0.28	0.28	0.60	0.51	0.51
d, Delay for Lane Group [s/veh]	66.34	57.34	60.08	83.49	7.37	7.62	79.29	10.56	11.34
Lane Group LOS	E	E	E	F	A	A	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.32	2.85	1.18	3.15	3.95	4.23	1.71	9.36	9.77
50th-Percentile Queue Length [ft/ln]	108.09	71.25	29.51	78.87	98.87	105.72	42.69	233.89	244.18
95th-Percentile Queue Length [veh/ln]	7.73	5.13	2.12	5.68	7.12	7.60	3.07	14.37	14.89
95th-Percentile Queue Length [ft/ln]	193.34	128.24	53.12	141.96	177.96	190.03	76.85	359.29	372.31

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.34	66.34	57.34	60.08	60.08	60.08	83.49	7.46	7.62	79.29	10.78	11.34
Movement LOS	E	E	E	E	E	E	F	A	A	E	B	B
d_A, Approach Delay [s/veh]	62.49			60.08			12.17			12.23		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	15.50											
Intersection LOS	B											
Intersection V/C	0.581											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.107	1.771	3.123	3.276
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.34	64.50
l_b,int, Bicycle LOS Score for Intersection	1.876	1.614	2.216	2.656
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	63.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.791

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	207	449	86	301	619	147	359	786	125	436	1367	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	-6	2	15	15	1	32	0	0	60	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	207	473	80	303	634	162	360	818	125	436	1427	212
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	118	20	76	159	41	90	205	31	109	357	53
Total Analysis Volume [veh/h]	207	473	80	303	634	162	360	818	125	436	1427	212
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	45.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	20	44	0	23	47	0	25	49	0	34	58	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	15	39	39	18	42	42	20	44	44	29	53	53
g / C, Green / Cycle	0.10	0.26	0.26	0.12	0.28	0.28	0.14	0.30	0.30	0.19	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.07	0.17	0.17	0.10	0.20	0.11	0.12	0.20	0.20	0.14	0.34	0.35
s, saturation flow rate [veh/h]	3113	1683	1599	3113	3204	1431	3113	3204	1571	3113	3204	1575
c, Capacity [veh/h]	320	442	420	382	906	404	423	949	465	600	1141	561
d1, Uniform Delay [s]	64.69	49.02	49.05	63.95	48.11	43.52	63.31	46.31	46.32	56.85	47.25	47.53
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.76	6.96	7.36	15.53	4.49	2.94	18.88	3.71	7.40	7.53	18.56	31.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.64	0.64	0.79	0.70	0.40	0.85	0.67	0.67	0.73	0.96	0.97
d, Delay for Lane Group [s/veh]	74.45	55.99	56.40	79.48	52.60	46.46	82.19	50.02	53.72	64.38	65.81	78.98
Lane Group LOS	E	E	E	E	D	D	F	D	D	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.23	10.26	9.82	6.44	11.15	5.22	7.80	10.82	11.10	8.37	22.67	24.63
50th-Percentile Queue Length [ft/ln]	105.84	256.43	245.47	160.92	278.67	130.57	195.11	270.56	277.51	209.16	566.63	615.67
95th-Percentile Queue Length [veh/ln]	7.61	15.51	14.96	10.60	16.62	8.97	12.39	16.22	16.56	13.11	30.47	32.77
95th-Percentile Queue Length [ft/ln]	190.20	387.74	373.94	264.94	415.56	224.26	309.64	405.44	414.11	327.75	761.83	819.13

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Movement, Approach, & Intersection Results

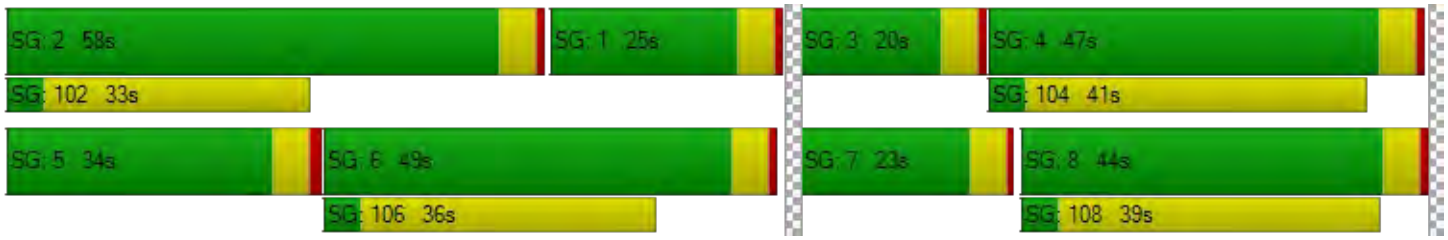
d_M, Delay for Movement [s/veh]	74.45	56.15	56.40	79.48	52.60	46.46	82.19	50.86	53.72	64.38	68.88	78.98
Movement LOS	E	E	E	E	D	D	F	D	D	E	E	E
d_A, Approach Delay [s/veh]	61.16			59.11			59.79			68.96		
Approach LOS	E			E			E			E		
d_I, Intersection Delay [s/veh]	63.48											
Intersection LOS	E											
Intersection V/C	0.791											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	67.21	67.21	67.21	67.21
l_p,int, Pedestrian LOS Score for Intersection	2.939	3.055	3.194	3.215
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	525	565	592	712
d_b, Bicycle Delay [s]	40.77	38.59	37.17	31.11
l_b,int, Bicycle LOS Score for Intersection	2.187	2.466	2.276	2.701
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	35.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	1	91	5	3	12	64	1237	5	26	1790	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	-1	0	-2	0	0	0	-1	32	0	0	57	-12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	1	89	5	3	12	63	1269	5	26	1847	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	22	1	1	3	16	317	1	7	462	16
Total Analysis Volume [veh/h]	62	1	89	5	3	12	63	1269	5	26	1847	63
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	95.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	33	68	0	31	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	140	140	140	140	140	140	140	140
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	29	64	64	27	62	62
g / C, Green / Cycle	0.26	0.26	0.21	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.04	0.23	0.23	0.01	0.35	0.35
s, saturation flow rate [veh/h]	1525	1583	1781	3560	1866	1781	3560	1839
c, Capacity [veh/h]	437	448	373	1625	852	347	1574	813
d1, Uniform Delay [s]	42.01	38.49	45.37	27.03	27.03	46.03	33.70	33.73
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.18	0.19	0.98	1.17	2.22	0.42	4.35	8.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.04	0.17	0.51	0.51	0.07	0.80	0.80
d, Delay for Lane Group [s/veh]	44.19	38.68	46.35	28.20	29.24	46.45	38.05	41.90
Lane Group LOS	D	D	D	C	C	D	D	D
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.64	0.56	1.91	10.11	10.85	0.78	19.05	20.58
50th-Percentile Queue Length [ft/ln]	116.03	13.97	47.66	252.74	271.16	19.61	476.13	514.59
95th-Percentile Queue Length [veh/ln]	8.17	1.01	3.43	15.32	16.25	1.41	26.20	28.02
95th-Percentile Queue Length [ft/ln]	204.36	25.15	85.80	383.10	406.18	35.30	655.06	700.61

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.19	44.19	44.19	38.68	38.68	38.68	46.35	28.55	29.24	46.45	39.28	41.90
Movement LOS	D	D	D	D	D	D	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	44.19			38.68			29.39			39.46		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	35.76											
Intersection LOS	D											
Intersection V/C	0.523											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	59.43	59.43	61.29	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.850	1.749	3.156	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	526	913	884
d_b, Bicycle Delay [s]	38.04	38.04	20.68	21.78
l_b,int, Bicycle LOS Score for Intersection	1.810	1.593	2.295	2.624
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	140.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.307

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	9	0	29	1	0	0	34	1337	0	14	1587	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	1	0	0	0	6	36	0	0	54	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	30	1	0	0	40	1373	0	14	1641	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	8	0	0	0	10	343	0	4	410	5
Total Analysis Volume [veh/h]	10	0	30	1	0	0	40	1373	0	14	1641	21
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.31	0.00	0.11	0.03	0.00	0.00	0.22	0.01	0.00	0.05	0.02	0.00
d_M, Delay for Movement [s/veh]	140.57	475.06	43.27	104.90	460.10	18.45	29.74	0.00	0.00	19.78	0.00	0.00
Movement LOS	F	F	E	F	F	C	D	A	A	C	A	A
95th-Percentile Queue Length [veh/ln]	1.73	1.73	1.73	0.08	0.08	0.08	0.79	0.00	0.00	0.17	0.00	0.00
95th-Percentile Queue Length [ft/ln]	43.31	43.31	43.31	2.04	2.04	2.04	19.81	0.00	0.00	4.29	0.00	0.00
d_A, Approach Delay [s/veh]	67.60			104.90			0.84			0.17		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	1.37											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	38.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	42	0	99	0	0	0	68	1304	0	6	1850	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	7	0	0	0	10	42	0	0	55	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	0	106	0	0	0	78	1346	0	6	1905	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	27	0	0	0	20	337	0	2	476	5
Total Analysis Volume [veh/h]	42	0	106	0	0	0	78	1346	0	6	1905	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	134.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	44	44	0	0	0	0	36	73	0	33	70	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	150		150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	40		32	69	69	29	66	66
g / C, Green / Cycle	0.27		0.22	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.09		0.04	0.25	0.25	0.00	0.36	0.36
s, saturation flow rate [veh/h]	1639		1781	3560	1870	1781	3560	1860
c, Capacity [veh/h]	440		383	1635	859	348	1564	817
d1, Uniform Delay [s]	44.09		48.29	29.15	29.15	48.73	36.57	36.58
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.05		1.19	1.28	2.43	0.09	4.62	8.50
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.34		0.20	0.54	0.54	0.02	0.81	0.81
d, Delay for Lane Group [s/veh]	46.15		49.49	30.43	31.58	48.82	41.18	45.08
Lane Group LOS	D		D	C	C	D	D	D
Critical Lane Group	Yes		Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.78		2.54	11.68	12.54	0.19	20.87	22.70
50th-Percentile Queue Length [ft/ln]	119.41		63.51	292.06	313.62	4.80	521.72	567.47
95th-Percentile Queue Length [veh/ln]	8.36		4.57	17.29	18.35	0.35	28.36	30.51
95th-Percentile Queue Length [ft/ln]	209.01		114.32	432.20	458.84	8.64	709.02	762.81

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	46.15	46.15	46.15	0.00	0.00	0.00	49.49	30.83	31.58	48.82	42.49	45.08
Movement LOS	D	D	D				D	C	C	D	D	D
d_A, Approach Delay [s/veh]	46.15			0.00			31.85			42.54		
Approach LOS	D			A			C			D		
d_I, Intersection Delay [s/veh]	38.35											
Intersection LOS	D											
Intersection V/C	0.521											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	64.40	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.840	1.742	3.176	3.158
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	537	0	919	879
d_b, Bicycle Delay [s]	40.11	75.00	21.92	23.58
l_b,int, Bicycle LOS Score for Intersection	1.804	1.560	2.343	2.622
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	44.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.518

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	0	273	0	135	64	1151	201	205	1837	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	8	15	3	14	16	24	17	37	5	27	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	8	15	276	14	151	88	1168	238	210	1864	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	4	69	4	38	22	292	60	53	466	8
Total Analysis Volume [veh/h]	18	8	15	276	14	151	88	1168	238	210	1864	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	132.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	9	0	0	42	0	31	66	0	33	68	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	5	38	38	38	27	62	62	29	64	64
g / C, Green / Cycle	0.04	0.26	0.26	0.26	0.18	0.41	0.41	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.08	0.09	0.05	0.27	0.27	0.06	0.35	0.35
s, saturation flow rate [veh/h]	1721	1781	1789	1589	1781	3560	1712	3459	3560	1855
c, Capacity [veh/h]	61	455	457	406	324	1469	707	676	1517	790
d1, Uniform Delay [s]	71.50	45.27	45.27	45.96	52.79	35.28	35.28	51.70	37.99	38.02
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	46.50	1.84	1.83	2.60	2.06	2.21	4.52	1.20	5.10	9.41
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.32	0.32	0.37	0.27	0.65	0.65	0.31	0.82	0.82
d, Delay for Lane Group [s/veh]	118.00	47.10	47.09	48.56	54.85	37.49	39.80	52.90	43.10	47.43
Lane Group LOS	F	D	D	D	D	D	D	D	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.38	4.70	4.72	5.03	3.05	14.28	14.19	3.51	20.98	22.86
50th-Percentile Queue Length [ft/ln]	59.52	117.47	117.98	125.68	76.31	356.92	354.73	87.81	524.52	571.38
95th-Percentile Queue Length [veh/ln]	4.29	8.25	8.28	8.70	5.49	20.47	20.37	6.32	28.49	30.70
95th-Percentile Queue Length [ft/ln]	107.14	206.35	207.05	217.60	137.36	511.84	509.17	158.07	712.32	767.39

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Movement, Approach, & Intersection Results

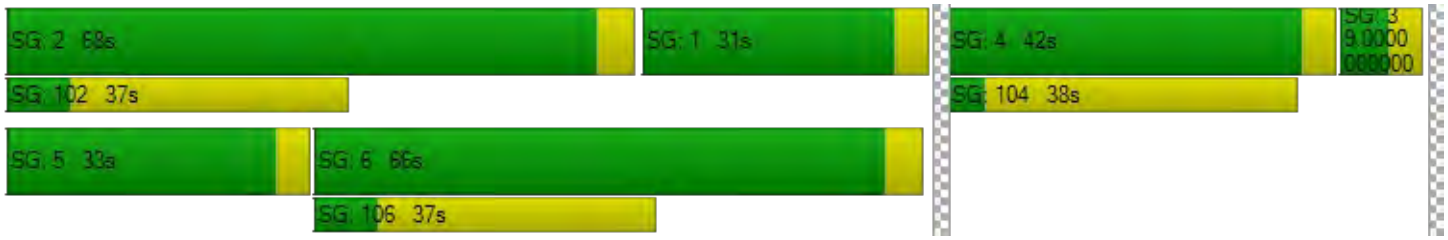
d_M, Delay for Movement [s/veh]	118.00	118.00	118.00	47.10	47.09	48.56	54.85	37.92	39.80	52.90	44.54	47.43
Movement LOS	F	F	F	D	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	118.00			47.60			39.22			45.41		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	44.11											
Intersection LOS	D											
Intersection V/C	0.518											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	67.21
l_p,int, Pedestrian LOS Score for Intersection	1.781	2.470	0.000	3.241
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	71	511	825	852
d_b, Bicycle Delay [s]	69.79	41.59	25.87	24.71
l_b,int, Bicycle LOS Score for Intersection	1.627	2.287	2.381	2.717
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	50.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.534

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	3	45	0	140	61	1075	96	118	1930	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	47	0	24	60	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	3	45	0	140	61	1122	96	142	1990	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	11	0	35	15	281	24	36	498	1
Total Analysis Volume [veh/h]	0	1	3	45	0	140	61	1122	96	142	1990	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	105.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	24	60	0	29	65	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	20	55	55	25	60	60
g / C, Green / Cycle	0.10	0.25	0.25	0.13	0.37	0.37	0.16	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.09	0.03	0.23	0.23	0.08	0.37	0.37
s, saturation flow rate [veh/h]	1651	1781	1589	1781	3560	1796	1781	3560	1869
c, Capacity [veh/h]	164	450	402	232	1315	663	291	1434	753
d1, Uniform Delay [s]	60.99	42.97	45.93	58.78	38.61	38.62	57.05	42.27	42.27
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	0.44	2.38	2.76	2.17	4.25	5.76	10.24	17.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.10	0.35	0.26	0.62	0.62	0.49	0.91	0.91
d, Delay for Lane Group [s/veh]	61.26	43.42	48.31	61.54	40.77	42.87	62.81	52.51	59.44
Lane Group LOS	E	D	D	E	D	D	E	D	E
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.15	1.37	4.64	2.28	12.65	13.15	5.40	24.74	27.42
50th-Percentile Queue Length [ft/ln]	3.85	34.26	115.95	57.12	316.26	328.82	134.98	618.49	685.62
95th-Percentile Queue Length [veh/ln]	0.28	2.47	8.17	4.11	18.48	19.10	9.21	32.90	36.01
95th-Percentile Queue Length [ft/ln]	6.93	61.67	204.24	102.82	462.09	477.52	230.25	822.41	900.33

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Movement, Approach, & Intersection Results

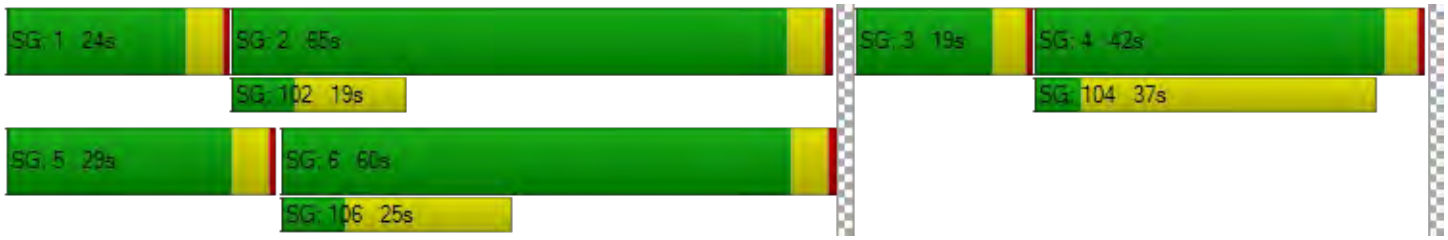
d_M, Delay for Movement [s/veh]	61.26	61.26	61.26	43.42	48.31	48.31	61.54	41.36	42.87	62.81	54.89	59.44
Movement LOS	E	E	E	D	D	D	E	D	D	E	D	E
d_A, Approach Delay [s/veh]	61.26			47.12			42.43			55.42		
Approach LOS	E			D			D			E		
d_I, Intersection Delay [s/veh]	50.39											
Intersection LOS	D											
Intersection V/C	0.534											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.756	2.079	0.000	3.092
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	805
d_b, Bicycle Delay [s]	60.84	41.89	29.83	26.76
l_b,int, Bicycle LOS Score for Intersection	1.566	1.865	2.263	2.733
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	55.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.544

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	51	27	82	201	30	119	88	1000	152	237	1558	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	33	0	0	54	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	27	82	201	30	119	88	1033	152	237	1612	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	7	21	50	8	30	22	258	38	59	403	31
Total Analysis Volume [veh/h]	51	27	82	201	30	119	88	1033	152	237	1612	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	63.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	25	0	0	42	0	21	48	0	35	60	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	21	21	38	38	38	17	44	44	31	56	56
g / C, Green / Cycle	0.14	0.14	0.25	0.25	0.25	0.11	0.29	0.29	0.21	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.04	0.05	0.06	0.06	0.07	0.05	0.22	0.22	0.13	0.32	0.32
s, saturation flow rate [veh/h]	1811	1589	1781	1803	1589	1781	3560	1750	1781	3560	1804
c, Capacity [veh/h]	251	220	450	456	402	199	1035	509	372	1320	669
d1, Uniform Delay [s]	58.15	58.67	44.78	44.77	45.28	62.21	48.57	48.59	54.18	43.86	43.95
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.20	4.76	1.37	1.35	1.88	6.93	5.46	10.65	8.12	8.07	14.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.37	0.26	0.25	0.30	0.44	0.77	0.77	0.64	0.87	0.87
d, Delay for Lane Group [s/veh]	61.34	63.43	46.14	46.12	47.15	69.15	54.03	59.23	62.30	51.94	58.82
Lane Group LOS	E	E	D	D	D	E	D	E	E	D	E
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.97	3.20	3.64	3.68	3.84	3.52	14.30	14.81	9.00	21.09	22.76
50th-Percentile Queue Length [ft/ln]	74.21	80.08	90.98	91.96	96.09	88.04	357.53	370.22	225.05	527.27	568.95
95th-Percentile Queue Length [veh/ln]	5.34	5.77	6.55	6.62	6.92	6.34	20.50	21.12	13.92	28.62	30.58
95th-Percentile Queue Length [ft/ln]	133.58	144.15	163.76	165.53	172.97	158.46	512.58	527.99	348.06	715.56	764.54

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Movement, Approach, & Intersection Results

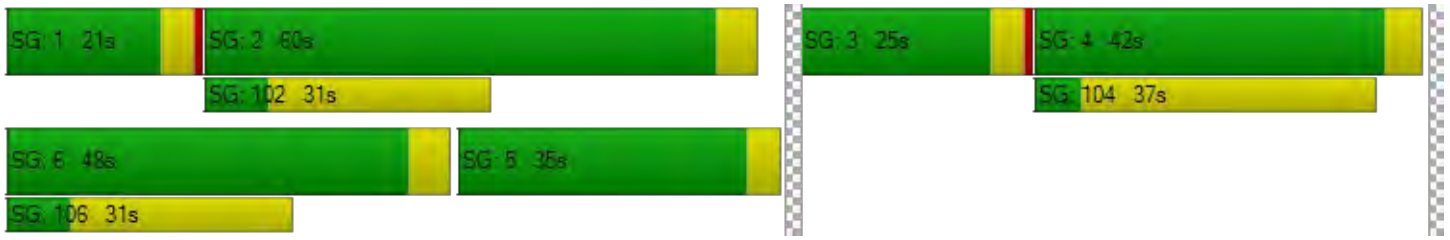
d_M, Delay for Movement [s/veh]	61.34	61.34	63.43	46.13	46.12	47.15	69.15	55.23	59.23	62.30	53.91	58.82
Movement LOS	E	E	E	D	D	D	E	E	E	E	D	E
d_A, Approach Delay [s/veh]	62.41			46.48			56.67			55.23		
Approach LOS	E			D			E			E		
d_I, Intersection Delay [s/veh]	55.21											
Intersection LOS	E											
Intersection V/C	0.544											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	2.030	2.342	0.000	3.135
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	277	505	581	741
d_b, Bicycle Delay [s]	55.64	41.89	37.74	29.70
l_b,int, Bicycle LOS Score for Intersection	1.824	2.137	2.260	2.644
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	40.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.426

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	3	4	4	71	0	38	13	1248	111	45	1608	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	20	0	0	0	31	6	0	55	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	4	4	91	0	38	13	1279	117	45	1663	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	23	0	10	3	320	29	11	416	0
Total Analysis Volume [veh/h]	3	4	4	91	0	38	13	1279	117	45	1663	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	83.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	45	0	0	45	0	39	64	0	41	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	41	35	60	60	37	62	62
g / C, Green / Cycle	0.27	0.27	0.23	0.40	0.40	0.25	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.01	0.09	0.01	0.26	0.26	0.03	0.31	0.31
s, saturation flow rate [veh/h]	1648	1479	1781	3560	1791	1781	3560	1870
c, Capacity [veh/h]	481	445	416	1424	716	439	1472	773
d1, Uniform Delay [s]	39.85	43.03	44.41	36.53	36.53	43.67	37.21	37.21
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.09	1.64	0.14	2.33	4.58	0.47	3.40	6.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.29	0.03	0.65	0.65	0.10	0.74	0.74
d, Delay for Lane Group [s/veh]	39.94	44.67	44.55	38.86	41.11	44.13	40.61	43.52
Lane Group LOS	D	D	D	D	D	D	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.31	4.06	0.39	14.22	14.75	1.36	17.46	18.97
50th-Percentile Queue Length [ft/ln]	7.87	101.39	9.84	355.38	368.68	34.06	436.48	474.15
95th-Percentile Queue Length [veh/ln]	0.57	7.30	0.71	20.40	21.05	2.45	24.31	26.11
95th-Percentile Queue Length [ft/ln]	14.17	182.50	17.72	509.96	526.13	61.31	607.79	652.70

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Movement, Approach, & Intersection Results

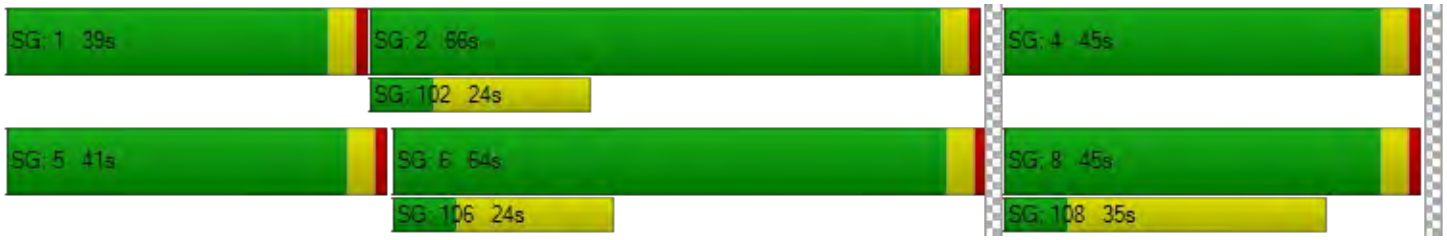
d_M, Delay for Movement [s/veh]	39.94	39.94	39.94	44.67	44.67	44.67	44.55	39.48	41.11	44.13	41.61	43.52
Movement LOS	D	D	D	D	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	39.94			44.67			39.66			41.68		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	40.92											
Intersection LOS	D											
Intersection V/C	0.426											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	41.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	39.60	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.751	1.883	3.243	3.115
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	547	547	800	827
d_b, Bicycle Delay [s]	39.60	39.60	27.00	25.81
l_b,int, Bicycle LOS Score for Intersection	1.578	1.772	2.335	2.499
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.055

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	1	85	63	3	44	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	6	4	6	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	91	67	9	45	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	23	17	2	11	8
Total Analysis Volume [veh/h]	2	91	67	9	45	32
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.03
d_M, Delay for Movement [s/veh]	7.37	0.00	0.00	0.00	9.76	9.02
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.10	0.10	0.00	0.00	7.13	7.13
d_A, Approach Delay [s/veh]	0.16		0.00		9.45	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.02					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	0	3	1	49	5	40	3	19	38	42	24	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	2	0	0	3	4	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	1	51	5	42	3	19	41	46	24	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	13	1	11	1	5	10	12	6	1
Total Analysis Volume [veh/h]	0	3	1	51	5	42	3	19	41	46	24	3
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.07	0.01	0.04	0.00	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	10.02	10.26	8.45	10.17	10.64	9.02	7.27	0.00	0.00	7.40	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.38	0.38	0.38	0.01	0.01	0.01	0.09	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.40	0.40	0.40	9.56	9.56	9.56	0.14	0.14	0.14	2.30	2.30	2.30
d_A, Approach Delay [s/veh]	9.81			9.70			0.35			4.67		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	5.68											
Intersection LOS	B											

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Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	66.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.518

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	926	54	20	969	57	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	0	4	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	943	54	20	973	57	13
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	236	14	5	243	14	3
Total Analysis Volume [veh/h]	943	54	20	973	57	13
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.03	0.01	0.52	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	10.38	0.00	66.74	41.00
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.00	2.63	2.63
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.24	0.00	65.66	65.66
d_A, Approach Delay [s/veh]	0.00		0.21		61.96	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	2.21					
Intersection LOS	F					

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Vistro File: \...\330 Distel Circle Vistro PM.vistro
Report File: \...\Near-Term + Project PM.pdf

Scenario 4 Near-Term + Project PM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	44	799	18	18	992	38	43	18	41	30	7	25	2073

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	3	830	273	122	913	7	8	0	0	213	0	122	2491

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	105	5	82	13	2	18	74	1109	11	41	1793	159	3412

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	207	473	80	303	634	162	360	818	125	436	1427	212	5237

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	62	1	89	5	3	12	63	1269	5	26	1847	63	3445

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	10	0	30	1	0	0	40	1373	0	14	1641	21	3130

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	42	0	106	0	78	1346	0	6	1905	21	3504

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	18	8	15	276	14	151	88	1168	238	210	1864	30	4080

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	1	3	45	0	140	61	1122	96	142	1990	2	3602

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	51	27	82	201	30	119	88	1033	152	237	1612	122	3754

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	3	4	4	91	0	38	13	1279	117	45	1663	0	3257

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	2	91	67	9	45	32	246

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	0	3	1	51	5	42	3	19	41	46	24	3	238

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	943	54	20	973	57	13	2060

Vistro File: \...\330 Distel Circle Vistro AM.vistro
Report File: \...\Cumulative AM.pdf

Scenario 5 Cumulative AM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.858	32.5	C
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	NB Left	0.739	27.2	C
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	SEB Left	0.640	23.4	C
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Right	0.819	76.4	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.578	21.0	C
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	SWB Left	0.130	509.1	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	SEB Left	0.639	31.3	C
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NWB Right	0.677	65.9	E
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	NWB Right	0.444	52.5	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NWB Right	0.549	57.8	E
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	NWB Right	0.614	57.5	E
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.073	15.1	C
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.011	25.2	D
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	1.862	664.9	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	32.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.858

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	150	887	44	12	820	61	171	76	182	43	48	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	62	0	0	36	0	0	0	0	0	0	-1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	177	1109	52	14	1004	72	202	90	215	51	57	43
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	277	13	4	251	18	51	23	54	13	14	11
Total Analysis Volume [veh/h]	177	1109	52	14	1004	72	202	90	215	51	57	43
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	99	99	99	99	99	99	99	99	99
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	12	43	43	2	32	32	40	40	40
g / C, Green / Cycle	0.12	0.43	0.43	0.02	0.33	0.33	0.40	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.10	0.31	0.31	0.01	0.29	0.29	0.35	0.14	0.39
s, saturation flow rate [veh/h]	1781	1870	1841	1781	1870	1826	826	1589	388
c, Capacity [veh/h]	215	805	792	29	610	596	393	639	204
d1, Uniform Delay [s]	42.67	23.46	23.48	48.47	31.84	31.85	26.86	20.54	30.48
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.36	0.11	0.42
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.69	1.27	1.30	11.66	4.82	4.93	8.75	0.31	18.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.73	0.73	0.48	0.89	0.89	0.74	0.34	0.74
d, Delay for Lane Group [s/veh]	50.36	24.73	24.78	60.14	36.66	36.78	35.62	20.84	48.69
Lane Group LOS	D	C	C	E	D	D	D	C	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.62	11.01	10.88	0.43	12.71	12.44	7.15	3.49	4.70
50th-Percentile Queue Length [ft/ln]	115.43	275.22	271.93	10.84	317.71	310.93	178.87	87.29	117.57
95th-Percentile Queue Length [veh/ln]	8.14	16.45	16.29	0.78	18.56	18.22	11.54	6.28	8.26
95th-Percentile Queue Length [ft/ln]	203.53	411.26	407.14	19.52	463.88	455.52	288.53	157.12	206.48

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Movement, Approach, & Intersection Results

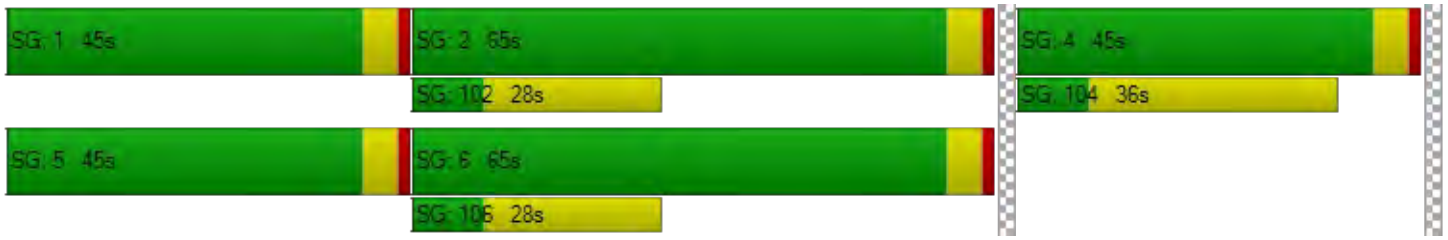
d_M, Delay for Movement [s/veh]	50.36	24.75	24.78	60.14	36.71	36.78	35.62	35.62	20.84	48.69	48.69	48.69
Movement LOS	D	C	C	E	D	D	D	D	C	D	D	D
d_A, Approach Delay [s/veh]	28.14			37.02			29.35			48.69		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	32.48											
Intersection LOS	C											
Intersection V/C	0.858											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.39	0.00	38.39	38.39
l_p,int, Pedestrian LOS Score for Intersection	2.969	0.000	2.164	1.868
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1208	1208	805	805
d_b, Bicycle Delay [s]	7.79	7.79	17.72	17.72
l_b,int, Bicycle LOS Score for Intersection	2.663	2.459	2.396	1.809
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.739

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	0	847	161	172	981	0	0	0	0	279	0	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	44	3	0	29	10	18	0	4	6	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1043	193	203	1187	10	18	0	4	335	0	230
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	261	48	51	297	3	5	0	1	84	0	58
Total Analysis Volume [veh/h]	1	1043	193	203	1187	10	18	0	4	335	0	230
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	104	104	104	104	104	104	104	104	104
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	46	46	14	60	60	29	29	29
g / C, Green / Cycle	0.00	0.45	0.45	0.14	0.58	0.58	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.00	0.34	0.34	0.11	0.32	0.32	0.07	0.22	0.14
s, saturation flow rate [veh/h]	1781	1870	1770	1781	1870	1864	304	1520	1589
c, Capacity [veh/h]	1	832	788	242	1086	1082	146	487	437
d1, Uniform Delay [s]	52.12	24.28	24.33	43.94	13.50	13.50	39.03	35.09	32.04
k, delay calibration	0.15	0.41	0.41	0.15	0.40	0.40	0.15	0.18	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	481.48	5.34	5.72	10.39	1.62	1.63	0.67	2.84	1.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.98	0.76	0.76	0.84	0.55	0.55	0.15	0.69	0.53
d, Delay for Lane Group [s/veh]	533.59	29.62	30.05	54.34	15.12	15.13	39.70	37.93	33.44
Lane Group LOS	F	C	C	D	B	B	D	D	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.16	13.64	13.06	5.71	8.45	8.43	0.59	8.14	5.04
50th-Percentile Queue Length [ft/ln]	4.07	341.01	326.60	142.86	211.20	210.80	14.68	203.61	125.88
95th-Percentile Queue Length [veh/ln]	0.29	19.70	18.99	9.63	13.21	13.19	1.06	12.82	8.71
95th-Percentile Queue Length [ft/ln]	7.33	492.43	474.79	240.87	330.37	329.85	26.42	320.62	217.87

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Movement, Approach, & Intersection Results

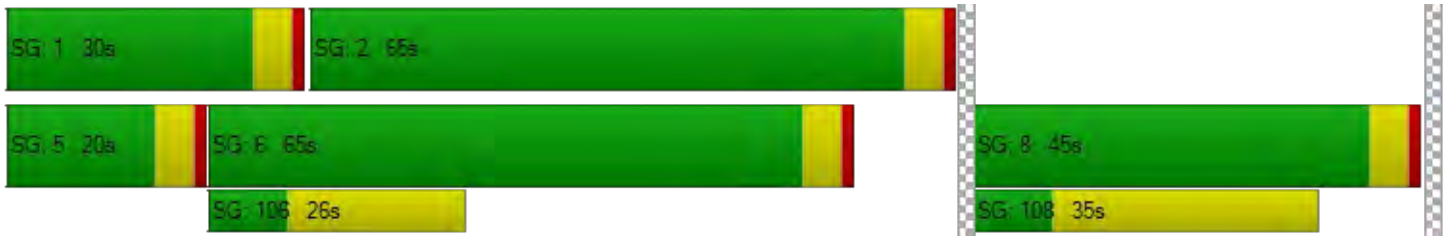
d_M, Delay for Movement [s/veh]	533.59	29.79	30.05	54.34	15.13	15.13	39.70	39.70	39.70	37.93	37.93	33.44
Movement LOS	F	C	C	D	B	B	D	D	D	D	D	C
d_A, Approach Delay [s/veh]	30.24			20.81			39.70			36.10		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	27.24											
Intersection LOS	C											
Intersection V/C	0.739											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	40.77	40.77	57.20
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.944	1.729	2.272
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1152	1152	768	768
d_b, Bicycle Delay [s]	9.36	9.36	19.76	19.76
l_b,int, Bicycle LOS Score for Intersection	2.580	2.715	1.596	2.492
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	23.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	166	4	166	14	9	4	101	1423	7	53	738	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	-1	0	0	0	0	92	0	0	100	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	197	5	195	17	11	5	119	1771	8	63	971	143
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	1	49	4	3	1	30	443	2	16	243	36
Total Analysis Volume [veh/h]	197	5	195	17	11	5	119	1771	8	63	971	143
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	128.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	40	0	20	40	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	34	34	34	12	97	97	7	92	92
g / C, Green / Cycle	0.22	0.22	0.22	0.08	0.65	0.65	0.05	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.21	0.12	0.24	0.07	0.33	0.33	0.04	0.21	0.21
s, saturation flow rate [veh/h]	977	1589	138	1781	3560	1866	1781	3560	1750
c, Capacity [veh/h]	266	356	67	143	2311	1211	81	2187	1075
d1, Uniform Delay [s]	56.94	51.47	52.28	67.97	13.74	13.74	70.82	14.11	14.12
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.42	1.31	5.41	11.66	0.79	1.51	14.56	0.43	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.55	0.49	0.83	0.51	0.51	0.78	0.34	0.34
d, Delay for Lane Group [s/veh]	61.36	52.79	57.69	79.64	14.53	15.24	85.38	14.54	14.99
Lane Group LOS	E	D	E	E	B	B	F	B	B
Critical Lane Group	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.82	6.67	1.39	4.95	10.27	11.01	2.72	6.26	6.30
50th-Percentile Queue Length [ft/ln]	195.51	166.73	34.69	123.83	256.75	275.17	68.05	156.49	157.59
95th-Percentile Queue Length [veh/ln]	12.41	10.90	2.50	8.60	15.53	16.45	4.90	10.36	10.42
95th-Percentile Queue Length [ft/ln]	310.17	272.62	62.44	215.07	388.15	411.20	122.50	259.07	260.52

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.36	61.36	52.79	57.69	57.69	57.69	79.64	14.77	15.24	85.38	14.64	14.99
Movement LOS	E	E	D	E	E	E	E	B	B	F	B	B
d_A, Approach Delay [s/veh]	57.15			57.69			18.84			18.47		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	23.42											
Intersection LOS	C											
Intersection V/C	0.640											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.186	1.779	3.129	3.394
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.33	64.49
l_b,int, Bicycle LOS Score for Intersection	2.215	1.614	2.604	2.207
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	76.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.819

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	178	718	41	182	712	276	261	1180	179	299	606	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	48	12	17	27	29	4	58	51	38	53	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	211	895	60	232	867	355	312	1450	262	391	768	175
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	53	224	15	58	217	89	78	363	66	98	192	44
Total Analysis Volume [veh/h]	211	895	60	232	867	355	312	1450	262	391	768	175
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	153.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	27	56	0	27	56	0	30	63	0	34	67	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	22	51	51	22	51	51	25	58	58	29	62	62
g / C, Green / Cycle	0.12	0.29	0.29	0.12	0.29	0.29	0.14	0.32	0.32	0.16	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.06	0.26	0.26	0.07	0.24	0.22	0.09	0.32	0.33	0.11	0.18	0.18
s, saturation flow rate [veh/h]	3459	1870	1829	3459	3560	1589	3459	3560	1728	3459	3560	1698
c, Capacity [veh/h]	430	534	522	430	1017	454	488	1155	561	555	1234	589
d1, Uniform Delay [s]	73.48	61.92	61.94	73.95	60.73	59.15	72.98	60.63	60.80	71.50	46.81	46.82
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.95	21.24	21.70	4.78	9.02	12.61	6.29	25.09	39.35	7.31	1.55	3.23
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.90	0.90	0.54	0.85	0.78	0.64	0.99	1.01	0.70	0.52	0.52
d, Delay for Lane Group [s/veh]	77.43	83.16	83.63	78.73	69.75	71.76	79.27	85.71	100.15	78.82	48.36	50.05
Lane Group LOS	E	F	F	E	E	E	E	F	F	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.81	24.36	23.92	5.34	19.96	16.50	7.26	30.01	31.58	9.13	11.76	11.50
50th-Percentile Queue Length [ft/ln]	120.14	609.05	597.97	133.56	499.05	412.42	181.42	750.32	789.56	228.25	294.02	287.52
95th-Percentile Queue Length [veh/ln]	8.40	32.46	31.94	9.13	27.29	23.16	11.67	39.00	40.96	14.09	17.38	17.06
95th-Percentile Queue Length [ft/ln]	210.01	811.42	798.49	228.32	682.23	578.94	291.87	974.93	1023.94	352.13	434.62	426.56

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Movement, Approach, & Intersection Results

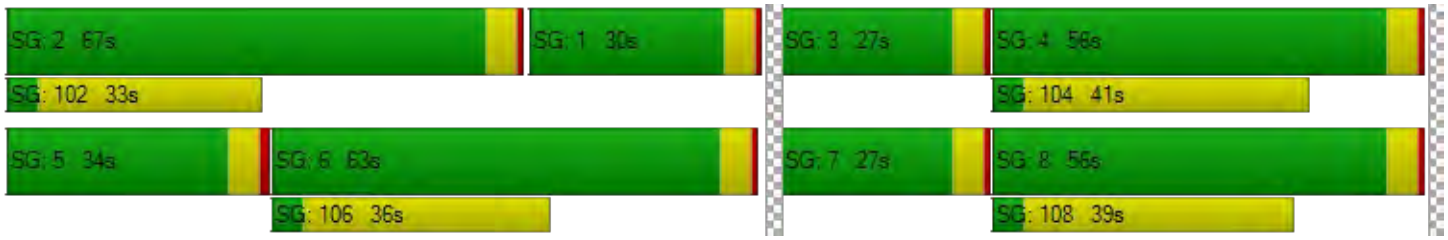
d_M, Delay for Movement [s/veh]	77.43	83.38	83.63	78.73	69.75	71.76	79.27	88.72	100.15	78.82	48.64	50.05
Movement LOS	E	F	F	E	E	E	E	F	F	E	D	D
d_A, Approach Delay [s/veh]	82.31			71.68			88.74			57.67		
Approach LOS	F			E			F			E		
d_I, Intersection Delay [s/veh]	76.40											
Intersection LOS	E											
Intersection V/C	0.819											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	82.18	82.18	82.18	82.18
l_p,int, Pedestrian LOS Score for Intersection	3.038	3.186	3.198	3.236
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	571	571	649	693
d_b, Bicycle Delay [s]	45.94	45.94	41.07	38.42
l_b,int, Bicycle LOS Score for Intersection	2.522	2.759	2.673	2.293
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	21.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.578

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	60	10	109	0	6	8	54	1686	29	9	859	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	3	7	0	0	0	1	99	15	0	56	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	77	15	136	0	7	9	65	2088	49	11	1070	118
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	4	34	0	2	2	16	522	12	3	268	30
Total Analysis Volume [veh/h]	77	15	136	0	7	9	65	2088	49	11	1070	118
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	179.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	19	128	0	11	120	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	15	124	124	7	116	116
g / C, Green / Cycle	0.20	0.20	0.09	0.69	0.69	0.04	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate	0.15	0.01	0.04	0.39	0.40	0.01	0.22	0.22
s, saturation flow rate [veh/h]	1549	1701	1781	3560	1848	1781	3560	1777
c, Capacity [veh/h]	344	368	151	2451	1272	72	2293	1144
d1, Uniform Delay [s]	66.58	57.50	78.20	14.44	14.47	83.36	14.68	14.69
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.72	0.22	8.66	0.98	1.90	4.43	0.41	0.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.04	0.43	0.57	0.58	0.15	0.35	0.35
d, Delay for Lane Group [s/veh]	76.30	57.73	86.86	15.43	16.37	87.79	15.09	15.52
Lane Group LOS	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.84	0.63	3.24	14.81	15.78	0.59	7.62	7.75
50th-Percentile Queue Length [ft/ln]	271.00	15.74	81.01	370.33	394.42	14.63	190.43	193.73
95th-Percentile Queue Length [veh/ln]	16.24	1.13	5.83	21.13	22.29	1.05	12.14	12.31
95th-Percentile Queue Length [ft/ln]	405.99	28.33	145.82	528.13	557.28	26.34	303.59	307.86

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	76.30	76.30	76.30	57.73	57.73	57.73	86.86	15.73	16.37	87.79	15.20	15.52
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	76.30			57.73			17.85			15.90		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	21.04											
Intersection LOS	C											
Intersection V/C	0.578											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	81.23	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.917	1.770	3.181	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	409	409	1377	1288
d_b, Bicycle Delay [s]	56.96	56.96	8.74	11.41
l_b,int, Bicycle LOS Score for Intersection	1.936	1.586	2.771	2.219
Bicycle LOS	A	A	C	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	509.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.130

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	4	0	12	1	0	1	130	1684	2	6	1043	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	121	0	0	78	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	14	1	0	1	153	2108	2	7	1309	53
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	4	0	0	0	38	527	1	2	327	13
Total Analysis Volume [veh/h]	5	0	14	1	0	1	153	2108	2	7	1309	53
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.32	0.00	0.04	0.13	0.00	0.01	0.59	0.02	0.00	0.06	0.01	0.00
d_M, Delay for Movement [s/veh]	270.01	2316.40	50.30	509.08	2409.78	58.97	36.70	0.00	0.00	39.97	0.00	0.00
Movement LOS	F	F	F	F	F	F	E	A	A	E	A	A
95th-Percentile Queue Length [veh/ln]	1.30	1.30	1.30	0.38	0.38	0.38	3.40	0.00	0.00	0.20	0.00	0.00
95th-Percentile Queue Length [ft/ln]	32.44	32.44	32.44	9.50	9.50	9.50	85.05	0.00	0.00	5.02	0.00	0.00
d_A, Approach Delay [s/veh]	108.12			284.03			2.48			0.20		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	2.33											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	31.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.639

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	0	204	0	0	0	93	1769	0	8	1024	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	3	0	0	0	6	121	0	0	78	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	74	0	244	0	0	0	116	2208	0	9	1286	112
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	0	61	0	0	0	29	552	0	2	322	28
Total Analysis Volume [veh/h]	74	0	244	0	0	0	116	2208	0	9	1286	112
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	78.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	49	49	0	0	0	0	43	122	0	9	88	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	180		180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	45		39	118	118	5	84	84
g / C, Green / Cycle	0.25		0.22	0.66	0.66	0.03	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.20		0.07	0.41	0.41	0.01	0.26	0.26
s, saturation flow rate [veh/h]	1630		1781	3560	1870	1781	3560	1794
c, Capacity [veh/h]	410		389	2332	1225	52	1660	836
d1, Uniform Delay [s]	62.61		58.82	18.05	18.05	85.21	34.72	34.72
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.36		1.96	1.25	2.37	6.98	1.37	2.70
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78		0.30	0.62	0.62	0.17	0.56	0.56
d, Delay for Lane Group [s/veh]	75.97		60.78	19.31	20.42	92.19	36.09	37.42
Lane Group LOS	E		E	B	C	F	D	D
Critical Lane Group	Yes		No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	15.25		4.67	17.65	18.92	0.51	15.15	15.58
50th-Percentile Queue Length [ft/ln]	381.35		116.87	441.33	473.10	12.81	378.74	389.50
95th-Percentile Queue Length [veh/ln]	21.66		8.22	24.54	26.06	0.92	21.53	22.05
95th-Percentile Queue Length [ft/ln]	541.48		205.52	613.60	651.46	23.06	538.33	551.33

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Movement, Approach, & Intersection Results

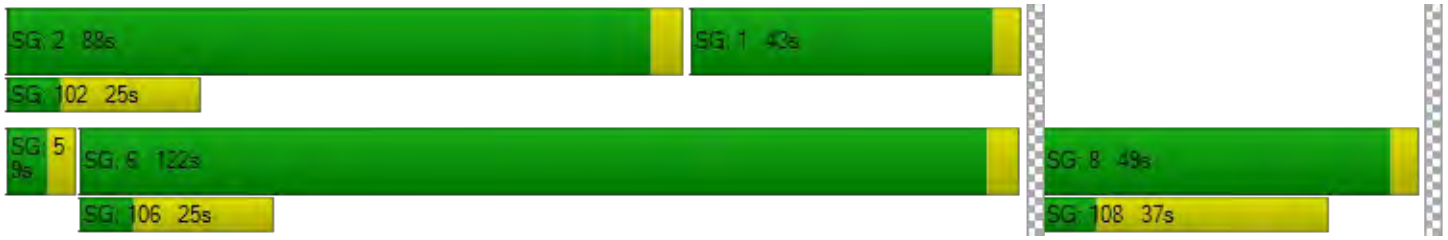
d_M, Delay for Movement [s/veh]	75.97	75.97	75.97	0.00	0.00	0.00	60.78	19.69	20.42	92.19	36.46	37.42
Movement LOS	E	E	E				E	B	C	F	D	D
d_A, Approach Delay [s/veh]	75.97			0.00			21.74			36.89		
Approach LOS	E			A			C			D		
d_I, Intersection Delay [s/veh]	31.27											
Intersection LOS	C											
Intersection V/C	0.639											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	79.34	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.969	1.752	3.253	3.226
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	503	0	1310	932
d_b, Bicycle Delay [s]	50.40	90.00	10.71	25.65
l_b,int, Bicycle LOS Score for Intersection	2.084	1.560	2.838	2.333
Bicycle LOS	B	A	C	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	65.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.677

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	299	0	200	53	1593	212	152	1106	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	10	33	3	3	15	9	89	11	12	62	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	10	34	356	3	251	72	1969	261	191	1367	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	3	9	89	1	63	18	492	65	48	342	2
Total Analysis Volume [veh/h]	23	10	34	356	3	251	72	1969	261	191	1367	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	21	0	0	51	0	27	79	0	29	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	17	47	47	47	23	75	75	25	77	77
g / C, Green / Cycle	0.10	0.26	0.26	0.26	0.13	0.42	0.42	0.14	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.10	0.10	0.16	0.04	0.42	0.42	0.06	0.25	0.25
s, saturation flow rate [veh/h]	1690	1781	1782	1589	1781	3560	1761	3459	3560	1864
c, Capacity [veh/h]	162	468	468	418	231	1482	733	486	1521	797
d1, Uniform Delay [s]	76.57	54.40	54.39	58.09	71.08	52.55	52.55	70.36	39.55	39.55
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.57	2.37	2.37	6.27	3.51	23.49	38.43	2.38	1.71	3.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.38	0.38	0.60	0.31	1.00	1.02	0.39	0.59	0.59
d, Delay for Lane Group [s/veh]	84.14	56.77	56.76	64.36	74.59	76.04	90.98	72.74	41.26	42.79
Lane Group LOS	F	E	E	E	E	F	F	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.34	7.13	7.14	10.92	3.26	37.93	40.57	4.19	15.79	16.88
50th-Percentile Queue Length [ft/ln]	83.51	178.33	178.45	273.06	81.43	948.15	1014.18	104.74	394.77	421.91
95th-Percentile Queue Length [veh/ln]	6.01	11.51	11.52	16.34	5.86	48.04	51.83	7.54	22.31	23.61
95th-Percentile Queue Length [ft/ln]	150.32	287.83	287.99	408.56	146.57	1201.09	1295.63	188.54	557.70	590.34

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Movement, Approach, & Intersection Results

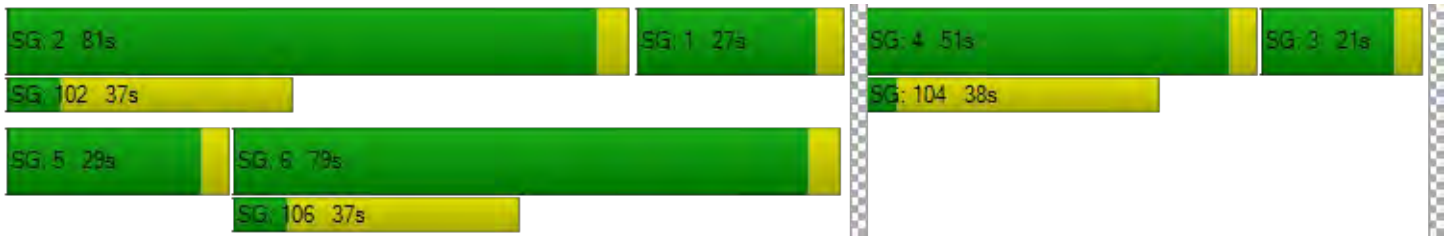
d_M, Delay for Movement [s/veh]	84.14	84.14	84.14	56.77	56.76	64.36	74.59	79.73	90.98	72.74	41.78	42.79
Movement LOS	F	F	F	E	E	E	E	E	F	E	D	D
d_A, Approach Delay [s/veh]	84.14			59.89			80.85			45.56		
Approach LOS	F			E			F			D		
d_I, Intersection Delay [s/veh]	65.93											
Intersection LOS	E											
Intersection V/C	0.677											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	82.18
l_p,int, Pedestrian LOS Score for Intersection	1.784	2.507	0.000	3.301
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	192	526	832	854
d_b, Bicycle Delay [s]	73.53	48.91	30.68	29.53
l_b,int, Bicycle LOS Score for Intersection	1.670	2.566	2.826	2.421
Bicycle LOS	A	B	C	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	52.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.444

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	0	0	0	86	1341	118	99	1078	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	88	0	7	96	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	0	0	0	101	1670	139	124	1368	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	25	418	35	31	342	0
Total Analysis Volume [veh/h]	0	0	1	0	0	0	101	1670	139	124	1368	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	108.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	28	60	0	29	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	24	55	55	25	56	56
g / C, Green / Cycle	0.10	0.25	0.25	0.16	0.37	0.37	0.16	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.00	0.06	0.34	0.34	0.07	0.25	0.25
s, saturation flow rate [veh/h]	1589	1781	1870	1781	3560	1798	1781	3560	1870
c, Capacity [veh/h]	158	450	472	279	1315	664	291	1339	703
d1, Uniform Delay [s]	60.88	0.00	0.00	56.55	45.01	45.09	56.43	39.04	39.04
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.00	0.00	3.61	11.18	19.56	4.52	2.68	5.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.00	0.00	0.36	0.91	0.92	0.43	0.67	0.67
d, Delay for Lane Group [s/veh]	60.95	0.00	0.00	60.16	56.18	64.65	60.95	41.72	44.06
Lane Group LOS	E	A	A	E	E	E	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	3.73	23.23	25.12	4.63	14.36	15.54
50th-Percentile Queue Length [ft/ln]	0.96	0.00	0.00	93.34	580.74	628.01	115.67	358.90	388.45
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.00	6.72	31.13	33.34	8.15	20.57	22.00
95th-Percentile Queue Length [ft/ln]	1.73	0.00	0.00	168.02	778.35	833.50	203.87	514.25	550.07

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Movement, Approach, & Intersection Results

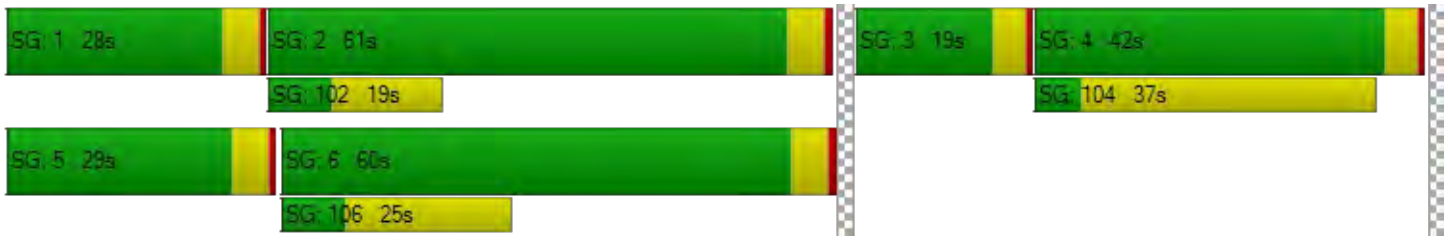
d_M, Delay for Movement [s/veh]	60.95	60.95	60.95	0.00	0.00	0.00	60.16	58.56	64.65	60.95	42.53	44.06
Movement LOS	E	E	E	A	A	A	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	60.95			0.00			59.09			44.06		
Approach LOS	E			A			E			D		
d_I, Intersection Delay [s/veh]	52.50											
Intersection LOS	D											
Intersection V/C	0.444											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.764	2.036	0.000	3.060
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	752
d_b, Bicycle Delay [s]	60.84	41.89	29.83	29.20
l_b,int, Bicycle LOS Score for Intersection	1.561	1.560	2.610	2.380
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	57.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.549

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	14	4	5	77	13	97	27	1321	87	148	756	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	0	0	112	0	0	81	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	5	6	103	15	114	32	1671	103	175	973	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	2	26	4	29	8	418	26	44	243	15
Total Analysis Volume [veh/h]	17	5	6	103	15	114	32	1671	103	175	973	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	168.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	28	0	0	42	0	29	70	0	40	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	24	24	38	38	38	25	66	66	36	77	77
g / C, Green / Cycle	0.13	0.13	0.21	0.21	0.21	0.14	0.36	0.36	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.03	0.03	0.07	0.02	0.33	0.33	0.10	0.19	0.19
s, saturation flow rate [veh/h]	1800	1589	1781	1803	1589	1781	3560	1815	1781	3560	1816
c, Capacity [veh/h]	238	210	375	380	335	245	1298	661	359	1515	773
d1, Uniform Delay [s]	68.61	68.03	58.00	58.00	60.42	68.13	54.25	54.29	63.61	36.75	36.76
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.77	0.25	0.89	0.88	2.75	1.10	10.59	18.37	4.67	0.97	1.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.09	0.03	0.16	0.16	0.34	0.13	0.91	0.91	0.49	0.45	0.45
d, Delay for Lane Group [s/veh]	69.38	68.28	58.89	58.87	63.18	69.23	64.84	72.66	68.28	37.72	38.66
Lane Group LOS	E	E	E	E	E	E	E	E	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.97	0.26	2.32	2.33	4.75	1.38	27.03	29.05	7.61	11.03	11.46
50th-Percentile Queue Length [ft/ln]	24.20	6.57	57.88	58.36	118.73	34.46	675.67	726.17	190.22	275.80	286.59
95th-Percentile Queue Length [veh/ln]	1.74	0.47	4.17	4.20	8.32	2.48	35.55	37.89	12.13	16.48	17.02
95th-Percentile Queue Length [ft/ln]	43.56	11.82	104.18	105.04	208.08	62.02	888.82	947.14	303.31	411.97	425.41

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.38	69.38	68.28	58.88	58.87	63.18	69.23	67.17	72.66	68.28	38.00	38.66
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	69.14			60.99			67.52			42.42		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	57.81											
Intersection LOS	E											
Intersection V/C	0.549											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	81.23
l_p,int, Pedestrian LOS Score for Intersection	1.995	2.289	0.000	3.117
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	421	729	851
d_b, Bicycle Delay [s]	67.77	56.09	36.35	29.70
l_b,int, Bicycle LOS Score for Intersection	1.606	1.942	2.553	2.223
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	57.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.614

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	0	150	0	59	18	1458	136	31	957	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	28	0	0	0	115	6	0	63	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	0	205	0	70	21	1835	166	37	1192	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	51	0	18	5	459	42	9	298	0
Total Analysis Volume [veh/h]	0	1	0	205	0	70	21	1835	166	37	1192	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	66	0	0	66	0	37	76	0	38	77	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	62	62	33	72	72	34	73	73
g / C, Green / Cycle	0.34	0.34	0.18	0.40	0.40	0.19	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.01	0.37	0.38	0.02	0.22	0.22
s, saturation flow rate [veh/h]	1870	1468	1781	3560	1792	1781	3560	1870
c, Capacity [veh/h]	664	541	327	1424	717	336	1444	758
d1, Uniform Delay [s]	38.70	47.30	60.74	51.68	51.87	60.47	40.75	40.75
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	3.40	0.38	12.42	21.55	0.66	1.46	2.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.51	0.06	0.93	0.94	0.11	0.54	0.54
d, Delay for Lane Group [s/veh]	38.70	50.70	61.12	64.10	73.42	61.13	42.21	43.51
Lane Group LOS	D	D	E	E	E	E	D	D
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	10.60	0.84	30.94	33.25	1.48	13.62	14.58
50th-Percentile Queue Length [ft/ln]	0.77	264.95	20.90	773.56	831.25	36.91	340.41	364.43
95th-Percentile Queue Length [veh/ln]	0.06	15.94	1.50	40.07	42.71	2.66	19.67	20.84
95th-Percentile Queue Length [ft/ln]	1.38	398.42	37.62	1001.63	1067.66	66.44	491.70	520.97

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Version 2021 (SP 0-4)

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	38.70	38.70	38.70	50.70	50.70	50.70	61.12	66.67	73.42	61.13	42.66	43.51
Movement LOS	D	D	D	D	D	D	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	38.70			50.70			67.17			43.21		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	57.53											
Intersection LOS	E											
Intersection V/C	0.614											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	62.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	38.68	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.758	1.981	3.445	3.136
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	689	800	811
d_b, Bicycle Delay [s]	38.68	38.68	32.40	31.80
l_b,int, Bicycle LOS Score for Intersection	1.561	2.013	2.672	2.236
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.073

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	31	274	205	21	25	79
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	6	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	326	248	25	30	93
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	82	62	6	8	23
Total Analysis Volume [veh/h]	37	326	248	25	30	93
Pedestrian Volume [ped/h]	0		0		0	

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.07	0.12
d_M, Delay for Movement [s/veh]	7.87	0.00	0.00	0.00	15.06	10.96
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.71	0.71
95th-Percentile Queue Length [ft/ln]	2.21	2.21	0.00	0.00	17.65	17.65
d_A, Approach Delay [s/veh]	0.80		0.00		11.96	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.32					
Intersection LOS	C					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	25.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	4	3	3	123	3	171	3	52	141	160	33	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	3	0	3	0	0	2	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	4	4	148	4	205	4	61	168	190	39	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	37	1	51	1	15	42	48	10	0
Total Analysis Volume [veh/h]	5	4	4	148	4	205	4	61	168	190	39	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.40	0.01	0.23	0.00	0.00	0.00	0.14	0.00	0.00
d_M, Delay for Movement [s/veh]	19.82	16.35	8.86	24.98	25.20	19.36	7.30	0.00	0.00	8.13	0.00	0.00
Movement LOS	C	C	A	C	D	C	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.11	4.42	4.42	4.42	0.01	0.01	0.01	0.49	0.49	0.49
95th-Percentile Queue Length [ft/ln]	2.80	2.80	2.80	110.57	110.57	110.57	0.19	0.19	0.19	12.36	12.36	12.36
d_A, Approach Delay [s/veh]	15.38			21.76			0.13			6.72		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	11.45											
Intersection LOS	D											

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Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	664.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.862

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	1114	58	17	1369	51	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	62	0	0	39	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1377	68	20	1654	60	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	344	17	5	414	15	4
Total Analysis Volume [veh/h]	1377	68	20	1654	60	17
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.04	0.02	1.86	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	13.09	0.00	664.89	562.95
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.13	0.00	8.13	8.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.36	0.00	203.28	203.28
d_A, Approach Delay [s/veh]	0.00		0.16		642.39	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	15.56					
Intersection LOS	F					

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Vistro File: \...\330 Distel Circle Vistro AM.vistro
Report File: \...\Cumulative AM.pdf

Scenario 5 Cumulative AM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	177	1109	52	14	1004	72	202	90	215	51	57	43	3086

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	1	1043	193	203	1187	10	18	0	4	335	0	230	3224

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	197	5	195	17	11	5	119	1771	8	63	971	143	3505

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	211	895	60	232	867	355	312	1450	262	391	768	175	5978

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	77	15	136	0	7	9	65	2088	49	11	1070	118	3645

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	5	0	14	1	0	1	153	2108	2	7	1309	53	3653

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	74	0	244	0	116	2208	0	9	1286	112	4049

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	23	10	34	356	3	251	72	1969	261	191	1367	8	4545

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	0	1	0	0	0	101	1670	139	124	1368	0	3403

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	17	5	6	103	15	114	32	1671	103	175	973	59	3273

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	0	1	0	205	0	70	21	1835	166	37	1192	0	3527

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	37	326	248	25	30	93	759

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	5	4	4	148	4	205	4	61	168	190	39	1	833

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	1377	68	20	1654	60	17	3196

Vistro File: \...\330 Distel Circle Vistro PM.vistro
Report File: \...\Cumulative PM.pdf

Scenario 5 Cumulative PM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.568	11.0	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	NB Left	0.675	20.2	C
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	NWB Left	0.701	19.3	B
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	SEB Right	0.952	87.9	F
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Right	0.656	45.8	D
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	NEB Left	0.762	414.6	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	SEB Right	0.620	50.5	D
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NEB Left	0.610	55.9	E
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	SEB Right	0.629	73.2	E
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	SEB Right	0.650	75.6	E
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	SEB Right	0.510	48.5	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.065	10.0	A
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.009	11.0	B
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.982	204.2	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.568

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	44	781	18	18	976	38	43	18	41	30	7	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	29	0	0	54	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	951	21	21	1206	45	51	21	48	35	8	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	238	5	5	302	11	13	5	12	9	2	8
Total Analysis Volume [veh/h]	52	951	21	21	1206	45	51	21	48	35	8	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	40	40	40	40	40	40	40	40	40
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	2	18	18	1	17	17	5	5	5
g / C, Green / Cycle	0.06	0.46	0.46	0.03	0.43	0.43	0.14	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.03	0.26	0.26	0.01	0.34	0.34	0.04	0.03	0.07
s, saturation flow rate [veh/h]	1781	1870	1856	1781	1870	1846	1687	1589	999
c, Capacity [veh/h]	100	859	852	48	804	794	386	218	271
d1, Uniform Delay [s]	18.26	7.87	7.87	19.06	9.74	9.75	15.42	15.28	15.65
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.16	0.59	0.60	6.25	1.71	1.74	0.23	0.50	0.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.57	0.57	0.44	0.78	0.78	0.19	0.22	0.27
d, Delay for Lane Group [s/veh]	22.41	8.47	8.47	25.32	11.45	11.49	15.65	15.78	16.18
Lane Group LOS	C	A	A	C	B	B	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.51	2.03	2.01	0.24	3.40	3.37	0.54	0.37	0.54
50th-Percentile Queue Length [ft/ln]	12.65	50.71	50.35	6.12	84.91	84.15	13.46	9.24	13.62
95th-Percentile Queue Length [veh/ln]	0.91	3.65	3.63	0.44	6.11	6.06	0.97	0.67	0.98
95th-Percentile Queue Length [ft/ln]	22.78	91.27	90.63	11.01	152.84	151.46	24.23	16.64	24.51

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Movement, Approach, & Intersection Results

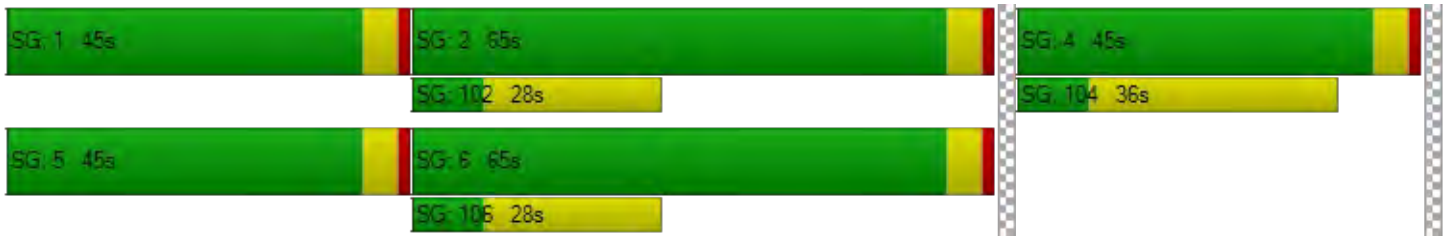
d_M, Delay for Movement [s/veh]	22.41	8.47	8.47	25.32	11.47	11.49	15.65	15.65	15.78	16.18	16.18	16.18
Movement LOS	C	A	A	C	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	9.18			11.70			15.70			16.18		
Approach LOS	A			B			B			B		
d_I, Intersection Delay [s/veh]	10.99											
Intersection LOS	B											
Intersection V/C	0.568											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	9.65	0.00	9.65	9.65
l_p,int, Pedestrian LOS Score for Intersection	2.824	0.000	1.949	1.729
Crosswalk LOS	C	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	3024	3024	2016	2016
d_b, Bicycle Delay [s]	5.20	5.20	0.00	0.00
l_b,int, Bicycle LOS Score for Intersection	2.404	2.609	1.758	1.680
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.675

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	3	821	273	122	914	2	0	0	0	213	0	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	17	2	0	33	20	12	0	2	-3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	986	324	144	1112	22	12	0	2	248	0	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	247	81	36	278	6	3	0	1	62	0	36
Total Analysis Volume [veh/h]	8	986	324	144	1112	22	12	0	2	248	0	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	87	87	87	87	87	87	87	87	87
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	44	44	9	53	53	19	19	19
g / C, Green / Cycle	0.00	0.51	0.51	0.10	0.61	0.61	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.00	0.36	0.37	0.08	0.30	0.30	0.04	0.16	0.09
s, saturation flow rate [veh/h]	1781	1870	1714	1781	1870	1857	358	1584	1589
c, Capacity [veh/h]	9	950	871	185	1136	1128	154	424	342
d1, Uniform Delay [s]	43.23	16.52	16.62	37.95	9.63	9.63	32.28	31.67	29.44
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	144.29	3.65	4.12	9.49	1.24	1.25	0.36	1.83	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.92	0.72	0.72	0.78	0.50	0.50	0.09	0.59	0.42
d, Delay for Lane Group [s/veh]	187.52	20.17	20.74	47.45	10.87	10.88	32.64	33.50	30.61
Lane Group LOS	F	C	C	D	B	B	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.52	10.30	9.71	3.39	5.59	5.56	0.31	4.92	2.65
50th-Percentile Queue Length [ft/ln]	12.94	257.62	242.65	84.63	139.64	138.89	7.67	123.02	66.28
95th-Percentile Queue Length [veh/ln]	0.93	15.57	14.82	6.09	9.46	9.42	0.55	8.56	4.77
95th-Percentile Queue Length [ft/ln]	23.28	389.24	370.38	152.34	236.54	235.53	13.81	213.97	119.30

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Movement, Approach, & Intersection Results

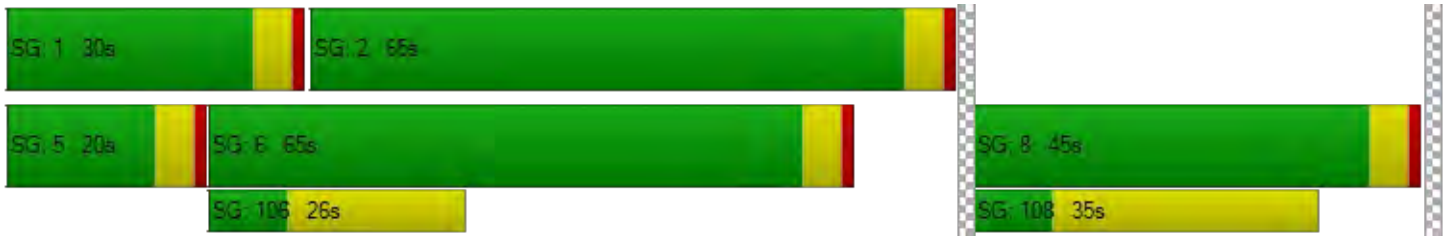
d_M, Delay for Movement [s/veh]	187.52	20.35	20.74	47.45	10.88	10.88	32.64	32.64	32.64	33.50	33.50	30.61
Movement LOS	F	C	C	D	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	21.46			15.00			32.64			32.44		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	20.19											
Intersection LOS	C											
Intersection V/C	0.675											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	32.22	32.22	48.53
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.864	1.722	2.233
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1383	1383	922	922
d_b, Bicycle Delay [s]	4.13	4.13	12.61	12.61
l_b,int, Bicycle LOS Score for Intersection	2.647	2.614	1.583	2.206
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	19.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.701

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	105	5	82	13	2	18	74	1062	11	41	1709	159
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	-1	0	0	0	0	97	0	0	94	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	6	96	15	2	21	87	1350	13	48	2111	188
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	2	24	4	1	5	22	338	3	12	528	47
Total Analysis Volume [veh/h]	129	6	96	15	2	21	87	1350	13	48	2111	188
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	116.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	30	0	20	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	29	29	29	9	103	103	6	100	100
g / C, Green / Cycle	0.19	0.19	0.19	0.06	0.69	0.69	0.04	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.17	0.06	0.18	0.05	0.25	0.25	0.03	0.43	0.43
s, saturation flow rate [veh/h]	777	1589	216	1781	3560	1861	1781	3560	1793
c, Capacity [veh/h]	194	302	74	109	2452	1281	72	2378	1198
d1, Uniform Delay [s]	59.53	52.41	52.47	69.51	9.72	9.72	70.98	14.45	14.61
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.41	0.60	5.33	12.50	0.42	0.81	10.19	1.33	2.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.32	0.51	0.80	0.37	0.37	0.67	0.64	0.65
d, Delay for Lane Group [s/veh]	63.94	53.01	57.80	82.01	10.14	10.52	81.17	15.78	17.35
Lane Group LOS	E	D	E	F	B	B	F	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.28	3.20	1.32	3.67	6.06	6.47	2.02	14.72	15.69
50th-Percentile Queue Length [ft/ln]	131.96	80.06	32.95	91.79	151.41	161.68	50.56	367.99	392.17
95th-Percentile Queue Length [veh/ln]	9.05	5.76	2.37	6.61	10.09	10.64	3.64	21.01	22.18
95th-Percentile Queue Length [ft/ln]	226.16	144.12	59.31	165.23	252.31	265.95	91.01	525.29	554.55

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.94	63.94	53.01	57.80	57.80	57.80	82.01	10.27	10.52	81.17	16.22	17.35
Movement LOS	E	E	D	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	59.40			57.80			14.57			17.64		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	19.29											
Intersection LOS	B											
Intersection V/C	0.701											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.134	1.777	3.222	3.411
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.34	64.50
l_b,int, Bicycle LOS Score for Intersection	1.941	1.622	2.357	2.850
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	87.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.952

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	207	449	86	301	619	147	359	786	125	436	1367	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	34	-5	47	52	50	1	48	18	10	54	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	244	564	96	402	782	223	425	975	166	524	1667	251
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	141	24	101	196	56	106	244	42	131	417	63
Total Analysis Volume [veh/h]	244	564	96	402	782	223	425	975	166	524	1667	251
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	45.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	20	44	0	23	47	0	25	49	0	34	58	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	15	39	39	18	42	42	20	44	44	29	53	53
g / C, Green / Cycle	0.10	0.26	0.26	0.12	0.28	0.28	0.14	0.30	0.30	0.19	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.08	0.20	0.20	0.13	0.24	0.16	0.14	0.24	0.24	0.17	0.40	0.41
s, saturation flow rate [veh/h]	3113	1683	1599	3113	3204	1431	3113	3204	1561	3113	3204	1575
c, Capacity [veh/h]	320	442	420	382	906	404	423	949	462	600	1141	561
d1, Uniform Delay [s]	65.53	51.04	51.04	65.80	51.05	45.72	64.80	48.87	48.88	58.78	48.30	48.30
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.83	11.94	12.52	60.62	10.70	5.33	44.73	7.39	14.18	16.17	64.60	86.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.77	0.77	1.05	0.86	0.55	1.00	0.81	0.81	0.87	1.12	1.15
d, Delay for Lane Group [s/veh]	81.36	62.98	63.57	126.42	61.75	51.05	109.53	56.27	63.06	74.95	112.90	134.89
Lane Group LOS	F	E	E	F	E	D	F	E	E	E	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.24	13.16	12.58	10.49	15.20	7.67	10.69	14.20	14.71	10.96	31.25	34.14
50th-Percentile Queue Length [ft/ln]	131.01	329.08	314.39	262.31	379.89	191.83	267.17	354.99	367.72	274.11	781.13	853.38
95th-Percentile Queue Length [veh/ln]	8.99	19.11	18.39	16.16	21.59	12.22	16.08	20.38	21.00	16.39	43.53	47.96
95th-Percentile Queue Length [ft/ln]	224.86	477.83	459.79	404.01	539.72	305.40	401.94	509.49	524.96	409.87	1088.19	1199.07

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Movement, Approach, & Intersection Results

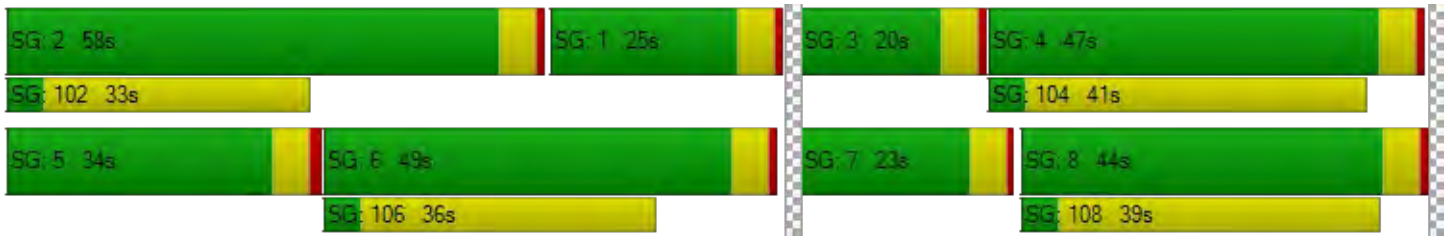
d_M, Delay for Movement [s/veh]	81.36	63.22	63.57	126.42	61.75	51.05	109.53	57.71	63.06	74.95	118.09	134.89
Movement LOS	F	E	E	F	E	D	F	E	E	E	F	F
d_A, Approach Delay [s/veh]	68.15			78.53			72.34			110.56		
Approach LOS	E			E			E			F		
d_I, Intersection Delay [s/veh]	87.89											
Intersection LOS	F											
Intersection V/C	0.952											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	67.21	67.21	67.21	67.21
l_p,int, Pedestrian LOS Score for Intersection	3.004	3.130	3.282	3.304
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	525	565	592	712
d_b, Bicycle Delay [s]	40.77	38.59	37.17	31.11
l_b,int, Bicycle LOS Score for Intersection	2.305	2.720	2.421	2.903
Bicycle LOS	B	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	45.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	1	91	5	3	12	64	1237	5	26	1790	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	22	0	0	0	4	50	0	0	92	-7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	1	129	6	4	14	80	1510	6	31	2204	82
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	0	32	2	1	4	20	378	2	8	551	21
Total Analysis Volume [veh/h]	89	1	129	6	4	14	80	1510	6	31	2204	82
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	95.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	33	68	0	31	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	140	140	140	140	140	140	140	140
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	29	64	64	27	62	62
g / C, Green / Cycle	0.26	0.26	0.21	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.14	0.02	0.04	0.28	0.28	0.02	0.42	0.43
s, saturation flow rate [veh/h]	1525	1534	1781	3560	1866	1781	3560	1836
c, Capacity [veh/h]	437	435	373	1625	852	347	1574	812
d1, Uniform Delay [s]	44.14	38.58	45.82	28.70	28.70	46.17	37.74	37.91
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.06	0.24	1.31	1.73	3.27	0.51	14.39	23.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.50	0.06	0.21	0.61	0.61	0.09	0.96	0.96
d, Delay for Lane Group [s/veh]	48.21	38.82	47.14	30.43	31.97	46.67	52.13	61.52
Lane Group LOS	D	D	D	C	C	D	D	E
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.12	0.67	2.45	12.83	13.82	0.94	27.37	30.58
50th-Percentile Queue Length [ft/ln]	178.11	16.83	61.28	320.80	345.43	23.46	684.28	764.51
95th-Percentile Queue Length [veh/ln]	11.50	1.21	4.41	18.71	19.91	1.69	35.95	39.65
95th-Percentile Queue Length [ft/ln]	287.55	30.30	110.31	467.67	497.83	42.23	898.78	991.23

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.21	48.21	48.21	38.82	38.82	38.82	47.14	30.96	31.97	46.67	55.11	61.52
Movement LOS	D	D	D	D	D	D	D	C	C	D	E	E
d_A, Approach Delay [s/veh]	48.21			38.82			31.77			55.22		
Approach LOS	D			D			C			E		
d_I, Intersection Delay [s/veh]	45.75											
Intersection LOS	D											
Intersection V/C	0.656											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	59.43	59.43	61.29	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.892	1.751	3.264	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	526	913	884
d_b, Bicycle Delay [s]	38.04	38.04	20.68	21.78
l_b,int, Bicycle LOS Score for Intersection	1.921	1.599	2.437	2.834
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	414.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.762

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	9	0	29	1	0	0	34	1337	0	14	1587	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	60	0	0	121	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	0	34	1	0	0	40	1638	0	17	1994	15
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	9	0	0	0	10	410	0	4	499	4
Total Analysis Volume [veh/h]	11	0	34	1	0	0	40	1638	0	17	1994	15
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.76	0.00	0.17	0.06	0.00	0.00	0.32	0.02	0.00	0.09	0.02	0.00
d_M, Delay for Movement [s/veh]	414.64	1567.67	182.73	233.61	1437.29	31.45	47.41	0.00	0.00	25.77	0.00	0.00
Movement LOS	F	F	F	F	F	D	E	A	A	D	A	A
95th-Percentile Queue Length [veh/ln]	3.89	3.89	3.89	0.18	0.18	0.18	1.28	0.00	0.00	0.29	0.00	0.00
95th-Percentile Queue Length [ft/ln]	97.32	97.32	97.32	4.38	4.38	4.38	31.93	0.00	0.00	7.26	0.00	0.00
d_A, Approach Delay [s/veh]	239.42			233.61			1.13			0.22		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	3.56											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	50.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.620

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	42	0	99	0	0	0	68	1304	0	6	1850	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	0	0	0	4	60	0	0	121	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	0	123	0	0	0	84	1599	0	7	2304	25
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	0	31	0	0	0	21	400	0	2	576	6
Total Analysis Volume [veh/h]	50	0	123	0	0	0	84	1599	0	7	2304	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	134.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	44	44	0	0	0	0	36	73	0	33	70	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	150		150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	40		32	69	69	29	66	66
g / C, Green / Cycle	0.27		0.22	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.11		0.05	0.29	0.29	0.00	0.43	0.43
s, saturation flow rate [veh/h]	1640		1781	3560	1870	1781	3560	1860
c, Capacity [veh/h]	441		383	1635	859	348	1564	817
d1, Uniform Delay [s]	44.84		48.46	31.07	31.07	48.75	41.32	41.38
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.61		1.31	1.94	3.66	0.11	17.98	26.85
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39		0.22	0.64	0.64	0.02	0.98	0.98
d, Delay for Lane Group [s/veh]	47.46		49.78	33.02	34.73	48.86	59.30	68.23
Lane Group LOS	D		D	C	C	D	E	E
Critical Lane Group	Yes		Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.70		2.75	14.87	16.03	0.22	31.03	34.53
50th-Percentile Queue Length [ft/ln]	142.48		68.69	371.68	400.66	5.60	775.87	863.34
95th-Percentile Queue Length [veh/ln]	9.61		4.95	21.19	22.59	0.40	40.17	44.17
95th-Percentile Queue Length [ft/ln]	240.36		123.65	529.77	564.80	10.08	1004.28	1104.28

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	47.46	47.46	47.46	0.00	0.00	0.00	49.78	33.61	34.73	48.86	62.30	68.23
Movement LOS	D	D	D				D	C	C	D	E	E
d_A, Approach Delay [s/veh]	47.46			0.00			34.41			62.33		
Approach LOS	D			A			C			E		
d_I, Intersection Delay [s/veh]	50.51											
Intersection LOS	D											
Intersection V/C	0.620											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	64.40	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.854	1.743	3.286	3.266
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	537	0	919	879
d_b, Bicycle Delay [s]	40.11	75.00	21.92	23.58
l_b,int, Bicycle LOS Score for Intersection	1.845	1.560	2.485	2.844
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	55.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.610

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	0	273	0	135	64	1151	201	205	1837	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	8	15	3	14	13	24	33	37	16	81	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	8	15	325	14	172	100	1391	274	258	2249	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	4	81	4	43	25	348	69	65	562	8
Total Analysis Volume [veh/h]	18	8	15	325	14	172	100	1391	274	258	2249	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	132.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	9	0	0	42	0	31	66	0	33	68	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	5	38	38	38	27	62	62	29	64	64
g / C, Green / Cycle	0.04	0.26	0.26	0.26	0.18	0.41	0.41	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.02	0.09	0.09	0.11	0.06	0.32	0.32	0.07	0.42	0.42
s, saturation flow rate [veh/h]	1721	1781	1788	1589	1781	3560	1717	3459	3560	1857
c, Capacity [veh/h]	61	455	457	406	324	1469	709	676	1517	791
d1, Uniform Delay [s]	71.50	45.95	45.95	46.64	53.17	37.78	37.84	52.48	42.61	42.73
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	46.50	2.33	2.32	3.22	2.46	3.82	7.76	1.64	20.05	29.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.37	0.37	0.42	0.31	0.76	0.77	0.38	0.99	0.99
d, Delay for Lane Group [s/veh]	118.00	48.28	48.27	49.86	55.63	41.60	45.60	54.11	62.66	72.35
Lane Group LOS	F	D	D	D	E	D	D	D	E	E
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.38	5.60	5.62	5.83	3.50	18.28	18.49	4.39	31.06	34.69
50th-Percentile Queue Length [ft/ln]	59.52	139.92	140.44	145.87	87.57	456.92	462.32	109.84	776.45	867.16
95th-Percentile Queue Length [veh/ln]	4.29	9.48	9.50	9.80	6.31	25.29	25.55	7.83	40.20	44.35
95th-Percentile Queue Length [ft/ln]	107.14	236.91	237.61	244.91	157.63	632.20	638.63	195.78	1004.95	1108.63

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Movement, Approach, & Intersection Results

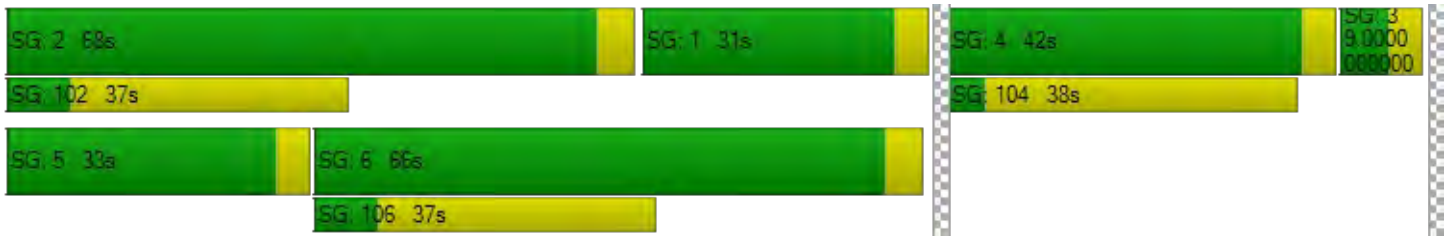
d_M, Delay for Movement [s/veh]	118.00	118.00	118.00	48.28	48.27	49.86	55.63	42.37	45.60	54.11	65.91	72.35
Movement LOS	F	F	F	D	D	D	E	D	D	D	E	E
d_A, Approach Delay [s/veh]	118.00			48.81			43.62			64.78		
Approach LOS	F			D			D			E		
d_I, Intersection Delay [s/veh]	55.86											
Intersection LOS	E											
Intersection V/C	0.610											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	67.21
l_p,int, Pedestrian LOS Score for Intersection	1.784	2.495	0.000	3.337
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	71	511	825	852
d_b, Bicycle Delay [s]	69.79	41.59	25.87	24.71
l_b,int, Bicycle LOS Score for Intersection	1.627	2.403	2.530	2.955
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	73.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.629

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	3	45	0	140	61	1075	96	118	1930	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	98	0	24	65	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	4	53	0	165	72	1367	113	163	2342	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	13	0	41	18	342	28	41	586	1
Total Analysis Volume [veh/h]	0	1	4	53	0	165	72	1367	113	163	2342	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	105.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	24	60	0	29	65	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	20	55	55	25	60	60
g / C, Green / Cycle	0.10	0.25	0.25	0.13	0.37	0.37	0.16	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.10	0.04	0.28	0.28	0.09	0.43	0.43
s, saturation flow rate [veh/h]	1639	1781	1589	1781	3560	1798	1781	3560	1869
c, Capacity [veh/h]	163	450	402	232	1315	664	291	1434	753
d1, Uniform Delay [s]	61.03	43.17	46.74	59.16	41.21	41.22	57.79	44.80	44.80
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.35	0.53	3.09	3.47	3.92	7.54	7.60	45.68	53.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.12	0.41	0.31	0.75	0.75	0.56	1.07	1.07
d, Delay for Lane Group [s/veh]	61.38	43.71	49.83	62.63	45.14	48.76	65.39	90.48	98.73
Lane Group LOS	E	D	D	E	D	D	E	F	F
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.19	1.62	5.59	2.73	16.61	17.44	6.35	35.50	39.00
50th-Percentile Queue Length [ft/ln]	4.82	40.56	139.71	68.17	415.20	436.08	158.78	887.56	975.01
95th-Percentile Queue Length [veh/ln]	0.35	2.92	9.47	4.91	23.29	24.29	10.48	47.66	51.87
95th-Percentile Queue Length [ft/ln]	8.68	73.01	236.63	122.70	582.29	607.31	262.10	1191.45	1296.73

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Movement, Approach, & Intersection Results

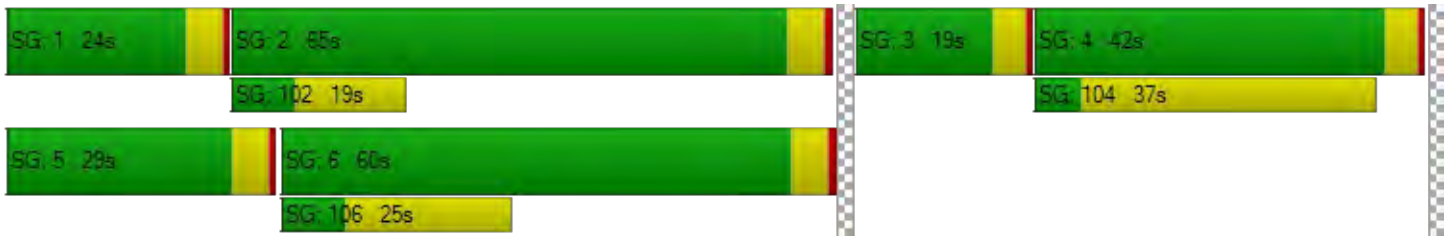
d_M, Delay for Movement [s/veh]	61.38	61.38	61.38	43.71	49.83	49.83	62.63	46.15	48.76	65.39	93.31	98.73
Movement LOS	E	E	E	D	D	D	E	D	D	E	F	F
d_A, Approach Delay [s/veh]	61.38			48.34			47.11			91.50		
Approach LOS	E			D			D			F		
d_I, Intersection Delay [s/veh]	73.18											
Intersection LOS	E											
Intersection V/C	0.629											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.758	2.099	0.000	3.182
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	805
d_b, Bicycle Delay [s]	60.84	41.89	29.83	26.76
l_b,int, Bicycle LOS Score for Intersection	1.568	1.919	2.413	2.938
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	75.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.650

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	51	27	82	201	30	119	88	1000	152	237	1558	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	67	0	0	94	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	32	97	237	35	140	104	1247	179	280	1932	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	8	24	59	9	35	26	312	45	70	483	36
Total Analysis Volume [veh/h]	60	32	97	237	35	140	104	1247	179	280	1932	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	63.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	25	0	0	42	0	23	48	0	35	60	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	21	21	38	38	38	19	44	44	31	56	56
g / C, Green / Cycle	0.14	0.14	0.25	0.25	0.25	0.13	0.29	0.29	0.21	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.08	0.08	0.09	0.06	0.27	0.27	0.16	0.39	0.39
s, saturation flow rate [veh/h]	1811	1589	1781	1803	1589	1781	3560	1752	1781	3560	1805
c, Capacity [veh/h]	251	220	450	456	402	223	1035	509	372	1320	669
d1, Uniform Delay [s]	58.62	59.26	45.33	45.33	45.93	60.94	51.58	51.58	55.73	47.20	47.20
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.09	6.26	1.71	1.69	2.38	6.84	14.70	24.80	13.23	35.58	49.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.44	0.30	0.30	0.35	0.47	0.92	0.92	0.75	1.04	1.05
d, Delay for Lane Group [s/veh]	62.71	65.52	47.04	47.01	48.31	67.78	66.28	76.39	68.95	82.78	96.79
Lane Group LOS	E	E	D	D	D	E	E	E	E	F	F
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.55	3.86	4.35	4.40	4.60	4.11	19.38	20.51	11.29	30.75	33.78
50th-Percentile Queue Length [ft/ln]	88.74	96.57	108.67	109.91	115.08	102.65	484.59	512.82	282.16	768.85	844.59
95th-Percentile Queue Length [veh/ln]	6.39	6.95	7.77	7.84	8.12	7.39	26.60	27.94	16.80	40.98	44.97
95th-Percentile Queue Length [ft/ln]	159.73	173.83	194.16	195.88	203.04	184.76	665.10	698.51	419.90	1024.47	1124.30

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Movement, Approach, & Intersection Results

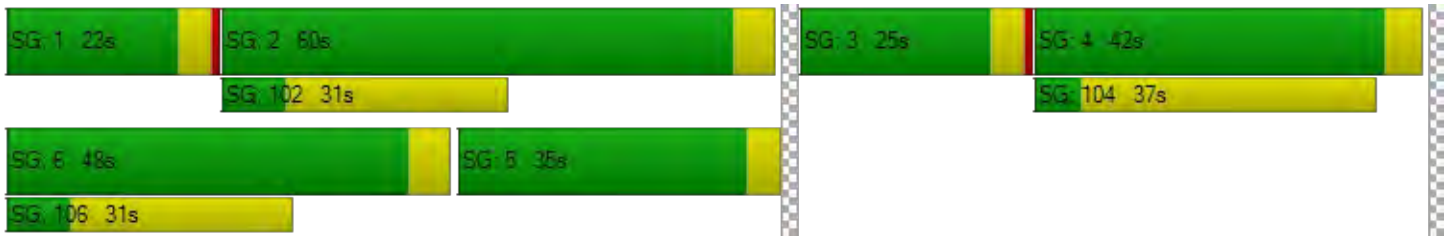
d_M, Delay for Movement [s/veh]	62.71	62.71	65.52	47.03	47.01	48.31	67.78	68.64	76.39	68.95	86.84	96.79
Movement LOS	E	E	E	D	D	D	E	E	E	E	F	F
d_A, Approach Delay [s/veh]	64.15			47.46			69.49			85.32		
Approach LOS	E			D			E			F		
d_I, Intersection Delay [s/veh]	75.56											
Intersection LOS	E											
Intersection V/C	0.650											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	2.041	2.376	0.000	3.237
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	277	505	581	741
d_b, Bicycle Delay [s]	55.64	41.89	37.74	29.70
l_b,int, Bicycle LOS Score for Intersection	1.871	2.239	2.401	2.855
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	48.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	3	4	4	71	0	38	13	1248	111	45	1608	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	20	0	0	0	54	6	0	114	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	5	5	104	0	45	15	1527	137	53	2011	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	26	0	11	4	382	34	13	503	0
Total Analysis Volume [veh/h]	4	5	5	104	0	45	15	1527	137	53	2011	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	83.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	45	0	0	45	0	39	64	0	41	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	41	35	60	60	37	62	62
g / C, Green / Cycle	0.27	0.27	0.23	0.40	0.40	0.25	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.01	0.10	0.01	0.31	0.31	0.03	0.37	0.37
s, saturation flow rate [veh/h]	1639	1480	1781	3560	1792	1781	3560	1870
c, Capacity [veh/h]	479	445	416	1424	717	439	1472	773
d1, Uniform Delay [s]	39.92	43.65	44.46	39.17	39.19	43.87	40.99	40.99
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	2.02	0.16	4.22	8.12	0.56	8.86	15.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.33	0.04	0.78	0.78	0.12	0.90	0.90
d, Delay for Lane Group [s/veh]	40.03	45.67	44.62	43.40	47.31	44.43	49.85	56.14
Lane Group LOS	D	D	D	D	D	D	D	E
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.40	4.77	0.45	18.41	19.33	1.61	24.15	26.71
50th-Percentile Queue Length [ft/ln]	10.04	119.15	11.37	460.15	483.28	40.33	603.65	667.86
95th-Percentile Queue Length [veh/ln]	0.72	8.35	0.82	25.44	26.54	2.90	32.20	35.19
95th-Percentile Queue Length [ft/ln]	18.07	208.65	20.47	636.05	663.54	72.59	805.11	879.77

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Movement, Approach, & Intersection Results

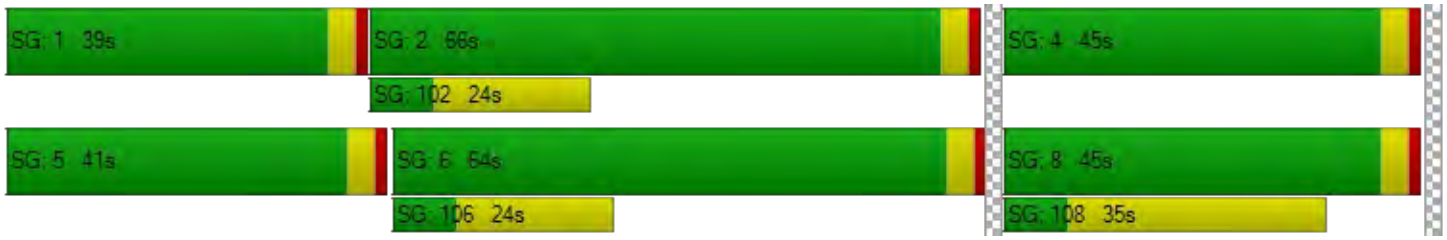
d_M, Delay for Movement [s/veh]	40.03	40.03	40.03	45.67	45.67	45.67	44.62	44.48	47.31	44.43	52.02	56.14
Movement LOS	D	D	D	D	D	D	D	D	D	D	D	E
d_A, Approach Delay [s/veh]	40.03			45.67			44.71			51.82		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	48.49											
Intersection LOS	D											
Intersection V/C	0.510											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	41.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	39.60	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.753	1.907	3.364	3.215
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	547	547	800	827
d_b, Bicycle Delay [s]	39.60	39.60	27.00	25.81
l_b,int, Bicycle LOS Score for Intersection	1.583	1.805	2.483	2.695
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.065

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	1	85	63	3	44	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	4	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	106	78	4	52	38
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	27	20	1	13	10
Total Analysis Volume [veh/h]	1	106	78	4	52	38
Pedestrian Volume [ped/h]	0		0		0	

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.06	0.04
d_M, Delay for Movement [s/veh]	7.38	0.00	0.00	0.00	9.98	9.15
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.00	0.00	8.65	8.65
d_A, Approach Delay [s/veh]	0.07		0.00		9.63	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.13					
Intersection LOS	A					

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Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	0	3	1	49	5	40	3	19	38	42	24	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	2	0	0	3	3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	1	60	6	49	4	22	48	53	28	4
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	15	2	12	1	6	12	13	7	1
Total Analysis Volume [veh/h]	0	4	1	60	6	49	4	22	48	53	28	4
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.08	0.01	0.05	0.00	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	10.34	10.51	8.48	10.55	11.01	9.20	7.28	0.00	0.00	7.44	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.48	0.48	0.48	0.01	0.01	0.01	0.11	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.53	0.53	0.53	11.92	11.92	11.92	0.19	0.19	0.19	2.69	2.69	2.69
d_A, Approach Delay [s/veh]	10.10			10.00			0.39			4.64		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	5.82											
Intersection LOS	B											

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Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	204.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.982

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	926	54	20	969	57	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	29	0	0	53	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1122	64	24	1196	67	15
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	281	16	6	299	17	4
Total Analysis Volume [veh/h]	1122	64	24	1196	67	15
Pedestrian Volume [ped/h]	0		0		0	

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.04	0.01	0.98	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	11.42	0.00	204.19	159.43
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.13	0.00	5.63	5.63
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.21	0.00	140.65	140.65
d_A, Approach Delay [s/veh]	0.00		0.22		196.00	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	6.57					
Intersection LOS	F					

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Report File: \...\Cumulative PM.pdf

Scenario 5 Cumulative PM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	52	951	21	21	1206	45	51	21	48	35	8	30	2489

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	8	986	324	144	1112	22	12	0	2	248	0	144	3002

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	129	6	96	15	2	21	87	1350	13	48	2111	188	4066

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	244	564	96	402	782	223	425	975	166	524	1667	251	6319

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	89	1	129	6	4	14	80	1510	6	31	2204	82	4156

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	11	0	34	1	0	0	40	1638	0	17	1994	15	3750

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	50	0	123	0	84	1599	0	7	2304	25	4192

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	18	8	15	325	14	172	100	1391	274	258	2249	30	4854

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	1	4	53	0	165	72	1367	113	163	2342	2	4282

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	60	32	97	237	35	140	104	1247	179	280	1932	144	4487

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	4	5	5	104	0	45	15	1527	137	53	2011	0	3906

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	1	106	78	4	52	38	279

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	0	4	1	60	6	49	4	22	48	53	28	4	279

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	1122	64	24	1196	67	15	2488

Vistro File: \...\330 Distel Circle Vistro AM.vistro
Report File: \...\Cumulative + Project AM.pdf

Scenario 6 Cumulative Plus Project AM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.861	32.5	C
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	NB Left	0.738	27.2	C
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	SEB Left	0.641	23.4	C
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	NWB Right	0.819	76.6	E
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Left	0.579	21.1	C
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	SWB Left	0.131	513.7	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	SEB Left	0.644	31.5	C
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NWB Right	0.677	65.8	E
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	NWB Right	0.445	52.6	D
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	NWB Right	0.551	58.1	E
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	NWB Right	0.616	57.9	E
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.090	15.3	C
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.011	25.4	D
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	1.859	663.2	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	32.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.861

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	150	887	44	12	820	61	171	76	182	43	48	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	60	0	0	38	0	0	0	0	0	0	-1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	177	1107	52	14	1006	72	202	90	215	51	57	43
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	277	13	4	252	18	51	23	54	13	14	11
Total Analysis Volume [veh/h]	177	1107	52	14	1006	72	202	90	215	51	57	43
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	99	99	99	99	99	99	99	99	99
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	12	43	43	2	32	32	40	40	40
g / C, Green / Cycle	0.12	0.43	0.43	0.02	0.33	0.33	0.40	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.10	0.31	0.31	0.01	0.29	0.29	0.35	0.14	0.39
s, saturation flow rate [veh/h]	1781	1870	1841	1781	1870	1826	826	1589	386
c, Capacity [veh/h]	215	806	793	29	611	597	393	639	203
d1, Uniform Delay [s]	42.72	23.42	23.44	48.52	31.85	31.85	26.92	20.58	30.57
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.36	0.11	0.43
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.70	1.25	1.28	11.67	4.82	4.94	8.80	0.31	18.73
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.72	0.73	0.48	0.89	0.89	0.74	0.34	0.74
d, Delay for Lane Group [s/veh]	50.41	24.67	24.73	60.19	36.66	36.79	35.73	20.89	49.31
Lane Group LOS	D	C	C	E	D	D	D	C	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.62	10.98	10.85	0.43	12.74	12.47	7.17	3.50	4.73
50th-Percentile Queue Length [ft/ln]	115.55	274.49	271.19	10.85	318.57	311.78	179.27	87.45	118.36
95th-Percentile Queue Length [veh/ln]	8.15	16.41	16.25	0.78	18.60	18.26	11.56	6.30	8.30
95th-Percentile Queue Length [ft/ln]	203.69	410.35	406.22	19.54	464.93	456.58	289.06	157.41	207.57

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Movement, Approach, & Intersection Results

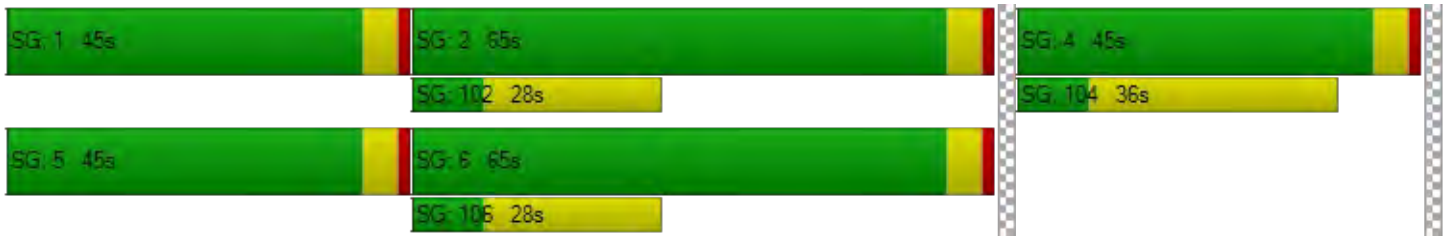
d_M, Delay for Movement [s/veh]	50.41	24.70	24.73	60.19	36.72	36.79	35.73	35.73	20.89	49.31	49.31	49.31
Movement LOS	D	C	C	E	D	D	D	D	C	D	D	D
d_A, Approach Delay [s/veh]	28.11			37.02			29.43			49.31		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	32.52											
Intersection LOS	C											
Intersection V/C	0.861											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.44	0.00	38.44	38.44
l_p,int, Pedestrian LOS Score for Intersection	2.969	0.000	2.164	1.868
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1207	1207	805	805
d_b, Bicycle Delay [s]	7.82	7.82	17.76	17.76
l_b,int, Bicycle LOS Score for Intersection	2.662	2.461	2.396	1.809
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	0	847	161	172	981	0	0	0	0	279	0	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	41	3	0	33	10	18	0	4	6	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1040	193	203	1191	10	18	0	4	335	0	230
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	260	48	51	298	3	5	0	1	84	0	58
Total Analysis Volume [veh/h]	1	1040	193	203	1191	10	18	0	4	335	0	230
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	104	104	104	104	104	104	104	104	104
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	46	46	14	60	60	29	29	29
g / C, Green / Cycle	0.00	0.44	0.44	0.14	0.58	0.58	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.34	0.34	0.11	0.32	0.32	0.07	0.22	0.14
s, saturation flow rate [veh/h]	1781	1870	1770	1781	1870	1864	305	1520	1589
c, Capacity [veh/h]	1	832	787	242	1085	1082	147	487	437
d1, Uniform Delay [s]	52.01	24.24	24.29	43.84	13.52	13.52	38.92	35.00	31.97
k, delay calibration	0.15	0.41	0.41	0.15	0.40	0.40	0.15	0.18	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	481.43	5.31	5.69	10.37	1.64	1.64	0.66	2.82	1.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.98	0.76	0.76	0.84	0.55	0.55	0.15	0.69	0.53
d, Delay for Lane Group [s/veh]	533.44	29.56	29.98	54.22	15.16	15.17	39.59	37.83	33.36
Lane Group LOS	F	C	C	D	B	B	D	D	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.16	13.57	12.99	5.70	8.48	8.46	0.59	8.12	5.02
50th-Percentile Queue Length [ft/ln]	4.07	339.25	324.82	142.52	212.00	211.60	14.64	203.04	125.55
95th-Percentile Queue Length [veh/ln]	0.29	19.61	18.90	9.62	13.26	13.24	1.05	12.80	8.70
95th-Percentile Queue Length [ft/ln]	7.33	490.29	472.61	240.41	331.39	330.88	26.35	319.88	217.43

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Movement, Approach, & Intersection Results

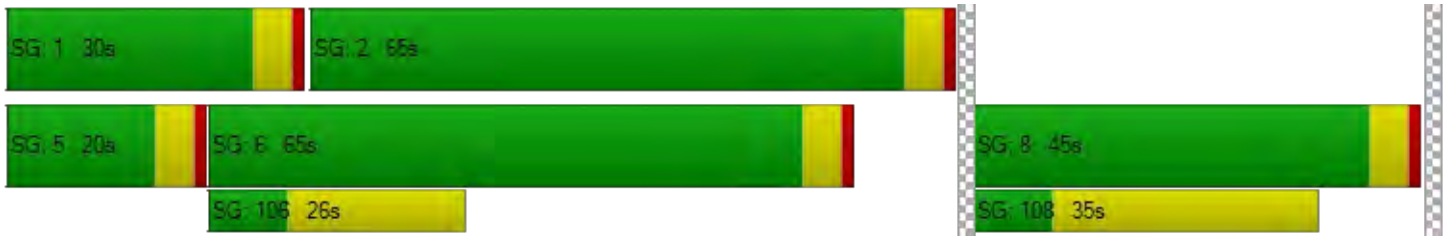
d_M, Delay for Movement [s/veh]	533.44	29.72	29.98	54.22	15.16	15.17	39.59	39.59	39.59	37.83	37.83	33.36
Movement LOS	F	C	C	D	B	B	D	D	D	D	D	C
d_A, Approach Delay [s/veh]	30.17			20.81			39.59			36.01		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	27.18											
Intersection LOS	C											
Intersection V/C	0.738											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	40.66	40.66	57.09
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.944	1.729	2.272
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1155	1155	770	770
d_b, Bicycle Delay [s]	9.28	9.28	19.66	19.66
l_b,int, Bicycle LOS Score for Intersection	2.578	2.718	1.596	2.492
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	23.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	166	4	166	14	9	4	101	1423	7	53	738	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	-1	0	0	0	0	95	0	0	99	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	197	5	195	17	11	5	119	1774	8	63	970	143
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	1	49	4	3	1	30	444	2	16	243	36
Total Analysis Volume [veh/h]	197	5	195	17	11	5	119	1774	8	63	970	143
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	128.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	40	0	20	40	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	34	34	34	12	97	97	7	92	92
g / C, Green / Cycle	0.22	0.22	0.22	0.08	0.65	0.65	0.05	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.21	0.12	0.24	0.07	0.33	0.33	0.04	0.21	0.21
s, saturation flow rate [veh/h]	977	1589	138	1781	3560	1866	1781	3560	1750
c, Capacity [veh/h]	266	356	67	143	2311	1211	81	2187	1075
d1, Uniform Delay [s]	56.94	51.47	52.28	67.97	13.75	13.75	70.82	14.11	14.12
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.42	1.31	5.41	11.66	0.79	1.51	14.56	0.43	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.55	0.49	0.83	0.51	0.51	0.78	0.34	0.34
d, Delay for Lane Group [s/veh]	61.36	52.79	57.69	79.64	14.54	15.26	85.38	14.53	14.98
Lane Group LOS	E	D	E	E	B	B	F	B	B
Critical Lane Group	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.82	6.67	1.39	4.95	10.30	11.04	2.72	6.25	6.30
50th-Percentile Queue Length [ft/ln]	195.51	166.73	34.69	123.83	257.40	275.88	68.05	156.32	157.40
95th-Percentile Queue Length [veh/ln]	12.41	10.90	2.50	8.60	15.56	16.48	4.90	10.35	10.41
95th-Percentile Queue Length [ft/ln]	310.17	272.62	62.44	215.07	388.96	412.08	122.50	258.84	260.28

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.36	61.36	52.79	57.69	57.69	57.69	79.64	14.79	15.26	85.38	14.64	14.98
Movement LOS	E	E	D	E	E	E	E	B	B	F	B	B
d_A, Approach Delay [s/veh]	57.15			57.69			18.85			18.47		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	23.42											
Intersection LOS	C											
Intersection V/C	0.641											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.186	1.779	3.129	3.395
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.33	64.49
l_b,int, Bicycle LOS Score for Intersection	2.215	1.614	2.605	2.206
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	76.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.819

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	178	718	41	182	712	276	261	1180	179	299	606	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	48	10	16	27	29	6	61	53	38	52	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	211	895	58	231	867	355	314	1453	264	391	767	175
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	53	224	15	58	217	89	79	363	66	98	192	44
Total Analysis Volume [veh/h]	211	895	58	231	867	355	314	1453	264	391	767	175
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	153.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	27	56	0	27	56	0	30	63	0	34	67	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	22	51	51	22	51	51	25	58	58	29	62	62
g / C, Green / Cycle	0.12	0.29	0.29	0.12	0.29	0.29	0.14	0.32	0.32	0.16	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.06	0.26	0.26	0.07	0.24	0.22	0.09	0.32	0.33	0.11	0.18	0.18
s, saturation flow rate [veh/h]	3459	1870	1830	3459	3560	1589	3459	3560	1728	3459	3560	1698
c, Capacity [veh/h]	430	534	523	430	1017	454	488	1155	561	555	1234	589
d1, Uniform Delay [s]	73.48	61.87	61.88	73.93	60.73	59.15	73.02	60.71	60.80	71.50	46.80	46.81
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.95	20.96	21.40	4.74	9.02	12.61	6.40	25.76	40.19	7.31	1.55	3.23
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.90	0.90	0.54	0.85	0.78	0.64	1.00	1.01	0.70	0.52	0.52
d, Delay for Lane Group [s/veh]	77.43	82.82	83.28	78.67	69.75	71.76	79.42	86.47	100.99	78.82	48.35	50.03
Lane Group LOS	E	F	F	E	E	E	E	F	F	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.81	24.25	23.82	5.32	19.96	16.50	7.31	30.23	31.70	9.13	11.75	11.48
50th-Percentile Queue Length [ft/ln]	120.14	606.29	595.57	132.91	499.05	412.42	182.80	755.81	792.55	228.25	293.64	287.12
95th-Percentile Queue Length [veh/ln]	8.40	32.33	31.83	9.10	27.29	23.16	11.75	39.25	41.19	14.09	17.37	17.04
95th-Percentile Queue Length [ft/ln]	210.01	808.20	795.69	227.44	682.23	578.94	293.67	981.24	1029.76	352.13	434.16	426.07

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Movement, Approach, & Intersection Results

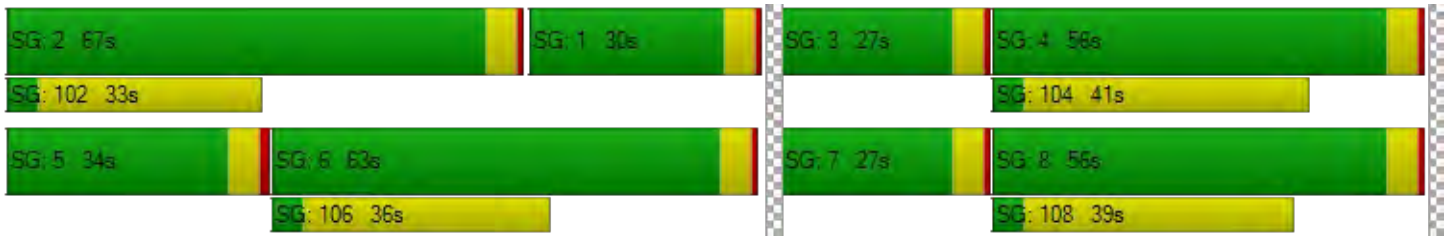
d_M, Delay for Movement [s/veh]	77.43	83.03	83.28	78.67	69.75	71.76	79.42	89.48	100.99	78.82	48.63	50.03
Movement LOS	E	F	F	E	E	E	E	F	F	E	D	D
d_A, Approach Delay [s/veh]	82.03			71.66			89.42			57.67		
Approach LOS	F			E			F			E		
d_I, Intersection Delay [s/veh]	76.59											
Intersection LOS	E											
Intersection V/C	0.819											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	82.18	82.18	82.18	82.18
l_p,int, Pedestrian LOS Score for Intersection	3.038	3.187	3.198	3.236
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	571	571	649	693
d_b, Bicycle Delay [s]	45.94	45.94	41.07	38.42
l_b,int, Bicycle LOS Score for Intersection	2.520	2.758	2.677	2.293
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	21.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	60	10	109	0	6	8	54	1686	29	9	859	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	3	6	0	0	0	3	106	15	0	52	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	77	15	135	0	7	9	67	2095	49	11	1066	118
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	4	34	0	2	2	17	524	12	3	267	30
Total Analysis Volume [veh/h]	77	15	135	0	7	9	67	2095	49	11	1066	118
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	179.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	19	128	0	11	120	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	15	124	124	7	116	116
g / C, Green / Cycle	0.20	0.20	0.09	0.69	0.69	0.04	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate	0.15	0.01	0.04	0.40	0.40	0.01	0.22	0.22
s, saturation flow rate [veh/h]	1549	1701	1781	3560	1848	1781	3560	1776
c, Capacity [veh/h]	344	368	151	2451	1272	72	2293	1144
d1, Uniform Delay [s]	66.53	57.50	78.30	14.47	14.50	83.36	14.67	14.67
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.60	0.22	9.11	0.99	1.91	4.43	0.41	0.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.04	0.44	0.58	0.58	0.15	0.34	0.34
d, Delay for Lane Group [s/veh]	76.13	57.73	87.41	15.46	16.41	87.79	15.08	15.50
Lane Group LOS	E	E	F	B	B	F	B	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.78	0.63	3.35	14.89	15.87	0.59	7.58	7.72
50th-Percentile Queue Length [ft/ln]	269.46	15.74	83.79	372.34	396.64	14.63	189.61	192.88
95th-Percentile Queue Length [veh/ln]	16.16	1.13	6.03	21.22	22.40	1.05	12.10	12.27
95th-Percentile Queue Length [ft/ln]	404.06	28.33	150.82	530.56	559.95	26.34	302.53	306.76

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	76.13	76.13	76.13	57.73	57.73	57.73	87.41	15.77	16.41	87.79	15.19	15.50
Movement LOS	E	E	E	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	76.13			57.73			17.96			15.89		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	21.07											
Intersection LOS	C											
Intersection V/C	0.579											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	81.23	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.918	1.770	3.182	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	409	409	1377	1288
d_b, Bicycle Delay [s]	56.96	56.96	8.74	11.41
I_b,int, Bicycle LOS Score for Intersection	1.934	1.586	2.776	2.217
Bicycle LOS	A	A	C	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	513.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.131

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	4	0	12	1	0	1	130	1684	2	6	1043	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	3	0	0	0	0	124	0	0	78	-5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	0	17	1	0	1	153	2111	2	7	1309	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	4	0	0	0	38	528	1	2	327	12
Total Analysis Volume [veh/h]	12	0	17	1	0	1	153	2111	2	7	1309	48
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.76	0.00	0.05	0.13	0.00	0.01	0.58	0.02	0.00	0.06	0.01	0.00
d_M, Delay for Movement [s/veh]	388.35	2420.54	170.22	513.67	2384.69	59.59	36.32	0.00	0.00	40.10	0.00	0.00
Movement LOS	F	F	F	F	F	F	E	A	A	E	A	A
95th-Percentile Queue Length [veh/ln]	2.91	2.91	2.91	0.38	0.38	0.38	3.37	0.00	0.00	0.20	0.00	0.00
95th-Percentile Queue Length [ft/ln]	72.67	72.67	72.67	9.56	9.56	9.56	84.28	0.00	0.00	5.04	0.00	0.00
d_A, Approach Delay [s/veh]	260.48			286.63			2.45			0.21		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	3.81											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	31.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.644

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	0	204	0	0	0	93	1769	0	8	1024	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	8	0	0	0	4	121	0	0	81	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	77	0	249	0	0	0	114	2208	0	9	1289	112
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	0	62	0	0	0	29	552	0	2	322	28
Total Analysis Volume [veh/h]	77	0	249	0	0	0	114	2208	0	9	1289	112
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	78.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	49	49	0	0	0	0	43	122	0	9	88	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	180		180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	45		39	118	118	5	84	84
g / C, Green / Cycle	0.25		0.22	0.66	0.66	0.03	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.20		0.06	0.41	0.41	0.01	0.26	0.26
s, saturation flow rate [veh/h]	1631		1781	3560	1870	1781	3560	1794
c, Capacity [veh/h]	410		389	2332	1225	52	1660	836
d1, Uniform Delay [s]	62.99		58.75	18.05	18.05	85.21	34.74	34.74
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.62		1.91	1.25	2.37	6.98	1.38	2.72
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79		0.29	0.62	0.62	0.17	0.56	0.56
d, Delay for Lane Group [s/veh]	77.61		60.66	19.31	20.42	92.19	36.12	37.46
Lane Group LOS	E		E	B	C	F	D	D
Critical Lane Group	Yes		No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	15.83		4.59	17.65	18.92	0.51	15.19	15.63
50th-Percentile Queue Length [ft/ln]	395.73		114.69	441.33	473.10	12.81	379.85	390.68
95th-Percentile Queue Length [veh/ln]	22.35		8.10	24.54	26.06	0.92	21.59	22.11
95th-Percentile Queue Length [ft/ln]	558.85		202.50	613.60	651.46	23.06	539.66	552.75

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Movement, Approach, & Intersection Results

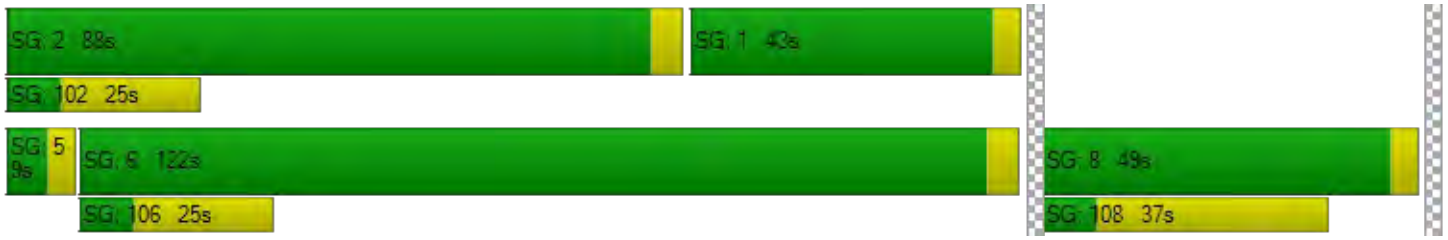
d_M, Delay for Movement [s/veh]	77.61	77.61	77.61	0.00	0.00	0.00	60.66	19.69	20.42	92.19	36.49	37.46
Movement LOS	E	E	E				E	B	C	F	D	D
d_A, Approach Delay [s/veh]	77.61			0.00			21.70			36.92		
Approach LOS	E			A			C			D		
d_I, Intersection Delay [s/veh]	31.48											
Intersection LOS	C											
Intersection V/C	0.644											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	79.34	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.972	1.752	3.254	3.227
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	503	0	1310	932
d_b, Bicycle Delay [s]	50.40	90.00	10.71	25.65
l_b,int, Bicycle LOS Score for Intersection	2.098	1.560	2.837	2.335
Bicycle LOS	B	A	C	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	65.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.677

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	299	0	200	53	1593	212	152	1106	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	10	33	3	3	14	9	87	11	15	66	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	10	34	356	3	250	72	1967	261	194	1371	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	3	9	89	1	63	18	492	65	49	343	2
Total Analysis Volume [veh/h]	23	10	34	356	3	250	72	1967	261	194	1371	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	80.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	21	0	0	51	0	27	79	0	29	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	17	47	47	47	23	75	75	25	77	77
g / C, Green / Cycle	0.10	0.26	0.26	0.26	0.13	0.42	0.42	0.14	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.10	0.10	0.16	0.04	0.42	0.42	0.06	0.25	0.25
s, saturation flow rate [veh/h]	1690	1781	1782	1589	1781	3560	1761	3459	3560	1864
c, Capacity [veh/h]	162	468	468	418	231	1482	733	486	1521	797
d1, Uniform Delay [s]	76.57	54.40	54.39	58.04	71.08	52.54	52.55	70.43	39.59	39.59
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.57	2.37	2.37	6.21	3.51	23.29	38.17	2.44	1.72	3.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.38	0.38	0.60	0.31	1.00	1.02	0.40	0.60	0.60
d, Delay for Lane Group [s/veh]	84.14	56.77	56.76	64.26	74.59	75.83	90.72	72.87	41.31	42.85
Lane Group LOS	F	E	E	E	E	E	F	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.34	7.13	7.14	10.87	3.26	37.86	40.51	4.26	15.85	16.94
50th-Percentile Queue Length [ft/ln]	83.51	178.33	178.45	271.68	81.43	946.56	1012.82	106.52	396.34	423.61
95th-Percentile Queue Length [veh/ln]	6.01	11.51	11.52	16.27	5.86	47.95	51.73	7.65	22.38	23.70
95th-Percentile Queue Length [ft/ln]	150.32	287.83	287.99	406.84	146.57	1198.84	1293.14	191.15	559.59	592.38

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Movement, Approach, & Intersection Results

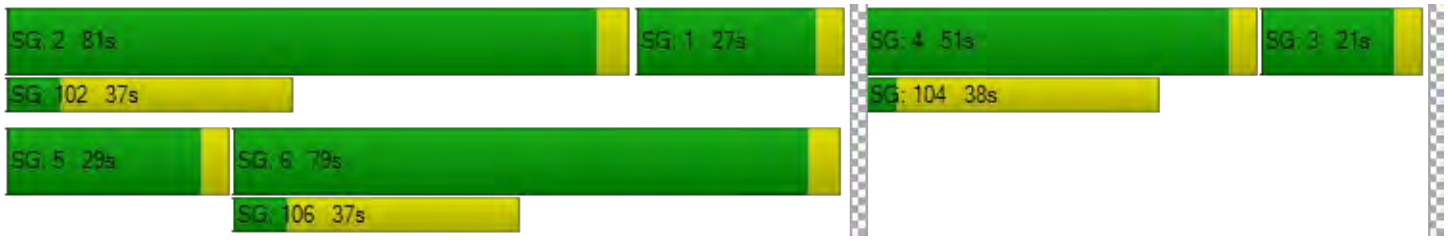
d_M, Delay for Movement [s/veh]	84.14	84.14	84.14	56.77	56.76	64.26	74.59	79.51	90.72	72.87	41.84	42.85
Movement LOS	F	F	F	E	E	E	E	E	F	E	D	D
d_A, Approach Delay [s/veh]	84.14			59.84			80.62			45.67		
Approach LOS	F			E			F			D		
d_I, Intersection Delay [s/veh]	65.81											
Intersection LOS	E											
Intersection V/C	0.677											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	82.18
l_p,int, Pedestrian LOS Score for Intersection	1.784	2.507	0.000	3.302
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	192	526	832	854
d_b, Bicycle Delay [s]	73.53	48.91	30.68	29.53
l_b,int, Bicycle LOS Score for Intersection	1.670	2.564	2.825	2.425
Bicycle LOS	A	B	C	B

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	52.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.445

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	1	0	0	0	86	1341	118	99	1078	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	91	0	7	95	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	0	0	0	101	1673	139	124	1367	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	25	418	35	31	342	0
Total Analysis Volume [veh/h]	0	0	1	0	0	0	101	1673	139	124	1367	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	108.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	28	60	0	29	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	24	55	55	25	56	56
g / C, Green / Cycle	0.10	0.25	0.25	0.16	0.37	0.37	0.16	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.00	0.06	0.34	0.34	0.07	0.25	0.25
s, saturation flow rate [veh/h]	1589	1781	1870	1781	3560	1798	1781	3560	1870
c, Capacity [veh/h]	158	450	472	279	1315	664	291	1339	703
d1, Uniform Delay [s]	60.88	0.00	0.00	56.55	45.04	45.13	56.43	39.03	39.03
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.00	0.00	3.61	11.31	19.76	4.52	2.68	5.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.00	0.00	0.36	0.91	0.92	0.43	0.67	0.67
d, Delay for Lane Group [s/veh]	60.95	0.00	0.00	60.16	56.36	64.89	60.95	41.70	44.04
Lane Group LOS	E	A	A	E	E	E	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	3.73	23.31	25.21	4.63	14.34	15.52
50th-Percentile Queue Length [ft/ln]	0.96	0.00	0.00	93.34	582.66	630.32	115.67	358.54	388.04
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.00	6.72	31.22	33.45	8.15	20.55	21.98
95th-Percentile Queue Length [ft/ln]	1.73	0.00	0.00	168.02	780.60	836.20	203.87	513.80	549.57

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Movement, Approach, & Intersection Results

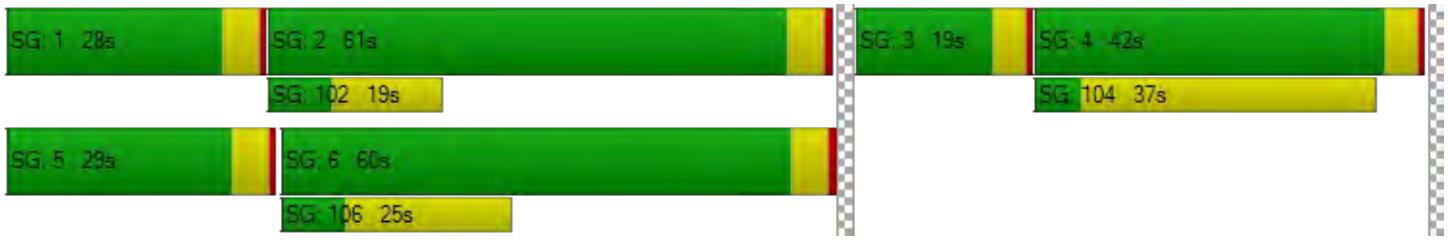
d_M, Delay for Movement [s/veh]	60.95	60.95	60.95	0.00	0.00	0.00	60.16	58.76	64.89	60.95	42.51	44.04
Movement LOS	E	E	E	A	A	A	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	60.95			0.00			59.28			44.04		
Approach LOS	E			A			E			D		
d_I, Intersection Delay [s/veh]	52.61											
Intersection LOS	D											
Intersection V/C	0.445											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.764	2.036	0.000	3.060
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	752
d_b, Bicycle Delay [s]	60.84	41.89	29.83	29.20
l_b,int, Bicycle LOS Score for Intersection	1.561	1.560	2.612	2.380
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	58.1
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.551

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	14	4	5	77	13	97	27	1321	87	148	756	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	0	0	119	0	0	77	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	5	6	103	15	114	32	1678	103	175	969	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	2	26	4	29	8	420	26	44	242	15
Total Analysis Volume [veh/h]	17	5	6	103	15	114	32	1678	103	175	969	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	168.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	28	0	0	42	0	29	70	0	40	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	24	24	38	38	38	25	66	66	36	77	77
g / C, Green / Cycle	0.13	0.13	0.21	0.21	0.21	0.14	0.36	0.36	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.03	0.03	0.07	0.02	0.33	0.33	0.10	0.19	0.19
s, saturation flow rate [veh/h]	1800	1589	1781	1803	1589	1781	3560	1815	1781	3560	1816
c, Capacity [veh/h]	238	210	375	380	335	245	1298	662	359	1515	773
d1, Uniform Delay [s]	68.61	68.03	58.00	58.00	60.42	68.13	54.35	54.40	63.61	36.72	36.73
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.77	0.25	0.89	0.88	2.75	1.10	10.90	18.81	4.67	0.97	1.89
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.09	0.03	0.16	0.16	0.34	0.13	0.91	0.91	0.49	0.45	0.45
d, Delay for Lane Group [s/veh]	69.38	68.28	58.89	58.87	63.18	69.23	65.25	73.20	68.28	37.68	38.61
Lane Group LOS	E	E	E	E	E	E	E	E	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.97	0.26	2.32	2.33	4.75	1.38	27.23	29.28	7.61	10.98	11.41
50th-Percentile Queue Length [ft/ln]	24.20	6.57	57.88	58.36	118.73	34.46	680.68	732.04	190.22	274.47	285.18
95th-Percentile Queue Length [veh/ln]	1.74	0.47	4.17	4.20	8.32	2.48	35.78	38.16	12.13	16.41	16.95
95th-Percentile Queue Length [ft/ln]	43.56	11.82	104.18	105.04	208.08	62.02	894.61	953.91	303.31	410.32	423.66

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.38	69.38	68.28	58.88	58.87	63.18	69.23	67.61	73.20	68.28	37.96	38.61
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	69.14			60.99			67.96			42.40		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	58.09											
Intersection LOS	E											
Intersection V/C	0.551											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	0.00	81.23
l_p,int, Pedestrian LOS Score for Intersection	1.995	2.289	0.000	3.117
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	421	729	851
d_b, Bicycle Delay [s]	67.77	56.09	36.35	29.70
l_b,int, Bicycle LOS Score for Intersection	1.606	1.942	2.557	2.221
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	57.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	0	150	0	59	18	1458	136	31	957	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	28	0	0	0	124	6	0	58	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	0	205	0	70	21	1844	166	37	1187	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	51	0	18	5	461	42	9	297	0
Total Analysis Volume [veh/h]	0	1	0	205	0	70	21	1844	166	37	1187	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	180
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	66	0	0	66	0	37	76	0	38	77	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	180	180	180	180	180	180	180	180
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	62	62	33	72	72	34	73	73
g / C, Green / Cycle	0.34	0.34	0.18	0.40	0.40	0.19	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.01	0.37	0.38	0.02	0.22	0.22
s, saturation flow rate [veh/h]	1870	1468	1781	3560	1792	1781	3560	1870
c, Capacity [veh/h]	664	541	327	1424	717	336	1444	758
d1, Uniform Delay [s]	38.70	47.30	60.74	51.82	52.02	60.47	40.70	40.70
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	3.40	0.38	12.89	22.21	0.66	1.45	2.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.51	0.06	0.94	0.94	0.11	0.54	0.54
d, Delay for Lane Group [s/veh]	38.70	50.70	61.12	64.70	74.22	61.13	42.15	43.44
Lane Group LOS	D	D	E	E	E	E	D	D
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	10.60	0.84	31.23	33.60	1.48	13.54	14.50
50th-Percentile Queue Length [ft/ln]	0.77	264.95	20.90	780.85	839.99	36.91	338.55	362.42
95th-Percentile Queue Length [veh/ln]	0.06	15.94	1.50	40.40	43.11	2.66	19.58	20.74
95th-Percentile Queue Length [ft/ln]	1.38	398.42	37.62	1009.99	1077.65	66.44	489.43	518.53

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	38.70	38.70	38.70	50.70	50.70	50.70	61.12	67.33	74.22	61.13	42.59	43.44
Movement LOS	D	D	D	D	D	D	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	38.70			50.70			67.83			43.15		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	57.93											
Intersection LOS	E											
Intersection V/C	0.616											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	62.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	79.34	79.34	38.68	79.34
l_p,int, Pedestrian LOS Score for Intersection	1.758	1.981	3.446	3.137
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	689	800	811
d_b, Bicycle Delay [s]	38.68	38.68	32.40	31.80
l_b,int, Bicycle LOS Score for Intersection	1.561	2.013	2.677	2.233
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	15.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.090

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	31	274	205	21	25	79
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	6	-2	7	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	326	248	23	37	97
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	82	62	6	9	24
Total Analysis Volume [veh/h]	37	326	248	23	37	97
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.09	0.12
d_M, Delay for Movement [s/veh]	7.87	0.00	0.00	0.00	15.27	11.18
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.81	0.81
95th-Percentile Queue Length [ft/ln]	2.21	2.21	0.00	0.00	20.16	20.16
d_A, Approach Delay [s/veh]	0.80		0.00		12.31	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.53					
Intersection LOS	C					

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Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	25.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	4	3	3	123	3	171	3	52	141	160	33	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	5	0	5	0	0	3	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	4	4	150	4	207	4	61	169	189	39	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	38	1	52	1	15	42	47	10	0
Total Analysis Volume [veh/h]	5	4	4	150	4	207	4	61	169	189	39	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.40	0.01	0.23	0.00	0.00	0.00	0.14	0.00	0.00
d_M, Delay for Movement [s/veh]	19.85	16.33	8.86	25.22	25.44	19.62	7.30	0.00	0.00	8.13	0.00	0.00
Movement LOS	C	C	A	D	D	C	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.11	4.52	4.52	4.52	0.01	0.01	0.01	0.49	0.49	0.49
95th-Percentile Queue Length [ft/ln]	2.80	2.80	2.80	113.07	113.07	113.07	0.19	0.19	0.19	12.30	12.30	12.30
d_A, Approach Delay [s/veh]	15.38			22.01			0.12			6.71		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	11.60											
Intersection LOS	D											

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Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	663.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.859

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	1114	58	17	1369	51	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	59	0	0	43	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1374	68	20	1658	60	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	344	17	5	415	15	4
Total Analysis Volume [veh/h]	1374	68	20	1658	60	17
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.04	0.02	1.86	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	13.07	0.00	663.15	561.38
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.13	0.00	8.13	8.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.35	0.00	203.13	203.13
d_A, Approach Delay [s/veh]	0.00		0.16		640.68	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	15.51					
Intersection LOS	F					

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Report File: \...\Cumulative + Project AM.pdf

Scenario 6 Cumulative Plus Project AM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	177	1107	52	14	1006	72	202	90	215	51	57	43	3086

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	1	1040	193	203	1191	10	18	0	4	335	0	230	3225

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	197	5	195	17	11	5	119	1774	8	63	970	143	3507

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	211	895	58	231	867	355	314	1453	264	391	767	175	5981

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	77	15	135	0	7	9	67	2095	49	11	1066	118	3649

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	12	0	17	1	0	1	153	2111	2	7	1309	48	3661

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	77	0	249	0	114	2208	0	9	1289	112	4058

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	23	10	34	356	3	250	72	1967	261	194	1371	8	4549

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	0	1	0	0	0	101	1673	139	124	1367	0	3405

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	17	5	6	103	15	114	32	1678	103	175	969	59	3276

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	0	1	0	205	0	70	21	1844	166	37	1187	0	3531

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	37	326	248	23	37	97	768

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	5	4	4	150	4	207	4	61	169	189	39	1	837

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	1374	68	20	1658	60	17	3197

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Report File: \...\Cumulative + Project PM.pdf

Scenario 6 Cumulative + Project PM
3/25/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	San Antonio Rd. @ Portola Ave.	Signalized	HCM 6th Edition	SB Left	0.568	11.0	B
2	San Antonio Rd. @ Almond Ave.	Signalized	HCM 6th Edition	NB Left	0.675	20.2	C
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	Signalized	HCM 6th Edition	NWB Left	0.702	19.3	B
26	El Camino Real @ San Antonio Rd.	Signalized	HCM 6th Edition	SEB Right	0.955	88.4	F
28	El Camino Real @ Jordan Ave.	Signalized	HCM 6th Edition	SEB Right	0.658	46.1	D
29	El Camino Real @ Distel Cir.	Two-way stop	HCM 6th Edition	NEB Left	0.900	490.7	F
30	El Camino Real @ Distel Dr.	Signalized	HCM 6th Edition	SEB Right	0.625	50.6	D
31	El Camino Real @ Rengstorff Ave.	Signalized	HCM 6th Edition	NEB Left	0.613	55.9	E
45	El Camino Real @ Del Medio Ave.	Signalized	HCM 6th Edition	SEB Right	0.630	73.6	E
51	El Camino Real @ Showers Dr.	Signalized	HCM 6th Edition	SEB Right	0.651	76.2	E
113	El Camino Real @ Ortega Ave	Signalized	HCM 6th Edition	SEB Right	0.512	48.7	D
115	Distel Drive @ Distel Circle	Two-way stop	HCM 6th Edition	SEB Left	0.067	10.0	B
116	Distel Drive @ Marich Way	Two-way stop	HCM 6th Edition	SWB Thru	0.009	11.0	B
128	San Antonio @ Jordan	Two-way stop	HCM 6th Edition	WB Left	0.984	204.9	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report

Intersection 1: San Antonio Rd. @ Portola Ave.

Control Type:	Signalized	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.568

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			W Portola Ave.					
Base Volume Input [veh/h]	44	781	18	18	976	38	43	18	41	30	7	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	30	0	0	54	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	952	21	21	1206	45	51	21	48	35	8	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	238	5	5	302	11	13	5	12	9	2	8
Total Analysis Volume [veh/h]	52	952	21	21	1206	45	51	21	48	35	8	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	40	60	0	40	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	8	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	20	0	0	20	0	0	28	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	R	C
C, Cycle Length [s]	40	40	40	40	40	40	40	40	40
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	2	18	18	1	17	17	5	5	5
g / C, Green / Cycle	0.06	0.46	0.46	0.03	0.43	0.43	0.14	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.03	0.26	0.26	0.01	0.34	0.34	0.04	0.03	0.07
s, saturation flow rate [veh/h]	1781	1870	1856	1781	1870	1846	1687	1589	999
c, Capacity [veh/h]	100	859	852	48	804	794	386	218	271
d1, Uniform Delay [s]	18.26	7.88	7.88	19.06	9.74	9.75	15.42	15.28	15.65
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.16	0.60	0.60	6.25	1.71	1.74	0.23	0.50	0.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.57	0.57	0.44	0.78	0.78	0.19	0.22	0.27
d, Delay for Lane Group [s/veh]	22.41	8.47	8.48	25.32	11.45	11.49	15.65	15.78	16.18
Lane Group LOS	C	A	A	C	B	B	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.51	2.03	2.02	0.24	3.40	3.37	0.54	0.37	0.54
50th-Percentile Queue Length [ft/ln]	12.65	50.78	50.43	6.12	84.91	84.15	13.46	9.24	13.62
95th-Percentile Queue Length [veh/ln]	0.91	3.66	3.63	0.44	6.11	6.06	0.97	0.67	0.98
95th-Percentile Queue Length [ft/ln]	22.78	91.41	90.77	11.01	152.84	151.46	24.23	16.64	24.51

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Movement, Approach, & Intersection Results

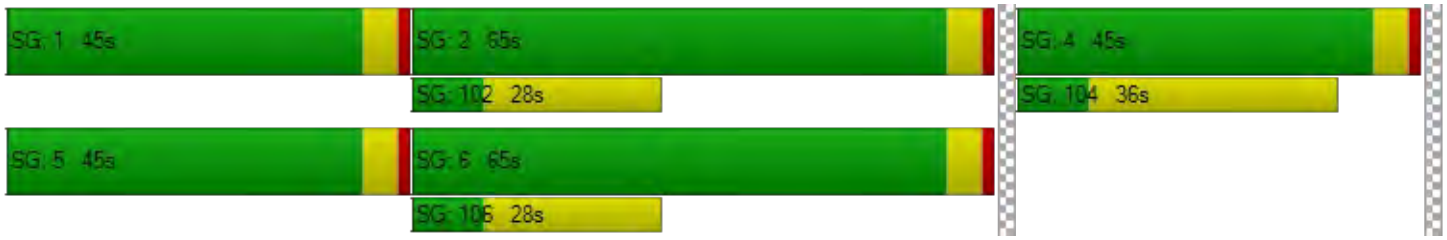
d_M, Delay for Movement [s/veh]	22.41	8.47	8.48	25.32	11.47	11.49	15.65	15.65	15.78	16.18	16.18	16.18
Movement LOS	C	A	A	C	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	9.18			11.70			15.70			16.18		
Approach LOS	A			B			B			B		
d_I, Intersection Delay [s/veh]	10.99											
Intersection LOS	B											
Intersection V/C	0.568											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	0.0	12.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	9.65	0.00	9.65	9.65
l_p,int, Pedestrian LOS Score for Intersection	2.824	0.000	1.949	1.729
Crosswalk LOS	C	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	3024	3024	2016	2016
d_b, Bicycle Delay [s]	5.20	5.20	0.00	0.00
l_b,int, Bicycle LOS Score for Intersection	2.405	2.609	1.758	1.680
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 2: San Antonio Rd. @ Almond Ave.

Control Type:	Signalized	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.675

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	90.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	260.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			15.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			Amendra Pl.			Almond Avenue		
Base Volume Input [veh/h]	3	821	273	122	914	2	0	0	0	213	0	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	18	2	0	33	20	12	0	2	-3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	987	324	144	1112	22	12	0	2	248	0	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	247	81	36	278	6	3	0	1	62	0	36
Total Analysis Volume [veh/h]	8	987	324	144	1112	22	12	0	2	248	0	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	8	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	5	0	0	5	0
Maximum Green [s]	15	60	0	25	60	0	0	40	0	0	40	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	6.0	0.0	4.0	6.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
Walk [s]	0	0	0	0	8	0	0	8	0	0	8	0
Pedestrian Clearance [s]	0	0	0	0	18	0	0	27	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Version 2021 (SP 0-4)

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C	R
C, Cycle Length [s]	87	87	87	87	87	87	87	87	87
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	0	44	44	9	53	53	19	19	19
g / C, Green / Cycle	0.00	0.51	0.51	0.10	0.61	0.61	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.00	0.36	0.37	0.08	0.30	0.30	0.04	0.16	0.09
s, saturation flow rate [veh/h]	1781	1870	1715	1781	1870	1857	358	1584	1589
c, Capacity [veh/h]	9	951	872	185	1136	1128	154	424	342
d1, Uniform Delay [s]	43.26	16.53	16.63	37.98	9.63	9.63	32.31	31.70	29.46
k, delay calibration	0.15	0.39	0.39	0.15	0.39	0.39	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	144.28	3.65	4.13	9.50	1.24	1.25	0.36	1.83	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.92	0.72	0.72	0.78	0.50	0.50	0.09	0.59	0.42
d, Delay for Lane Group [s/veh]	187.54	20.18	20.76	47.48	10.87	10.88	32.67	33.53	30.64
Lane Group LOS	F	C	C	D	B	B	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.52	10.32	9.72	3.39	5.59	5.56	0.31	4.93	2.65
50th-Percentile Queue Length [ft/ln]	12.94	258.03	243.08	84.70	139.69	138.95	7.68	123.13	66.34
95th-Percentile Queue Length [veh/ln]	0.93	15.59	14.84	6.10	9.46	9.42	0.55	8.56	4.78
95th-Percentile Queue Length [ft/ln]	23.29	389.75	370.92	152.46	236.61	235.60	13.82	214.12	119.41

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Movement, Approach, & Intersection Results

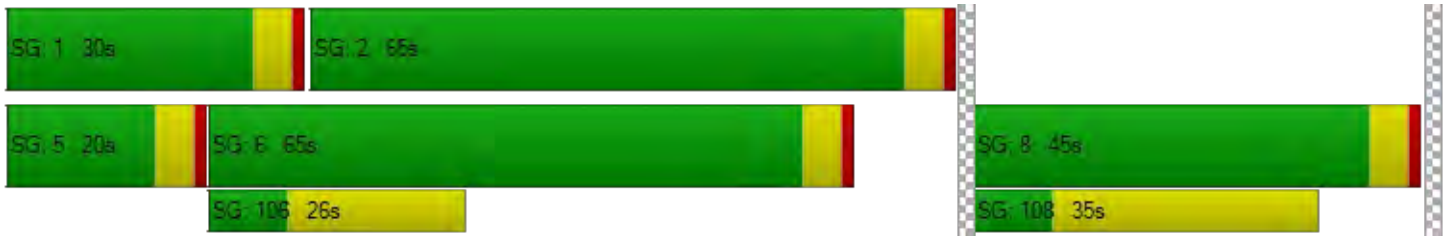
d_M, Delay for Movement [s/veh]	187.54	20.36	20.76	47.48	10.87	10.88	32.67	32.67	32.67	33.53	33.53	30.64
Movement LOS	F	C	C	D	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	21.47			15.00			32.67			32.47		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	20.20											
Intersection LOS	C											
Intersection V/C	0.675											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	12.0	12.0	-5.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	32.25	32.25	48.56
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.864	1.722	2.233
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1382	1382	921	921
d_b, Bicycle Delay [s]	4.15	4.15	12.63	12.63
l_b,int, Bicycle LOS Score for Intersection	2.648	2.614	1.583	2.206
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 25: El Camino Real @ Cesano Ct. / Los Altos Ave.

Control Type:	Signalized	Delay (sec / veh):	19.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.702

Intersection Setup

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	280.00	100.00	100.00	140.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Los Altos Ave.			Cesano Ct.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	105	5	82	13	2	18	74	1062	11	41	1709	159
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	-1	0	0	0	0	98	0	0	99	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	6	96	15	2	21	87	1351	13	48	2116	188
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	2	24	4	1	5	22	338	3	12	529	47
Total Analysis Volume [veh/h]	129	6	96	15	2	21	87	1351	13	48	2116	188
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	116.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	26	0	0	23	0	20	30	0	20	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	74	0	0	74	0	61	30	0	46	15	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	30	0	0	32	0	0	15	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.1	2.1	0.0	2.1	2.1	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.10
g_i, Effective Green Time [s]	29	29	29	9	103	103	6	100	100
g / C, Green / Cycle	0.19	0.19	0.19	0.06	0.69	0.69	0.04	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.17	0.06	0.18	0.05	0.25	0.25	0.03	0.43	0.43
s, saturation flow rate [veh/h]	777	1589	216	1781	3560	1861	1781	3560	1794
c, Capacity [veh/h]	194	302	74	109	2452	1281	72	2378	1198
d1, Uniform Delay [s]	59.53	52.41	52.47	69.51	9.72	9.72	70.98	14.47	14.64
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.41	0.60	5.33	12.50	0.42	0.81	10.19	1.34	2.75
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.32	0.51	0.80	0.37	0.37	0.67	0.64	0.65
d, Delay for Lane Group [s/veh]	63.94	53.01	57.80	82.01	10.14	10.52	81.17	15.81	17.39
Lane Group LOS	E	D	E	F	B	B	F	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.28	3.20	1.32	3.67	6.06	6.47	2.02	14.77	15.75
50th-Percentile Queue Length [ft/ln]	131.96	80.06	32.95	91.79	151.56	161.84	50.56	369.36	393.81
95th-Percentile Queue Length [veh/ln]	9.05	5.76	2.37	6.61	10.10	10.65	3.64	21.08	22.26
95th-Percentile Queue Length [ft/ln]	226.16	144.12	59.31	165.23	252.51	266.16	91.01	526.95	556.53

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.94	63.94	53.01	57.80	57.80	57.80	82.01	10.27	10.52	81.17	16.25	17.39
Movement LOS	E	E	D	E	E	E	F	B	B	F	B	B
d_A, Approach Delay [s/veh]	59.40			57.80			14.57			17.67		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	19.31											
Intersection LOS	B											
Intersection V/C	0.702											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	19.0	34.0	36.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	71.05	57.20	44.85	43.32
l_p,int, Pedestrian LOS Score for Intersection	2.134	1.777	3.223	3.412
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	345	145
d_b, Bicycle Delay [s]	21.33	21.33	51.34	64.50
l_b,int, Bicycle LOS Score for Intersection	1.941	1.622	2.358	2.853
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 26: El Camino Real @ San Antonio Rd.

Control Type:	Signalized	Delay (sec / veh):	88.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.955

Intersection Setup

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	2	0	0	0	0	0	2	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	420.00	100.00	100.00	100.00	100.00	100.00	520.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	N San Antonio Rd.			N San Antonio Rd.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	207	449	86	301	619	147	359	786	125	436	1367	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	34	-4	49	52	50	1	49	18	10	59	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	244	564	97	404	782	223	425	976	166	524	1672	251
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	141	24	101	196	56	106	244	42	131	418	63
Total Analysis Volume [veh/h]	244	564	97	404	782	223	425	976	166	524	1672	251
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	45.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	21	29	0	14	27	0	21	30	0	26	20	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0	4.1	4.1	0.0
All red [s]	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	1.0	0.5	0.0
Split [s]	20	44	0	23	47	0	25	49	0	34	58	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	0	4	0	0	4	0
Pedestrian Clearance [s]	0	35	0	0	37	0	0	32	0	0	29	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.6	2.6	0.0	2.6	2.6	0.0	2.6	2.6	0.0	3.1	2.6	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	Yes		No	Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	5.10	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	3.10	2.60	2.60
g_i, Effective Green Time [s]	15	39	39	18	42	42	20	44	44	29	53	53
g / C, Green / Cycle	0.10	0.26	0.26	0.12	0.28	0.28	0.14	0.30	0.30	0.19	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.08	0.20	0.20	0.13	0.24	0.16	0.14	0.24	0.24	0.17	0.40	0.41
s, saturation flow rate [veh/h]	3113	1683	1598	3113	3204	1431	3113	3204	1561	3113	3204	1575
c, Capacity [veh/h]	320	442	420	382	906	404	423	949	462	600	1141	561
d1, Uniform Delay [s]	65.53	51.06	51.06	65.80	51.05	45.72	64.80	48.89	48.89	58.78	48.30	48.30
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.83	12.02	12.61	62.21	10.70	5.33	44.73	7.42	14.23	16.17	65.67	87.77
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.77	0.77	1.06	0.86	0.55	1.00	0.81	0.81	0.87	1.12	1.15
d, Delay for Lane Group [s/veh]	81.36	63.08	63.67	128.01	61.75	51.05	109.53	56.31	63.12	74.95	113.97	136.07
Lane Group LOS	F	E	E	F	E	D	F	E	E	E	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.24	13.20	12.60	10.58	15.20	7.67	10.69	14.22	14.73	10.96	31.41	34.33
50th-Percentile Queue Length [ft/ln]	131.01	329.95	315.09	264.42	379.89	191.83	267.17	355.45	368.27	274.11	785.37	858.15
95th-Percentile Queue Length [veh/ln]	8.99	19.16	18.43	16.30	21.59	12.22	16.08	20.40	21.03	16.39	43.80	48.28
95th-Percentile Queue Length [ft/ln]	224.86	478.90	460.65	407.57	539.72	305.40	401.94	510.05	525.63	409.87	1095.12	1206.98

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Movement, Approach, & Intersection Results

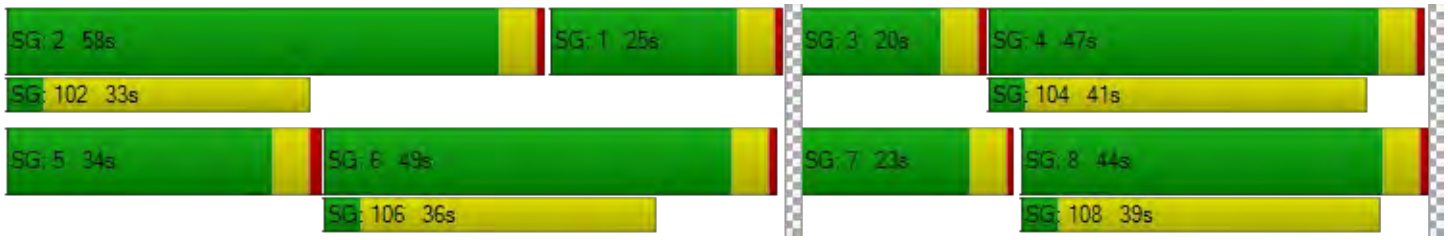
d_M, Delay for Movement [s/veh]	81.36	63.31	63.67	128.01	61.75	51.05	109.53	57.76	63.12	74.95	119.19	136.07
Movement LOS	F	E	E	F	E	D	F	E	E	E	F	F
d_A, Approach Delay [s/veh]	68.22			79.05			72.37			111.45		
Approach LOS	E			E			E			F		
d_I, Intersection Delay [s/veh]	88.38											
Intersection LOS	F											
Intersection V/C	0.955											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	8.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	67.21	67.21	67.21	67.21
l_p,int, Pedestrian LOS Score for Intersection	3.004	3.130	3.283	3.305
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	525	565	592	712
d_b, Bicycle Delay [s]	40.77	38.59	37.17	31.11
l_b,int, Bicycle LOS Score for Intersection	2.306	2.722	2.421	2.905
Bicycle LOS	B	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 28: El Camino Real @ Jordan Ave.

Control Type:	Signalized	Delay (sec / veh):	46.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.658

Intersection Setup

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	235.00	100.00	100.00	130.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			15.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

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Volumes

Name	Jordan Ave.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	63	1	91	5	3	12	64	1237	5	26	1790	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	22	0	0	0	4	51	0	0	100	-7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	1	129	6	4	14	80	1511	6	31	2212	82
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	0	32	2	1	4	20	378	2	8	553	21
Total Analysis Volume [veh/h]	89	1	129	6	4	14	80	1511	6	31	2212	82
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	95.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	23	0	21	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	41	0	0	41	0	33	68	0	31	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		Yes			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	140	140	140	140	140	140	140	140
L, Total Lost Time per Cycle [s]	4.20	4.20	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	37	37	29	64	64	27	62	62
g / C, Green / Cycle	0.26	0.26	0.21	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.14	0.02	0.04	0.28	0.28	0.02	0.42	0.43
s, saturation flow rate [veh/h]	1525	1534	1781	3560	1866	1781	3560	1836
c, Capacity [veh/h]	437	435	373	1625	852	347	1574	812
d1, Uniform Delay [s]	44.14	38.58	45.82	28.71	28.71	46.17	37.83	38.01
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.06	0.24	1.31	1.73	3.28	0.51	14.88	24.23
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.50	0.06	0.21	0.61	0.61	0.09	0.96	0.97
d, Delay for Lane Group [s/veh]	48.21	38.82	47.14	30.44	31.99	46.67	52.71	62.24
Lane Group LOS	D	D	D	C	C	D	D	E
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.12	0.67	2.45	12.84	13.83	0.94	27.62	30.88
50th-Percentile Queue Length [ft/ln]	178.11	16.83	61.28	321.10	345.76	23.46	690.55	771.97
95th-Percentile Queue Length [veh/ln]	11.50	1.21	4.41	18.72	19.93	1.69	36.24	39.99
95th-Percentile Queue Length [ft/ln]	287.55	30.30	110.31	468.04	498.23	42.23	906.03	999.80

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.21	48.21	48.21	38.82	38.82	38.82	47.14	30.97	31.99	46.67	55.73	62.24
Movement LOS	D	D	D	D	D	D	D	C	C	D	E	E
d_A, Approach Delay [s/veh]	48.21			38.82			31.78			55.84		
Approach LOS	D			D			C			E		
d_I, Intersection Delay [s/veh]	46.12											
Intersection LOS	D											
Intersection V/C	0.658											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	59.43	59.43	61.29	0.00
l_p,int, Pedestrian LOS Score for Intersection	1.892	1.751	3.266	0.000
Crosswalk LOS	A	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	526	913	884
d_b, Bicycle Delay [s]	38.04	38.04	20.68	21.78
l_b,int, Bicycle LOS Score for Intersection	1.921	1.599	2.438	2.838
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 29: El Camino Real @ Distel Cir.

Control Type:	Two-way stop	Delay (sec / veh):	490.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.900

Intersection Setup

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	220.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Distel Cir.			Diveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	9	0	29	1	0	0	34	1337	0	14	1587	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	1	0	0	0	6	60	0	0	121	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	0	35	1	0	0	46	1638	0	17	1994	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	9	0	0	0	12	410	0	4	499	6
Total Analysis Volume [veh/h]	12	0	35	1	0	0	46	1638	0	17	1994	23
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.90	0.00	0.17	0.06	0.00	0.00	0.38	0.02	0.00	0.09	0.02	0.00
d_M, Delay for Movement [s/veh]	490.72	1778.32	238.19	254.06	1606.68	33.77	51.02	0.00	0.00	25.77	0.00	0.00
Movement LOS	F	F	F	F	F	D	F	A	A	D	A	A
95th-Percentile Queue Length [veh/ln]	4.40	4.40	4.40	0.19	0.19	0.19	1.55	0.00	0.00	0.29	0.00	0.00
95th-Percentile Queue Length [ft/ln]	109.96	109.96	109.96	4.71	4.71	4.71	38.77	0.00	0.00	7.26	0.00	0.00
d_A, Approach Delay [s/veh]	302.66			254.06			1.39			0.22		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	4.58											
Intersection LOS	F											

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Intersection Level Of Service Report

Intersection 30: El Camino Real @ Distel Dr.

Control Type:	Signalized	Delay (sec / veh):	50.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625

Intersection Setup

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	145.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Distel Dr.			Driveway			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	42	0	99	0	0	0	68	1304	0	6	1850	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	7	0	0	0	10	66	0	0	122	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	0	124	0	0	0	90	1605	0	7	2305	25
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	0	31	0	0	0	23	401	0	2	576	6
Total Analysis Volume [veh/h]	50	0	124	0	0	0	90	1605	0	7	2305	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	134.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	8	8	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	18	18	0	0	0	0	23	30	0	25	30	0
Amber [s]	3.7	3.7	0.0	0.0	0.0	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	44	44	0	0	0	0	36	73	0	33	70	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	7	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	30	30	0	0	0	0	0	18	0	0	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.7	1.7	0.0	0.0	0.0	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No					No	Yes		No	Yes	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C		L	C	C	L	C	C
C, Cycle Length [s]	150		150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70		3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70		1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	40		32	69	69	29	66	66
g / C, Green / Cycle	0.27		0.22	0.46	0.46	0.20	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.11		0.05	0.30	0.30	0.00	0.43	0.43
s, saturation flow rate [veh/h]	1640		1781	3560	1870	1781	3560	1860
c, Capacity [veh/h]	441		383	1635	859	348	1564	817
d1, Uniform Delay [s]	44.87		48.64	31.12	31.12	48.75	41.33	41.39
k, delay calibration	0.50		0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.64		1.43	1.96	3.70	0.11	18.06	26.94
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39		0.23	0.64	0.64	0.02	0.98	0.98
d, Delay for Lane Group [s/veh]	47.51		50.07	33.08	34.82	48.86	59.39	68.33
Lane Group LOS	D		D	C	C	D	E	E
Critical Lane Group	Yes		Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.74		2.96	14.95	16.12	0.22	31.07	34.58
50th-Percentile Queue Length [ft/ln]	143.43		73.92	373.71	402.90	5.60	776.80	864.38
95th-Percentile Queue Length [veh/ln]	9.67		5.32	21.29	22.70	0.40	40.21	44.22
95th-Percentile Queue Length [ft/ln]	241.63		133.06	532.23	567.50	10.08	1005.35	1105.46

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	47.51	47.51	47.51	0.00	0.00	0.00	50.07	33.68	34.82	48.86	62.40	68.33
Movement LOS	D	D	D				D	C	C	D	E	E
d_A, Approach Delay [s/veh]	47.51			0.00			34.55			62.42		
Approach LOS	D			A			C			E		
d_I, Intersection Delay [s/veh]	50.57											
Intersection LOS	D											
Intersection V/C	0.625											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	64.40	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.857	1.743	3.288	3.267
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	537	0	919	879
d_b, Bicycle Delay [s]	40.11	75.00	21.92	23.58
l_b,int, Bicycle LOS Score for Intersection	1.847	1.560	2.492	2.845
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 31: El Camino Real @ Rengstorff Ave.

Control Type:	Signalized	Delay (sec / veh):	55.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.613

Intersection Setup

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	2	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	150.00	230.00	100.00	100.00	180.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Driveway			Rengstorff Ave.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	0	0	273	0	135	64	1151	201	205	1837	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	8	15	3	14	17	24	40	37	17	82	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	8	15	325	14	176	100	1398	274	259	2250	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	4	81	4	44	25	350	69	65	563	8
Total Analysis Volume [veh/h]	18	8	15	325	14	176	100	1398	274	259	2250	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	132.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	16	0	0	15	0	16	30	0	21	30	0
Amber [s]	0.0	3.7	0.0	0.0	3.7	0.0	3.7	4.1	0.0	3.7	4.1	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	9	0	0	42	0	31	66	0	33	68	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	4	0	0	4	0	5	7	0	0	7	0
Pedestrian Clearance [s]	0	34	0	0	34	0	10	30	0	0	30	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.7	0.0	0.0	1.7	0.0	1.7	2.1	0.0	1.7	2.1	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	3.70	3.70	3.70	3.70	3.70	4.10	4.10	3.70	4.10	4.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.70	1.70	1.70	1.70	1.70	2.10	2.10	1.70	2.10	2.10
g_i, Effective Green Time [s]	5	38	38	38	27	62	62	29	64	64
g / C, Green / Cycle	0.04	0.26	0.26	0.26	0.18	0.41	0.41	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.02	0.09	0.09	0.11	0.06	0.32	0.32	0.07	0.42	0.42
s, saturation flow rate [veh/h]	1721	1781	1788	1589	1781	3560	1718	3459	3560	1857
c, Capacity [veh/h]	61	455	457	406	324	1469	709	676	1517	791
d1, Uniform Delay [s]	71.50	45.95	45.95	46.77	53.17	37.85	37.91	52.49	42.63	42.74
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	46.50	2.33	2.32	3.35	2.46	3.88	7.88	1.65	20.14	29.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.37	0.37	0.43	0.31	0.77	0.77	0.38	0.99	0.99
d, Delay for Lane Group [s/veh]	118.00	48.28	48.27	50.12	55.63	41.73	45.79	54.14	62.77	72.46
Lane Group LOS	F	D	D	D	E	D	D	D	E	E
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.38	5.60	5.62	5.99	3.50	18.39	18.63	4.41	31.10	34.73
50th-Percentile Queue Length [ft/ln]	59.52	139.92	140.44	149.82	87.57	459.82	465.69	110.31	777.42	868.25
95th-Percentile Queue Length [veh/ln]	4.29	9.48	9.50	10.01	6.31	25.43	25.71	7.86	40.24	44.40
95th-Percentile Queue Length [ft/ln]	107.14	236.91	237.61	250.18	157.63	635.65	642.65	196.43	1006.06	1109.88

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Movement, Approach, & Intersection Results

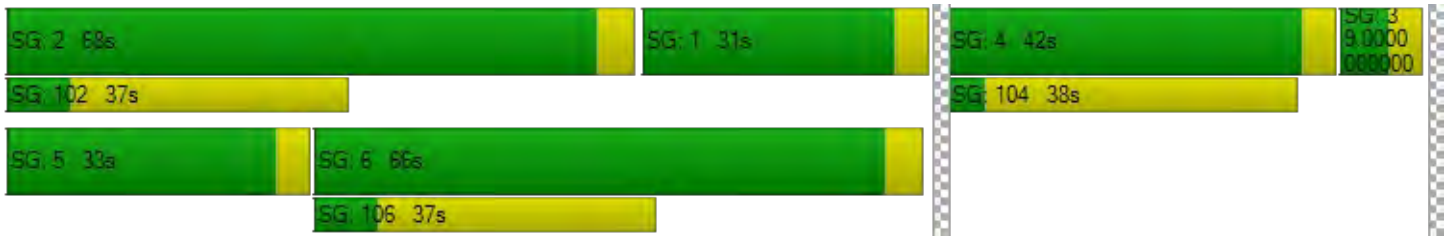
d_M, Delay for Movement [s/veh]	118.00	118.00	118.00	48.28	48.27	50.12	55.63	42.52	45.79	54.14	66.01	72.46
Movement LOS	F	F	F	D	D	D	E	D	D	D	E	E
d_A, Approach Delay [s/veh]	118.00			48.91			43.76			64.88		
Approach LOS	F			D			D			E		
d_I, Intersection Delay [s/veh]	55.95											
Intersection LOS	E											
Intersection V/C	0.613											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	67.21
l_p,int, Pedestrian LOS Score for Intersection	1.784	2.496	0.000	3.339
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	71	511	825	852
d_b, Bicycle Delay [s]	69.79	41.59	25.87	24.71
l_b,int, Bicycle LOS Score for Intersection	1.627	2.409	2.534	2.956
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 45: El Camino Real @ Del Medio Ave.

Control Type:	Signalized	Delay (sec / veh):	73.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.630

Intersection Setup

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	75.00	240.00	100.00	100.00	120.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Del Medio Av.			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	0	1	3	45	0	140	61	1075	96	118	1930	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	99	0	24	70	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	4	53	0	165	72	1368	113	163	2347	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	13	0	41	18	342	28	41	587	1
Total Analysis Volume [veh/h]	0	1	4	53	0	165	72	1368	113	163	2347	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	105.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	12	0	0	5	0	20	30	0	20	30	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.0	4.1	0.0	4.0	4.1	0.0
All red [s]	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0
Split [s]	0	19	0	0	42	0	24	60	0	29	65	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	18	0	0	12	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.1	0.0	0.0	2.1	0.0	2.5	2.6	0.0	2.5	2.6	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		Yes	Yes		Yes	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.10	4.10	4.10	4.50	4.60	4.60	4.50	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.10	2.10	2.10	2.50	2.60	2.60	2.50	2.60	2.60
g_i, Effective Green Time [s]	15	38	38	20	55	55	25	60	60
g / C, Green / Cycle	0.10	0.25	0.25	0.13	0.37	0.37	0.16	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.10	0.04	0.28	0.28	0.09	0.43	0.43
s, saturation flow rate [veh/h]	1639	1781	1589	1781	3560	1798	1781	3560	1869
c, Capacity [veh/h]	163	450	402	232	1315	664	291	1434	753
d1, Uniform Delay [s]	61.03	43.17	46.74	59.16	41.22	41.23	57.79	44.80	44.80
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.35	0.53	3.09	3.47	3.93	7.56	7.60	46.50	54.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.12	0.41	0.31	0.75	0.75	0.56	1.07	1.07
d, Delay for Lane Group [s/veh]	61.38	43.71	49.83	62.63	45.16	48.79	65.39	91.30	99.50
Lane Group LOS	E	D	D	E	D	D	E	F	F
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.19	1.62	5.59	2.73	16.62	17.46	6.35	35.67	39.16
50th-Percentile Queue Length [ft/ln]	4.82	40.56	139.71	68.17	415.61	436.54	158.78	891.65	979.05
95th-Percentile Queue Length [veh/ln]	0.35	2.92	9.47	4.91	23.31	24.31	10.48	47.93	52.14
95th-Percentile Queue Length [ft/ln]	8.68	73.01	236.63	122.70	582.78	607.87	262.10	1198.14	1303.50

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Movement, Approach, & Intersection Results

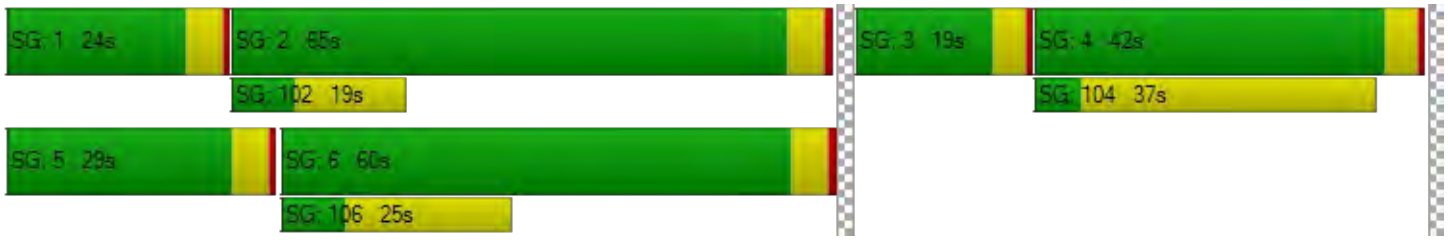
d_M, Delay for Movement [s/veh]	61.38	61.38	61.38	43.71	49.83	49.83	62.63	46.18	48.79	65.39	94.12	99.50
Movement LOS	E	E	E	D	D	D	E	D	D	E	F	F
d_A, Approach Delay [s/veh]	61.38			48.34			47.13			92.26		
Approach LOS	E			D			D			F		
d_I, Intersection Delay [s/veh]	73.64											
Intersection LOS	E											
Intersection V/C	0.630											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	1.758	2.099	0.000	3.183
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	199	505	739	805
d_b, Bicycle Delay [s]	60.84	41.89	29.83	26.76
l_b,int, Bicycle LOS Score for Intersection	1.568	1.919	2.414	2.941
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report

Intersection 51: El Camino Real @ Showers Dr.

Control Type:	Signalized	Delay (sec / veh):	76.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.651

Intersection Setup

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	190.00	100.00	100.00	165.00	100.00	100.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	15.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

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Volumes

Name	Driveway			Showers Drive			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	51	27	82	201	30	119	88	1000	152	237	1558	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	68	0	0	102	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	32	97	237	35	140	104	1248	179	280	1940	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	8	24	59	9	35	26	312	45	70	485	36
Total Analysis Volume [veh/h]	60	32	97	237	35	140	104	1248	179	280	1940	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Version 2021 (SP 0-4)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	63.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	23	0	0	19	0	16	30	0	26	30	0
Amber [s]	0.0	3.7	0.0	0.0	4.1	0.0	3.7	4.4	0.0	3.7	4.4	0.0
All red [s]	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Split [s]	0	25	0	0	42	0	23	48	0	35	60	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	32	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.1	0.0	2.2	2.4	0.0	1.7	2.4	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.20	4.20	4.10	4.10	4.10	4.20	4.40	4.40	3.70	4.40	4.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.10	2.10	2.10	2.20	2.40	2.40	1.70	2.40	2.40
g_i, Effective Green Time [s]	21	21	38	38	38	19	44	44	31	56	56
g / C, Green / Cycle	0.14	0.14	0.25	0.25	0.25	0.13	0.29	0.29	0.21	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.08	0.08	0.09	0.06	0.27	0.27	0.16	0.39	0.39
s, saturation flow rate [veh/h]	1811	1589	1781	1803	1589	1781	3560	1752	1781	3560	1805
c, Capacity [veh/h]	251	220	450	456	402	223	1035	509	372	1320	669
d1, Uniform Delay [s]	58.62	59.26	45.33	45.33	45.93	60.94	51.59	51.60	55.73	47.20	47.20
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.09	6.26	1.71	1.69	2.38	6.84	14.77	24.90	13.23	36.80	50.89
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.44	0.30	0.30	0.35	0.47	0.92	0.92	0.75	1.04	1.06
d, Delay for Lane Group [s/veh]	62.71	65.52	47.04	47.01	48.31	67.78	66.36	76.49	68.95	84.00	98.09
Lane Group LOS	E	E	D	D	D	E	E	E	E	F	F
Critical Lane Group	No	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.55	3.86	4.35	4.40	4.60	4.11	19.41	20.54	11.29	30.98	34.03
50th-Percentile Queue Length [ft/ln]	88.74	96.57	108.67	109.91	115.08	102.65	485.26	513.58	282.16	774.44	850.75
95th-Percentile Queue Length [veh/ln]	6.39	6.95	7.77	7.84	8.12	7.39	26.64	27.98	16.80	41.35	45.39
95th-Percentile Queue Length [ft/ln]	159.73	173.83	194.16	195.88	203.04	184.76	665.89	699.41	419.90	1033.79	1134.70

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Movement, Approach, & Intersection Results

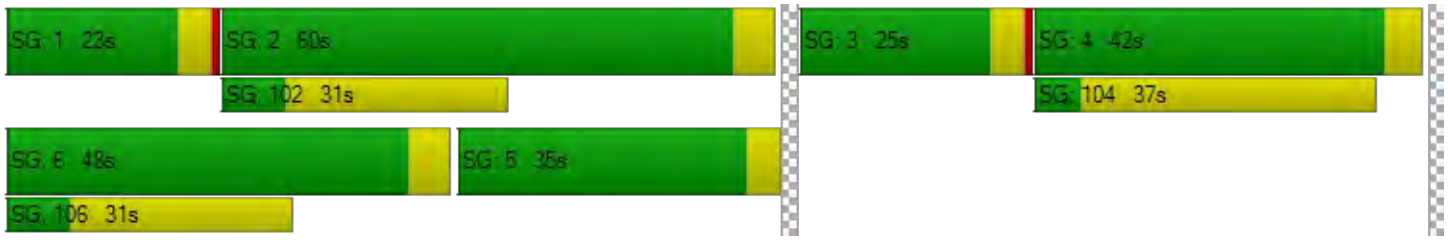
d_M, Delay for Movement [s/veh]	62.71	62.71	65.52	47.03	47.01	48.31	67.78	68.73	76.49	68.95	88.09	98.09
Movement LOS	E	E	E	D	D	D	E	E	E	E	F	F
d_A, Approach Delay [s/veh]	64.15			47.46			69.58			86.43		
Approach LOS	E			D			E			F		
d_I, Intersection Delay [s/veh]	76.18											
Intersection LOS	E											
Intersection V/C	0.651											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	0.00	66.27
l_p,int, Pedestrian LOS Score for Intersection	2.041	2.376	0.000	3.239
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	277	505	581	741
d_b, Bicycle Delay [s]	55.64	41.89	37.74	29.70
l_b,int, Bicycle LOS Score for Intersection	1.871	2.239	2.402	2.860
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Version 2021 (SP 0-4)

Intersection Level Of Service Report

Intersection 113: El Camino Real @ Ortega Ave

Control Type:	Signalized	Delay (sec / veh):	48.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.512

Intersection Setup

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	Driveway			Ortega Ave			El Camino Real			El Camino Real		
Base Volume Input [veh/h]	3	4	4	71	0	38	13	1248	111	45	1608	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	20	0	0	0	55	6	0	122	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	5	5	104	0	45	15	1528	137	53	2019	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	26	0	11	4	382	34	13	505	0
Total Analysis Volume [veh/h]	4	5	5	104	0	45	15	1528	137	53	2019	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	150
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	83.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	9.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	4	0	0	8	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	45	0	0	45	0	39	64	0	41	66	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	28	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			Yes		No	Yes		No	Yes	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	150	150	150	150	150	150	150	150
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	41	35	60	60	37	62	62
g / C, Green / Cycle	0.27	0.27	0.23	0.40	0.40	0.25	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.01	0.10	0.01	0.31	0.31	0.03	0.37	0.37
s, saturation flow rate [veh/h]	1639	1480	1781	3560	1792	1781	3560	1870
c, Capacity [veh/h]	479	445	416	1424	717	439	1472	773
d1, Uniform Delay [s]	39.92	43.65	44.46	39.18	39.20	43.87	41.09	41.09
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	2.02	0.16	4.23	8.14	0.56	9.11	15.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.33	0.04	0.78	0.78	0.12	0.90	0.90
d, Delay for Lane Group [s/veh]	40.03	45.67	44.62	43.42	47.34	44.43	50.20	56.61
Lane Group LOS	D	D	D	D	D	D	D	E
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.40	4.77	0.45	18.42	19.35	1.61	24.34	26.94
50th-Percentile Queue Length [ft/ln]	10.04	119.15	11.37	460.58	483.77	40.33	608.49	673.56
95th-Percentile Queue Length [veh/ln]	0.72	8.35	0.82	25.46	26.57	2.90	32.43	35.45
95th-Percentile Queue Length [ft/ln]	18.07	208.65	20.47	636.56	664.13	72.59	810.76	886.37

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Movement, Approach, & Intersection Results

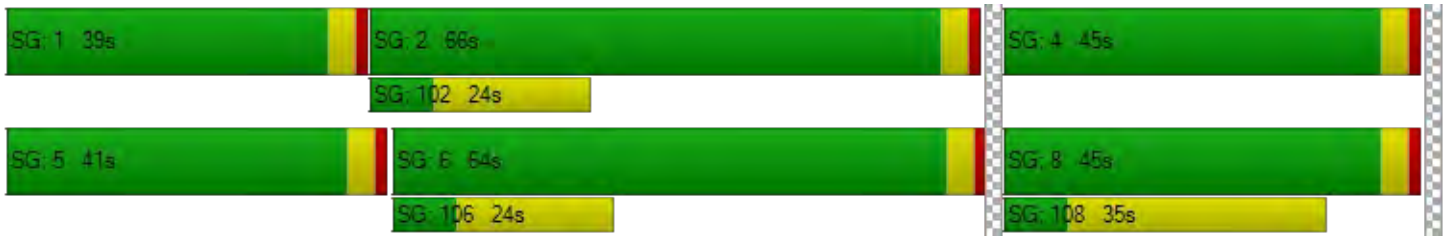
d_M, Delay for Movement [s/veh]	40.03	40.03	40.03	45.67	45.67	45.67	44.62	44.50	47.34	44.43	52.41	56.61
Movement LOS	D	D	D	D	D	D	D	D	D	D	D	E
d_A, Approach Delay [s/veh]	40.03			45.67			44.73			52.20		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	48.71											
Intersection LOS	D											
Intersection V/C	0.512											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	41.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	64.40	64.40	39.60	64.40
l_p,int, Pedestrian LOS Score for Intersection	1.753	1.907	3.365	3.217
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	547	547	800	827
d_b, Bicycle Delay [s]	39.60	39.60	27.00	25.81
l_b,int, Bicycle LOS Score for Intersection	1.583	1.805	2.484	2.699
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Intersection Level Of Service Report
Intersection 115: Distel Drive @ Distel Circle

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name	Distel Dr.		Distel Dr.		Distel Circle	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Distel Dr.		Distel Dr.		Distel Circle	
Base Volume Input [veh/h]	1	85	63	3	44	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	6	4	6	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	106	78	10	53	38
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	27	20	3	13	10
Total Analysis Volume [veh/h]	2	106	78	10	53	38
Pedestrian Volume [ped/h]	0		0		0	

Generated with PTV VISTRO

Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.07	0.04
d_M, Delay for Movement [s/veh]	7.39	0.00	0.00	0.00	10.02	9.18
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.10	0.10	0.00	0.00	8.82	8.82
d_A, Approach Delay [s/veh]	0.14		0.00		9.67	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.12					
Intersection LOS	B					

Generated with PTV VISTRO
Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 116: Distel Drive @ Marich Way

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Distel Dr.			Distel Dr.			Marich Way			Marich Way		
Base Volume Input [veh/h]	0	3	1	49	5	40	3	19	38	42	24	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	2	0	0	3	4	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	1	60	6	49	4	22	48	54	28	4
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	15	2	12	1	6	12	14	7	1
Total Analysis Volume [veh/h]	0	4	1	60	6	49	4	22	48	54	28	4
Pedestrian Volume [ped/h]	0			0			0			0		

Generated with PTV VISTRO

Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.08	0.01	0.05	0.00	0.00	0.00	0.04	0.00	0.00
d_M, Delay for Movement [s/veh]	10.36	10.53	8.48	10.57	11.03	9.21	7.28	0.00	0.00	7.44	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.48	0.48	0.48	0.01	0.01	0.01	0.11	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.53	0.53	0.53	11.95	11.95	11.95	0.19	0.19	0.19	2.74	2.74	2.74
d_A, Approach Delay [s/veh]	10.12			10.01			0.39			4.67		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	5.83											
Intersection LOS	B											

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Version 2021 (SP 0-4)

Intersection Level Of Service Report
Intersection 128: San Antonio @ Jordan

Control Type:	Two-way stop	Delay (sec / veh):	204.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.984

Intersection Setup

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	N San Antonio Rd.		N San Antonio Rd.		Jordan Ave	
Base Volume Input [veh/h]	926	54	20	969	57	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	30	0	0	53	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1123	64	24	1196	67	15
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	281	16	6	299	17	4
Total Analysis Volume [veh/h]	1123	64	24	1196	67	15
Pedestrian Volume [ped/h]	0		0		0	

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Version 2021 (SP 0-4)

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.04	0.01	0.98	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	11.43	0.00	204.86	160.02
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.13	0.00	5.63	5.63
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.21	0.00	140.85	140.85
d_A, Approach Delay [s/veh]	0.00		0.22		196.66	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	6.59					
Intersection LOS	F					

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Version 2021 (SP 0-4)

Vistro File: \...\330 Distel Circle Vistro PM.vistro
Report File: \...\Cumulative + Project PM.pdf

Scenario 6 Cumulative + Project PM
3/25/2022

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	San Antonio Rd. @ Portola Ave.	52	952	21	21	1206	45	51	21	48	35	8	30	2490

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	San Antonio Rd. @ Almond Ave.	8	987	324	144	1112	22	12	0	2	248	0	144	3003

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
25	El Camino Real @ Cesano Ct. / Los Altos Ave.	129	6	96	15	2	21	87	1351	13	48	2116	188	4072

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
26	El Camino Real @ San Antonio Rd.	244	564	97	404	782	223	425	976	166	524	1672	251	6328

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
28	El Camino Real @ Jordan Ave.	89	1	129	6	4	14	80	1511	6	31	2212	82	4165

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
29	El Camino Real @ Distel Cir.	12	0	35	1	0	0	46	1638	0	17	1994	23	3766

ID	Intersection Name	Northeastbound			Southwestbound	Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Right	Left	Thru	Right	Left	Thru	Right	
30	El Camino Real @ Distel Dr.	50	0	124	0	90	1605	0	7	2305	25	4206

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ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
31	El Camino Real @ Rengstorff Ave.	18	8	15	325	14	176	100	1398	274	259	2250	30	4867

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
45	El Camino Real @ Del Medio Ave.	0	1	4	53	0	165	72	1368	113	163	2347	2	4288

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
51	El Camino Real @ Showers Dr.	60	32	97	237	35	140	104	1248	179	280	1940	144	4496

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
113	El Camino Real @ Ortega Ave	4	5	5	104	0	45	15	1528	137	53	2019	0	3915

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
115	Distel Drive @ Distel Circle	2	106	78	10	53	38	287

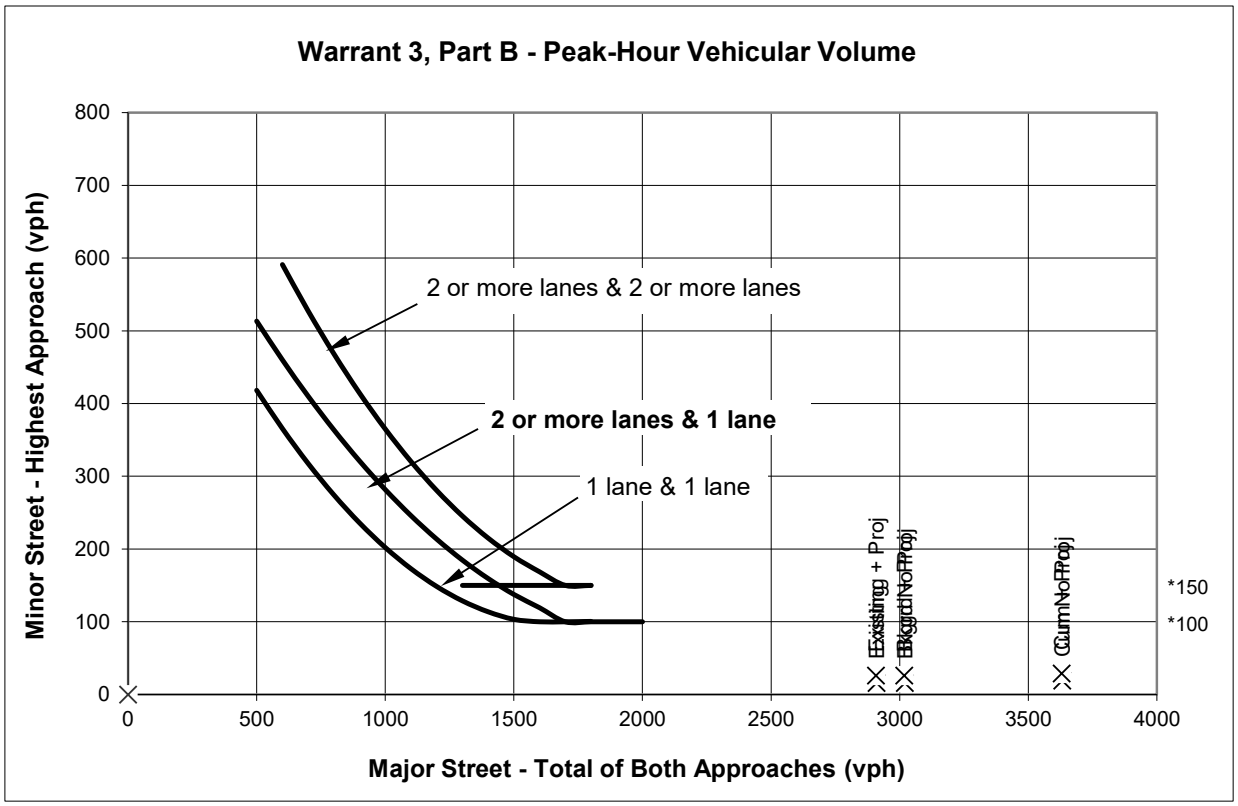
ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
116	Distel Drive @ Marich Way	0	4	1	60	6	49	4	22	48	54	28	4	280

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
128	San Antonio @ Jordan	1123	64	24	1196	67	15	2489

Appendix E
Signal Warrant Analysis

330 Distel Circle

El Camino Real and Distel Circle **AM PEAK PERIOD**



Source: Figure 4C-3 *California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California)* .

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		AM PEAK PERIOD							
		One	2 or More	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj	0	
Major Street - Both Approaches	El Camino		X	2910	2908	3020	3018	3632	3630	0	
Minor Street - Highest Approach	Distel Circle/ Driveway	X		16	26	16	26	19	29	0	
Signal Warranted Based on Part B - Peak-Hour Volumes?				**No**	**No**	**No**	**No**	**No**	**No**		

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

330 Distel Circle

TRAFFIC SIGNAL WARRANTS WORKSHEET

Analyst: SJ date: 3/10/22

Major Street: El Camino — Critical Approach Speed* (mph) 35

Minor Street: Distel Circle/ Driveway — Critical Approach Speed* (mph) 25

**Posted Speed.*

Critical speed of major street traffic > 50 mph (64 km/h)…… ☑ or ☐ **Rural (R)**

In built up area of isolated community of < 10,000 population…… ☐ **Urban (U)**

AM PEAK PERIOD

Warrant 3 - Peak Hour

PART A

(All parts 1, 2, and 3 below must be satisfied)

	AM PEAK PERIOD							
	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj	0:00	
Minor Street Approach Direction w/ Highest Delay	SB	SB	SB	SB	SB	SB		
Highest Minor Street Average Delay (sec/veh)	87.3	88.1	99.7	100.6	284.0	286.6		
Corresponding Minor Street Approach Volume (veh/hr)	2	2	2	2	2	2		
Minor Street Total Delay (veh-hrs)	0.0	0.0	0.1	0.1	0.2	0.2		
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; AND	No	No	No	No	No	No		
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; AND	No	No	No	No	No	No		
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	Yes	Yes	Yes	Yes	Yes	Yes		
Signal Warranted based on Part A?	**No**	**No**	**No**	**No**	**No**	**No**		

PART B

		Approach Lanes		AM PEAK PERIOD							
		One	2 or More	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj		
Major Street - Both Approaches	El Camino		X	2910	2908	3020	3018	3632	3630		
Minor Street - Highest Approach	Distel Circle/ Driveway	X		16	26	16	26	19	29		
Signal Warranted based on Part B?				**No**	**No**	**No**	**No**	**No**	**No**		

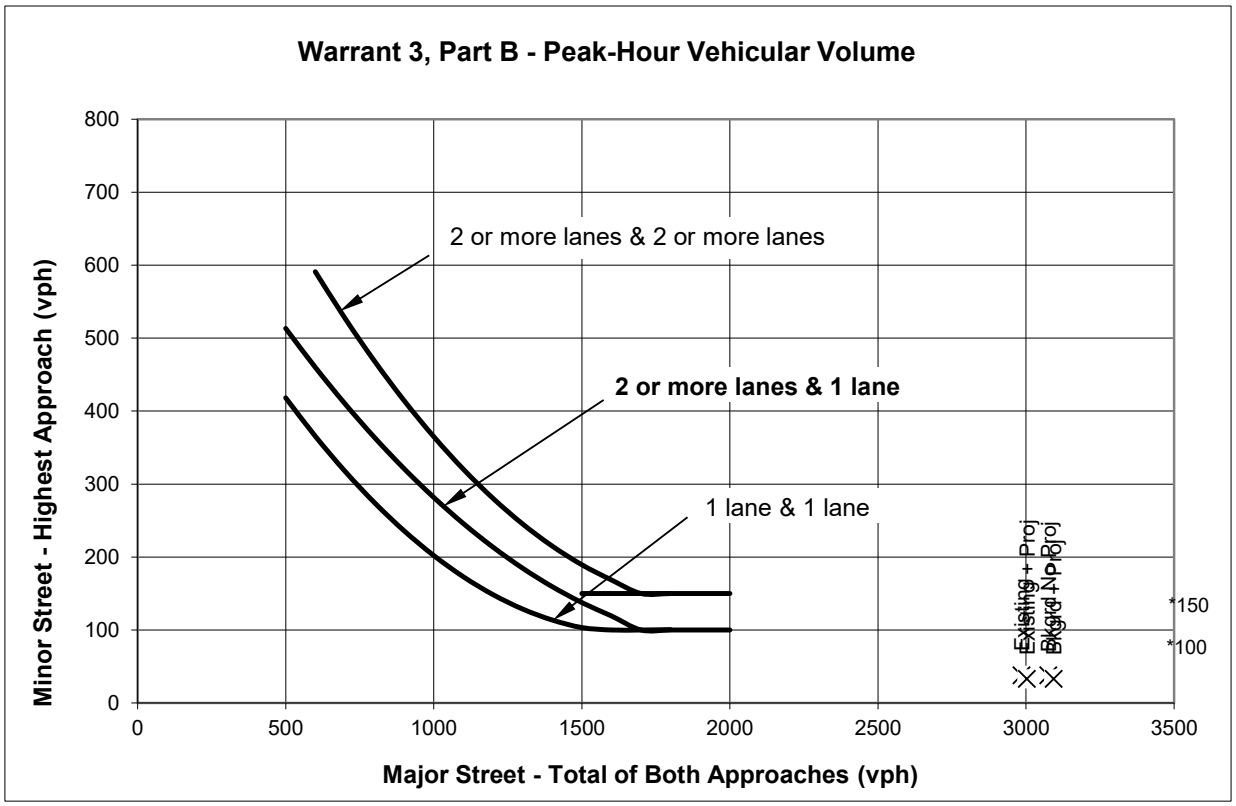
The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

Notes:

330 Distel Circle

El Camino Real and Distel Circle **PM PEAK HOUR**



Source: Figure 4C-3 *California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California)* .

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		PM PEAK HOUR							
		One	2 or More	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj		
Major Street - Both Approaches	El Camino		X	2985	3003	3075	3093	3704	3722		
Minor Street - Highest Approach	Distel Circle/ Driveway	X		38	33	38	33	45	40		
Signal Warranted Based on Part B - Peak-Hour Volumes?				**No**	**No**	**No**	**No**	**No**	**No**		

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

330 Distel Circle

TRAFFIC SIGNAL WARRANTS WORKSHEET

Analyst: SJ date: 3/10/22

Major Street: El Camino — Critical Approach Speed* (mph) 35

Minor Street: Distel Circle/ Driveway — Critical Approach Speed* (mph) 25

**Posted Speed.*

Critical speed of major street traffic > 50 mph (64 km/h)…… ☑ or ☐ **Rural (R)**

In built up area of isolated community of < 10,000 population…… ☐ **Urban (U)**

PM PEAK HOUR

Warrant 3 - Peak Hour

PART A

(All parts 1, 2, and 3 below must be satisfied)

PM PEAK HOUR

	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj		
Minor Street Approach Direction w/ Highest Delay	SB	SB	SB	SB	SB	NB		
Highest Minor Street Average Delay (sec/veh)	90.4	95.0	99.6	104.9	233.6	302.6		
Corresponding Minor Street Approach Volume (veh/hr)	1	1	1	1	1	40		
Minor Street Total Delay (veh-hrs)	0.0	0.0	0.0	0.0	0.1	3.4		
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; AND	No	No	No	No	No	No		
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; AND	No	No	No	No	No	No		
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	Yes	Yes	Yes	Yes	Yes	Yes		
Signal Warranted based on Part A?	**No**	**No**	**No**	**No**	**No**	**No**		

PART B

PM PEAK HOUR

		Approach Lanes: One	Approach Lanes: 2 or More	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj	0:00	
Major Street - Both Approaches	El Camino		X	2985	3003	3075	3093	3704	3722	0	
Minor Street - Highest Approach	Distel Circle/ Driveway	X		38	33	38	33	45	40	0	
Signal Warranted based on Part B?				**No**	**No**	**No**	**No**	**No**	**No**	**0**	

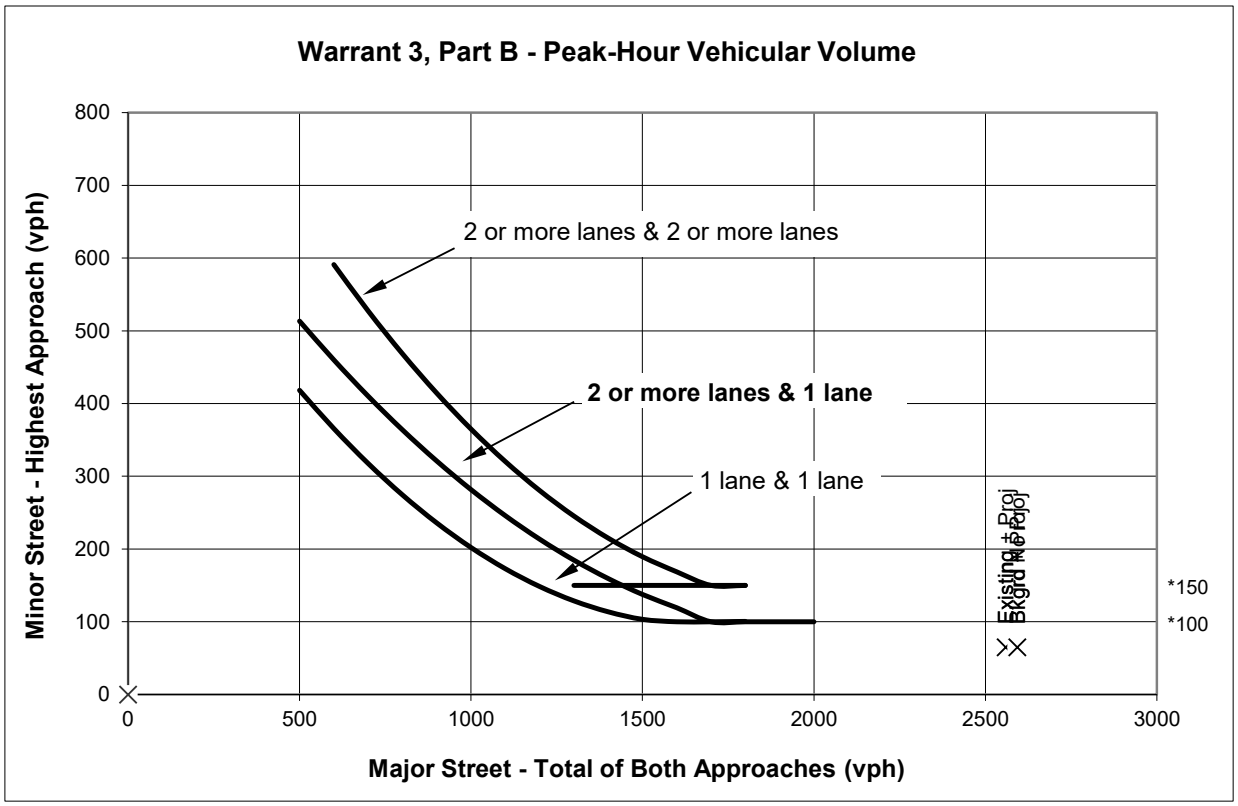
The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

Notes:

330 Distel Circle

San Antonio Road and Jordan Avenue **AM PEAK PERIOD**



Source: Figure 4C-3 *California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California)* .

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		AM PEAK PERIOD							
		One	2 or More	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj	0	
Major Street - Both Approaches	San Antonio		X	2558	2559	2592	2593	3119	3120	0	
Minor Street - Highest Approach	Jordan Ave/	X		65	65	65	65	77	77	0	
Signal Warranted Based on Part B - Peak-Hour Volumes?				**No**	**No**	**No**	**No**	**No**	**No**		

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

330 Distel Circle

TRAFFIC SIGNAL WARRANTS WORKSHEET

Analyst: SJ date: 3/10/22

Major Street: San Antonio — Critical Approach Speed* (mph) 35

Minor Street: Jordan Ave/ — Critical Approach Speed* (mph) 25

**Posted Speed.*

Critical speed of major street traffic > 50 mph (64 km/h)…… ☑ or ☐ **Rural (R)**

In built up area of isolated community of < 10,000 population…… ☐ **Urban (U)**

AM PEAK PERIOD

Warrant 3 - Peak Hour

PART A

(All parts 1, 2, and 3 below must be satisfied)

	AM PEAK PERIOD							
	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj	0:00	
Minor Street Approach Direction w/ Highest Delay	WB	WB	WB	WB	WB	WB		
Highest Minor Street Average Delay (sec/veh)	104.1	153.6	164.5	163.9	652.4	640.7		
Corresponding Minor Street Approach Volume (veh/hr)	65	65	65	65	77	77		
Minor Street Total Delay (veh-hrs)	1.9	2.8	3.0	3.0	14.0	13.7		
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; AND	No	No	No	No	Yes	Yes		
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; AND	No	No	No	No	No	No		
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	Yes	Yes	Yes	Yes	Yes	Yes		
Signal Warranted based on Part A?	**No**	**No**	**No**	**No**	**No**	**No**		

PART B

		Approach Lanes		AM PEAK PERIOD							
		One	2 or More	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj		
Major Street - Both Approaches	San Antonio		X	2558	2559	2592	2593	3119	3120		
Minor Street - Highest Approach	Jordan Ave/	X		65	65	65	65	77	77		
Signal Warranted based on Part B?				**No**	**No**	**No**	**No**	**No**	**No**		

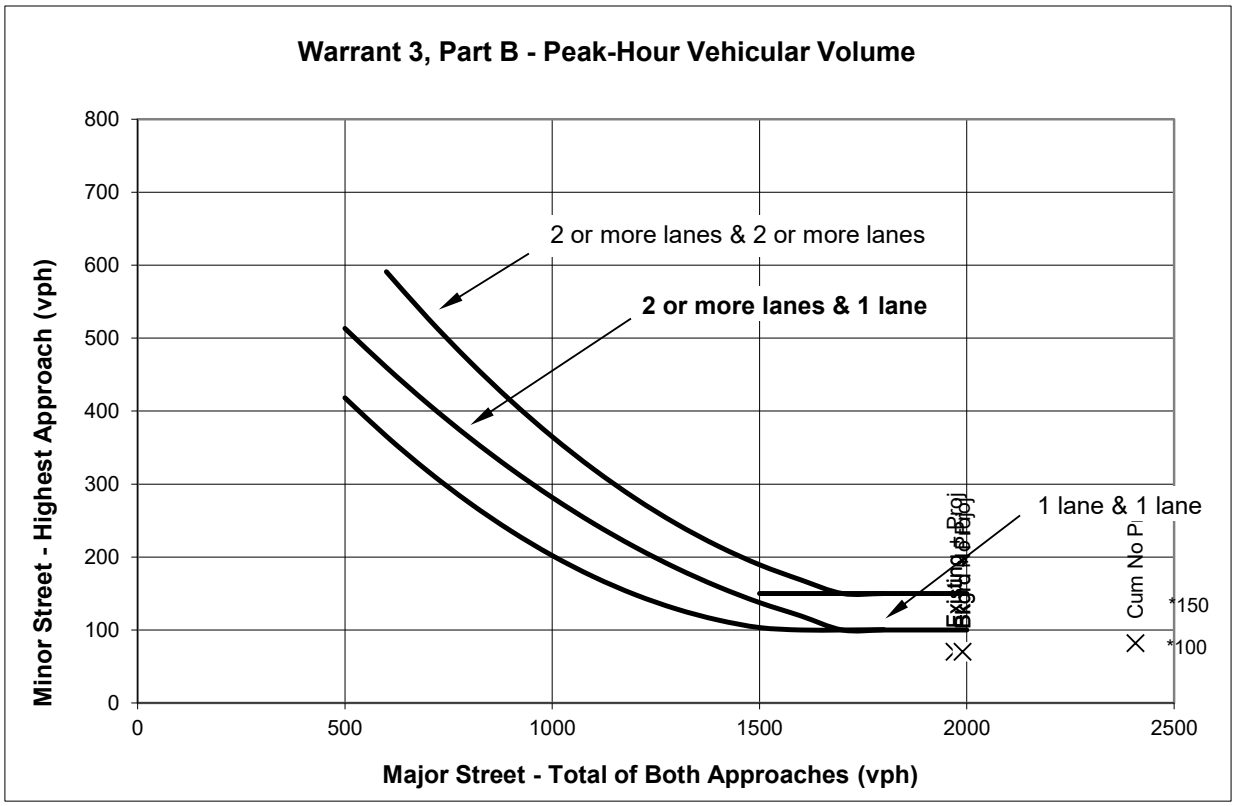
The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

Notes:

330 Distel Circle

San Antonio Road and Jordan Avenue **PM PEAK HOUR**



Source: Figure 4C-3 *California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California)* .

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		PM PEAK HOUR							
		One	2 or More	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj		
Major Street - Both Approaches	San Antonio		X	1969	1970	1989	1990	2406	2407		
Minor Street - Highest Approach	Jordan Ave/	X		70	70	70	70	82	82		
Signal Warranted Based on Part B - Peak-Hour Volumes?				**No**	**No**	**No**	**No**	**No**	**No**		

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

330 Distel Circle

TRAFFIC SIGNAL WARRANTS WORKSHEET

Analyst: SJ date: 3/10/22

Major Street: San Antonio — Critical Approach Speed* (mph) 35

Minor Street: Jordan Ave/ — Critical Approach Speed* (mph) 25

**Posted Speed.*

Critical speed of major street traffic > 50 mph (64 km/h)…… ☑ or ☐ **Rural (R)**

In built up area of isolated community of < 10,000 population…… ☐ **Urban (U)**

PM PEAK HOUR

Warrant 3 - Peak Hour

PART A

(All parts 1, 2, and 3 below must be satisfied)

PM PEAK HOUR

	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj		
Minor Street Approach Direction w/ Highest Delay	WB	WB	WB	WB	WB	WB		
Highest Minor Street Average Delay (sec/veh)	59.0	59.2	61.8	62.0	196.0	196.7		
Corresponding Minor Street Approach Volume (veh/hr)	70	70	70	70	82	82		
Minor Street Total Delay (veh-hrs)	1.1	1.2	1.2	1.2	4.5	4.5		
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; AND	No	No	No	No	Yes	Yes		
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; AND	No	No	No	No	No	No		
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	Yes	Yes	Yes	Yes	Yes	Yes		
Signal Warranted based on Part A?	**No**	**No**	**No**	**No**	**No**	**No**		

PART B

PM PEAK HOUR

		Approach Lanes: One	Approach Lanes: 2 or More	Existing	Existing + Proj	Bkgrd No Proj	Bkgrd + Proj	Cum No Proj	Cum + Proj	0:00	
Major Street - Both Approaches	San Antonio		X	1969	1970	1989	1990	2406	2407	0	
Minor Street - Highest Approach	Jordan Ave/	X		70	70	70	70	82	82	0	
Signal Warranted based on Part B?				**No**	**No**	**No**	**No**	**No**	**No**	**0**	

The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

Notes:

Appendix F
Walk n Roll Maps

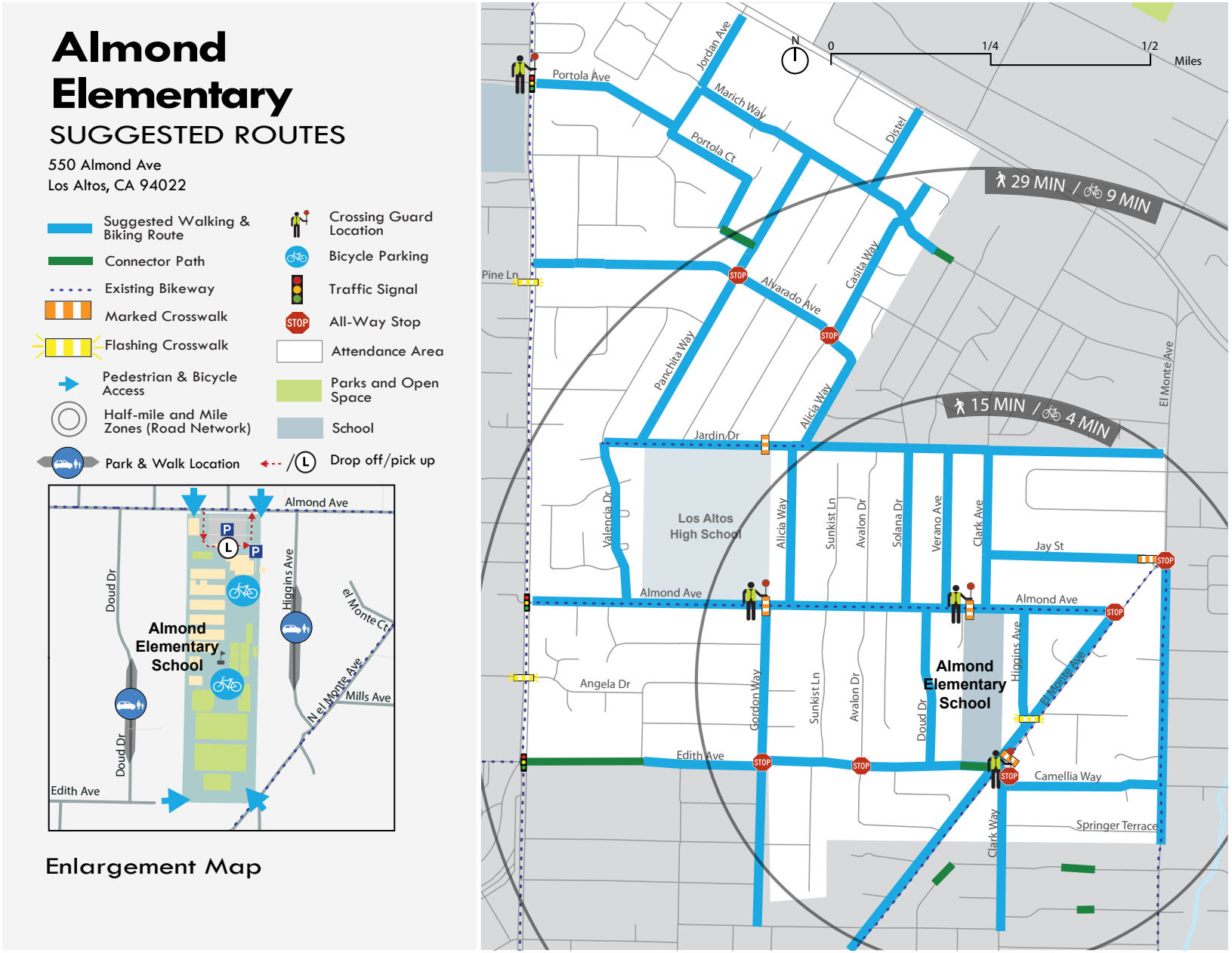


Figure E-1
Walk n Roll Map for Almond Elementary School

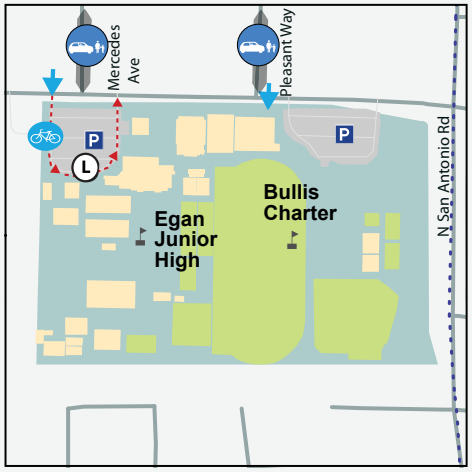
Source: Los Altos Complete Streets Master Plan, August 2021

Egan Junior High

SUGGESTED ROUTES

100 W Portola Ave
Los Altos, CA 94022

- Suggested Walking & Biking Route
- Connector Path
- Existing Cycle Track
- Existing Bikeway
- Marked Crosswalk
- Flashing Crosswalk
- Pedestrian & Bicycle Access
- Half-mile and Mile Zones (Road Network)
- Drop off/pick up
- Park & Walk Location
- Crossing Guard Location
- Bicycle Parking
- Traffic Signal
- All-Way Stop
- Attendance Area
- Parks and Open Space
- School



Enlargement Map

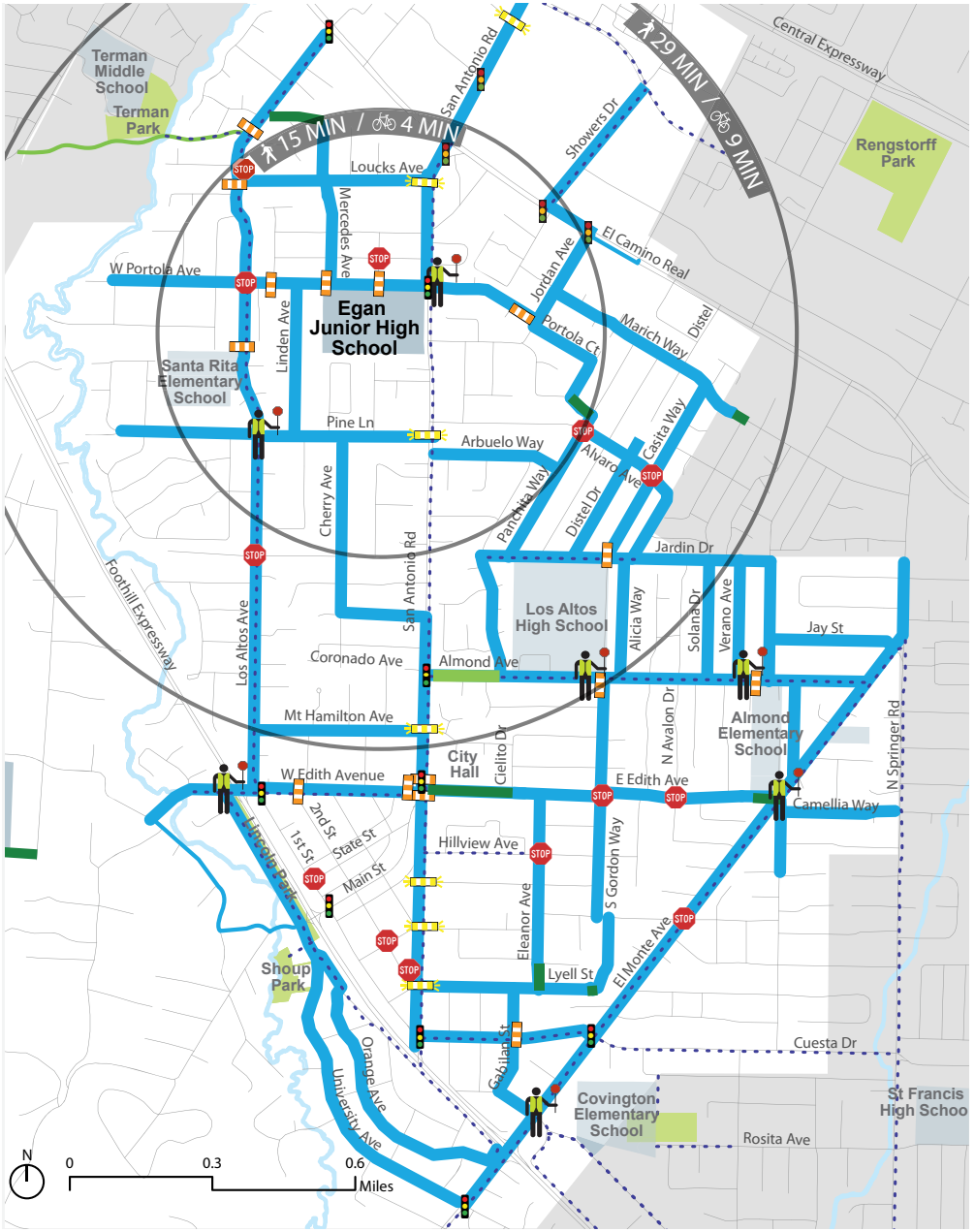


Figure E-2
Walk n Roll Map for Egan Junior High School

Source: Los Altos Complete Streets Master Plan, August 2021

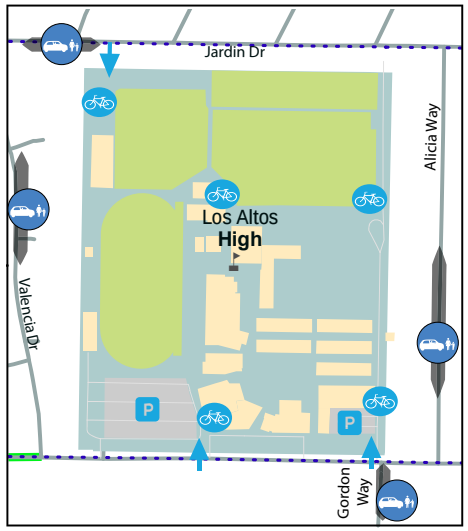
Not to Scale

Los Altos High

SUGGESTED ROUTES

201 Almond Ave
Los Altos, CA 94022

- Los Altos City Limits
- Suggested Walking & Biking Route
- Connector Path
- Existing Bikeway
- Existing Cycle Track
- Marked Crosswalk
- Flashing Crosswalk
- Pedestrian & Bicycle Access
- Half-mile and Mile Zones (Road Network)
- Crossing Guard Location
- Bicycle Parking
- Traffic Signal
- All-Way Stop
- Attendance Area
- Parks and Open Space
- School
- Park & Walk Location
- Drop off/pick up



Enlargement Map

August 2021

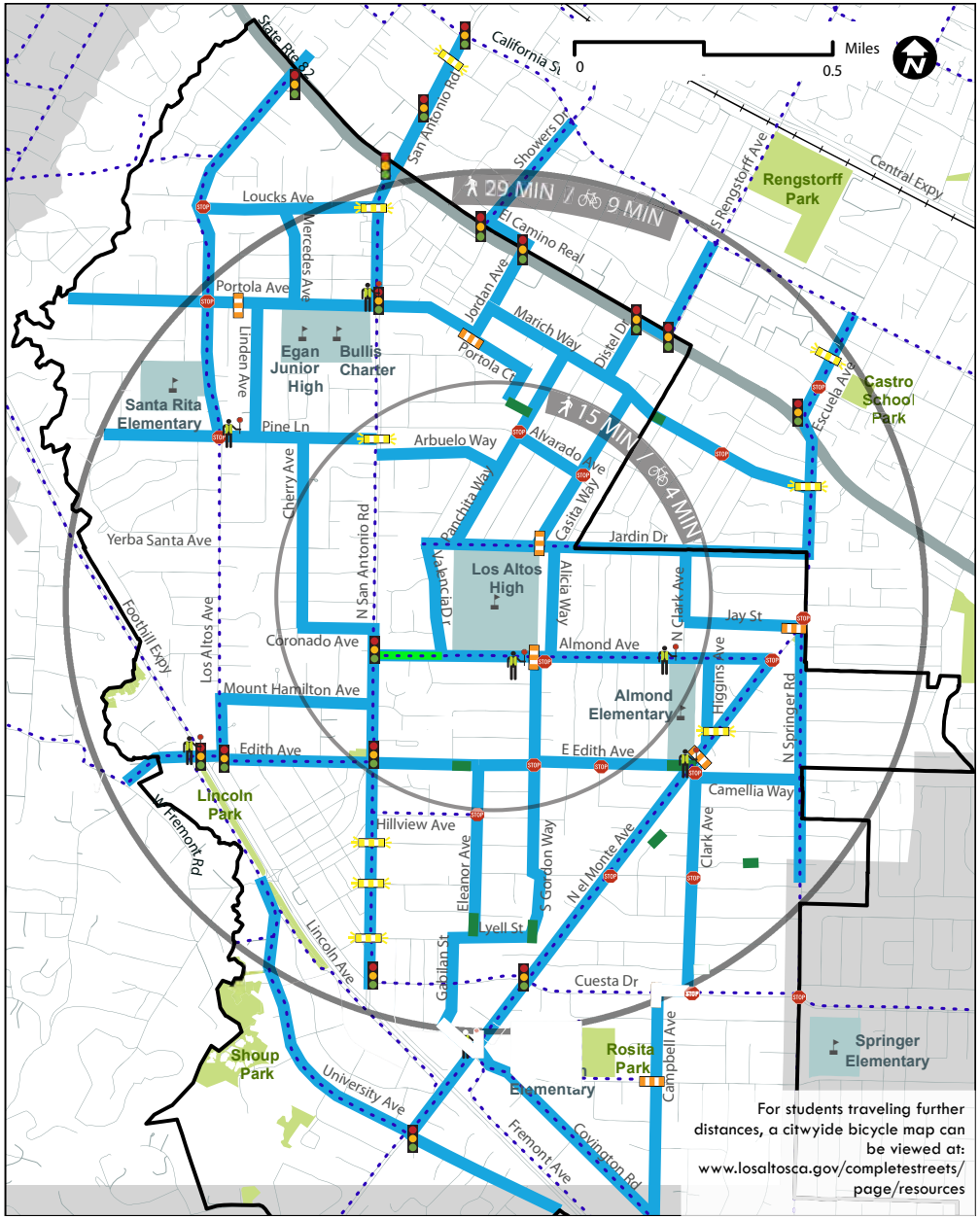


Figure E-3
Walk n Roll Map for Los Altos High School

Source: Los Altos Complete Streets Master Plan, August 2021

Not to Scale

Appendix G
Parking Counts

Parking Count Worksheet- 21MH10

AUTO CENSUS
Traffic Monitoring and Analysis
5973 Larkstone Loop
San Jose, Ca. 95123
Phone 408-533-3398

Date: 11/4/2021
Counters: Janice
Intersection Name: 330 Distel Dr, Los Altos
Weather: Fair

Area No.	10:30am	1:30pm	12:30am
1	23	24	4
2	21	21	2
3	62	33	0
4	17	13	0
5	4	4	0

Area 1 - Approximately 37

Area 2 - Approximately 39

Area 3 - Total Spaces - 90 (38 compact, 4 handicap)

Area 4 - Total Spaces - 37 (5 compact, 3 handicap, 1 motorcycle)

Area 3 - Total Spaces - 11

MEMORANDUM OF UNDERSTANDING
330 DISTEL CIRCLE

This Memorandum of Understanding (this "MOU") is made as of January 28, 2021, by and between the CITY OF LOS ALTOS, a municipal corporation of the State of California (the "City"), and the COUNTY OF SANTA CLARA, a political subdivision of the State of California (the "County").

WHEREAS, the County expects to enter into a Purchase and Sale Agreement (the "Purchase Agreement") with MidPeninsula Regional Open Space District to acquire property known as 330 Distel Circle in the City of Los Altos (the "Property") for the purpose of developing affordable and supportive multifamily housing, utilizing funds from the County's 2016 Measure A Affordable Housing Bond ("Housing Bond").

WHEREAS, the Housing Bond is a $950 million affordable housing bond measure passed by voters in Santa Clara County in 2016. The Housing Bond is part of an ongoing effort to: 1) increase affordable housing opportunities for our community's most vulnerable and poorest residents; and, 2) to prevent and reduce homelessness throughout Santa Clara County. The Housing Bond builds on key policy shifts and communitywide partnerships that have occurred over the last five years.

WHEREAS, the Purchase Agreement is contingent on the County's due diligence review of the Property and the potential development, including a commitment from the City on entitlements for the Project (defined below).

WHEREAS, the purpose of this MOU is to set forth the parties' support for a potential affordable housing development at Property and outline a path for potential waiver of contingencies by the County under the Purchase Agreement.

NOW THEREFORE, the parties hereby declare and acknowledge the following:

1. The County is considering acquiring the Property to develop, or to ground lease to a developer to develop, an affordable housing project (the "Project").
2. The Project is anticipated to contain a minimum of 90 units, with 100% of the units restricted to occupants earning 80% or less of the area medium income (AMI), with a minimum of 5% earning 30% or less of the area medium income (AMI), 50% earning 50% or less of the area medium income (AMI), and 45% earning 80% or less of the area medium income (AMI). The Parties acknowledge that the final affordability restrictions will depend in part on the requirements of available funding sources, including tax credit financing.
3. The County would solicit an affordable housing developer, either by issuing an RFP or selecting from a pre-approved list, and would impose development requirements and affordable housing restrictions on the Project through a ground lease with the developer and/or conditions set forth in Measure A loans provided to the developer.
4. The City supports the development of affordable housing on the Property and of the Project as described above and will provide transparency and flexibility, to the extent possible, in the entitlement process for the Project. The City shall be the agency responsible for the review and approval of zoning and land use requirements for the Project and shall receive any RHNA credits issued in connection with the Project. The City acknowledges that the County will need

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binding entitlements for the Project prior to April 27, 2021 in order for the County to waive contingencies under the Purchase Agreement.

5. In furtherance of its support of the Project, the City intends to provide the Project with a discount of up to 100% from the City's impact fees. The total, non-discounted impact fees for the Project are currently estimated to be $252,344.08 for traffic fees and $4,392,000 for park in lieu fees.

6. The parties further declare and acknowledge that the City's and the County's commitment to the Project are subject to compliance with all legal requirements, including but not limited to, compliance with the California Environmental Quality Act. Nothing in this MOU shall be construed to compel the County or City to approve or make any particular findings with respect to any environmental documentation that is prepared, pursuant to CEQA, for any portion of the Project. The City retains its full discretion to refuse to approve any CEQA document prepared to analyze the environmental impacts of the Project.

CITY OF LOS ALTOS

DocuSigned by:
Brad Kilger
5A5434FCD74B445...

Name: Brad Kilger
Title: Interim City Manager, Los Altos

APPROVED AS TO FORM:

DocuSigned by:
0B31E7C58B41464...

Name: Jolie Houston
Title: City Attorney, Los Altos

COUNTY OF SANTA CLARA

DocuSigned by:
Consuelo Hernandez
7B3319C0D83D4AC...

Name: Consuelo Hernandez,
Title: Director of Office of Supportive Housing

APPROVED AS TO FORM AND LEGALITY:

DocuSigned by:
Karen Willis
F889A27CD9EB463...

Karen M. Willis, Deputy County Counsel

Expanding the range of opportunities for all by developing, managing and promoting quality affordable housing and diverse communities.

Distel Circle Apartments

Density Bonus Report – Planning Application

July 74, 2022

Project:	**90-Unit Multifamily Affordable Housing Community**
Location:	330 Distel Circle, Los Altos (APN# 170-04-051)
Current Landowner:	Midpen Regional Open Space District
Applicant/Developer:	EAH Housing

As a permanently affordable rental community incorporating a mix of unit types and a range of rent tiers that supports a diversity of income-eligible tenants earning incomes from 30% to no more than 80% of Area Median Income (AMI), the 330 Distel Circle development is eligible for a density bonus in accordance with California Government Code Section 65915 et seq. ("Density Bonus Law").

EAH as the applicant is requesting an increase in the density allowable at 330 Distel Circle and other incentives, waivers, concessions, and parking reductions allowed by the Density Bonus Law.

Requested Density Bonus

Density Bonus is considered in the LAMC section 14.28.040 (C) and contemplates density bonus up to 35% depending on both the affordability and the number of restricted units. The LAMC also has a provision that can provide a for additional density bonus 14.28.040 (E)(7) which states: Nothing in this section shall be construed to prohibit the city from granting a density bonus greater than what is described in this section for a development that meets the requirements of this section or from granting a proportionately lower density bonus than what is required by this section for developments that do not meet the requirements of this section.

The California Government Code Section 65915 also allows for unlimited density for 100% affordable developments that are withing one-half mile from a major transit stop, section 65915 (f)(3)(D)(ii). 330 Distel Circle is within one-half mile from a major transit stop (please see Memorandum on Consistency with Density Bonus Provisions - Glaser Weil).

In alignment with the MOU between the City of Los Altos and the County of Santa Clara, that acknowledges the development to contain a minimum of 90 units at 330 Distel Circle, EAH is requesting a density bonus to allow for 103.45 units per acre.

The California Government Code Section 65915(d)(2)(D) allows for a height increase of an additional 3 stories or 33 feet for 100% affordable housing developments. The current zoning district (CT) allows for structures up to 45 feet in height and considering the additional 33 feet allowed by the Density Bonus Law, a building up to 78 feet would be consistent with the height allowed under the law. The proposed building height at 330 Distel Circle is 64 feet and consistent with Density Bonus Law.

Zoning	Commercial Thoroughfare District (CT)
General Plan	Thoroughfare Commercial
Maximum Density	38 dwelling units per net acre (dua)
Site Size	38,030 sf (0.87 acres)
Units Permitted	0.87 X 38 = 33.06 units
Total Units Proposed	90 units
Proposed Affordable Units	88 units (100% exclusive of managers units)
Proposed Bonus Percentage	90 ÷ 33 =272%
Number of Density Bonus Units	90 – 33 = 57 units
Proposed Density Per Acre	90 ÷ 0.87 = 103.45 dua
Proposed Market Rate Bedrooms	0
Proposed Affordable Unit Bedrooms	155
Proposed Manager's Unit Bedrooms	4

Unit Mix – 330 Distel		AMI					
	SQFT PU	30%	50%	60%	80%	**Unit Total**	**Unit Mix**
SRO/Efficiency	465	14	3	7	-	24	27%
1-BR	645	9	3	7	1	20	22%
2-BR	965	12	3	4	2	21	23%
3-BR	1140	10	3	7	3	23	26%
4-BR	0	-	-	-	-	-	0%
MGR	965					2	2%
Unit Total		45	12	25	6	**90**	100%
Affordability Dist.		50%	13%	28%	7%	100%	
Average Affordability	**44.66%**						

The existing use of 330 Distel Circle is a single-story office building that is owned and occupied by Midpeninsula Regional Open Space District. There are currently no dwelling units on the site nor has there been in five years preceding the date of submittal of this application.

There are no recorded covenants, ordinances or laws applicable to the site that restrict rents.

Requested Incentives and Concessions

The applicant is requesting the following four (4) concessions:

- Reduced Front Yard Set Back
- Reduced Front Side Step-back
- Reduced Average-Per-Unit Open Space Provided
- Reduced EV Ready Parking Stalls

Reduced Front Yard Set Back

Los Altos Municipal Code (LAMC) section 14.50.090 has a standard of a 25-foot minimum depth of which 50% of the area should be landscaped. We are requesting a reduction in the minimum setback from 25 feet to 10 feet. LAMC Section 14.28.040 (F)(1)(e) allows for an On-Menu incentive to reduce the setback requirement by up to 20%. However, the reduction requested is greater than 20% and therefore is considered an **off-menu** request.

Reason for Request: The reason for this request is because a 25-foot setback would decrease the building area and thereby decrease the unit count.

Reduced Front Side Step-back

LAMC 14.50.170 (B)(1)(b) requires a minimum step-back of 10 feet from the ground floor façade for stories above 45 feet. EAH is requesting no step-back on the 4th and 5th levels. This is an **off-menu** request because step-back reductions are not an on-menu incentive.

Reason for Request: The reason for this request is because a step-back on the 4th and 5th level would decrease the building area and thereby decrease the unit count.

Reduced Average-Per-Unit Open Space Provided

LAMC 14.50.150(A) requires that an average of fifty (50) square feet of private open space shall be provided for the total number of dwelling units within the project. EAH is requesting a reduction in the average square feet of private open space from 50 to 25 square feet. LAMC Section 14.28.040 (F)(1)(f) allows for an On-Menu incentive to reduce the open-space requirement by up to 20%. However, the reduction requested is greater than 20% and therefore is considered an **off-menu** request.

Reason for Request: The site has a 10' foot public utility easement (PUE) running along the front of the property along Distel Drive. The PUE has to be clear to sky and therefore we are unable to provide cantilevering balconies along the Distel frontage. Providing decks within the units along Distel would require a decrease in unit size, a decrease in unit count or an increase in cost due to customization of modular units. We have mitigated the reduction in Private Open Space by proving more Common Open Space than required.

Reduced EV Ready Parking Stalls

LAMC 4.106.4.2 (Exceptions) requires all multifamily Affordable Housing, 10% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. The remaining dwelling units with parking space(s) shall each be provided with at least one Level 1 EV Ready Space. The required spaces with this calculation would be the following. We are requesting to provide the state minimum required by our current code (2019) which is 10% EV Ready spaces- 9 total- instead of the 90 required by Los Altos code.

Level 2 EV Ready Space = 9 spaces
Level 1 EV Ready Space = 81 spaces
Total = 90 spaces

Reason for Request: The additional costs related for infrastructure, transformer(s), and cost of pedestals for charging.

1. Meeting the requirement will increase the amount of costs of utility infrastructure required such as conduit/raceways and transformers. We are estimating the costs as $1000/stall per Energy Solutions report (dated 2019 so costs are likely higher). For the additional stalls beyond the 10% required by CalGreen we estimate $81,000 (81 stalls x $1,000).

Table 1. Estimated Cost of Installing EV Infrastructure (price per spot)

Code Scenario:	Market Rate 25% Level 2 75% Level 1		Affordable Housing 10% Level 2 90% Level 1	
Building Type	New Construction	Retrofit[4]	New Construction	Retrofit
60-Unit MUD	$1,410	$4,443	$1,049	+$3,982
150-Unit MUD	$1,197	$4,101	$1,002	+$3,854
60-Space Office Building	$1,166	$3,232	N/A	N/A

Table 1: Energy Solutions article dated November 5, 2019. EV Infrastructure Cost Analysis Report for Peninsula Clean Energy and Silicon Valley Clean Energy (page 1).

2. If/when the mechanized stalls go from EV Ready to having the capability to charge, Level 2 chargers will require ±$2,500 per pedestal depending on the manufacturer. For Level 1 chargers, 110v receptacle can be added to the platform.

3. The project is required to have zero parking spaces as a result of being a 100% affordable housing project within ½ mile of major transit. As such, if we were to provide zero stalls, we would not be required to provide any EV Ready stalls per CA and City of Los Altos code and CA Cal Green code.

Cost Justification:

There are two areas of focus related to the cost containment of this affordable housing community and how it relates to the requested concessions: the total costs to build the units (hard costs) and the average cost per unit including all other soft costs.

Hard costs associated with the construction of the modular units include the material and labor expense it takes to create and build each unit. The modular factories are set up for standardization, not for customization, so any modification to the factory standards would lead to additional costs and additional waist. By way of a simple example, if the factory is set up to build units using wood in 20 foot lengths but we request shorter units that require 18 foot lengths, then the factory would need to customize the machinery to cut the shorter lengths. This customization would increase the labor costs and slow the process down adding more time. In addition, more waist is created because in this example, the two-foot section of wood is unlikely to be re-used and will be thrown away.

The second area of focus is the developments cost per unit. This development has fixed costs including the land and other soft costs including design and environmental analysis. By way of a simple example, if the design fees are $3 million and the design yields 90 units, the per-unit cost is $33,333. However, if the same design fees were yielding only 60 units, the per-unit cost would be $50,000. While this does not increase the total cost of development, a higher cost per unit makes this project less competitive when trying to leverage additional funding source at the State and Federal level. Therefore, a design or building standard that leads to a reduction of building area or total number of units is considered to increase costs and reduce competitiveness.

Requested Waivers

The applicant is requesting the following waivers:

- Visibility of Interior Courtyard
- Exterior Materials
- Trash Staging Area

Visibility of Interior Courtyard

LAMC 14.50.170 (C)(5)(a) requires that an interior courtyard must be partially visible from the street and linked to the street by a clear accessible path of travel. EAH is requesting that this requirement be satisfied by allowing visibility from the parking lot behind the building. In addition, EAH is requesting that the interior courtyard not be required to be linked to the street by a clear accessible path of travel. This is an **off-menu** request.

Reason for Request: The courtyard has been raised to the second level to provide additional parking on the ground level. A second level courtyard also provides additional privacy to the residents and neighbors. Removing a portion of the building to make the courtyard visible from the street would decrease units and parking area.

Exterior Building Materials:

LAMC 14.66.280 (D)(4)(a) Base. For multistory buildings, the base of the building shall be defined by a distinct material selected from among the following: Stone, brick, concrete, CMU, or stucco ("base material"). EAH is requesting that wood be approved as a distinct material for the base.

Reason for Request: We believe that the intent of this design standard is being achieved because wood serves as a distinct material. We are proposing wood and storefront glazing at the base of the building.

Trash Staging Area:

LAMC 14.50.060 (C) (2) states that every development will be required to provide suitable space on-site for solid waste separation, collection, storage, and pick up and shall site these in locations that facilitate access, collection, and minimize any negative impact on persons occupying the development site, neighboring properties, or public rights-of-way. EAH is requesting a waiver from the requirement so that the solid waste collection can take place in the public right of way (Distel Circle).

Reason for Request: The location of trash storage is on the ground floor in the garage but is not in a location that can be serviced by the collection company, Mission Trails. Mission Trails requests that the trash staging area be within a specific distance from the street so that the trucks can access the trash bins. Redesigning the ground floor to accommodate a staging area closer to the street is not desirable because it would require relocating the bicycle parking, resulting in the loss of amenity space on the ground floor. Our proposal is to have building staff stage the trash bins on Distel Circle on trash pick-up day and return the bins to the trash room after the trash has been collected.

Requested Parking Reductions

LAMC 14.28.040(G)(2)(b) - For low or very low income housing near major transit stop. Upon the request of the developer, the city shall not impose a parking requirement, inclusive of handicapped and guest parking, that exceeds one-half parking spaces per bedroom if the development includes the maximum percentage of low or very low income units; and the development is located within one-half mile of a major transit stop; and there is unobstructed access to the major transit stop to the development. EAH is requesting parking requirement alterations be applied to the proposed development because the development:

- Exceeds the percentage required of low or very low income units
- Is within one half-mile of a major transit stop
- Has unobstructed access to the major transit stop to the development This is an ***On-Menu*** request.

The proposed development at 330 Distel Circle will have a total of 159 bedrooms. Using the one-half parking space per bedroom outlined in the LAMC would require 80 parking spaces. As proposed, this community will have 90 parking spaces.

State Density Bonus Law does not require any parking for 100% affordable developments that are withing one-half mile from a major transit stop, section 65915 (p)(3). 330 Distel Circle is within one-half mile from a major transit stop (please see Memorandum on Consistency with Density Bonus Provisions - Glaser Weil).

330 Distel: Density Bonus, Concessions, Waivers				
Allowed by Density Bonus Law				
Density (DU/acre)	38du/acre	90 Units = 103 du/acre	Density Bonus Law	14.5.080 (LAMC)
Height	45ft + 33ft = 78ft permitted	64ft, 5 stories	Density Bonus Law	
Concession	**Standard**	**Proposed**	**Reason**	Code Section
Setback, Front Yard	25ft min. depth, 50% of which shall be landscaped	10ft setback	25ft setback would decrease building area and unit count	14.5.090 (LAMC)
Stepback	Street Side: Minimum 10 feet from ground floor façade above 45 feet in height	Requesting no stepback on 4th and 5th levels.	We need building area to get to 90 units.	14.50.170_1B. Obj. Standards
Open Space	50SF; An average of fifty (50) square feet of private open space shall be provided for the total number of dwelling units within a project.	Approximately 25 sf average / unit requested	10ft Public Utility Easement has to be clear to sky so we are unable to provide cantilevering balconies along the Distel frontage. Juliette balconies are provided on Distel. Providing decks within the units would require a decrese in unit area and impact unit count. Private open space provided on all decks except for those facing Distel.	14.50.150 (LAMC)
EV Ready Parking stalls	4.106.4.2 New multifamily dwellings. Exception: For all multifamily Affordable Housing, 10% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. The remaining dwelling units with parking space(s) shall each be provided with at least one Level 1 EV Ready Space. Calculation: (9) Level 2 EV ready spaces and (81) Level 1 EV ready spaces.	Requesting 10% (9 stalls) to be EV Ready stalls per Cal Green code.	1. Cost of utility infrastructure 2. Cost of pedestal costs if EV is installed in future 3. Parking required is zero, which means zero EV Ready stalls would be required.	4.106.4.2 (LAMC)
Waiver	**Standard**	**Proposed**	**Reason**	
Interior Courtyard	Partially visible from the street and linked to the street by a clear accessible path of travel.	Requesting visibility from back parking lot, no access from exterior to courtyard	Raised courtyard on level 2 not visible from Distel, may be visible from El Camino. Raised courtyard to provide additional parking. Also creates privacy for single family neighbor and residents. Removing a leg of the building to make the courtyard visible would decrease unit and parking area.	14.50.170_5A. Obj. Standards
Materials	Base. For multistory elements, the base of the building shall be defined by a distinct material selected from among the following: Stone, brick, concrete, CMU, or stucco ("base material").	Requesting approval of wood as a distinct material.	Intent achieved. Wood serves as distinct material. Wood and storefront glazing proposed at the base.	14.66.280_DA Obj. Standards
Trash	Pickup not in right of way	Waiver from requirement	PUE Easement, no other location for trash	14.50.060_C2 Required Conditions

1814 Franklin St.
Suite 400
Oakland, CA 94612
510.272.2910
ktgy.com

To: Radha Hayagreev
City of Los Altos- Senior Consulting Planner

Date: July 5, 2022
Project Name: 330 Distel Circle
Project No: 210042

Re: EV Capable Concession Request

From: Lily Ciammaichella, AIA, BD+C
KTGY Architecture + Planning

Dear Radha,

We are requesting to make the Los Altos EV capable charging requirement as a State Density Bonus Law inentive/concession. From section **4.106.4.2** of the Los Altos municipal code, we are required to provide the following:

4.106.4.2 New multifamily dwellings
Exception: For all multifamily Affordable Housing, 10% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. The remaining dwelling units with parking space(s) shall each be provided with at least one Level 1 EV Ready Space.

Required EV Ready stalls
EV2 ready = 9 spaces
EV1 ready = 81 spaces
Total = 90 spaces

We are requesting to provide less EV capable stalls to 10% of the total number of parking spaces (9 stalls) as Level 1 spaces.

The reasons are as follows:

1. Meeting the requirement will increase the amount of costs of utility infrastructure required such as conduit/raceways and transformer needs. We are estimating the costs as $1000/stall per Energy Solutions report. For the additional stalls beyond the 10% required by CalGreen and proposed, or 81 stalls x$1,000 = $81,000. Cost was from 2019 report by Energy Solutions and costs are likely more than estimated below.

Table 1. Estimated Cost of Installing EV Infrastructure (price per spot)

Code Scenario:	Market Rate 25% Level 2 75% Level 1		Affordable Housing 10% Level 2 90% Level 1	
Building Type	New Construction	Retrofit[4]	New Construction	Retrofit
60-Unit MUD	$1,410	$4,443	$1,049	+$3,982
150-Unit MUD	$1,197	$4,101	$1,002	+$3,854
60-Space Office Building	$1,166	$3,232	N/A	N/A

2. If/when the mechanized stalls will be ready to convert the mechanized stalls to have the capability to charge, at this time, Level 2 chargers will require ±$2,500 per pedestal depending on the manufacturer. For Level 1 chargers, 110v receptacle cade be added to the platform.

3. The project is required to have zero parking spaces as a result of being a 100% affordable housing project within ½ mile of major transit. As such, if we were to provide zero stalls, we would not be required to provide any EV Ready stalls per CA and City of Los Altos code and CA Cal Green code.

Definitions:

Electric vehicle infrastructure Cost Analysis Report for Peninsula Clean Energy & Silicon Valley Clean energy. By Enegry Solutions. Page 4

EV Capable	Includes conduit / raceways
EV Ready ("Plug and play")	Includes full circuit with a receptacle / outlet
EV Installed	Includes full charging capability with EVSE

Los Altos Municipal code Definitions:

"Level 1 EV Ready Space" means a parking space served by a complete electric circuit with a minimum of 110/120 volt, 20-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE).

"Level 2 EV Ready Space" means a parking space served by a complete electric circuit with 208/240 volt, 40-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE) with a minimum output of 30 amperes.

Glaser Weil

MEMORANDUM

TO: EAH Housing

FROM: Elisa Paster and Eric Geier

DATE: February 9, 2022

SUBJECT: 330 Distel Circle-Project Consistency with Density Bonus Provisions

I. Introduction

EAH Housing is partnering with the City of Los Altos ("City") to develop a 100% affordable housing project, with the exception of a manager's unit, using a Density Bonus (the "Project") at 330 Distel Circle, Los Altos, California 94022 ("Project Site"). The Project is a 64 foot building that consists of 90 affordable units (24 Studio, 20 one-bedroom, 23 two-bedroom, and 23 three-bedroom) and 90 parking spaces. The Project is seeking a 165% Density Bonus, existing zoning allows for 34 units (rounded up from 33.06) at the Project Site.

Based on its proximity to transit, as demonstrated below, state law permits the Project to an unlimited Density Bonus, a height increase up to 33 feet, and no minimum parking requirements. As the Project is 100% affordable, even if a determination is made that the Project is not within one-half mile of a major transit stop, the Project can still be approved as designed with the approval of concessions and waivers.

II. The Project Site is Within One-Half Mile of a Major Transit Stop

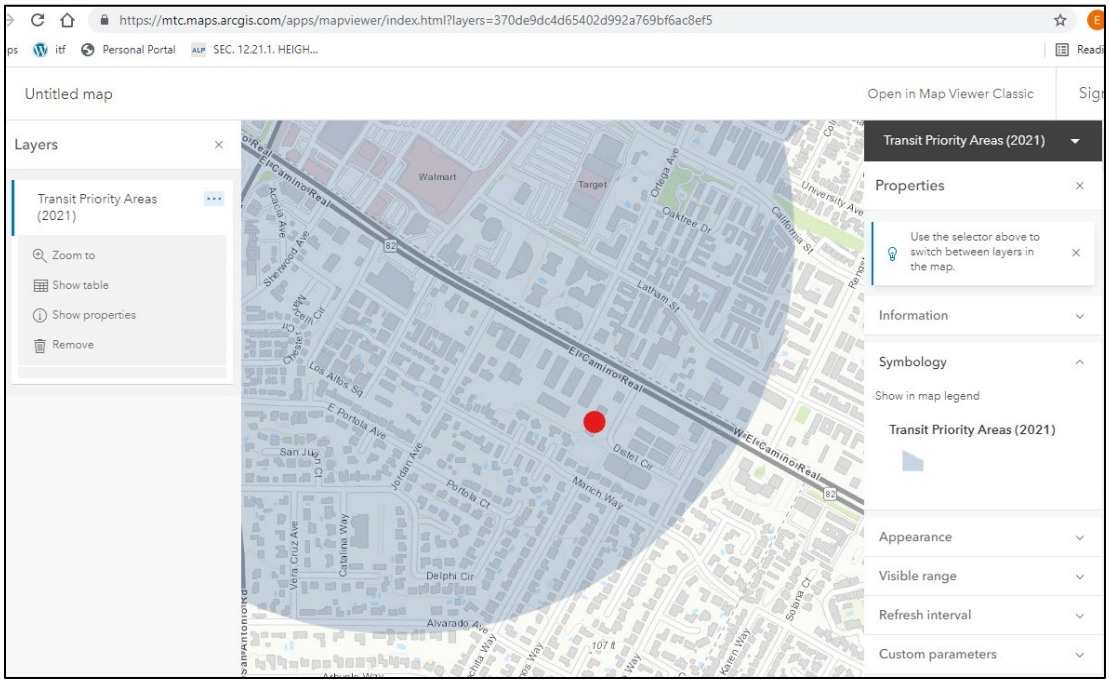
For the purpose of State Density Bonus law, codified in Government Code (GOV) section 65195, a major transit stop is defined as existing or planned rail or bus rapid transit (BRT) stations, ferry terminals served by either a bus or rail transit service, and the intersection of two or more bus routes with a frequency of service interval of fifteen minutes or less during the morning and afternoon peak commute periods. (Public Resources Code (PRC) §§ 21064.3, 21155(b).)[1]

A. Available Resources Identify the Project Site as Being One-Half Mile of a Major Transit Stop

A Transit Priority Area is defined as "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan." (PRC § 21099(a).) Accordingly, if the Project Site is

[1] State Density Bonus law treats planned major transit stops as existing major transit stops. Limited analysis was performed on whether major transit stops are planned within one-half mile of the Project Site. Our initial conclusion is that no such transit stops are planned, thus our research focused on existing major transit stops.

located in a Transit Priority Area, it is by definition within one-half mile of a major transit stop. The Metropolitan Transportation Commission (MTC), the metropolitan planning organization for the San Francisco Bay Area, identifies the Project Site as being within a Transit Priority Area. The graphic below is taken from the MTC's GIS system, which shades the TPAs in blue; the Project Site is designated by a red dot.



B. A Major Transit Stop is Located at El Camino Real and Showers Drive

Although the MTC identifies the Project Site as being within a Transit Priority Area, it does not identify the major transit stop within one-half mile of the Project Site. Because the Project Site is not within one-half mile of a rail station, ferry terminal, or BRT station,[2] analysis focuses on the intersection of two or more bus routes with requisite service during the peak hour commute periods.

The statute does not define morning and afternoon peak commute hours, nor does the Los Altos Municipal Code (LAMC) or other City documentation. The Santa Clara Valley Transportation Authority (VTA), the City's transit provider, defines peak hours as "the highest morning or evening hour of travel reported on a transportation network or street." As the Congestion Management Agency for Santa Clara County, the VTA's Guidelines can be considered applicable in the absence of any other City guidance.

[2] Note that the Rapid 522 does not appear to have the elements of BRT service identified in the PRC, such as 1) dedicated bus lanes or a separate right-of-way, 2) transit signal priority, 3) all door boarding, 4) fare collection system promoting efficiency, and 5) defined stations. (PRC § 21060.2.) Accordingly, the Rapid 522 does not establish a major transit stop in and of itself.

Typically, peak hours are defined at between 7:00 am and 9:00 am and 4:00 pm and 6:00 pm.

The bus stop at the intersection of El Camino Real and Showers Drive, approximately 1,513 feet from the Project Site, constitutes a major transit stop, as VTA lines 22, 40, and Rapid 522 operate at less than 15 minute intervals between 7:00 am and 9:00 am and 4:00 pm and 6:00 pm, morning and afternoon peak commute periods. A chart demonstrating the bus lines frequency follows.

Northbound/Eastbound				**Southbound*/Westbound**			
Morning Peak Hours (7:00 AM-9:00 AM)		**Afternoon Peak Hours (4:00 PM-6:00 PM)**		**Morning Peak Hours (7:00 AM-9:00 AM)**		**Afternoon Peak Hours (4:00 PM-6:00 PM)**	
Time	**Bus Line**	**Time**	**Bus Line**	**Time**	**Bus Line**	**Time**	**Bus Line**
7:07 AM	22	4:01 PM	22	7:09 AM	522	4:01 PM	22
7:10 AM	522	4:02 PM	40	7:15 AM	22	4:07 PM	522
7:18 AM	22	4:05 PM	522	7:25 AM	40	4:14 PM	40
7:24 AM	522	4:16 PM	22	7:25 AM	522	4:16 PM	22
7:25 AM	40	4:17 PM	40	7:36 AM	22	4:23 PM	522
7:32 AM	22	4:20 PM	522	7:41 AM	522	4:31 PM	22
7:37 AM	522	4:31 PM	22	7:55 AM	40	4:38 PM	522
7:47 AM	22	4:35 PM	522	7:56 AM	22	4:44 PM	40
7:48 AM	522	4:46 PM	22	7:59 AM	522	4:46 PM	22
7:56 AM	40	4:47 PM	40	8:12 AM	22	4:53 PM	522
8:02 AM	22	4:50 PM	522	8:15 AM	40	5:01 PM	22
8:03 AM	522	5:02 PM	22	8:19 AM	40	5:09 PM	522
8:16 AM	22	5:04 PM	522	8:20 AM	522	5:14 PM	40
8:18 AM	522	5:17 PM	40	8:27 AM	22	5:16 PM	22
8:26 AM	40	5:17 PM	22	8:40 AM	522	5:24 PM	522
8:31 AM	22	5:19 PM	522	8:46 AM	22	5:31 PM	22
8:33 AM	522	5:33 PM	22	8:55 AM	40	5:39 PM	522
8:45 AM	22	5:33 PM	522	8:57 AM	522	5:46 PM	40
8:48 AM	522	5:46 PM	40			5:46 PM	22
8:50 AM	40	5:48 PM	22			5:54 PM	522
8:59 AM	22	5:49 PM	522				

*There are two southbound stops for Line 40 at Latham Street, one is south of Latham Street, approximately a third of the distance to El Camino Real. This stop functionally serves to connect Line 40 to Line 22 and Rapid 522.

III. Consistency with Density Bonus Provisions Based on Proximity to a Major Transit Stop

A. Density Bonus

The LAMC provisions contemplate up to a 35% Density Bonus. (LAMC § 14.28.040(C).) Alternatively, the Government Code allows for unlimited density for projects that are 100% affordable (at least 80% low income and up to 20% moderate income) and within one-half mile of a major transit stop. (GOV § 65915(f)(3)(D)(ii).) As the Project is a 100% affordable housing project, using Santa Clara County Measure A funding, City of Los Altos fee waivers, and Low Income Housing Tax Credits, its affordability will be subject to a covenant. Accordingly, as a 100% affordable project, the 165% Density Bonus is permitted by state law. The density increase is not considered an incentive/concession.

B. Height

Projects that are 100% affordable and within one-half mile of a major transit stop are entitled to a height increase of three additional stories, or 33 feet. (GOV § 65915(d)(2)(D).) The Project is designed to be 64 feet in height, 19 feet greater than the 45 feet allowed in the Commercial Thoroughfare zone. (LAMC § 14.50.140.) However, because the 64 feet would be within the additional 33 feet allowed for by GOV § 65915(d)(2)(D), the Project height is consistent with state Density Bonus provisions. Per the Government Code, this height increase is not considered an incentive/concession. (GOV § 65915(d)(2)(D).)

C. Parking

The City's Density Bonus provisions include a parking standard of .5 parking space per bedroom for affordable housing with unobstructed access to a major transit stop within one-half mile. (LAMC § 14.28.040(G)(2)(b).) As the Project consists of 159 bedrooms, this provision would require the Project to provide 80 parking spaces. Alternatively, state Density Bonus provisions do not require any parking for 100% affordable projects with unobstructed access to a major transit stop located within one-half mile of the project site. (GOV § 65915(p)(3).) As the Project proposes to include 90 parking spaces, it would satisfy both the state and local requirement. Use of these provisions is not considered an incentive/concession. (GOV § 65915(p)(9), LAMC § 14.28.040(G)(2)(e).)

D. Incentives, Concessions, and Waivers

Projects that are 100% affordable are entitled to four concessions or incentives. (GOV § 65915(d)(2)(D).) Concession or incentive is defined as "A reduction in site

development standards or a modification of zoning code requirements or architectural design requirements…that results in identifiable and actual cost reductions, to provide for affordable housing costs…." (GOV § 65915(k)(1).) Although entitled to four concessions, we understand that the EAH Housing is requesting two concessions which will result in cost reductions to allow the Project to be built: 1) a reduction in front yard setback from 25 feet to 10 feet, and 2) a reduction in private open space from a 50 square foot average to 25 square foot average.[3] The application for the Project should include findings or evidence demonstrating that reduction of the front yard setback and reduction of the open space would result in cost reductions to provide for the affordable housing. We can assist with those findings at your request.

EAH Housing may also request waivers, apart from an incentive/concession. (LAMC § 14.28.040(H).) The LAMC defines waiver as "the deletion or reduction of any development standards that would otherwise have the effect of physically precluding" a Density Bonus Development. (LAMC § 14.28.040(B)(27).) The Project is seeking a waiver to reduce the front step back of a minimum 10 feet from ground floor façade for stories above 45 feet in height, as maintaining that step back would preclude the Project from being constructed with the identified density. The application for the Project should include findings or evidence demonstrating that imposition of the front step back requirement would physically preclude the construction of the Project. We can assist with those findings at your request.

IV. Alternative Consistency with Density Bonus Provisions

As demonstrated above the Project Site is located within one-half mile of a major transit stop as defined by the Government Code and Public Resources Code. The subsequent analysis demonstrates that the Project Site's proximity to a major transit stop qualifies the Project for unlimited density, increased height, and decreased parking. However, even if the Project Site is not determined to be within one-half mile of a major transit stop, it would still be consistent with state and local Density Bonus provisions based on available concessions and waivers.

Projects that are 100% affordable are entitled to four concessions or incentives. (GOV § 65915(d)(2)(D).) The LAMC does not include a limitation on the number of waivers a project can seek, but rather contemplates the use of multiple waivers by using the plural of the term, waivers, in relevant provisions.[4] State law specifically allows a city to grant multiple waivers. (GOV § 65915(e)(3).)

[3] The staff report for the Joint City Council/Planning Commission Study Session on January 11, 2022 identified a third concession, increase in building height. As noted above, this increase in allowed by state law and not considered an incentive, consistent with GOV § 65915(d)(2)(D).
[4] See LAMC §§ 14.28.040(A), 14.28.040(C), 14.28.040(D)(1)(f), 14.28.040(H).

If the Project Site is not determined to be within one-half mile of a major transit stop, the Density Bonus can still be processed by including the following concessions and waivers.

A. Incentives/Concessions

An incentive or concession is defined as "A reduction in site development standards or a modification of zoning code requirements…that results in identifiable and actual cost reductions, to provide for affordable housing costs." (GOV § 65915(k)(1).) As density is specifically identified as a zoning code requirement, an increase to the identified level, 103.45 dwelling units/acre as opposed to the 38 dwelling units/acre identified in LAMC § 14.50.080, would constitute a modification to a zoning code requirement, and therefore an incentive/concession. As it is not enumerated in LAMC § 14.28.040(F)(1), this would be considered an off-menu incentive or potentially a wavier (discussed below).

A reduction in required parking is specifically cited as an example of a concession or incentive. (GOV § 65915(k)(1).) The LAMC specifically allows for "off-menu parking requirement alterations." (LAMC § 14.28.040(G)(3).) Further, the LAMC vests the City with broad authority to determine the parking required for a project: "This section does not preclude the city from reducing or eliminating a parking requirement for development projects of any type in any location." (LAMC § 14.28.040(G)(4).)

The Project has previously identified the reduction in front yard setback from 25 feet to 10 feet and the reduction in private open space from a 50 square foot average to 25 square foot average as potential incentives/concessions. The staff report for the Joint City Council/Planning Commission Study Session on January 11, 2022 identified both of these as on-menu incentives/concessions.

B. Waivers

As noted above, maintaining the step back requirement would preclude the Project from being constructed with the identified density. Similarly, limiting the Project's height to 45 feet would preclude the Project from being constructed at the identified density. The Project, as designed, includes dwelling unit square footages consistent with code requirements and ground floor amenities, as well as required parking. Reducing the Project to 45 feet would cause the removal of two stories from the Project. Maintaining the identified density while reducing the Project by two stories would likely require 1) redesign of the Project to include rooms of a substandard size, and/or 2) the removal of required parking and Project amenities on the ground floor, which would be displaced by residential units. Accordingly, the increased height would constitute a permissible waiver, as maintaining the 45 foot height limit would reduce the Project's density.

The Project's increased density could also be considered a waiver. As the Project seeks to construct an affordable housing development with a density of 103.45 dwelling units/acre, maintaining the density required by the LAMC would have the effect of physically precluding the Project. Accordingly, the Project's increased density could treated as a waiver rather than an incentive.

RAND|PASTER|NELSON

MEMORANDUM

VIA EMAIL

TO: EAH Housing

FROM: Elisa Paster

DATE: September 15, 2022

SUBJECT: **330 Distel Circle - Density Bonus**

I. INTRODUCTION

EAH Housing is partnering with the City of Los Altos ("City") to develop a 100% affordable housing project, with the exception of two manager's units, using a Density Bonus (the "Project") at 330 Distel Circle, Los Altos, California 94022 ("Project Site"). The Project is a 64 foot building that consists of 90 affordable units (24 Studio, 20 one-bedroom, 21 two-bedroom, and 23 three-bedroom) and 90 parking spaces. The Project is seeking a 165% Density Bonus; existing zoning allows for 34 units (rounded up from 33.06) at the Project Site. Based on its proximity to transit, as demonstrated below, state law permits the Project to receive an unlimited increase in density, a height increase up to 33 feet, and no minimum parking requirements.

EAH Housing is requesting the following concessions:

- Reduced front yard setback from 25 feet to 10 feet
- Reduced front side step-back on the 4th and 5th levels
- Reduced average per-unit open space requirement from 50 square feet to 25 square feet
- Reduced EV ready parking stalls from 90 to 9 stalls

EAH Housing is also requesting the following waivers:

- Modification of the requirement for an inner courtyard to be partially visible from the street and linked by a clear accessible path of travel
- Allowance to use wood as a distinct material for the base of the building
- Allowance to locate the solid waste staging area in the public right-of-way

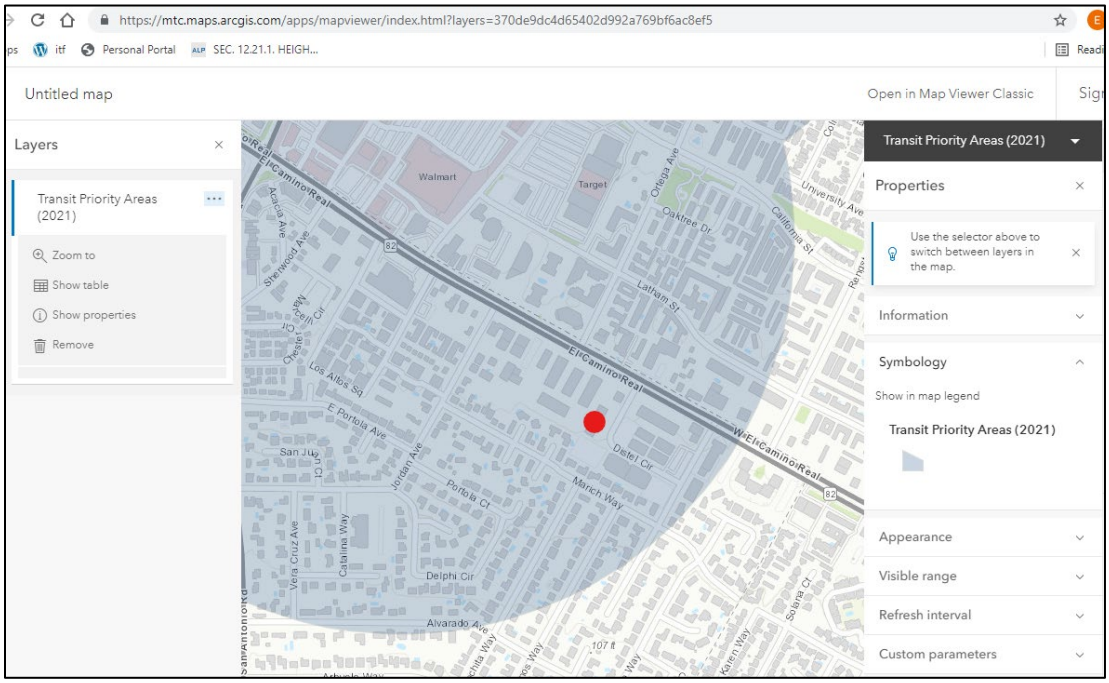
II. THE PROJECT SITE IS WITHIN ONE-HALF MILE OF A MAJOR TRANSIT STOP

For the purpose of state Density Bonus law, codified in Government Code (GOV) section 65195, a major transit stop is defined as existing or planned rail or bus rapid transit (BRT) stations, ferry terminals served by either a bus or rail transit service, and the intersection of two or more bus routes with a

frequency of service interval of fifteen minutes or less during the morning and afternoon peak commute periods. (Public Resources Code (PRC) §§ 21064.3, 21155(b).)[1]

A. Available Resources Identify the Project Site as Being One-Half Mile of a Major Transit Stop

A Transit Priority Area is defined as "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan." (PRC § 21099(a).) Accordingly, if the Project Site is located in a Transit Priority Area, it is by definition within one-half mile of a major transit stop. The Metropolitan Transportation Commission (MTC), the metropolitan planning organization for the San Francisco Bay Area, identifies the Project Site as being within a Transit Priority Area. The graphic below is taken from the MTC's GIS system, which shades the TPAs in blue; the Project Site is designated by a red dot.



A. A Major Transit Stop is Located at El Camino Real and Showers Drive

Although the MTC identifies the Project Site as being within a Transit Priority Area, it does not identify the major transit stop within one-half mile of the Project Site. Because the Project Site is not within one-half mile of a rail station, ferry terminal, or BRT station,[2] analysis focuses on the intersection of two or more bus routes with requisite service during the peak hour commute periods.

[1] State Density Bonus law treats planned major transit stops as existing major transit stops. Limited analysis was performed on whether major transit stops are planned within one-half mile of the Project Site. Our initial conclusion is that no such transit stops are planned, thus our research focused on existing major transit stops.

[2] Note that the Rapid 522 does not appear to have the elements of BRT service identified in the PRC, such as 1) dedicated bus lanes or a separate right-of-way, 2) transit signal priority, 3) all door boarding,

The statute does not define morning and afternoon peak commute hours, nor does the Los Altos Municipal Code (LAMC) or other City documentation. The Santa Clara Valley Transportation Authority (VTA), the City's transit provider, defines peak hours as "the highest morning or evening hour of travel reported on a transportation network or street." As the Congestion Management Agency for Santa Clara County, the VTA's Guidelines can be considered applicable in the absence of any other City guidance. Typically, peak hours are defined at between 7:00 am and 9:00 am and 4:00 pm and 6:00 pm.

The bus stop at the intersection of El Camino Real and Showers Drive, approximately 1,513 feet from the Project Site, constitutes a major transit stop, as VTA lines 22, 40, and Rapid 522 operate at less than 15 minute intervals between 7:00 am and 9:00 am and 4:00 pm and 6:00 pm, morning and afternoon peak commute periods. A chart demonstrating the bus lines frequency follows.

Northbound/Eastbound				**Southbound*/Westbound**			
Morning Peak Hours (7:00 AM-9:00 AM)		**Afternoon Peak Hours (4:00 PM-6:00 PM)**		**Morning Peak Hours (7:00 AM-9:00 AM)**		**Afternoon Peak Hours (4:00 PM-6:00 PM)**	
Time	**Bus Line**	**Time**	**Bus Line**	**Time**	**Bus Line**	**Time**	**Bus Line**
7:01 AM	522			7:00 AM	522		
7:07 AM	22	4:02 PM	40	7:05 AM	22	4:04 PM	22
7:14 AM	522	4:03 PM	40	7:17 AM	522	4:07 PM	522
7:10 AM	22	4:13 PM	522	7:21 AM	22	4:19 PM	22
7:26 AM	40	4:14 PM	22	7:26 AM	40	4:23 PM	522
7:27 AM	522	4:28 PM	522	7:33 AM	522	4:26 PM	40
7:34 AM	22	4:29 PM	22	7:38 AM	22	4:34 PM	22
7:39 AM	522	4:34 PM	40	7:56 AM	40	4:38 PM	522
7:48 AM	22	4:43 PM	522	7:58 AM	22	4:48 PM	22
7:54 AM	522	4:45 PM	22	7:51 AM	522	4:53 PM	40
7:56 AM	40	4:56 PM	40	8:10 AM	522	4:53 PM	522
8:03 AM	22	4:57 PM	522	8:14 AM	22	5:03 PM	22
8:09 AM	522	5:00 PM	22	8:14 AM	40	5:09 PM	522
8:18 AM	22	5:12 PM	522	8:19 AM	40	5:18 PM	22
8:24 AM	522	5:16 PM	22	8:27 AM	522	5:24 PM	522
8:26 AM	40	5:23 PM	40	8:30 AM	22	5:25 PM	40
8:31 AM	22	5:28 PM	522	8:43 AM	522	5:33 PM	22
8:39 AM	522	5:32 PM	22	8:47 AM	22	5:39 PM	522
8:47 AM	22	5:49 PM	522	8:56 AM	40	5:48 PM	22
8:49 AM	40	5:48 PM	22	8:59 AM	522	5:54 PM	522
8:53 AM	522	5:57 PM	40			5:56 PM	40
8:59 AM	22						

4) fare collection system promoting efficiency, and 5) defined stations. (PRC § 21060.2.) Accordingly, the Rapid 522 does not establish a major transit stop in and of itself.

*There are two southbound stops for Line 40 at Latham Street, one is south of Latham Street, approximately a third of the distance to El Camino Real. This stop functionally serves to connect Line 40 to Line 22 and Rapid 522.

II. Consistency with Density Bonus Provisions Based on Proximity to a Major Transit Stop

A. Density Bonus

The LAMC provisions contemplate up to a 50% Density Bonus. (Chapter 14.28, Article 2.) The Government Code also allows for unlimited density for projects that are 100% affordable (at least 80% low income and up to 20% moderate income) and within one-half mile of a major transit stop. (GOV § 65915(f)(3)(D)(ii).) As the Project is a 100% affordable housing project, using Santa Clara County Measure A funding, City of Los Altos fee waivers, and Low Income Housing Tax Credits, and its affordability will be subject to a covenant, it will qualify for unlimited density. Therefore, the 165% Density Bonus is permitted by state law, and is not considered an incentive/concession.

B. Height

Projects that are 100% affordable and within one-half mile of a major transit stop are entitled to a height increase of three additional stories, or 33 feet. (GOV § 65915(d)(2)(D).) The Project is designed to be 64 feet in height, 19 feet greater than the 45 feet allowed in the Commercial Thoroughfare zone. (LAMC § 14.50.140.) However, because the 64 feet would be within the additional 33 feet allowed for by GOV § 65915(d)(2)(D), the Project height is consistent with state law. Per the Government Code, this height increase is not considered an incentive/concession. (GOV § 65915(d)(2)(D).)

C. Parking

The City's Density Bonus law incorporates state parking reductions, which permit a parking standard of .5 parking space per bedroom for affordable housing with unobstructed access to a major transit stop within one-half mile. (LAMC § 14.28.046.) As the Project consists of 159 bedrooms, this provision would require the Project to provide 80 parking spaces. Alternatively, state Density Bonus provisions do not require any parking for 100% affordable projects with unobstructed access to a major transit stop located within one-half mile of the project site. (GOV § 65915(p)(3).) As the Project proposes to include 90 parking spaces, it would satisfy both the state and local requirement. Use of these provisions is not considered an incentive/concession. (GOV § 65915(p)(9), LAMC § 14.28.042.)

D. Incentives, Concessions, and Waivers

Projects that are 100% affordable are entitled to four concessions or incentives. (GOV § 65915(d)(2)(D).) Concession or incentive is defined as "A reduction in site development standards or a modification of zoning code requirements or architectural design requirements…that results in identifiable and actual cost reductions, to provide for affordable housing costs…." (GOV § 65915(k)(1).) The Project seeks four incentives or concessions:

- Reduced front yard setback from 25 feet to 10 feet because implementing the setback would decrease the building area and unit count.

- Reduced front side step-back on the 4th and 5th levels because implementing the stet-back would decrease the building area and unit count.
- Reduced average per-unit open space requirement from 50 square feet to 25 square feet because the existing of a ten foot wide utility easement prevents cantilevered balconies along the Distel frontage. Modifying the units to accommodate additional open space would decrease the building area and unit count.
- Reduced EV ready parking stalls from 90 to 9 stalls because providing 90 EV ready stalls is cost prohibitive.

The City must approve the incentives or concessions, unless the City makes written findings, based upon substantial evidence, of any of the following:

> "(A) The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).
>
> (B) The concession or incentive would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon public health and safety or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households.
>
> (C) The concession or incentive would be contrary to state or federal law."
> (GOV § 65915(d)(1).)

No substantial evidence supports denial of the Project based on the above factors. Additional information is provided in the applicant's memo to the City dated July 24, 2022.

EAH Housing may also request waivers, in addition to any incentives or concessions. (LAMC § 14.28.040(H).) The Project is seeking the following waiver:

- Modification of the requirement for an inner courtyard to be partially visible from the street and linked by a clear accessible path of travel because the courtyard has been raised to the second level to accommodate parking on the ground level.
- Allowance to use wood as a distinct material for the base of the building because the prescribed materials would preclude the Project.
- Allowance to locate the solid waste staging area in the public right-of-way because the trash collection company requires that the staging area be within a specified distance from the street. Moving the trash collection area on the site would result in lost amenity space.

The City must approve the waivers only "if the waiver or reduction would have a specific, adverse impact . . . upon health, safety, or the physical environment," would have "an adverse impact" on an historic resource, or "would be contrary to state or federal law." (GOV § 65915(e)(1).) Further, the City may not impose any development standard that would have the effect of physically precluding the construction of the Project. No substantial evidence supports denial of the Project based on the above factors. Additional information is provided in the applicant's memo to the City dated July 24, 2022.

JOINT PLANNING COMMISSION/COMPLETE STREETS COMMISSION MEETING AGENDA

7:00 PM - Thursday, August 18, 2022

via Teleconference

Per California Executive Order N-29-20, the Commission will meet via teleconference only. Members of the Public may call (253) 215-8782 to participate in the conference call (Meeting ID: 831 9438 7650 and Passcode: 538635 or via the web at https://tinyurl.com/y6unt9hs or https://losaltosca-gov.zoom.us/j/83194387650?pwd=VDMybmhuS09KaWVmUjdyakRZUzdVdz09&from=addon). Public testimony will be taken at the direction of the Chair and members of the public may only comment during times allotted for public comments. Members of the public are also encouraged to submit written testimony prior to the meeting at PCPublicComment@losaltosca.gov. Emails received prior to the meeting will be included in the public record.

ESTABLISH QUORUM

PUBLIC COMMENTS

ITEMS FOR CONSIDERATION/ACTION

CONSENT CALENDAR

1. **Planning Commission Minutes**
   Approve minutes of the regular meeting of July 21, 2022.

PUBLIC HEARING

2. **D22-0002 – EAH Housing – 330 Distel Circle**
   Multiple-Family Design Review and Conditional Use Permit for a new multiple-family development with a five-story building with 90 condominium units for rent along 330 Distel Circle with mechanized parking system and amenity space on the first floor. The proposal is for a 100% affordable housing project seeking a density bonus which allows increased height and reducing parking ratios with development incentives including step-back reduction, reduced courtyard visibility and base material to be wood for the design review approval. The project is categorically exempt from environmental review pursuant to Section 15332 (Class 32), Infill Exemption of the California Environmental Quality Act (CEQA) Guidelines. *Project Planner: Hayagreev*

COMMISSIONERS' REPORTS AND COMMENTS

POTENTIAL FUTURE AGENDA ITEMS

ADJOURNMENT

SPECIAL NOTICES TO PUBLIC

In compliance with the Americans with Disabilities Act, the City of Los Altos will make reasonable arrangements to ensure accessibility to this meeting. If you need special assistance to participate in this meeting, please contact the City Clerk 72 hours prior to the meeting at (650) 947-2720. Agendas, Staff Reports and some associated documents for Planning Commission items may be viewed on the Internet at *http://www.losaltosca.gov/citycouncil/online/index.html*. Commission Meetings are televised live and rebroadcast on Cable Channel 26. On occasion the Planning Commission may consider agenda items out of order. All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, and that are distributed to a majority of the legislative body, will be available for public inspection at the Office of the City Clerk's Office, City of Los Altos, located at One North San Antonio Road, Los Altos, California at the same time that the public records are distributed or made available to the legislative body. If you wish to provide written materials, please provide the Community Development Department with 10 copies of any document that you would like to submit to the Planning Commission for the public record. If you challenge any planning or land use decision made at this meeting in court, you may be limited to raising only those issues you or someone else raised at the public hearing held at this meeting, or in written correspondence delivered to the Planning Commission at, or prior to, the public hearing. Please take notice that the time within which to seek judicial review of any final administrative determination reached at this meeting is governed by Section 1094.6 of the California Code of Civil Procedure. For other questions regarding the Planning Commission meeting proceedings, please contact the Community Development Department at (650) 947-2750.

PLANNING COMMISSION MEETING MINUTES

7:00 PM - Thursday, July 21, 2022

Telephone/Video Conference Only

CALL MEETING TO ORDER

At 7:02 p.m. Chair Doran called the meeting to order.

ESTABLISH QUORUM

PRESENT:	Chair Doran, Vice-Chair Mensinger, Commissioners Ahi (joined the meeting at approximately 7:18 PM), Bodner, Marek, and Roche
ABSENT:	Commissioners Steinle
STAFF:	Development Services Director Zornes, City Attorney Houston, Interim Planning Services Manager Golden, and Consulting Senior Planner Hayagreev

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

None.

ITEMS FOR CONSIDERATION/ACTION

CONSENT CALENDAR

1. **Planning Commission Minutes**
   Approve minutes of the regular meeting of July 7, 2022.

Action: Upon motion by Vice-Chair Mensinger, seconded by Commissioner Roche, the Commission recommended approval of the minutes from the July 7, 2022 Regular Meeting as written.
The motion was approved (5-0) by the following vote:
AYES: Chair Doran, Vice-Chair Mensinger, Commissioners Bodner, and Roche
NOES: None
ABSENT: Commissioners Ahi and Steinle

PUBLIC HEARING

2. **D22-0002 – EAH Housing – 330 Distel Circle**
   Multiple-Family Design Review and Conditional Use Permit for a new multiple-family development with a five-story building with 90 condominium units for rent along 330 Distel Circle with 90 parking spaces utilizing a mechanized parking system and a common amenity space on the first floor. The proposal is for a 100% affordable housing project and is eligible for a density bonus, development incentives, and development waivers under state law and city ordinance. The project is categorically exempt from environmental review pursuant to Section 15332 (Class 32), Infill Exemption of the California Environmental Quality Act (CEQA) Guidelines. *Project Planner: Hayagreev* This item has been removed from the agenda. The item will be re-noticed for a future meeting.

3. **19-D-01, 19-UP-01 and 19-SD-01 – Gregory and Angela Galatolo – 4350 El Camino Real**
Multiple-Family Design Review, Conditional Use Permit and Tentative Subdivision map for a new multiple-family development with a five-story building with 47 condominium units along El Camino Real with two levels of underground parking. The proposal includes seven affordable units with four moderate-income units and three very-low-income units, and a density bonus with development incentives to allow for increased building height and a reduced parking aisle width. A Mitigated Negative Declaration with Mitigation Monitoring and Reporting Program in compliance with the California Environmental Quality Act (CEQA) will be considered. *Project Planner: Hayagreev* THIS ITEM WAS CONTINUED FROM THE JUNE 16, 2022 PC MEETING DUE TO LACK OF A QUORUM.

STAFF PRESENTATION
Consulting Senior Planner Hayagreev gave the staff presentation.

COMMISSIONER QUESTIONS
None.

COMMISSIONER AHI JOINED THE MEETING AT APPROXIMATELY 7:18 PM.

APPLICANT PRESENTATION
Applicant Angela Galatolo introduced project architect Alex Seidel and David Kornfield, project planner. Both provided presentations.

Applicant requested changes to the following conditions:

- Reword Condition No. 27 to add a beginning phrase referring to the list of "items the plans shall include" (Prior to Building Permit Condition).
- Reword Condition 27.6 to omit the sentence "Replace existing shelter with a new VTA standard shelter (17-foot Full Back with Ad panel) consistent with VTA direction" for consistency with VTA approval to allow a bench or custom architectural enclosure.
- Reword Condition No. 45 to omit the requirement to rebuild an off-site ADA ramp at the southwest corner of the intersection – no nexus.

COMMISSIONER QUESTIONS
Vice-Chair Mensinger asked questions about the BMR unit distribution proposed by staff. These were accepted by applicant. She then asked a clarifying parking question.

David Kornfield, project planner and project architect Alex Seidel responded.

Regarding Condition 27.6, Interim Planning Services Manager Golden said staff is amenable to change the language to allow an alternative design at the discretion and approval of the Valley Transportation Authority.

Regarding Condition 45, Interim Planning Services Manager Golden responded that in general, the entire facility is typically improved when a crosswalk or ramp on either side is improved, but will be reviewed further with the Engineering Division.

PUBLIC COMMENT
None.

Chair Doran closed the Public Comment period and Commission discussion proceeded.

Action: Upon motion by Chair Doran, seconded by Commissioner Roche, the Commission moved to recommend approval of the Mitigated Negative Declaration to the City Council and recommend approval to the City Council of Multiple-Family Design Review, Conditional Use Permit and Tentative Subdivision map applications 19-D-01, 19-UP-01 and 19-SD-01 subject to the staff report findings and conditions with staff's revised comments and with the following change:

- Modify Condition 27.6 to revise the language to install the bus shelter per Valley Transportation Authority (VTA) standards (17-foot Full Back with Ad Panel) or an alternative proposed design by the Applicant as acceptable, and at the discretion of VTA.

The motions were approved (6-0) by the following vote:
AYES: Chair Doran, Vice-Chair Mensinger, Commissioners Ahi, Bodner, Marek and Roche
NOES: None
ABSENT: Commissioner Steinle

COMMISSIONERS' REPORTS AND COMMENTS

City Attorney Houston mentioned a webinar training for the Planning Commissioners taking place tomorrow, July 22nd.

Development Services Director Zornes noted that the 30-day public comment period for the Housing Element Update was closing at midnight this Sunday, July 24, 2022.

POTENTIAL FUTURE AGENDA ITEMS

None.

ADJOURNMENT

Chair Doran adjourned the meeting at 8:10 PM.

Steve Golden
Interim Planning Services Manager

DATE: AUGUST 18, 2022

Agenda Item # 2

AGENDA REPORT SUMMARY

Meeting Date: August 18, 2022

Subject: 330 Distel Circle - Planning Commission / Complete Streets Commission Joint Public Hearing

Prepared by: Radha Hayagreev, Consulting Senior Planner

Reviewed by: Steve Golden, Interim Planning Services Manager
Nick Zornes, Community Development Director
Jolie Houston and Erik Ramakrishnan, City Attorney's Office

Initiated by: Welton Jordan, EAH Housing

RECOMMENDATION

Recommend to the City Council approval of Multiple-Family Design Review (application D22-0002) and Conditional Use Permit (application CUP22-0001) with a Density Bonus and Development Incentives and Development Waivers for a 90-unit residential development at 330 Distel Circle per the findings and conditions contained in the resolution.

Recommend the City Council consider the Project categorically exempt from environmental review pursuant to Section 15332 (Class 32), Infill Exemption of the California Environmental Quality Act (CEQA) Guidelines.

ATTACHMENTS

A. ~~Draft Resolution with Findings, 2022-XX and Conditions of Approval~~
B. ~~Notice of Exemption memo pursuant to CEQA requirements~~
~~Exhibit B1 including Appendices and Figures supporting Notice of Exemption~~
C. ~~Story Pole Exemption plans and notice boards~~.
D. ~~Revised Density Bonus Report~~
~~D1. Memorandum for Project Consistency with Density Bonus Provisions~~.
E. Public Notification Map
F. Public Correspondences
G. Objective Design Control standards conformance matrix.
H. Arborist Report
I. January 11, 2022, Joint Study Session Minutes and Comment Response Letter
J. Trash Management Plan
K. Project Description and Proposal Statement
L. Fire Department Comment Letter
M. ~~Architectural Plan Set~~

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

ENVIRONMENTAL REVIEW

To conform with the California Environmental Quality Act (CEQA) requirements, the City of Los Altos has made findings that the proposed project on 330 Distel Circle is categorically exempt from environmental review pursuant to Section 15332 (Class 32), Infill Exemption of the California Environmental Quality Act (CEQA) Guidelines and that the proposed project will not have a significant effect on the environment.

The development proposal is consistent with the General Plan and Zoning Ordinance, as set forth in this staff report; does not result in any significant effects related to traffic, noise, air or water quality; is adequately served by all required utilities and public services; and none of the exceptions stated in CEQA Guidelines Section 15300.2 to applicability of the exemption applies. A Notice of Exemption (NOE) has been prepared, as referenced in Attachment B. Exhibit B1 has the technical analyses and reports to support the Notice of Exemption.

PROJECT DESCRIPTION

The project site (APN 170-04-051) is approximately 0.87-acres located at 330 Distel Circle at the western area of Distel Circle. The project site is designated Thoroughfare Commercial (TC) in the General Plan and zoned Commercial Thoroughfare (CT). The site is currently developed with an approximately 12,120 square foot, single-story office building with perimeter landscaping including twenty-seven trees, and surface parking. The project would demolish the existing office building, remove nineteen trees that would be impacted by the new development and preserve the remaining eight trees, and remove of the surface parking lot to construct a newbuilding and associated improvements.

The proposed project (Project) includes a five-story apartment building with 90 rental units, all of which are proposed to be affordable (100 percent affordable project). The first/ground floor is comprised of only common building amenities with no residential units and will be mass timber construction. Parking will be provided at the ground-level in a podium parking garage containing a total of 90 vehicle parking spaces that includes eight at grade parking spaces and 82 parking spaces on a mechanical parking lift system. The ground floor also contains a common amenity space, tenant administrative offices, tenant coworking space, trash collection and sorting room, a bike locker room for 45 bicycles, and other common amenities. The upper floors constructed on top of the mass timber system will be constructed using a modular unit system that are manufactured off-site and assembled on-site.

The second floor has a 5,530 square-foot common open space courtyard. The upper four floors consist of a total of ninety (90) residential units. The unit distribution is twenty-four (24) studio units,

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

twenty (20) one-bedroom units, twenty-three (23) two-bedroom units, and twenty-three (23) three-bedroom units. A complete set of design plans including site and landscape plans, architectural plans, and engineering plans are included in Attachment M. An arborist report (Attachment H) includes a detailed assessment of the trees and describes the disposition of tree preservation or removal and tree preservation guidelines for the eight trees which are proposed to be preserved on site.

The following table summarizes the project's technical details and comparison to objective development standards.

Table 1 Development Standards

	Standard (in CT zone)	Proposed	Complies	Notes
General Plan	Thoroughfare Commercial (TC)	Residential	Yes.	Per Table LU-1 of the General Plan, the TC land use designation can accommodate mixed-use projects and affordable residential projects.
Zoning	Commercial Thoroughfare (CT)	Residential	Yes	Per LAMC 14.50.040 K. Multiple-family housing requires a Conditional Use Permit
Density	38 du/acre	104 du/acre	Yes, when the density bonus to which the project is entitled is applied.	LAMC – 14.28.040
Lot Size	38,050 sq. Ft. (0.87 acres)			
Units	31	90	Yes, project site is within one-half mile	Applying Density bonus provisions. Pursuant to Gov.

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

	Standard (in CT zone)	Proposed	Complies	Notes
			of a major transit stop.	Code, § 65915, subd. (f)(3)(D)(ii)
Site Area	Min 20,000 sq. Ft. Frontage 75ft.	38,050 sq. Ft and 222'-6"	Yes	Per LAMC 14.50.070
Height	45ft	64' 6"	Yes, applying State Density bonus Law Provisions	Per State Density Bonus Law provisions, height increase for affordable housing projects can be over 3 stories or 33ft above max. allowed height.
Height of Ground Floor commercial / mixed-use structures	12ft minimum	14' 6"	Yes	
Front Setback	25ft	10ft	Yes, if the requested concession is granted.	Concession-1 requested
Front Setback Landscaping	50% landscaped	More than 50% landscape with entry planter boxes	Yes	
Side Setback	Average 7'- 6"	10'-11"	Yes	
Rear Setback	0ft.	11'-0"	Yes	Complies. Parcel adjoins CT and OA-1 Zone

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

	Standard (in CT zone)	Proposed	Complies	Notes
Private Open Space	Not required for every unit, average 50 sq. Ft. shall be provided for the total number of dwelling units. For 90 units 4,500 sq. ft	25 sq. Ft. Average 2,550 sq. ft.	Yes, if the requested concession is granted.	Concession-2 requested
Common Open Space	3200 sq. Ft.	5,530 sq. ft.	Yes	
Parking alternative Standard (LAMC 14.28.040 G)	If 14.28.040 G (2)b - on-menu alternate standard - ½ mile from transit = 45 parking spaces.	90	Yes	Per State Density Bonus Law, affordable housing projects within 1/2 mile from a major transit stop can avail parking exemptions.
Bicycle Parking	1 Class I (Bike Locker) for every 3 units (30 required)	45	Yes	
	1 Class II (Bike Rack) for every 15 units (6 required)	10	Yes	Sheet L1.1 of Attachment-E
Loading spaces	1 truck loading space	1	Yes	Sheet L1.1 of Attachment-E

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

	Standard (in CT zone)	Proposed	Complies	Notes
Width of driveway	One way – 12ft Two-way drive min – 18ft	23ft	Yes	Sheet A2.1 of Attachment-E
Design Control Standards (LAMC 14.50.170) and Required Conditions of CT District (LAMC 14.50.060) are detailed in Attachment G-Objective Design Standard Conformance Matrix.				
Design Control 14.50.170 B (1) Building Massing and articulation. Upper Story Step-Back	Min 10ft from ground floor façade for stories above 45ft in height (top story)	No step back	Yes, if the requested concession is granted.	Concession-3 requested
Design Control 14.50.170 C (5) a. Building Design. Interior Courtyard.	Interior courtyard must be partially visible from the street and linked to the street by a clear accessible path of travel	Raised courtyard on level 2 not visible from the street. Access to courtyard and exit via stair.	Yes, if the requested waiver is granted.	Waiver-1
Design Control 14.50.170 D (4) a. Materials. Materials Defining Building Elements.	For multistory elements, the base of the building shall be defined by a distinct material selected from among the following: stone, brick, concrete, CMU, or stucco ("base material")	Wood serves as a distinct base material	Yes, if the requested waiver is granted.	Waiver-2

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

	Standard (in CT zone)	Proposed	Complies	Notes
CT required conditions 14.50.0t60 C. 2. Access and screening of refuse collection	Every development will be required to provide suitable space on-site for solid waste separation, collection, storage and pick up and shall site these in locations that facilitate access, collection, and minimize any negative impact on persons occupying the development site, neighboring properties, or public right-of-way	Solid waste separation, collection and storage are on-site, but the pickup is proposed to be in the service staging area on the public right-of-way	Yes, if the requested waiver is granted.	Waiver -3

The project is consistent with the objective design standards for the CT zone of the Los Altos Zoning Code if the requested concessions/waivers are granted, as noted in Table 1 above. Additional details with all design control standards is available in Attachment G.

BACKGROUND

The City of Los Altos is partnering with the County of Santa Clara for this proposed 100 percent affordable housing project. A Memorandum of Understanding (MOU) was executed between the City and County on January 28, 2021, memorializing the expected purchase agreement by the County for the property from Midpeninsula Open Space District and the commitment to develop a 90-unit affordable housing project with certain affordability levels and the City's commitment to waive 100 percent of the project's development impact fees. Since January 2021, the project Applicant, EAH Housing has conducted a series of community outreach meetings to receive the community's feedback, submitted a Preliminary SB 330 application, and received feedback from the Planning Commission during a Pre-application Project Review study session that is summarized below.

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

The City's webpage has an archive of the community outreach efforts along with the supporting documents, link here -https://www.losaltosca.gov/communitydevelopment/page/330-distel-circle

The Applicant conducted several community meetings, both virtually and in-person to share details of and to receive feedback from the community to inform the completion of their design. One significant change to the design resulted from community input for voluntary inclusion of parking within the project[1] which now provides 90 parking stalls.

The community outreach meetings that were conducted for the project are as follows:

January 27, 2021	Virtual Community Meeting #1
February 11, 2021	Virtual Community Meeting #2
May 13, 2021	Affordable Housing Tour
August 12, 2021	Virtual Community Meeting #3
September 9, 2021	Virtual Community Meeting #4
September 20, 2021	Open House

Planning Commission Study Session

On October 21, 2021, the Applicant submitted an SB 330 Preliminary application that also served as a Pre-Application Design Review application that is typically reviewed by the Planning Commission only, but since this is a city sponsored project, the City Council was also included in the Pre-Application review to obtain their early feedback to inform the completion of the design. On January 11, 2022, the Planning Commission and City Council held a joint study session. The project received significant support from community members and appointed and elected officials. A number of public commenters and city officials also expressed an interest in expediting the formal review process since it is a 100 percent affordable project. Additionally, at this meeting, the applicant received suggestions to consider improving the design and address concerns by members of the community and city officials. A detailed summary of the comments can be found in the joint meeting minutes in Attachment I.

[1] As discussed further in the document, since the project is 100 percent affordable, it is exempt from providing parking pursuant to State Density Bonus Law.

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

SB 330 - Joint Complete Streets Commission and Planning Commission Meeting
Development project applications submitted after January 1, 2020, are subject to SB 330, the Housing Crisis Act of 2019. To be consistent with California Government Code Section 65905.5(a). the city is limited to no more than five hearings to make an approval determination of the proposed housing development project. The application was submitted on March 3, 2020; therefore, the project is subject to the maximum five hearing limitation. One public hearing was already conducted on March 22, 2022, for the Applicant's request to the City Council for an exemption to the requirement for the installation of story poles pursuant to the Council's Open Government Policy.

Pursuant to Section 14.78.090 of the Zoning Code, multiple-family residential development projects are subject to a multi-modal transportation review hearing by the Complete Streets Commission (CSC) and recommendation to the Planning Commission (PC) and City Council. Pursuant to Section 14.78.020(C), the PC shall review development project applications at a public hearing and provide a recommendation to the City Council. To reduce the total number of hearings, the Los Altos City Council directed staff and commissions to hold a joint CSC/PC meeting to provide joint recommendation to the City Council. As specified by the Zoning Code, the CSC is tasked with reviewing the bicycle, pedestrian, parking, and traffic elements of a development application. Prior to consideration by the City Council, the PC completes a more comprehensive development review of the application and provides a recommendation to the City Council. This agenda report combines information addressing both the CSC's multi-modal transportation review and the PC's comprehensive review of the development project.

Story Pole Exemption
On March 22, 2022, the City Council approved an exemption to the story pole installation for this development project. As an alternative, the Applicant was required to install additional billboard signs which included an additional 3D rendering of the proposed project from the residential neighborhood on Marich Way. The billboard signs including the additional 3D rendering were installed per the approved plans on May 12th as verified by staff. Per the story pole policy, the requirement is for the story poles to remain installed 30days prior to any public hearing approval. Refer to Attachment B for details of the installed poles and compliance provided by the applicant.

DISCUSSION/ANALYSIS
This section includes discussion and analysis for review and consideration for approving this project including General Plan Conformance, Density Bonus and Affordable Housing, Design Review, Conditional Use Permit, Multi-modal Transportation Analysis, and the Environmental Review.

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

Los Altos General Plan Conformance

The General Plan contains goals and policies for the El Camino Real Corridor under the Special Planning Area in the Land Use Element, Community Design and Historic Resources Element, Housing Element and Economic Development Element. Together these elements discourage exclusive office use, promotes inclusion of residential development, encourages affordable housing projects, increases height for residential development, intensifies development along the El Camino Real Corridor, and provides streetscape improvements and pedestrian friendly streetscape designs. The proposed project is generally consistent with the following goals and objectives of the General Plan that are envisioned for the neighborhood around El Camino Real Corridor.

Community Design and Historic Resources Element

Goal 4 Policy 4.3: Evaluate development applications to ensure compatibility with neighborhoods south of the corridor.

Land Use Element

Goal 4 Improve the land use mix along El Camino Real to ensure fiscal stability, encourage affordable housing, and to allow for development intensification along this corridor in a manner that is compatible with the adjacent residential neighborhoods and the local circulation system.

Goal 4 Policy 4.3 Encourage residential development on appropriate sites within the El Camino Real corridor.

Goal 4 policy 4.4 Encourage the development of affordable housing.

Housing Element

Housing Element Policy 2.1 The City will maintain zoning that provides for a range of housing sizes and residential densities.

Housing Element Goal 4 Allow a variety of housing densities and types in appropriate locations to accommodate housing needs at all income categories.

Housing Element Program 4.3.4 Continue to encourage maximum densities.

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State Density Bonus Provisions and Affordable Housing The proposed 90-unit residential project is a 100 percent affordable project exclusive of two manager units. As such, pursuant to State Density Bonus Law and the Los Altos Density Bonus (Chapter 14.28, Article 2), the project is eligible for a density bonus, development incentives, and eliminates the parking requirements that would otherwise be required in compliance with the zoning code. Per the Commercial Thoroughfare (CT) zoning district standards (Section 14.50.080 LAMC), the maximum permitted residential density shall be 38 dwelling units per net acre which would allow up to a maximum of 33 units on the project site. With density bonus, there is no maximum density limitation since 100 percent of the housing units will be affordable and the project is located within one-half mile of a major transit stop. (Table D of the Appendix to the Affordable Housing Ordinance (Chapter 14.28 LAMC) and State Density Bonus (Government Code Section 65915 (f)(3)(D)(ii).

Per State Density Bonus Law Section 65915(o)(4) "major transit stop" has the same meaning as defined in subdivision (b) of Section 21155 of the Public Resources Code, and pursuant to subdivision (b) of Section 21155 of the Public Resources Code, among other definitions a "major transit stop" also includes a "major transit stop" as defined in Section 21064.3 of the Public Resources Code. And finally, per Section 21064.3 (a) of the Public Resources Code, a "major transit stop" includes an existing rail or bus rapid transit station.

The project site is 0.4 miles to a major transit bus stop at El Camino Real and Showers Drive since VTA Rapid line 522 makes a stop at this location (also see page 1-3 of Attachment D1); therefore, the project is within one-half mile of a major transit stop as defined in the State Density Bonus Law and is eligible for unlimited density.

Unit Distribution and Affordability Rates. The proposed project has eighty-eight below market rate units and two market rate units utilized as manager's units.

The table below provides the proposed unit distribution and affordability rates of each unit. All units except the two manager's units will fall within one of the following affordability levels: less than 80% AMI indicates Low Income units (LI), 50% AMI indicated Very Low-income housing (VLI), 30% or lesser AMI indicates Extremely Low-income units (ELI).

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Unit Mix – 330 Distel		AMI					
	SQFT PU	30%	50%	60%	80%	Unit Total	Unit Mix
SRO/Efficiency	465	14	3	7	-	24	27%
1-BR	645	9	3	7	1	20	22%
2-BR	965	12	3	4	2	21	23%
3-BR	1140	10	3	7	3	23	26%
4-BR	0	-	-	-	-	-	0%
MGR	965					2	2%
Unit Total		45	12	25	6	**90**	100%
Affordability Dist.		50%	13%	28%	7%	100%	
Average Affordability	**44.66%**						

Density Bonus, Development Concessions, and Waivers

Per State Density Bonus Law and the Los Altos Density Bonus Ordinance (Chapter 12.28 LAMC, Article 2), projects providing 100 percent affordable units including total units and density bonus units, exclusive of manager's units, are entitled to four development concessions. The table below summarizes the four concessions requested by the applicant that are detailed further in the applicant's submitted Density Bonus report (Attachment D and D1) including the project's eligibility for the density bonus allowances, the concession and waiver requests and justification for the requests.

Table 4: Concessions and Waivers

	Standard (in CT zone)	**Proposed**	**Concessions and Waivers**
Front Setback LAMC 14.50.090	25ft	10ft	Concession -1
Private Open Space LAMC 14.50.150	Not required for every unit, average 50 sq. Ft. shall be provided for the total number of dwelling units. For 90 units 4,500 sq. ft	25 sq. Ft. Average 2,550 sq. ft.	Concession - 2

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Design Control 14.50.170 B (1) Building Massing and articulation. Upper Story Step-Back	Min 10ft from ground floor façade for stories above 45ft in height (top story)	No step back	Concesssion-3
Reduced Standards for Los Altos REACH codes for EV Ready charging points for affordable housing projects to meet reduced requirement which is 10% EV2 ready spaces of total of 9 spaces in total.	EV2 ready spaces – 9 EV1 ready spaces – 81	Meets affordable housing 10% EV2 ready spaces. (2019 code) Proposed EV2 ready - 9	Concession – 4

Requested Concessions

All requested concessions in the proposed project are off-menu concessions per the Los Altos Density Bonus

Pursuant to Govt Code Section 65915(d)(1), A concession request must be granted unless the City Council is able to make one of the following findings:

1. The concession requested will not result in an identifiable and actual cost reduction to provide for affordable housing cost; or
2. Granting the concession would violate federal or state law; or
3. Granting the concession would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources.

Concession #1**:** To reduce the front yard setback to 10 feet whereas a standard front setback of 25 feet for the CT zoning district is required per Section 14.50.090 (LAMC).
The standard requirement of 25-foot setback would reduce the proposed building footprint and floor area and thereby reduce the unit count.

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Finding 1: The concession requested will not result in an identifiable and actual cost reduction to provide for affordable housing cost.

> Staff review: *This finding cannot be made* because reducing the setback increases the floor area and number of affordable housing unit thereby lowering the per-unit soft cost for the project. For example, if the soft costs for providing 90 units is $3 million, the per unit cost is $33,333. If the project complies with the 25-foot setback requirement and can accommodate only 60 units, the per unit soft cost would be $60,000. A conforming project without the benefit of the development concessions would result in a project with less units and therefore higher development costs per unit.

Finding 2: Granting the concession would violate federal or state law; or

> Staff review: *This finding cannot be made* since granting the reduced step back would not violate federal or state law.

Finding 3: Granting the concession would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources.

> Staff review: *This finding cannot be made* because the project site is not listed in the California Register of Historic Resources. The project setback reduction will not have a specific, adverse impact on the public health or safety as determined by the CEQA categorical exemption for environmental impact analysis reports.

Concession #2: To reduce the private open space requirement to an average 28 square feet whereas an average of 50 square feet of open space is required in the CT zoning district per Section 14.50.150 (LAMC).

The front setback has a ten-foot public utility easement which prevents any cantilever balconies. Customizing the modular units to have a recessed balcony/deck bay would decrease the livable area of the unit size and potentially decrease the unit count, and likely increase the construction cost due to customization of modular units. The Applicant cites that the proposal mitigates the reduced private open space by providing more common open space in the second-floor courtyard.

Finding 1: The concession requested will not result in an identifiable and actual cost reduction to provide for affordable housing cost.

Staff Review: *This finding cannot be made.* The concession of reduced private balcony space for units in the front setback area is to accommodate the 10ft easement. Customizing the modular units to have a recessed balcony/deck bay would decrease the livable area of individual units and potentially decrease the unit count, and likely increase the construction cost due to customization of the modular units. The reduction in private open space would also allow construction of the project at the highest possible density and provide more affordable housing and reduce identifiable soft costs per unit.

Finding 2: Granting the concession would violate federal or state law; or

Staff Review: *This finding cannot be made.* Granting reduced private open space does not violate federal or state law.

Finding 3: Granting the concession would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources.

Staff review: *This finding cannot be made.* From the studies conducted for air quality, noise impacts under the CEQA requirement, this reduced private open space does not create significant impact on the public health and safety. The project site is not listed in the California Register of Historic Resources.

Concession #3: To eliminate the 10-foot upper story step-back from the ground floor façade for stories above 45 feet in height as required in the CT Zoning District per Section 14.50.170.B.1 (LAMC).

The elimination of the upper story step back requirement allows for more building area and therefore more units within the allowable height limits.

Finding 1: The concession requested will not result in an identifiable and actual cost reduction to provide for affordable housing cost.

Staff review: *This finding cannot be made*. Elimination of the step back increases the floor area and number of units, which in turn reduces the soft costs for each unit. The step back provision would require customization of the modular units which increases costs; therefore, eliminating the step back provision reduces the customization of the units thereby reducing construction costs.
Granting the step back concession results in identifiable cost savings per unit.

Finding 2: Granting the concession would violate federal or state law; or

> Staff review: *This finding cannot be made* since granting the reduced step back would not violate federal or state law.

Finding 3: Granting the concession would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources.

> Staff review: *This finding cannot be made* because the project site is not listed in the California Register of Historic Resources. The project step back reduction will not have a specific, adverse impact on the public health or safety as determined by the CEQA categorical exemption for environmental impact analysis reports.

Concession #4**:** To eliminate the required electric vehicle parking requirements provided in the City's adopted REACH Codes per Section 4.106.4.2 (as the same may be renumbered or amended from time to time)

Electric vehicle (EV) parking requirements are required under the California Building Standards Code (Building Code) and the city has increased the requirements for EV parking under the city's adopted REACH codes. The REACH codes are the city's local amendment to the Building Code and under State Density Bonus Law, a developer cannot receive a development concession for a requirement under state law; therefore, the standards under the Building Code and more specifically the mandatory measures for EV parking under the California Green Building Standards Code would still apply.

Additionally, although the project is eligible to eliminate all parking spaces under State Density Bonus Laws because it is a 100% affordable housing project within one-half mile of a major transit stop, since the project is providing parking, the project is required to provide the minimum standards pursuant to the Building Codes and REACH code. Currently, Section 4.106.4.2 of the Los Altos Municipal Code requires for all multifamily affordable housing projects, a minimum of 10 percent of the dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready space and the remaining dwelling units with parking space(s) shall each be provided with at least one Level 1 EV ready space. For the 90 parking spaces being provided, nine spaces would be required to be Level 2 EV ready and 81 spaces Level 1 ready. Absent of the REACH codes, the California Green Building Standards (Cal Green) (adopted as part of the Building Code) requires 10 percent of the parking spaces be EV ready. The applicant has submitted information that the estimated cost for EV ready improvements is approximately $1,000 per space or an additional $81,000 for the additional 81 EV ready parking spaces under the REACH code.

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Please be advised that compliance review with the EV parking requirement is determined with the building permit and similar to other Building Code compliance requirements, the requirement that is in effect at the time of Building Permit submittal is the effective requirement. Therefore, the city can approve a concession to eliminate the REACH code EV parking requirement, but the number of EV parking spaces would still need to comply with the requirements of the Building Code (Cal Green) that are in effect at the time of building permit submittal. The city has made the applicant aware of changes to the Cal Green EV parking standards that become effective with the 2022 Building Code adoption cycle.

Finding 1: The concession requested will not result in an identifiable and actual cost reduction to provide for affordable housing cost.

> Staff review: *This finding cannot be made*. The elimination of additional EV ready spaces would result in lowering the cost of installing the infrastructure of the EV equipment detailed above which reduces the overall costs of building the affordable units.

Finding 2: Granting the concession would violate federal or state law; or

> Staff review: *This finding cannot be made* since eliminating the REACH code requirement for providing the EV parking is a local amendment to the Green Building Standards. The project would still need to comply with the requirement of the State Building Standards that are in effect at the time of Building Permit submittal.

Finding 3: Granting the concession would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources.

Staff review: *This finding cannot be made* because the project site is not listed in the California Register of Historic Resources. Granting the local EV Ready requirement elimination does not adversely impact the public health or safety.

In summary, the first three of the concessions would facilitate construction at a higher density, which will reduce soft costs per unit, and the fourth concession for relief from the city's EV parking requirements would reduce direct project costs. A conforming project without the benefit of the development concessions would result in a project with less floor area and units and therefore higher soft costs per unit.

Additionally, the applicant states that as a 100 percent affordable project, the higher cost per unit makes this a less competitive project when trying to leverage additional funds at the State and Federal level.

Requested Waivers

In addition to requesting concessions, density bonus projects are typically eligible for waivers of any development standards that would physically preclude the construction of a project with the density bonus and the incentives or concessions to which the development is entitled; however, per State Density Bonus Laws, development waivers are optional for 100 percent affordable projects within one-half mile of a major transit stop since the project is entitled up to a 33-foot building height increase and are at the discretion of city council approval.

	Standard (in CT zone)	**Proposed**	**Waivers**
Design Control 14.50.170 C (5) a. Building Design. Interior Courtyard.	Interior courtyard must be partially visible from the street and linked to the street by a clear accessible path of travel	Raised courtyard on level 2 not visible from the street. Access to courtyard and exit via stair.	Waiver-1
Design Control 14.50.170 D (4) a. Materials. Materials Defining Building Elements.	For multistory elements, the base of the building shall be defined by a distinct material selected from among the following: stone, brick, concrete, CMU, or stucco ("base material")	Wood serves as a distinct material	Waiver-2
CT required conditions 14.50.060 C. 2. Access and screening of refuse collection	Every development will be required to provide suitable space on-site for solid waste separation, collection, storage and pick up and shall site these in locations that	Solid waste separation, collection and storage are on-site, but the pickup is proposed to be in the service staging area	Waiver-3

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	facilitate access, collection, and minimize any negative impact on persons occupying the development site, neighboring properties, or public right-of-way	on the public right-of-way	

The applicant has requested three waivers that are necessary to the project as proposed. Because the project is a 100 percent affordable project, exclusive of the managers units, with 63 percent of the units for Very-Low and Extremely Low Income households, and because the City is a co-sponsor of the project and the project will help the City meet Regional Housing Needs Allocation (RHNA) targets at multiple affordability levels, staff recommends granting the optional waivers.

A waiver cannot be granted if doing so would have violate state or federal law or if the waiver would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources. Also, ordinarily an applicant must demonstrate that not granting the waiver would physically preclude the applicant from constructing a project that the applicant wants to construct at the allowed density and with the concessions granted. Because the waivers requested here are optional and no density limit applies to the project, other relevant factors may be considered. These factors may include, for example, the ability to provide parking even though no parking is required for the project (as discussed below), the desire otherwise to maximize the use of the site for affordable housing or to provide suitable amenities and services to residents, cost savings for affordable housing (like with a concession), the inability to achieve a concession or to realize its cost saving benefits without a waiver, or flexibility to achieve a superior design.

Waiver #1: No visibility and direct access to street from the second-floor interior courtyard whereas Design Control Section 14.50.170 C (5) (a) of the CT zoning district requires for interior courtyards partially visible from the street and linked to the street by a clear accessible path of travel visibility from street and lined to the street by a clear accessible path of travel to propose no visibility pursuant to Design Control

In the proposed design, the street frontage includes common amenity space and the parking garage which are suitable amenities and services provided to residents making the private courtyard raised to the second floor and surrounded by residential units, making it a private amenity for the residents.

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Findings: A waiver cannot be granted if doing would have violate state or federal law or if the waiver would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources.

> Staff Review: *The findings cannot be made* because approving the requested waiver would not violate any State or Federal law and would not have an adverse impact on the health or safety. Additionally, the property is not listed and will not impact any property listed in the California Register of Historic Resources. The waiver would benefit the project and result in a superior design because it allows on-site parking and common area amenities for the residents while also allowing the residents to have access to a common open space for passive use or recreational purposes.

Waiver #2**:** Temporary placement of refuse and recycling containers within the public right-of-way whereas Section 14.50.060 C 2. of the CT zoning district requires separation, collection, storage and pick-up is located in areas that minimize any negative impact on persons occupying the development site, neighboring properties, or public right-of-way.

The applicant states that the refuse collections operations would include that the building maintenance staff to stage the refuse containers on Distel Circle on the collection day(s) and return the containers to the collection room after the refuse has been collected. The more permanent location for the refuse containers will be inside the collection room where collection, separation and storage will be handled, but inaccessible by waste hauling trucks.

Findings: A waiver cannot be granted if doing would have violate state or federal law or if the waiver would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources.

Staff Review: *The findings cannot be made* because the temporary staging of refuse containers for pick up on collection days does not violate state or federal law. The temporary staging of refuse containers on the street is limited to collection times and it would not result in an impact on public health and safety since the receptacles would not be located in the travel lanes of the street and would not inhibit traffic circulation. Additionally, the property is not listed and will not impact any property listed in the California Register of Historic Resources.

Waiver #3**:** Use of wood as a distinct base material whereas Design Control Section 14.50.170 D (4) a. of the CT zoning district requires distinct material options of stone, brick, concrete, CMU, or stucco as the base material.

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Wood is not part of the standard base material listed in Section 14.50.170 D (4) a. LAMC. The proposed project design is using mass timber for the construction of the base of the building and therefore the materials listed in the zoning code would physically preclude this material being used. The use of mass timber wood at the base has architectural integrity with the overall building design yet contrasts with the upper stories and creates a visual differentiation at the pedestrian level.

Findings: A waiver cannot be granted if doing would have violate state or federal law or if the waiver would have a specific, adverse impact on public health or safety that cannot be mitigated feasibly, or on real property listed in the California Register of Historic Resources.

Staff Review: *The findings cannot be made* because granting the use of mass timber does not violate State or federal law and would not adversely impact public health and safety or impact any real property listed in the California Register of Historic Resources. Furthermore, the use of mass timber as the base material provides a similar architectural and design objective as the materials listed in the zoning code. Additionally, mass timber is a superior material considering its sustainability as compared to the materials in the zoning code.

Discretionary Entitlements

The project requires a Design Review Permit and a Conditional Use Permit, as discussed in greater detail below. Because at least 20 percent of the units in the project would provide housing for households at or below 60 percent of Area Median Income, the Housing Accountability Act states at Government Code Section 65589.5(d) that the City cannot deny the project or approve it subject to conditions of approval that would make the project infeasible for housing at the levels of affordability proposed, unless one of the following findings can be made:

(1) The City has met its RHNA targets for the current housing cycle at each of the affordability levels proposed for this project;
(2) Denial or the imposition a condition of approval that would have the effect of rendering the project infeasible for affordable housing is necessary to avoid a violation of state or federal law;
(3) The project site is located on land for agriculture or resource preservation and either: (1) the site lacks adequate water or wastewater facilities, or (2) the project site is surrounded on at least two sides by land used for agriculture or resource preservation;
(4) The project would have a specific, adverse, and unmitigable impact on public health or safety; or
(5) All the following are true: (1) the project is inconsistent with the zoning ordinance; (2) the project is inconsistent with the applicable general plan land use designation; (3) the City has a

certified Housing Element; and (4) the project site is not identified in the Housing Element inventory or is proposed at a greater density than projected in the inventory.

Even if one of the foregoing findings can be made, under Government Code Section 65589.5(j), the project must be approved at the density proposed if it complies with all applicable objective standards, unless the project would have a specific, adverse, and unmitigable impact on public health or safety, as defined in the statute. A project is deemed to be consistent with an objective standard unless notice of inconsistency was provided to the applicant pursuant to Government Code Section 65589.5(j)(2).

Finding 1. The City has met its RHNA targets for the current housing cycle at each of the affordability levels proposed for this project;

Staff Review: *The findings cannot be made.* The city has not met its RHNA targets for the current housing cycle at each of the affordability levels of the project.

Finding 2: Denial or the imposition a condition of approval that would have the effect of rendering the project infeasible for affordable housing is necessary to avoid a violation of state or federal law;

Staff Review: *The findings cannot be made.* The city has not imposed a condition of approval or recommends denial that would result in rendering the project infeasible for affordable housing to avoid a violation of state or federal law.

Finding 3: The project site is located on land for agriculture or resource preservation and either: (1) the site lacks adequate water or wastewater facilities, or (2) the project site is surrounded on at least two sides by land used for agriculture or resource preservation;

Staff Review: *The findings cannot be made.* The project site is in an urban infill site, surrounded by urban land uses and has an existing functional facility with adequate water and wastewater services.

Finding 4: The project would have a specific, adverse, and unmitigable impact on public health or safety; or

Staff Review: *The findings cannot be made.* The project site does not have a specific, adverse and unmitigable impact on public health. The project will be considered as a Class 32 categorical exemption pursuant to the guidelines and standards under the California Environmental Quality Act and a detailed analysis has been conducted to make this determination. There is no specific, adverse, or unmitigable impact on public health or safety as a result of the proposed project.

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Finding 5: All the following are true: (1) the project is inconsistent with the zoning ordinance; (2) the project is inconsistent with the applicable general plan land use designation; (3) the City has a certified Housing Element; and (4) the project site is not identified in the Housing Element inventory or is proposed at a greater density than projected in the inventory.

> Staff Review: *The findings cannot be made.* The project is consistent with the zoning ordinance and applicable general plan land use designation, and the city has a certified Housing Element. The city is currently updating the Housing Element (6th cycle) and the public available draft does not identify the project site as a housing opportunity site.

Therefore, pursuant to the Housing Accountability Act, the city cannot deny the project or approve it subject to conditions of approval that would make the project infeasible for housing at the levels of affordability proposed and the project must be approved at the density proposed.

Design Review

Pursuant to Section 14.76.060 LAMC, Design Review Findings, the City Council needs to make the following findings for the approval of the Design Review Permit.

A. The proposal meets the goals, policies and objectives of the general plan and any specific plan, design guidelines and ordinance design criteria adopted for the specific district or area.

   Staff review: Conformance of the project proposal to the zoning standards for CT district is shown in Table 1 above. The proposal meets the goals, policies and objectives of the General Plan, design guidelines and ordinance design criteria adopted for the Commercial Thoroughfare District. With the requested concessions and waivers, the project complies with the objective design standards.

B. The proposal has architectural integrity and has an appropriate relationship with other structures in the immediate area in terms of height, bulk and design.

   Staff Review: The proposal demonstrates architectural integrity while meeting most of the city's adopted design standards required in the CT zoning district. The Project is eligible for density bonus concessions and waivers. The applicant requests concessions and waivers to the objective design standards. The immediate area has structures that are 4-5 story tall structures, quite similar in scale and proportion to the proposed project. The relationship of this proposal with the neighboring structures and that of the recently approved projects in the area will result in harmonious buildings as envisioned in the General Plan for this zone and the El Camino Corridor Vision.

C. Building mass is articulated to relate to the human scale, both horizontally and vertically. Building elevations have variation and depth and avoid large blank wall surfaces. Residential or mixed-use residential projects incorporate elements that signal habitation, such as identifiable entrances, stairs, porches, bays, and balconies.

Staff Review: The project conforms to the city's adopted objective design standards with eligible concessions and waivers as noted in the agenda report. The bulk and massing have been appropriately scaled using architectural design elements such as metal screens, façade material separation into primary and secondary bays, mass timber canopy at the first floor, to articulate the human scale. The first-floor landscaping and primary façade make an inviting space to signal habitation in the amenity space while providing human scale to the five-story building. Each entrance has projecting wooden pergola elements and the pedestrian entrance is set inside. The walls are made of glass providing a visual connection between the outside and inside space enhancing the signs of habitation.

D. Exterior materials and finishes convey high quality, integrity, permanence and durability, and materials are used effectively to define building elements such as base, body, parapets, bays, arcades, and structural elements. Materials, finishes, and colors have been used in a manner that serves to reduce the perceived appearance of height, bulk, and mass, and are harmonious with other structures in the immediate area.

Staff review: The exterior base material is mass timber which is an alternative to the standard list of base materials; however, the applicant requests a development waiver. Although this is not part of the standard pre-approved for the base material, the mass timber as a material choice brings a high-quality architectural character to the structure while rendering a warm welcoming experience to the pedestrian environment. The exterior material of the upper floors is primarily stucco with highlights of wood panels, metal railings, wood composite railings and white metal and vinyl windows. All facades show accents of perforated metal screens which provide relief to a long façade in addition to the primary and secondary bays. The materials above in the second thru fifth floor are alternating dark grey and light grey stucco to highlight the primary and secondary bays. Each floor has a horizontal band showing visual separation for each floor. These materials and finishes are used in the manner to reduce the bulky nature of the five-story building and are harmonious with the other structures in the immediate area.

E. Landscaping is generous and inviting, and landscape and hardscape features are designed to complement the building and parking areas, and to be integrated with the building architecture and the surrounding streetscape. Landscaping includes substantial street tree canopy, either in the public right-of-way or within the project frontage.

Staff review: The landscape plan (Sheet L2.1 of Attachment M) shows six new proposed street trees along the Distel Circle frontage. There are twenty-seven peripheral trees and shrubs proposed along the side and rear setback. Additional six trees in planter boxes with other landscape features are shown in the 5,530 square foot courtyard space (Sheet L2.2)

Landscaping is generous and inviting. The project incorporates the appropriate designed hardscape and softscape features at the lobbies and entrances to signify entry elements. The tree canopy is substantial along the main Distel Circle side as well as the side setback areas. The landscaped courtyard area includes amenities such as play mounds, waterlily balance play structure, community garden planters, and gathering space with seating areas. The courtyard also has large trees in planters.

F. Signage is designed to complement the building architecture in terms of style, materials, colors, and proportions.

Staff Review: The architectural rendering indicates entrance signage which complement the building architectural style. A sign permit review is required if the project is approved.

G. Mechanical equipment is screened from public view and the screening is designed to be consistent with the building architecture in form, material, and detailing.

Staff review*:* The rooftop mechanical and other mechanical equipment appear to be set inside and appropriately screened from public view using a roof screen which is consistent with the building. Surface area for photovoltaic panels are set inside from the parapet line on the rooftop. These are consistent with the building architecture in form, material, and detailing.

H. Service, trash, and utility areas are screened from public view, or are enclosed in structures that are consistent with the building architecture in materials and detailing.

Staff review: The refuse collection room on the first floor is screened from public view and enclosed. Per requested waiver #2, temporary staging of refuse containers is requested to be located on Distel Circle on collection days. The location and design of the service, trash and utility areas are integrated well into the building architecture and is consistent with the rest of the building with the material use and detailing.

Conditional Use Permit Review

To grant Conditional Use Permit UP19-001, the City Council must make the following findings in accordance with Chapter 14.80.060 of the LAMC:

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A. That the proposed location of the conditional use is desirable or essential to the public health, safety, comfort, convenience, prosperity, or welfare.

Staff review: The proposed multi-family residential building is envisioned as a conditional use in the General Plan and has been reviewed and conditioned for approval for health and safety and environmental considerations. Based upon the technical reports and the categorical infill exemption for the project, there is evidence that the project will have no significant impact on the surrounding community. The project will enhance the affordable housing stock and make available more homes to enhance comfort, prosperity, and welfare of the community, furthering the City's housing goals.

B. That the proposed location of the conditional use is in accordance with the objectives of the zoning plan as stated in Chapter 14.02 of this title;

Staff review: The project is categorically exempt from CEQA as an infill project, and it will meet many of the goals and objectives of the General Plan and complies with the City's inclusionary housing requirements. Pursuant with State Density Bonus requirements, the project complies with the density bonus and avails additional height increase and parking reduction standards. The requested concessions and waivers are in compliance with the density bonus allowances. The project meets all the City's design policies and objectives, as set forth above with respect to the Design Review Permit findings. Notwithstanding the requested concessions and waivers, the project complies with all the objectives set forth in Section 14.02.020 of the Los Altos Municipal Code.

C. That the proposed location of the conditional use, under the circumstances of the particular case, will not be detrimental to the health, safety, comfort, convenience, prosperity, or welfare of persons residing or working in the vicinity or injurious to property or improvements in the vicinity.

Staff review: Because the project is categorically exempt as an infill project, the development of a housing project at 330 Distel Circle will not be detrimental to the health and safety, comfort, convenience, prosperity or welfare of persons residing or working in the vicinity to property or improvement in the vicinity.

D. That the proposed conditional use will comply with the regulations prescribed for the district in which the site is located and the general provisions of Chapter 14.02;

Staff review: Notwithstanding the density bonus concessions, waivers and approvals which is consistent with State Law, the proposed conditional use of a multi-family residential project

complies with the regulations prescribed for the CT district as detailed in the staff report analysis and development standards Table 1.

Multi-modal Transportation Review

Pursuant to Section 14.78.090 of the Zoning Code, an application for City Council design review shall be subject to a multimodal transportation review and recommendation to the Planning Commission and City Council by the Complete Streets Commission as part of the approval process to assess potential project impacts to various modes of transportation such as but not limited to bicycle, pedestrian, parking, traffic impacts on public streets, and/or public transportation.

For the Commercial Thoroughfare (CT) Zone, all projects are required to comply with the provisions of off-street parking, off street loading, parking design and access, site circulation and access, service area and screening and off-street Loading for residential sections of the LAMC chapter 14.50.

General Plan Circulation Element/Transportation Impact Analysis

Regarding transportation impact analysis, the Circulation Element in the General Plan includes Implementing Programs C7 and C8 that outlines the criteria for reviewing traffic and circulation impacts for new development.

Implementing C7 states:

> Maintain a minimum Level of service "D" operating standard at all signalized intersections under Los Altos jurisdictions. Identify minimum Levels of Service for intersections shared with adjacent communities and pursue agreements with adjacent communities to maintain those intersections at the agreed upon Level of Service.

Implementing Program C8 states:

> Require a transportation analysis for all development projects resulting in 50 or more net new daily trips. The analysis shall identify potential impacts to intersection and roadway operations, project access, and non-automobile travel modes, and shall identify feasible improvements or project modifications to reduce or eliminate impacts. Impact significance should be consistent with the criteria maintained by the Santa Clara Valley Transportation Authority. City staff should have the discretion to require focused studies regarding access, sight distance, and other operational and safety issues.

Implementing programs C7 and C8 also states that the City should maintain a minimum Level of Service (LOS) "D" operating standard at all signalized intersections under Los Altos jurisdiction and

that only after preparation of an environmental impact report with associated findings, accept LOS E or F operations at City-monitored signalized intersections after finding that no practical and feasible improvements can be implemented to mitigate the lower levels of service. This effectively established a significance threshold that was implemented under the California Environmental Quality Act (CEQA).

In 2013, Senate Bill 743 was signed by Governor Brown. SB 743 directed the State Office of Planning and Research (OPR) to develop new CEQA guidelines and to replace Level of Service (LOS) as the evaluation measure for transportation impacts under CEQA with another measure such as Vehicle Miles Traveled (VMT). In December 2018, the California Natural Resources Agency adopted new CEQA Guidelines including sections to implement SB 743. In that update, every project was required to, among other things that: a project's effect on automobile delay (i.e., Level of Service) shall not constitute a significant environmental impact under CEQA. It also stated that a lead agency must adopt the provisions no later than July 1, 2020. VMT is the most appropriate measure of transportation impacts; and a lead agency has the discretion to choose the most appropriate methodology to evaluate a project's VMT.

It should be noted that SB 743 does not preclude cities from retaining General Plan policies related to LOS. Furthermore, cities may continue to require transportation analyses of a project's consistency with the adopted LOS goals and/or other operational issues related to transportation. The City's General Plan Circulation Element has Level of Service (LOS) guidelines, which can form the basis of conditions of approval. The project has been analyzed for compliance with these guidelines as detailed in the Transportation Analysis report (Exhibit B1)

The results of the intersection level of service analysis under existing conditions, near-term conditions, and cumulative conditions, with and without the project determined that the addition of project trips would not adversely affect traffic operations at the signalized study intersections because these trips would not increase the average delay at the intersection by more than four seconds.

The unsignalized intersections of San Antonio Road and Jordan Avenue and Distel Circle and El Camino Real operate at an unacceptable level of service during at least one peak hour under all study scenarios, without and with the project, therefore, a signal warrant check was conducted for the intersections based on the peak-hour traffic warrant. However, the analysis shows that the signal warrant is not met at either of these intersections.

The analysis also made additional conclusions and recommendations for the project:

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

Recommendation: On-street parking should be prohibited approximately 40 feet to the south and 35 feet to the north of the project driveway. This would provide adequate sight distance for exiting drivers at the driveway to see the oncoming traffic along Distel Circle. The project driveway should also be free and clear of any obstructions such as shrubs or other landscape features to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Distel Circle.

Staff review: Staff concurs with the recommendation for eliminating on-street parking adjacent to the project site driveway and has included a condition of approval in the draft resolution (Item 1(e))(see Attachment A)

Recommendation: The site plan does not provide the height of the pit for the three-level mechanical stacker. Minimum 7 feet deep parking pits should be provided to accommodate the height of a design vehicle.

Staff review: Staff concurs with this requirement and has included a condition of approval in the draft resolution (Item 1(f)) (see Attachment A)

Recommendation: The applicant should work with the City and Mission Trail Waste Systems to design a plan for waste collection service.

Staff review: Staff concurs with this requirement and has included a condition of approval (Item1(g)) in the draft resolution (Attachment A) to address waste collection services.

VMT analysis:
With regards to VMT, the City had not adopted formal standards by July 1, 2020; however, in lieu of formal adoption, the Planning Division developed interim guidance for City review of projects to evaluate VMT impacts based on OPR Technical Advisory. The interim VMT policy, currently in effect, has set a standard for VMT for residential projects. The nine-county regional average for residential VMT per capita threshold is set at 13.95 VMT per capita for residential. If a project is 15% below this regional average (or 11.86), then a project is considered to not have a significant environmental impact. Per the Santa Clara County map based VMT evaluation tool, the project site is located within the area with a residential VMT per capita of 9.51 without the project, which is below the threshold set forth in the Interim VMT policy. Therefore, the project would also be screened out from further analysis using the threshold of significance in the Interim VMT policy. Refer to Attachment B, Exhibit B1 for more details on the transportation analysis.

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

The City's Draft VMT Policy, which hasn't been adopted, also has screening criteria wherein projects with 100 percent affordable housing shall be presumed to have a less than significant transportation impact on VMT. Attachment B, Exhibit B1 has details of the transportation analysis for this project. Since the project proposes 100 percent affordable housing, it is presumed to have a less-than significant transportation impact on VMT and is screened out from further VMT analysis.

In summary, the project is screened out from further VMT analysis if the Interim Departmental VMT guideline is applied since the project is in an area that is more than 15% below the regional VMT per capita average for residential development and since the project is 100 percent affordable which the draft VMT policy assumes to have a less than significant impact to per capita VMT.

Density Bonus and Parking

Pursuant to Government Code Section 65915 (p)(3), and Section 14.28.040 Table F of the Los Altos Density Bonus Ordinance, any project that is 100 percent affordable and has unobstructed access to a major transit stop located within a one-half mile radius does not require any vehicle parking. This special parking reduction is allowed in addition to any requested development concession or waiver. In lieu of the required parking elimination, the Applicant proposes 90 parking spaces. Additional discussion is provided below regarding the proposed parking.

Off Street Parking

The proposed project is located within one-half mile of a major transit stop on El Camino Real (see Attachment D and D1.) The VTA stop on El Camino Real and Showers Drive qualifies as a major transit stop, which is 0.4 miles from the project site with a continuous sidewalk access to reach the stop. Pursuant to Government Code Section 65915 (p)(3), any project that is 100 percent affordable and located within one half mile radius within a major transit stop with an unobstructed access to the stop does not require any parking. The proposed project includes 90 parking spaces even though none are required

The garage is located on the first floor of the project which has two rows of parking stalls with a 24-foot drive aisle. One row of parking stalls contains 69 parking stalls within a mechanical parking lift system. The lift system is designed as a three-level stacking solution with one level of parking platforms lowered into a pit, a second level at grade, and third stacked above. The opposite row contains regular at-grade stalls. The parking also provides for electric vehicle (EV) parking provisions, accessible parking, and a loading area. Details of the parking can be found in Sheets A2.1 and A3.0 of the design plans (Attachment M).

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

Since, vehicle parking requirements are eliminated for this project, any parking provided exceeds the minimum required.[2]

On-Street Parking

According to Attachment B, Exhibit B1 Transportation analysis reports that the on-street parking should be prohibited for approximately 40 feet to the south and 35 feet to the north of the project driveway. This would provide adequate sight distance for exiting drivers at the driveway to see the oncoming traffic along Distel Circle. The project driveway should also be free and clear of any obstructions (such as shrubs or other landscape features to optimize sight distance) thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles on Distel Circle.

The city of Los Altos has received complaints regarding the parking of commercial vehicles on Distel Circle and Distel Drive and will be posting signs in the near future to prohibit parking of commercial vehicles on those streets.

Off-Street Loading

Per LAMC 14.50.180 off-street loading for a multi-family residential project is required to accommodate on-site loading/unloading space to accommodate the deliver and shipping of goods. The requirements for off-street loading and the project's proposal are listed in Table 2 below.

Table 2 Off-street Loading for CT district

Standard **LAMC 14.50.180**	**Proposed**	**Conforms (Yes/No)**	**Notes**
One Loading/Unloading space provided, at least 10 ft X 25ft Vertical Clearance 14ft	One loading space provided 12ft X 27ft Vertical Clearance – 14'6"	Yes	Attachment M: Sheet 2.1 Sheet A3.0
Loading and unloading spaces shall be located and designed so that the vehicles intended to use them can	The unassigned spaces 70-72 is intended to be utilized for loading and	Yes	Attachment M: Sheet 2.1

[2] Since parking is being provided, minimum requirements for accessible parking and electric vehicle charging must be provided consistent with Building Code requirements.

Subject: 330 Distel Circle – 90-unit Affordable Housing Project

maneuver safely and conveniently to and from a public Right-of-way without interfering with the orderly movement of traffic and pedestrian on any public way and complete the loading and unloading operations without obstructing or interfering with any parking space or parking lot aisle.	unloading. The drive aisle will not be occupied.		
No area allocated to loading and unloading facilities may be used to satisfy the area requirements for off-street parking, nor shall any portion of any of off-street parking area be used to satisfy the area requirements for loading and unloading facilities.	The parking requirement for off-street parking is over the required threshold. See Section off-street parking above.	Yes.	Attachment M: Sheet 2.1 Spaces 70-72 designated as loading/unloading spaces.
A loading/unloading space may be located in the front yard setback but shall comply with other required setbacks.	Not Applicable (N/A)	N/A	
All loading spaces shall be designed and maintained so that vehicles do not back in from, or onto, a public street;	Loading space is inside the garage backing out to a private drive	Yes	Attachment M: Sheet 2.1
Loading spaces shall be striped indicating the loading spaces and identifying the spaces for "loading only." The striping shall be permanently maintained by the property owner/tenant in a clear and visible manner at all times.	Not striped but labelled as loading above spaces 70-72	Conditional approval	Attachment M: Sheet 2.1
Adequate signage shall be provided that directs delivery vehicles to the loading space.	Not available	Conditional approval	Attachment M: Sheet 2.1

The loading/unloading spaces marked on Sheet 2.1 of Attachment M is intended to occupy parking spaces numbered 70-72. Staff recommends that the applicant comply with the conditional striping and signage requirement as detailed in Table 2 above to ensure that this space is dedicated for loading/unloading purposes for the proposal to be more consistent with the off-street loading requirements. Condition of approval Item 1(d) of Attachment A reflects this striping requirement for loading/unloading space.

Public Transit

The closest bus stops are located approximately 0.1 mile from the subject site at El Camino Real and Distel Circle, which is considered an acceptable walking distance. Local VTA route 22 and Route C shuttle of the Mountain View Go mobility service.

El Camino and Showers is located at 0.4 miles away from the subject site, which is also considered acceptable walking distance. Local VTA route 22 and rapid bus line 522 provide service at this stop with less than 15-minute intervals during peak hour commute. Routes 22 and rapid 522 provide service between Palo Alto Transit Center and Eastridge. In addition to this, route number 40 intersects at this location providing service from Foothill College to Mountain View transit Center via North Bayshore.

Bicycle and Pedestrian

As recommended by the VTA guidelines, multiple family residential projects should provide one Class I bicycle parking space for every three units and one Class II bicycle parking space for every fifteen units (but no less than two). The Project is providing forty-five Class I bike lockers and ten Class II bicycle rack, whereas thirty-five Class I and six Class II bicycle parking spaces are required.

The Class I bicycle parking spaces would be located on the ground level in a closed room that is assumed to have lockable hardware (see Sheet L1.1 of Attachment M). The Class II spaces are at street level in front of the building (see Sheet L1.1 of Attachment M). With regards to the nearest dedicated bicycle facility, a Class II bicycle lane exists along San Antonio Road.

A sidewalk currently exists along the street frontage. The nearest improvement planned in the Complete Streets Master Plan is on Distel Drive as seen in the preliminary maps. [3]

[3] See maps https://losaltoscompletestreets.com/wp-content/uploads/2021/03/Concept-Plan-Line-Distel-Drive_Public_v2.pdf

The schools serving the site are Almond Elementary, Egan Middle School, and Los Altos High School. The City of Los Altos recently completed suggested "Walk n' Roll" maps for each school and suggested proposed improvements for some of the schools including the ones utilized by this Project[4]. No improvements are planned on the suggested routes and there is no nexus to require the proposed project to contribute to those improvements.

Public Notification and Correspondence

For this meeting, a public hearing notice was published in the *Town Crier*, and mailed to 455 property owners and 534 current tenants within 1,000 feet of the site (Attachment M). Four large public notice billboard with color renderings was installed along the project's Distel Circle frontage in conformance with the story pole exception approved by the City Council on March 22, 2022 (Resolution 2022-13, Attachment C).

All public correspondences received prior to the publication of this report are contained in Attachment F.

Options

Complete Streets Commission Recommendation

Consistent with the zoning code provisions, the CSC is recommended to adopt a motion recommending the project to the Planning Commission. The CSC can recommend denial with justification(s) for denial or approval with or without recommendations that could be incorporated as conditions of approval. If making specific recommendations for conditions, the Commission should state the justification for each condition with an understanding that the condition cannot lower the density of the proposed development, that there is nexus and proportionality to the request, and is feasible to incorporate into the proposed design. Because the project is an affordable housing project, a condition of approval also may not render the project infeasible for affordable housing at any income level.

Planning Commission

The Planning Commission is recommended to adopt a motion recommending approval, approval with modifications or incorporated as conditions, or denial of the proposed project with justification(s) for denial. If making specific recommendations for conditions, the Commission should

[4] See maps found here: https://losaltoscompletestreets.com/suggested-routes-to-school/

state the justification for each condition with an understanding that the condition cannot lower the density of the proposed development, that there is nexus and proportionality to the request, and is feasible to incorporate into the proposed design. Because the project is an affordable housing project, a condition of approval also may not render the project infeasible for affordable housing at any income level. Once the Planning Commission makes a recommendation, the Project will be forwarded to the City Council for consideration and final action.

Expanding the range of opportunities for all by developing, managing and promoting quality affordable housing and diverse communities.

Distel Circle Apartments

Density Bonus Report – Planning Application

July 74, 2022

Project:	**90-Unit Multifamily Affordable Housing Community**
Location:	330 Distel Circle, Los Altos (APN# 170-04-051)
Current Landowner:	Midpen Regional Open Space District
Applicant/Developer:	EAH Housing

As a permanently affordable rental community incorporating a mix of unit types and a range of rent tiers that supports a diversity of income-eligible tenants earning incomes from 30% to no more than 80% of Area Median Income (AMI), the 330 Distel Circle development is eligible for a density bonus in accordance with California Government Code Section 65915 et seq. ("Density Bonus Law").

EAH as the applicant is requesting an increase in the density allowable at 330 Distel Circle and other incentives, waivers, concessions, and parking reductions allowed by the Density Bonus Law.

Requested Density Bonus

Density Bonus is considered in the LAMC section 14.28.040 (C) and contemplates density bonus up to 35% depending on both the affordability and the number of restricted units. The LAMC also has a provision that can provide a for additional density bonus 14.28.040 (E)(7) which states: Nothing in this section shall be construed to prohibit the city from granting a density bonus greater than what is described in this section for a development that meets the requirements of this section or from granting a proportionately lower density bonus than what is required by this section for developments that do not meet the requirements of this section.

The California Government Code Section 65915 also allows for unlimited density for 100% affordable developments that are withing one-half mile from a major transit stop, section 65915 (f)(3)(D)(ii). 330 Distel Circle is within one-half mile from a major transit stop (please see Memorandum on Consistency with Density Bonus Provisions - Glaser Weil).

In alignment with the MOU between the City of Los Altos and the County of Santa Clara, that acknowledges the development to contain a minimum of 90 units at 330 Distel Circle, EAH is requesting a density bonus to allow for 103.45 units per acre.

The California Government Code Section 65915(d)(2)(D) allows for a height increase of an additional 3 stories or 33 feet for 100% affordable housing developments. The current zoning district (CT) allows for structures up to 45 feet in height and considering the additional 33 feet allowed by the Density Bonus Law, a building up to 78 feet would be consistent with the height allowed under the law. The proposed building height at 330 Distel Circle is 64 feet and consistent with Density Bonus Law.

Zoning	Commercial Thoroughfare District (CT)
General Plan	Thoroughfare Commercial
Maximum Density	38 dwelling units per net acre (dua)
Site Size	38,030 sf (0.87 acres)
Units Permitted	0.87 X 38 = 33.06 units
Total Units Proposed	90 units
Proposed Affordable Units	88 units (100% exclusive of managers units)
Proposed Bonus Percentage	90 ÷ 33 =272%
Number of Density Bonus Units	90 – 33 = 57 units
Proposed Density Per Acre	90 ÷ 0.87 = 103.45 dua
Proposed Market Rate Bedrooms	0
Proposed Affordable Unit Bedrooms	155
Proposed Manager's Unit Bedrooms	4

Unit Mix – 330 Distel		AMI					
	SQFT PU	30%	50%	60%	80%	**Unit Total**	**Unit Mix**
SRO/Efficiency	465	14	3	7	-	24	27%
1-BR	645	9	3	7	1	20	22%
2-BR	965	12	3	4	2	21	23%
3-BR	1140	10	3	7	3	23	26%
4-BR	0	-	-	-	-	-	0%
MGR	965					2	2%
Unit Total		45	12	25	6	**90**	100%
Affordability Dist.		50%	13%	28%	7%	100%	
Average Affordability	**44.66%**						

The existing use of 330 Distel Circle is a single-story office building that is owned and occupied by Midpeninsula Regional Open Space District. There are currently no dwelling units on the site nor has there been in five years preceding the date of submittal of this application.

There are no recorded covenants, ordinances or laws applicable to the site that restrict rents.

Requested Incentives and Concessions

The applicant is requesting the following four (4) concessions:

- Reduced Front Yard Set Back
- Reduced Front Side Step-back
- Reduced Average-Per-Unit Open Space Provided
- Reduced EV Ready Parking Stalls

Reduced Front Yard Set Back

Los Altos Municipal Code (LAMC) section 14.50.090 has a standard of a 25-foot minimum depth of which 50% of the area should be landscaped. We are requesting a reduction in the minimum setback from 25 feet to 10 feet. LAMC Section 14.28.040 (F)(1)(e) allows for an On-Menu incentive to reduce the setback requirement by up to 20%. However, the reduction requested is greater than 20% and therefore is considered an **off-menu** request.

Reason for Request: The reason for this request is because a 25-foot setback would decrease the building area and thereby decrease the unit count.

Reduced Front Side Step-back

LAMC 14.50.170 (B)(1)(b) requires a minimum step-back of 10 feet from the ground floor façade for stories above 45 feet. EAH is requesting no step-back on the 4th and 5th levels. This is an **off-menu** request because step-back reductions are not an on-menu incentive.

Reason for Request: The reason for this request is because a step-back on the 4th and 5th level would decrease the building area and thereby decrease the unit count.

Reduced Average-Per-Unit Open Space Provided

LAMC 14.50.150(A) requires that an average of fifty (50) square feet of private open space shall be provided for the total number of dwelling units within the project. EAH is requesting a reduction in the average square feet of private open space from 50 to 25 square feet. LAMC Section 14.28.040 (F)(1)(f) allows for an On-Menu incentive to reduce the open-space requirement by up to 20%. However, the reduction requested is greater than 20% and therefore is considered an **off-menu** request.

Reason for Request: The site has a 10' foot public utility easement (PUE) running along the front of the property along Distel Drive. The PUE has to be clear to sky and therefore we are unable to provide cantilevering balconies along the Distel frontage. Providing decks within the units along Distel would require a decrease in unit size, a decrease in unit count or an increase in cost due to customization of modular units. We have mitigated the reduction in Private Open Space by proving more Common Open Space than required.

Reduced EV Ready Parking Stalls

LAMC 4.106.4.2 (Exceptions) requires all multifamily Affordable Housing, 10% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. The remaining dwelling units with parking space(s) shall each be provided with at least one Level 1 EV Ready Space. The required spaces with this calculation would be the following. We are requesting to provide the state minimum required by our current code (2019) which is 10% EV Ready spaces- 9 total- instead of the 90 required by Los Altos code.

Level 2 EV Ready Space = 9 spaces
Level 1 EV Ready Space = 81 spaces
Total = 90 spaces

Reason for Request: The additional costs related for infrastructure, transformer(s), and cost of pedestals for charging.

1. Meeting the requirement will increase the amount of costs of utility infrastructure required such as conduit/raceways and transformers. We are estimating the costs as $1000/stall per Energy Solutions report (dated 2019 so costs are likely higher). For the additional stalls beyond the 10% required by CalGreen we estimate $81,000 (81 stalls x $1,000).

Table 1. Estimated Cost of Installing EV Infrastructure (price per spot)

Code Scenario:	Market Rate 25% Level 2 75% Level 1		Affordable Housing 10% Level 2 90% Level 1	
Building Type	New Construction	Retrofit[4]	New Construction	Retrofit
60-Unit MUD	$1,410	$4,443	$1,049	+$3,982
150-Unit MUD	$1,197	$4,101	$1,002	+$3,854
60-Space Office Building	$1,166	$3,232	N/A	N/A

Table 1: Energy Solutions article dated November 5, 2019. EV Infrastructure Cost Analysis Report for Peninsula Clean Energy and Silicon Valley Clean Energy (page 1).

2. If/when the mechanized stalls go from EV Ready to having the capability to charge, Level 2 chargers will require ±$2,500 per pedestal depending on the manufacturer. For Level 1 chargers, 110v receptacle can be added to the platform.

3. The project is required to have zero parking spaces as a result of being a 100% affordable housing project within ½ mile of major transit. As such, if we were to provide zero stalls, we would not be required to provide any EV Ready stalls per CA and City of Los Altos code and CA Cal Green code.

Cost Justification:

There are two areas of focus related to the cost containment of this affordable housing community and how it relates to the requested concessions: the total costs to build the units (hard costs) and the average cost per unit including all other soft costs.

Hard costs associated with the construction of the modular units include the material and labor expense it takes to create and build each unit. The modular factories are set up for standardization, not for customization, so any modification to the factory standards would lead to additional costs and additional waist. By way of a simple example, if the factory is set up to build units using wood in 20 foot lengths but we request shorter units that require 18 foot lengths, then the factory would need to customize the machinery to cut the shorter lengths. This customization would increase the labor costs and slow the process down adding more time. In addition, more waist is created because in this example, the two-foot section of wood is unlikely to be re-used and will be thrown away.

The second area of focus is the developments cost per unit. This development has fixed costs including the land and other soft costs including design and environmental analysis. By way of a simple example, if the design fees are $3 million and the design yields 90 units, the per-unit cost is $33,333. However, if the same design fees were yielding only 60 units, the per-unit cost would be $50,000. While this does not increase the total cost of development, a higher cost per unit makes this project less competitive when trying to leverage additional funding source at the State and Federal level. Therefore, a design or building standard that leads to a reduction of building area or total number of units is considered to increase costs and reduce competitiveness.

Requested Waivers

The applicant is requesting the following waivers:

- Visibility of Interior Courtyard
- Exterior Materials
- Trash Staging Area

Visibility of Interior Courtyard

LAMC 14.50.170 (C)(5)(a) requires that an interior courtyard must be partially visible from the street and linked to the street by a clear accessible path of travel. EAH is requesting that this requirement be satisfied by allowing visibility from the parking lot behind the building. In addition, EAH is requesting that the interior courtyard not be required to be linked to the street by a clear accessible path of travel. This is an **off-menu** request.

Reason for Request: The courtyard has been raised to the second level to provide additional parking on the ground level. A second level courtyard also provides additional privacy to the residents and neighbors. Removing a portion of the building to make the courtyard visible from the street would decrease units and parking area.

Exterior Building Materials:

LAMC 14.66.280 (D)(4)(a) Base. For multistory buildings, the base of the building shall be defined by a distinct material selected from among the following: Stone, brick, concrete, CMU, or stucco ("base material"). EAH is requesting that wood be approved as a distinct material for the base.

Reason for Request: We believe that the intent of this design standard is being achieved because wood serves as a distinct material. We are proposing wood and storefront glazing at the base of the building.

Trash Staging Area:

LAMC 14.50.060 (C) (2) states that every development will be required to provide suitable space on-site for solid waste separation, collection, storage, and pick up and shall site these in locations that facilitate access, collection, and minimize any negative impact on persons occupying the development site, neighboring properties, or public rights-of-way. EAH is requesting a waiver from the requirement so that the solid waste collection can take place in the public right of way (Distel Circle).

Reason for Request: The location of trash storage is on the ground floor in the garage but is not in a location that can be serviced by the collection company, Mission Trails. Mission Trails requests that the trash staging area be within a specific distance from the street so that the trucks can access the trash bins. Redesigning the ground floor to accommodate a staging area closer to the street is not desirable because it would require relocating the bicycle parking, resulting in the loss of amenity space on the ground floor. Our proposal is to have building staff stage the trash bins on Distel Circle on trash pick-up day and return the bins to the trash room after the trash has been collected.

Requested Parking Reductions

LAMC 14.28.040(G)(2)(b) - For low or very low income housing near major transit stop. Upon the request of the developer, the city shall not impose a parking requirement, inclusive of handicapped and guest parking, that exceeds one-half parking spaces per bedroom if the development includes the maximum percentage of low or very low income units; and the development is located within one-half mile of a major transit stop; and there is unobstructed access to the major transit stop to the development. EAH is requesting parking requirement alterations be applied to the proposed development because the development:

- Exceeds the percentage required of low or very low income units
- Is within one half-mile of a major transit stop
- Has unobstructed access to the major transit stop to the development This is an ***On-Menu*** request.

The proposed development at 330 Distel Circle will have a total of 159 bedrooms. Using the one-half parking space per bedroom outlined in the LAMC would require 80 parking spaces. As proposed, this community will have 90 parking spaces.

State Density Bonus Law does not require any parking for 100% affordable developments that are withing one-half mile from a major transit stop, section 65915 (p)(3). 330 Distel Circle is within one-half mile from a major transit stop (please see Memorandum on Consistency with Density Bonus Provisions - Glaser Weil).

330 Distel: Density Bonus, Concessions, Waivers				
Allowed by Density Bonus Law				
Density (DU/acre)	38du/acre	90 Units = 103 du/acre	Density Bonus Law	14.5.080 (LAMC)
Height	45ft + 33ft = 78ft permitted	64ft, 5 stories	Density Bonus Law	
Concession	**Standard**	**Proposed**	**Reason**	Code Section
Setback, Front Yard	25ft min. depth, 50% of which shall be landscaped	10ft setback	25ft setback would decrease building area and unit count	14.5.090 (LAMC)
Stepback	Street Side: Minimum 10 feet from ground floor façade above 45 feet in height	Requesting no stepback on 4th and 5th levels.	We need building area to get to 90 units.	14.50.170_1B. Obj. Standards
Open Space	50SF; An average of fifty (50) square feet of private open space shall be provided for the total number of dwelling units within a project.	Approximately 25 sf average / unit requested	10ft Public Utility Easement has to be clear to sky so we are unable to provide cantilevering balconies along the Distel frontage. Juliette balconies are provided on Distel. Providing decks within the units would require a decrese in unit area and impact unit count. Private open space provided on all decks except for those facing Distel.	14.50.150 (LAMC)
EV Ready Parking stalls	4.106.4.2 New multifamily dwellings. Exception: For all multifamily Affordable Housing, 10% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. The remaining dwelling units with parking space(s) shall each be provided with at least one Level 1 EV Ready Space. Calculation: (9) Level 2 EV ready spaces and (81) Level 1 EV ready spaces.	Requesting 10% (9 stalls) to be EV Ready stalls per Cal Green code.	1. Cost of utility infrastructure 2. Cost of pedestal costs if EV is installed in future 3. Parking required is zero, which means zero EV Ready stalls would be required.	4.106.4.2 (LAMC)
Waiver	**Standard**	**Proposed**	**Reason**	
Interior Courtyard	Partially visible from the street and linked to the street by a clear accessible path of travel.	Requesting visibility from back parking lot, no access from exterior to courtyard	Raised courtyard on level 2 not visible from Distel, may be visible from El Camino. Raised courtyard to provide additional parking. Also creates privacy for single family neighbor and residents. Removing a leg of the building to make the courtyard visible would decrease unit and parking area.	14.50.170_5A. Obj. Standards
Materials	Base. For multistory elements, the base of the building shall be defined by a distinct material selected from among the following: Stone, brick, concrete, CMU, or stucco ("base material").	Requesting approval of wood as a distinct material.	Intent achieved. Wood serves as distinct material. Wood and storefront glazing proposed at the base.	14.66.280_DA Obj. Standards
Trash	Pickup not in right of way	Waiver from requirement	PUE Easement, no other location for trash	14.50.060_C2 Required Conditions

1814 Franklin St.
Suite 400
Oakland, CA 94612
510.272.2910
ktgy.com

To: Radha Hayagreev
City of Los Altos- Senior Consulting Planner

Date: July 5, 2022
Project Name: 330 Distel Circle
Project No: 210042

Re: EV Capable Concession Request

From: Lily Ciammaichella, AIA, BD+C
KTGY Architecture + Planning

Dear Radha,

We are requesting to make the Los Altos EV capable charging requirement as a State Density Bonus Law inentive/concession. From section **4.106.4.2** of the Los Altos municipal code, we are required to provide the following:

4.106.4.2 New multifamily dwellings
Exception: For all multifamily Affordable Housing, 10% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. The remaining dwelling units with parking space(s) shall each be provided with at least one Level 1 EV Ready Space.

Required EV Ready stalls
EV2 ready = 9 spaces
EV1 ready = 81 spaces
Total = 90 spaces

We are requesting to provide less EV capable stalls to 10% of the total number of parking spaces (9 stalls) as Level 1 spaces.

The reasons are as follows:

1. Meeting the requirement will increase the amount of costs of utility infrastructure required such as conduit/raceways and transformer needs. We are estimating the costs as $1000/stall per Energy Solutions report. For the additional stalls beyond the 10% required by CalGreen and proposed, or 81 stalls x$1,000 = $81,000. Cost was from 2019 report by Energy Solutions and costs are likely more than estimated below.

Table 1. Estimated Cost of Installing EV Infrastructure (price per spot)

Code Scenario:	Market Rate 25% Level 2 75% Level 1		Affordable Housing 10% Level 2 90% Level 1	
Building Type	New Construction	Retrofit[4]	New Construction	Retrofit
60-Unit MUD	$1,410	$4,443	$1,049	+$3,982
150-Unit MUD	$1,197	$4,101	$1,002	+$3,854
60-Space Office Building	$1,166	$3,232	N/A	N/A

2. If/when the mechanized stalls will be ready to convert the mechanized stalls to have the capability to charge, at this time, Level 2 chargers will require ±$2,500 per pedestal depending on the manufacturer. For Level 1 chargers, 110v receptacle cade be added to the platform.

3. The project is required to have zero parking spaces as a result of being a 100% affordable housing project within ½ mile of major transit. As such, if we were to provide zero stalls, we would not be required to provide any EV Ready stalls per CA and City of Los Altos code and CA Cal Green code.

Definitions:

Electric vehicle infrastructure Cost Analysis Report for Peninsula Clean Energy & Silicon Valley Clean energy. By Enegry Solutions. Page 4

EV Capable	Includes conduit / raceways
EV Ready ("Plug and play")	Includes full circuit with a receptacle / outlet
EV Installed	Includes full charging capability with EVSE

Los Altos Municipal code Definitions:

"Level 1 EV Ready Space" means a parking space served by a complete electric circuit with a minimum of 110/120 volt, 20-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE).

"Level 2 EV Ready Space" means a parking space served by a complete electric circuit with 208/240 volt, 40-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE) with a minimum output of 30 amperes.

Glaser Weil

MEMORANDUM

TO: EAH Housing

FROM: Elisa Paster and Eric Geier

DATE: February 9, 2022

SUBJECT: 330 Distel Circle-Project Consistency with Density Bonus Provisions

I. Introduction

EAH Housing is partnering with the City of Los Altos ("City") to develop a 100% affordable housing project, with the exception of a manager's unit, using a Density Bonus (the "Project") at 330 Distel Circle, Los Altos, California 94022 ("Project Site"). The Project is a 64 foot building that consists of 90 affordable units (24 Studio, 20 one-bedroom, 23 two-bedroom, and 23 three-bedroom) and 90 parking spaces. The Project is seeking a 165% Density Bonus, existing zoning allows for 34 units (rounded up from 33.06) at the Project Site.

Based on its proximity to transit, as demonstrated below, state law permits the Project to an unlimited Density Bonus, a height increase up to 33 feet, and no minimum parking requirements. As the Project is 100% affordable, even if a determination is made that the Project is not within one-half mile of a major transit stop, the Project can still be approved as designed with the approval of concessions and waivers.

II. The Project Site is Within One-Half Mile of a Major Transit Stop

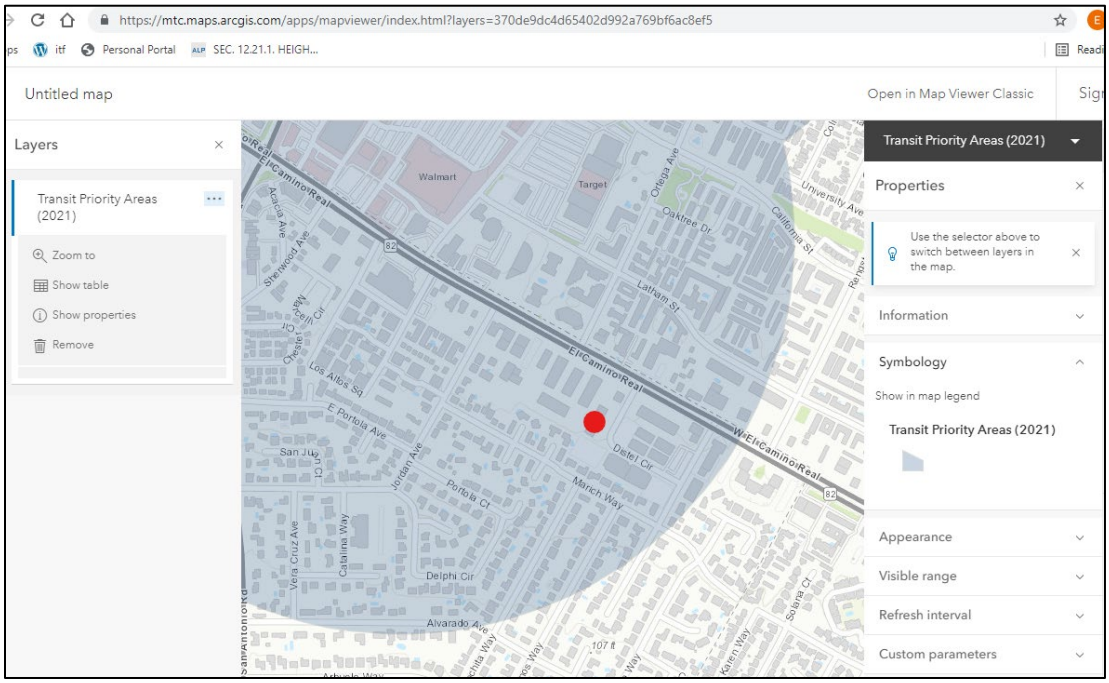
For the purpose of State Density Bonus law, codified in Government Code (GOV) section 65195, a major transit stop is defined as existing or planned rail or bus rapid transit (BRT) stations, ferry terminals served by either a bus or rail transit service, and the intersection of two or more bus routes with a frequency of service interval of fifteen minutes or less during the morning and afternoon peak commute periods. (Public Resources Code (PRC) §§ 21064.3, 21155(b).)[1]

A. Available Resources Identify the Project Site as Being One-Half Mile of a Major Transit Stop

A Transit Priority Area is defined as "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan." (PRC § 21099(a).) Accordingly, if the Project Site is

[1] State Density Bonus law treats planned major transit stops as existing major transit stops. Limited analysis was performed on whether major transit stops are planned within one-half mile of the Project Site. Our initial conclusion is that no such transit stops are planned, thus our research focused on existing major transit stops.

located in a Transit Priority Area, it is by definition within one-half mile of a major transit stop. The Metropolitan Transportation Commission (MTC), the metropolitan planning organization for the San Francisco Bay Area, identifies the Project Site as being within a Transit Priority Area. The graphic below is taken from the MTC's GIS system, which shades the TPAs in blue; the Project Site is designated by a red dot.



B. A Major Transit Stop is Located at El Camino Real and Showers Drive

Although the MTC identifies the Project Site as being within a Transit Priority Area, it does not identify the major transit stop within one-half mile of the Project Site. Because the Project Site is not within one-half mile of a rail station, ferry terminal, or BRT station,[2] analysis focuses on the intersection of two or more bus routes with requisite service during the peak hour commute periods.

The statute does not define morning and afternoon peak commute hours, nor does the Los Altos Municipal Code (LAMC) or other City documentation. The Santa Clara Valley Transportation Authority (VTA), the City's transit provider, defines peak hours as "the highest morning or evening hour of travel reported on a transportation network or street." As the Congestion Management Agency for Santa Clara County, the VTA's Guidelines can be considered applicable in the absence of any other City guidance.

[2] Note that the Rapid 522 does not appear to have the elements of BRT service identified in the PRC, such as 1) dedicated bus lanes or a separate right-of-way, 2) transit signal priority, 3) all door boarding, 4) fare collection system promoting efficiency, and 5) defined stations. (PRC § 21060.2.) Accordingly, the Rapid 522 does not establish a major transit stop in and of itself.

Typically, peak hours are defined at between 7:00 am and 9:00 am and 4:00 pm and 6:00 pm.

The bus stop at the intersection of El Camino Real and Showers Drive, approximately 1,513 feet from the Project Site, constitutes a major transit stop, as VTA lines 22, 40, and Rapid 522 operate at less than 15 minute intervals between 7:00 am and 9:00 am and 4:00 pm and 6:00 pm, morning and afternoon peak commute periods. A chart demonstrating the bus lines frequency follows.

Northbound/Eastbound				**Southbound*/Westbound**			
Morning Peak Hours (7:00 AM-9:00 AM)		**Afternoon Peak Hours (4:00 PM-6:00 PM)**		**Morning Peak Hours (7:00 AM-9:00 AM)**		**Afternoon Peak Hours (4:00 PM-6:00 PM)**	
Time	**Bus Line**	**Time**	**Bus Line**	**Time**	**Bus Line**	**Time**	**Bus Line**
7:07 AM	22	4:01 PM	22	7:09 AM	522	4:01 PM	22
7:10 AM	522	4:02 PM	40	7:15 AM	22	4:07 PM	522
7:18 AM	22	4:05 PM	522	7:25 AM	40	4:14 PM	40
7:24 AM	522	4:16 PM	22	7:25 AM	522	4:16 PM	22
7:25 AM	40	4:17 PM	40	7:36 AM	22	4:23 PM	522
7:32 AM	22	4:20 PM	522	7:41 AM	522	4:31 PM	22
7:37 AM	522	4:31 PM	22	7:55 AM	40	4:38 PM	522
7:47 AM	22	4:35 PM	522	7:56 AM	22	4:44 PM	40
7:48 AM	522	4:46 PM	22	7:59 AM	522	4:46 PM	22
7:56 AM	40	4:47 PM	40	8:12 AM	22	4:53 PM	522
8:02 AM	22	4:50 PM	522	8:15 AM	40	5:01 PM	22
8:03 AM	522	5:02 PM	22	8:19 AM	40	5:09 PM	522
8:16 AM	22	5:04 PM	522	8:20 AM	522	5:14 PM	40
8:18 AM	522	5:17 PM	40	8:27 AM	22	5:16 PM	22
8:26 AM	40	5:17 PM	22	8:40 AM	522	5:24 PM	522
8:31 AM	22	5:19 PM	522	8:46 AM	22	5:31 PM	22
8:33 AM	522	5:33 PM	22	8:55 AM	40	5:39 PM	522
8:45 AM	22	5:33 PM	522	8:57 AM	522	5:46 PM	40
8:48 AM	522	5:46 PM	40			5:46 PM	22
8:50 AM	40	5:48 PM	22			5:54 PM	522
8:59 AM	22	5:49 PM	522				

*There are two southbound stops for Line 40 at Latham Street, one is south of Latham Street, approximately a third of the distance to El Camino Real. This stop functionally serves to connect Line 40 to Line 22 and Rapid 522.

III. Consistency with Density Bonus Provisions Based on Proximity to a Major Transit Stop

A. Density Bonus

The LAMC provisions contemplate up to a 35% Density Bonus. (LAMC § 14.28.040(C).) Alternatively, the Government Code allows for unlimited density for projects that are 100% affordable (at least 80% low income and up to 20% moderate income) and within one-half mile of a major transit stop. (GOV § 65915(f)(3)(D)(ii).) As the Project is a 100% affordable housing project, using Santa Clara County Measure A funding, City of Los Altos fee waivers, and Low Income Housing Tax Credits, its affordability will be subject to a covenant. Accordingly, as a 100% affordable project, the 165% Density Bonus is permitted by state law. The density increase is not considered an incentive/concession.

B. Height

Projects that are 100% affordable and within one-half mile of a major transit stop are entitled to a height increase of three additional stories, or 33 feet. (GOV § 65915(d)(2)(D).) The Project is designed to be 64 feet in height, 19 feet greater than the 45 feet allowed in the Commercial Thoroughfare zone. (LAMC § 14.50.140.) However, because the 64 feet would be within the additional 33 feet allowed for by GOV § 65915(d)(2)(D), the Project height is consistent with state Density Bonus provisions. Per the Government Code, this height increase is not considered an incentive/concession. (GOV § 65915(d)(2)(D).)

C. Parking

The City's Density Bonus provisions include a parking standard of .5 parking space per bedroom for affordable housing with unobstructed access to a major transit stop within one-half mile. (LAMC § 14.28.040(G)(2)(b).) As the Project consists of 159 bedrooms, this provision would require the Project to provide 80 parking spaces. Alternatively, state Density Bonus provisions do not require any parking for 100% affordable projects with unobstructed access to a major transit stop located within one-half mile of the project site. (GOV § 65915(p)(3).) As the Project proposes to include 90 parking spaces, it would satisfy both the state and local requirement. Use of these provisions is not considered an incentive/concession. (GOV § 65915(p)(9), LAMC § 14.28.040(G)(2)(e).)

D. Incentives, Concessions, and Waivers

Projects that are 100% affordable are entitled to four concessions or incentives. (GOV § 65915(d)(2)(D).) Concession or incentive is defined as "A reduction in site

development standards or a modification of zoning code requirements or architectural design requirements…that results in identifiable and actual cost reductions, to provide for affordable housing costs…." (GOV § 65915(k)(1).) Although entitled to four concessions, we understand that the EAH Housing is requesting two concessions which will result in cost reductions to allow the Project to be built: 1) a reduction in front yard setback from 25 feet to 10 feet, and 2) a reduction in private open space from a 50 square foot average to 25 square foot average.[3] The application for the Project should include findings or evidence demonstrating that reduction of the front yard setback and reduction of the open space would result in cost reductions to provide for the affordable housing. We can assist with those findings at your request.

EAH Housing may also request waivers, apart from an incentive/concession. (LAMC § 14.28.040(H).) The LAMC defines waiver as "the deletion or reduction of any development standards that would otherwise have the effect of physically precluding" a Density Bonus Development. (LAMC § 14.28.040(B)(27).) The Project is seeking a waiver to reduce the front step back of a minimum 10 feet from ground floor façade for stories above 45 feet in height, as maintaining that step back would preclude the Project from being constructed with the identified density. The application for the Project should include findings or evidence demonstrating that imposition of the front step back requirement would physically preclude the construction of the Project. We can assist with those findings at your request.

IV. Alternative Consistency with Density Bonus Provisions

As demonstrated above the Project Site is located within one-half mile of a major transit stop as defined by the Government Code and Public Resources Code. The subsequent analysis demonstrates that the Project Site's proximity to a major transit stop qualifies the Project for unlimited density, increased height, and decreased parking. However, even if the Project Site is not determined to be within one-half mile of a major transit stop, it would still be consistent with state and local Density Bonus provisions based on available concessions and waivers.

Projects that are 100% affordable are entitled to four concessions or incentives. (GOV § 65915(d)(2)(D).) The LAMC does not include a limitation on the number of waivers a project can seek, but rather contemplates the use of multiple waivers by using the plural of the term, waivers, in relevant provisions.[4] State law specifically allows a city to grant multiple waivers. (GOV § 65915(e)(3).)

[3] The staff report for the Joint City Council/Planning Commission Study Session on January 11, 2022 identified a third concession, increase in building height. As noted above, this increase in allowed by state law and not considered an incentive, consistent with GOV § 65915(d)(2)(D).
[4] See LAMC §§ 14.28.040(A), 14.28.040(C), 14.28.040(D)(1)(f), 14.28.040(H).

If the Project Site is not determined to be within one-half mile of a major transit stop, the Density Bonus can still be processed by including the following concessions and waivers.

A. Incentives/Concessions

An incentive or concession is defined as "A reduction in site development standards or a modification of zoning code requirements…that results in identifiable and actual cost reductions, to provide for affordable housing costs." (GOV § 65915(k)(1).) As density is specifically identified as a zoning code requirement, an increase to the identified level, 103.45 dwelling units/acre as opposed to the 38 dwelling units/acre identified in LAMC § 14.50.080, would constitute a modification to a zoning code requirement, and therefore an incentive/concession. As it is not enumerated in LAMC § 14.28.040(F)(1), this would be considered an off-menu incentive or potentially a wavier (discussed below).

A reduction in required parking is specifically cited as an example of a concession or incentive. (GOV § 65915(k)(1).) The LAMC specifically allows for "off-menu parking requirement alterations." (LAMC § 14.28.040(G)(3).) Further, the LAMC vests the City with broad authority to determine the parking required for a project: "This section does not preclude the city from reducing or eliminating a parking requirement for development projects of any type in any location." (LAMC § 14.28.040(G)(4).)

The Project has previously identified the reduction in front yard setback from 25 feet to 10 feet and the reduction in private open space from a 50 square foot average to 25 square foot average as potential incentives/concessions. The staff report for the Joint City Council/Planning Commission Study Session on January 11, 2022 identified both of these as on-menu incentives/concessions.

B. Waivers

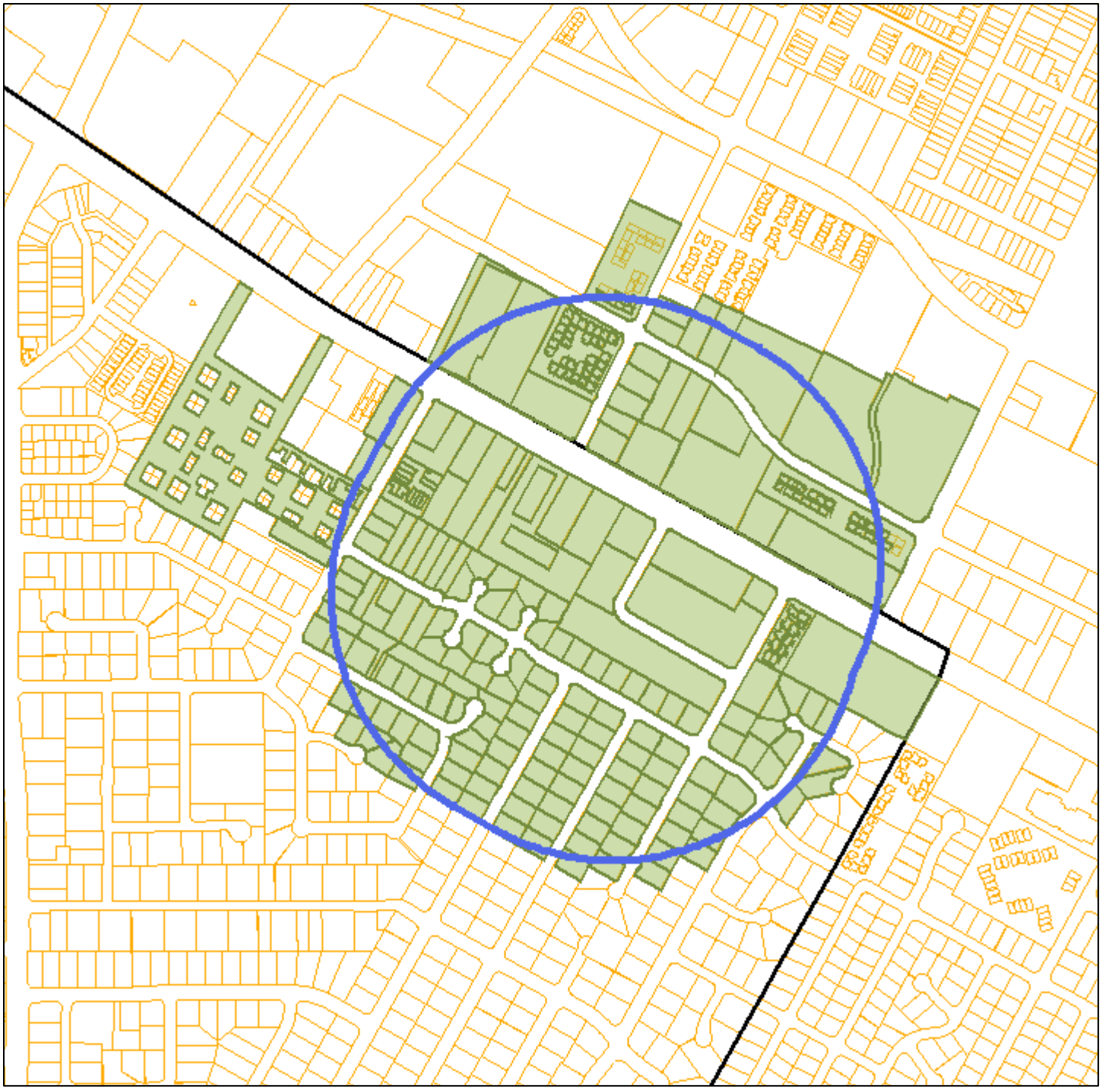
As noted above, maintaining the step back requirement would preclude the Project from being constructed with the identified density. Similarly, limiting the Project's height to 45 feet would preclude the Project from being constructed at the identified density. The Project, as designed, includes dwelling unit square footages consistent with code requirements and ground floor amenities, as well as required parking. Reducing the Project to 45 feet would cause the removal of two stories from the Project. Maintaining the identified density while reducing the Project by two stories would likely require 1) redesign of the Project to include rooms of a substandard size, and/or 2) the removal of required parking and Project amenities on the ground floor, which would be displaced by residential units. Accordingly, the increased height would constitute a permissible waiver, as maintaining the 45 foot height limit would reduce the Project's density.

The Project's increased density could also be considered a waiver. As the Project seeks to construct an affordable housing development with a density of 103.45 dwelling units/acre, maintaining the density required by the LAMC would have the effect of physically precluding the Project. Accordingly, the Project's increased density could treated as a waiver rather than an incentive.

ATTACHMENT E

Notification Map

Agenda Item # 10.



Print Date: June 1, 2022

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

- Schools
- Park and Recreation Areas
- City Limit
- Waterways
- Situs Label
- TaxParcel

The information on this map was derived from the City of Los Altos' GIS. The City of Los Altos does not guarantee data provided is free of errors, omissions, or the positional accuracy, and it should be verified.

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS comm

ATTACHMENT F

Agenda Item # 10.

330 Distel Circle 5 story building

Weiyan Farmer <[redacted]>
Mon 6/20/2022 11:08 PM

To: Radha Hayagreev [redacted]ov ;Steve Golden <sgolden@losaltosca.gov>;330distelcircle@eahhousing.org
[redacted]

Hi

I heard this from my neighbor, Damian I totally agree with his thoughtful suggestions Hopefully, you will take serious considerations about his suggestions.

Thanks.

Kate

To the Planning Commission and Los Altos City Council,

The 5 story building to be developed on 330 Distel Circle will impact the privacy of several homes located on Marich Way. This is due to the fact that the building windows facing Marich Way will be overlooking the various homes' backyards, swimming pools, and (bedroom) windows. The current trees provide little coverage due to the height of this new development. None of the houses developed on Marich Way or in the neighborhood, expected such a tall construction to be developed. I would like to request the developer of this building to plant additional trees (or equivalent tall vegetation) closer to the actual impacted homes so privacy can be respected (see image below). Alternatively, the windows of the building facing Marich should be reduced to small windows close to the ceiling of the apartment units so people inside the unit cannot see down while light can still go through. Looking forward to hearing from you.

Thanks

City of Los Altos contacts:
Radha Hayagreev rhayagreev@losaltosca.gov
Steve Golden <sgolden@losaltosca.gov>

EAH Housing contacts:
"330distelcircle@eahhousing.org" 330distelcircle@eahhousing.org
[redacted]

Steve Golden

From: Steve Golden
Sent: Thursday, June 16, 2022 1:12 PM
To: Damian H
Cc: 330distelcircle@eahhousing.org; Radha Hayagreev
Subject: RE: 330 Distel Circle housing development impacting my family privacy

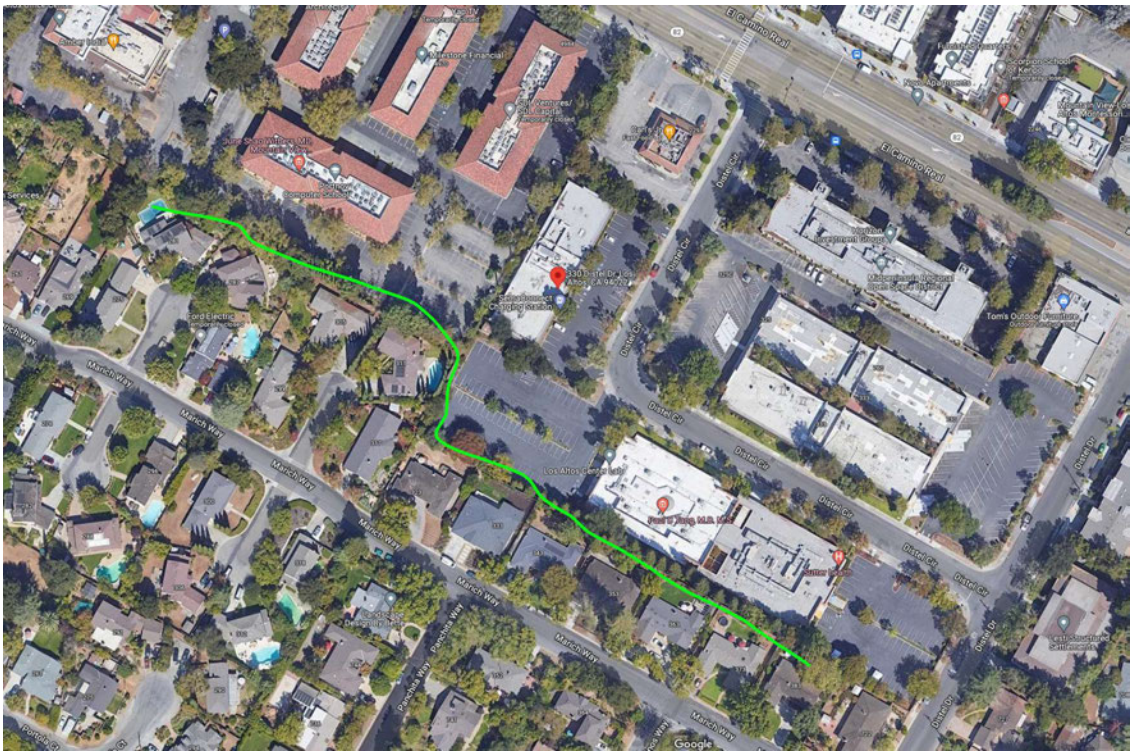
[redacted]

From: Damian H <[redacted]>
Sent: Monday, June 13, 2022 9:41 PM
To: Steve Golden <sgolden@losaltosca.gov>
Cc: 330distelcircle@eahhousing.org; Radha Hayagreev <rhayagreev@losaltosca.gov>
Subject: Re: 330 Distel Circle housing development impacting my family privacy

Steve, thanks for the note. Based on this, I would like to file a formal public comment, below. Would you let me know what are the next steps? Should I get in touch with the developer as well?

To the Planning Commission and Los Altos City Council,
The 5-story building to be developed on 330 Distel Circle will impact the privacy of several homes located on Marich Way. This is due to the fact that the building windows facing Marich Way will be overlooking the various homes' backyards, swimming pools, and (bedroom) windows. The current trees provide little coverage due to the height of this new development. None of the houses developed on Marich Way or in the neighborhood, expected such a tall construction to be developed. I would like to request the developer of this building to plant additional trees (or equivalent tall vegetation) closer to the actual impacted homes so privacy can be respected (see image below). Alternatively, the windows of the building facing Marich should be reduced to small windows close to the ceiling of the apartment units so people inside the unit cannot see down while light can still go through. Looking forward to hearing from you.

Thanks


El Camino Real
Distel Cir
Distel Dr
Marich Way
Panchita Way
Google

Agenda Item # 10.

FW: EAH Housing Proposal 330 Distel Circle

Yvonne Dupont <ydupont@losaltosca.gov>
Tue 6/7/2022 8:46 AM
To: Radha Hayagreev rhayagreev@losaltosca.gov

From: Steve Folkman [redacted]
Sent: Monday, June 06, 2022 10:09 PM
To: Public Comment PC PCpubliccomment@losaltosca gov ; Jonathan Weinberg jweinberg@losaltosca gov
Subject: EAH Housing Proposal 330 Distel Circle

Dear Planning Commission Members and Council Liaison,

I am a resident of Marich Way, the residential street directly behind Distel Circle
Many of the properties on Marich (admittedly not mine) share a backyard fence with other properties on Distel Circle I am concerned that allowing a 5 story building on Distel Circle sets precedent for other 5 story buildings on Distel CIrcle.

I would ask that the Planning Commission NOT APPROVE a 5 story structure but limit the structure to 3 stories. I am concerned that if a 5 story building is approved on Distel Circle, then the next developer will argue that their development should be allowed to be 5 stories also. Perhaps, then, PAMF may ask to expand their facility to 5 stories, leading to 5 story buildings sharing backfences with residents on Marich Or PAMF may sell to a developer who demands "equal treatment" to a 5 story development on the existing PAMF property.

Increased traffic on Marich and surrounding neighborhood streets is also a concern. Consider a trip from Distel Circle intended northwest bound on El Camino or southbound on San Antonio Road (towards downtown Los Altos!).
The traveller is most likely to turn right out of the complex to avoid the unregulated intersection at El Camino and Distel Circle. So the main thoroughfare route would be left out of Distel Circle onto Distel Dr, then through 6 lights, or potential stops, [Distel Dr / El Camino left turn, Distel Circle crosswalk, Ortega, Showers, San Antonio / El Camino] to get through the intersection at El Camino and San Antonio. Alternatively a right turn onto Distel Drive leads to a path down Marich, Jordan and Portola with a single stop sign at Marich before the next traffic control at the light at San Antonio / Portola.

Even traffic northbound across El Camino at San Antonio might use the route down Marich to save passing through 2 3 traffic lights

Adding to the undesirableness of a trip down El Camino will be the increased traffic density that occurs on El Camino when the proposed bike line is added.

Note that more than 200 residents of the new 5150 El Camino project headed northwest on El Camino or south on San Antonio will find it advantageous to use the Marich / Jordan / Portola corridor for access to or north of San Antonio Rd.

It is not the type of housing that is at issue here, but rather the precedent and size of the proposed developments ***I am concerned that the committee is not considering the aggregate of the effects of multiple projects on the residents of Marich Way and the surrounding neighborhood.***

Best regards,
Steve Folkman

ATTACHMENT G

330 Distel Circle Los Altos, CA **Objective Standards Compliance Chart (September 2021)**		5.25.22	
14.50.170	Design Control (CT)	Comment	Waiver/Concession/Density Bonus Permitted/Council Discussion
A. Building Placement.			
	A minimum 75 percent of ground-floor building frontages facing El Camino Real must be built at the minimum setback line. This standard applies to the building frontage only (exclusive of side setbacks).	Not facing ECR	
B. Building Massing and Articulation.			
	1. Upper-story Step-backs.		
	A. Front: Minimum 10 feet from ground floor façade for fifth story and above	Not stepping back on 4th and 5th floor. Need building area to get to 90 units	Concession
	B. Street Side: Minimum 10 feet from ground floor façade above 45 feet in height		
	2. Vertical Articulation.		
	a. When a building façade exceeds 100 feet in length along a right of way, it must be separated into primary façade bays no greater than 50 feet and secondary façade bays defined by a recess a minimum of 3 feet deep and 10 feet wide	Primary façade: Comply with 50ft bays. Secondary façade: Comply with 10ft width, and 3ft recess from the solar shade to the secondary wall.	
	b. A minimum one entrance shall be provided per 150 linear feet along El Camino Real and per primary façade bay along all other rights of way	Not facing ECR, one ped entrance and vehicle entrance provided on Distel Circle	
	c. The eave/roof of a secondary façade bay shall be no higher than the corresponding elements of the primary façade bay.	Secondary façade bay top of roof about 24inches less than the Primary façade bay	
3. Horizontal Articulation. New facades and façade modifications along a street or civic space shall be designed to visually express a base, middle, and top.			
	a. One or more of the following patterns shall be used to define the base:		
	i. Watertable: Base material extends from grade to between 8 and 54 inches above grade	Not used	
	ii. Podium: The base material encompasses the lowest story (or stories) of the building, with or without mezzanine(s), and terminates in a sill, string course, or cornice at its upper bound. (Multi-story buildings only.)	Comply- Mass timber base	
	iii. Watertable + Cornice/String Course: A watertable using the base material is combine with a cornice or string course at the lowest story's upper bound, including any mezzanine (multi-story buildings only).		
	b. The top of each building mass/bay shall be defined by elements spanning the full length of the façade of the mass/bay. Such elements may include a cornice, eave and/or gable(s), or other elements listed under Section 17.50.170.B.6. These elements shall be consistent with the overall architectural style of the building mass/bay.	Top of parapet and the solar shade as cornice	
4. Adjacencies.			
	a. Facades Adjacent to an R-1 District.	Does not apply. We are not adjacent to R-1. Adjacent to CT and O	
	b. Storefront Facades Adjacent to Storefront Facades	Does not apply. No adjacent buildings with retail storefront facades we are adjacent to	
	c. Compatibility with Adjacent Shorter Buildings with Height Difference of One Story or More. When adjacent to an existing shorter building with a height difference of one story or more, a proposed building must utilize two or more of the following strategies:		
	i. Incorporate the uppermost floor into the roof form		
	ii. Break the mass of the building into smaller modules through changes in wall plane, setbacks, and/or height	Does not apply. However, our storefront is similar in proportion to nearby office.	
	iii. Match window heights and/or proportions	Does not apply. However, large glazing elements similar to offices nearby.	
	v. Relate roof cornices and moldings at floor lines	Does not apply. However, 14ft office buildings adjacent work with our level 1 base	

330 Distel Circle Los Altos, CA **Objective Standards Compliance Chart (September 2021)**		5.25.22	
14.50.170	Design Control (CT)	Comment	Waiver/Concession/Density Bonus Permitted/Council Discussion
5. Privacy and Line of Sight		Comply	
	a. Primary living spaces and balconies located along a side setback shall orient principal windows and balconies toward the front and rear of the building	Comply	
	b. Where windows are within 10 feet of and oriented toward an interior side setback, glazing shall either be a minimum 30-degree angle measured perpendicular to the adjacent side setback line, have minimum sill height of 42 inches, or be opaque	Noted. On our side yards we are providing windows with a minimum sill height of 42 inches	
	c. The maximum sill height for an ingress/egress window is 44 inches from finished floor	Noted. We are Type IIIA. Egress Windows not required	
6. Roofline and Roof Design			
	a. Roof designs shall be limited to: i. Hipped; ii. Gable; iii. Shed; iv. Dormer; v. Parapet	We are providing a parapet	
	v. Parapet - (a) When used on the first or second floor, a parapet longer than 25 feet in length must include at least one but not more than two of the following design elements to break up the length of the parapet: (1) Steps; (2) Curves; (3) Angled surfaces	Parapet not provided on level 1 and 2 except at the small portion where Distel turns at the multipurpose room. That section is <25ft	
	(b) The length of a parapet segment on the third floor and above may not exceed 25 feet	No parapet on third floor	
	b. When the top story is stepped back and embedded in a sloped roof form, the floor below must (and other floors may) be stepped back to meet the slop of the top story	Top story is not stepped back. Would reduce the number of units. See exhibit A1.2	
	c. Building facades facing an R-1 district must have a hipped or gable roof and may incorporate dormers.	Do not face R-1	
	d. Roofline/parapet at corners shall not exceed roofline/parapet of adjacent wall planes by more than 24 inches	The difference between primary and secondary facades is 24" or less.	
C. Building Design			
	1. Façade Design		
	a. Building facades shall be arranged in an orderly composition of bays, defined by vertically aligned openings alternating horizontally with solid walls or columns. The pattern shall be visually expressed through the spacing of openings, recesses, eaves, inset panels, cornices, overhangs, trellises, exposed rafters, columns, or bay windows.	Bays on levels 2-5 provided	
	b. The pattern may be shared between the ground floor and upper stories provided the ground floor exhibits enhanced detail or modulation.	Ground floor has different articulation with mass timber columns and storefront	
	c. Residential facades shall incorporate at least one element that signals habitation, such as bay windows, or balconies.	Juliette balconies provided on Distel (area constraints). Other sides and courtyard have balconies	
	d. Non-glazed wall areas (blank walls) must be enhanced with architectural details, landscaping, and/or landscaped trellises or lattices.	No blank walls	
	2. Ground Level Transparency. A minimum 60 percent of commercial ground floor street-facing facades between 2 and 7 feet in height shall be transparent window surface. Opaque, reflective, or dark tinted glass is not allowed.	No commercial along Distel. However, large, transparent glazing area provided.	
	3. Pedestrian-Scaled Entrances		
	a. Buildings more than 70 feet in length along a right-of-way must incorporate at least one forecourt frontage on the right-of-way-facing façade. Required forecourts must also comply with the standards of Section 14.50.170.C.3.b.v. below	We comply with ii: Shopfront. Awning and mass timber columns do not exceed 25ft	
	b. Each street-facing building façade must incorporate at one of the following entry features. See Section 14.66.275 (Entrance Type Standards) for design standards applicable for each entrance type listed: i. Stoop; ii. Shopfront; iii. Gallery; iv. Arcade; v. Forecourt; vi. Terrace	We comply with ii: Shopfront. Awning and mass timber columns do not exceed 25ft	
	ii. Shopfront (a) Shopfronts more than 25 feet in width must incorporate variations in bulkhead, awnings, materials and/or color to visually articulate the shopfront into modules not to exceed 25 continuous feet.	Our storefront glazing is separated by columns that are less than 25ft	
	v. Forecourt (a) Forecourts must feature at least one entry to a shop and/or second floor use.		

330 Distel Circle Los Altos, CA **Objective Standards Compliance Chart (September 2021)**		5.25.22	
14.50.170	Design Control (CT)	Comment	Waiver/Concession/Density Bonus Permitted/Council Discussion
	(b) The size of the forecourt must be appropriate relative to the size of the building. The maximum ratio of building	Does not apply- we are complying with Shopfront	
	(c) Forecourt must be minimum 15 feet in width.		
	(d) Forecourt must be enclosed on at least three sides by buildings.		
	(e) Forecourt must remain open to the sky (arbors and trellises are allowed).		
	c. Primary Entrance Location(s). - Locate primary entrance on the front right-of-way.	Lobby entry along Distel	
	d. Individual Entries. - Ground floor residential units facing a street must provide individual entries along the street frontage.	No ground floor residential	
	e. Corner Entrances. - Chamfered corners must incorporate a building entrance. Any required entrances may be provided on the corner of the building assuming one of the intersecting sides is a primary frontage.	No corner entrances	
	f. Street-facing Entries to Upper Floors. - Street-facing entries to upper floors shall be equal in quality and detail to storefronts. This standard may be satisfied through two or more of the following:	No street facing entries to upper floors	
	i. Dedicated awning, canopy, or other roof element	Awning provided	
	ii. Stairs with a single color applied to treads and a contrasting color or pattern applied to risers	Not selected	
	iii. Dedicated light fixture(s)	Light figures provided	
	iv. Decorative street address numbers or tiles	Decorative address numbers provided	
	v. Plaque signs for upper-floor business tenants	Not selected	
	g. Entry Protection. - Primary street-facing entrances shall be protected by a recess in the building frontage at least 3 feet deep or by a projection extending outward at least 3 feet measured horizontally from the entrance, and wide enough to clear the building entryway on both sides.	Primary entry more than 3ft deep	
	i. Protection may be coterminous with an accent element	Noted	
	ii. Protection may take the form of an extended eave, overhang, awning, door canopy, gallery arcade frontage, or other element that provides shade and shelter from the elements.	Protection provided via awning and arcade on Distel	
	iii. The lowest edges of a projected awning or door canopy shall have a vertical clearance of no more than 8 feet.	Our awning is underneath the podium base. We are not extending out as the diagram shows.	
	iv. Recessed entries shall differentiate pavement within the recess through the use of a dedicated paving material or pattern.	Noted	
	h. Accent elements demarcating building frontage, entrance, and common open space areas shall not exceed the height of the ground floor story. Roof elements are excepted.	Noted	
4. Ground Floor Floor-to-Ceiling Height			
	a. Minimum 24 inches taller than typical upper floor floor-to-ceiling height where ground floor is non-residential.	Not applicable	
	b. Minimum 12 inches taller than typical upper floor floor-to-ceiling height where ground floor is residential.	Noted. We are 5ft taller than typical residential to fit mechanized parking	
5. Interior Courtyard. Interior Courtyards must be:			
	a. Partially visible from the street and linked to the street by a clear accessible path of travel.	Raised courtyard on level 2 not visible from street. Creating privacy for single family neighbor, western light for courtyard. Removing a leg of the building to make the courtyard visible would decrease unit and parking area. Access to courtyard and exit via stair.	Concession
	b. Enclosed on at least two sides by buildings.	Comply	
	c. Open to the sky (arbors and trellises are allowed).	Comply	
	d. A minimum width of 20 feet and a minimum area of 400 square feet.	Comply	
6. Paseos. Paseos must be:		No paseos in project	

330 Distel Circle Los Altos, CA **Objective Standards Compliance Chart (September 2021)**		5.25.22	
14.50.170	Design Control (CT)	Comment	Waiver/Concession/Density Bonus Permitted/Council Discussion
	a. A minimum of 10 feet for through-block paseos.	No paseos in project	
	b. A minimum width of 4 feet for entries to courtyards or individual single businesses.	No paseos in project	
D. Window Design. Vinyl windows are prohibited on facades visible from a right-of-way.		Vinyl windows not provided along Distel Circle. See elevations.	
E. Building Materials			
	1. Primary shall mean 50 percent or more of a façade surface area excluding transparent surfaces. Permitted primary cladding materials are limited to:		
	a. Stucco (minimum 2-coat stucco; synthetic stucco or EIFS not allowed)	Stucco proposed	
	b. Siding (lap, vertical, panelized, or shingle)	Not used	
	i. All siding shall be wood, composite wood, or cement fiberboard.	Not used	
	ii. Wood siding shall be painted or stained.	Mass Timber at base to be stained	
	iii. Vinyl and aluminum siding are not permitted.	Not used	
	c. Stone	Not used	
	d. Brick	Not used	
	e. Concrete (board-form only).	Not used	
	2. Secondary shall mean less than 50 percent of a façade surface area excluding transparent surfaces. Permitted secondary cladding materials are limited to:		
	a. Stucco (minimum 2-coat stucco; synthetic stucco not allowed, EIFS not allowed)	Stucco proposed	
	b. Siding (lap, vertical, panelized, or shingle)	Not used	
	i. All siding shall be wood, composite wood, or cement fiberboard.	Not used	
	ii. Wood siding shall be painted or stained.	Not used	
	iii. Vinyl and aluminum siding are not permitted.	Not used	
	c. Stone (building base only)	Not used	
	d. Brick (building base only)	Not used	
	e. Tile	Not used	
	f. Metal (matte finish or Cor-ten)	Matte finish for solar shades proposed	
	i. Ribbed metal, titanium, and mirrored finishes are not permitted.	Noted	
	g. Concrete Masonry Units (water table and building base only, and not allowed on any façade facing a right-of-way or a single-family zone)	Not used	
	h. Concrete (building base only, board-form only, cast concrete not permitted)	Not used	
	3. On attached elements, such as bay windows, orioles, and balconies.	Incomplete Statement	IMC has an incomplete senten
F. Ground Level Open Space. Where any required front, rear, or side yard setback is 10 feet or greater, on-site ground level open space shall be provided within the setback.		Provided	
	1. The ground level open space shall be usable and accessible.		
	2. The minimum dimension for ground level open space shall be 8 feet.		
G. Landscaping and Paving		External driveway not provided	
	1. Landscaping must be placed on each side of a driveway at grade or in raised planters.	Noted	
	2. Landscape elements shall be integrated with the building architecture, parking, and streetscape. Recommended patterns shall include, but are not limited to:		
	a. Planters for flowers and shrubs within street frontage.	Noted	
	b. Landscape buffers between parking spaces and building facades.	Noted	
	c. Landscaping within and/or on walls adjacent to courtyards, open spaces, and setbacks.	Noted	

330 Distel Circle Los Altos, CA **Objective Standards Compliance Chart (September 2021)**		5.25.22	
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3. See Sections 14.66.180 (Maintenance of Landscaped Areas) and 14.70.070 (Landscaped Strips) for additional landscaping standards.		Noted	
H. Parking Design and Access			
1. Where structured park	a. Lined with ground-floor non-residential uses at least 30 feet deep as measured from the front façade; or	Comply. Amenity provided in front of parking	
	b. Designed such that the floor elevation is a minimum 4 vertical feet below the elevation of the adjacent sidewalk.	Not applicable. Comply with a. above	
		Structured parking not visible from Distel Circle	
2. Visible structured park	a. Regular punched openings designed to resemble windows of habitable spaces	Not applicable	
	b. Trellis/living wall	Not applicable	
	c. Custom textured or decorative screening	Not applicable	
3. Entrances to Parking Fa	a. A maximum of two curb cuts for one-way traffic and one curb cut for two-way traffic may be permitted per street frontage per lot.	Comply. One curb cut provided.	
	b. Controlled entrances to parking facilities (gates, doors, etc.) shall be located a minimum 10 feet from the back of sidewalk.	Comply. Gate set back from back of sidewalk	
	c. Entrances to parking facilities along a street frontage shall be separated by a minimum of 60 feet.	Only one parking entrance provided	
	d. Where possible, curb cuts serving adjacent parking facilities shall be shared.		
I. Site Circulation and Access		Not applicable	
1. New development on abutting lots shall be designed to allow cross-access for internal pedestrian, bicycle, and vehicular circulation systems.		Noted	
2. Bicycle racks shall be p	a. In or within 50 feet of every parking area; and	Provided in indoor bicycle rack	
	b. Within 20 feet of at least one building entrance.	Provided in outdoor bicycle rack	
J. Services Areas and Screening			
	1. Service areas must be located at the rear of lot.	Trash room within building.	
	2. Service areas must be enclosed on enclosures that are architecturally consistent with primary building in terms of materials, colors, and style.	Noted	
K. Additional Design Standards. See Section 14.66.280 for additional design standards applicable to all residential mixed-use development in the CT District.			
14.66.280	**New Section 14.66.280 Design Standards Applicable to all multifamily and residential mixed use development**		
A. Architectural Integrity			
	1. Material palette on all floors above the ground floor, not including floors contained with a sloped roof form, must be consistent.	Achieved. Levels 2-5 are primarily stucco with metal solar shades	
	2. Change in material may occur only at the inside corner of a change in wall plane. Material must wrap around outside corners.	Noted. Comply	
B. Firewalls and Visible Sidewalls			
	1. Any exposed surfaces shall be consistent with and expressive of the overall building design and shall be finished in the same palette of materials as the rest of the building. Front façade finished materials, façade cornices, wall top projections, decorative details, and moldings must be carried and repeated on the side wall.	Noted	
	2. At least one of the following techniques must be employed on firewalls/visible sidewalls:	Noted	
	a. Incorporation of windows where code allows and adequate fire protection can be provided.	Noted	
	b. Gable and hip roofs to vary the height and appearance of sidewalls.	Not applicable	
	c. Inset panels.	Noted	

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	d. Stepped back front façade of upper floor(s) to vary the sidewall profile.	Noted	
C. Durability. Exterior finish materials shall have an expected lifespan of no less than 30 years.		Noted	
	1. Features to direct rainwater away from exterior walls shall include one or more of the following:	Noted	
	a. Cornice , with drip at outer edge of corona (minimum 12-inch projection).	Noted	
	b. Projecting eaves (minimum 12-inch projection)	Noted	
	c. Scuppers, with our without downspouts (min. 12-inch projection if no downspouts are used)	Noted	
	d. Gutters, with downspouts or rain chains.	Noted	
	i. Downspouts shall be one color and shall not change colors to match the wall behind them.	Noted	
	ii. Downspouts shall be round or rectangular, made of copper or metal.	Noted	
	iii. Downspouts shall not break façade profiles (such as a cornice) but shall wrap around projecting a profile	Noted	
	2. Exterior timber shall be protected from decay by one or more of the following:	Noted	
	a. Material properties (e.g. cedar)	Noted	
	b. Staining and sealing	Wood Mass Timber elements to be sealed	
	c. Painting	Noted	
	3. Exterior ferrous metals shall be protected from corrosion by one or more of the following:		
	a. Metallurgical properties (e.g. galvanized, stainless, or weathering still)	Noted	
	b. Painting or other impermeable coating.	Noted	
	4. Windows		
	a. All windows must be recessed a minimum of 3 inches from the outer wall surface for all Commercial and Multi-family zones except the CT zone.	We are CT zone. Does not apply	
	b. Window openings surrounded by masonry finish materials shall include a lintel that that is taller than the sill/apron and proportional to the load it appears to carry.	No masonry. Does not apply	
D. Materials: Materials shall appear only in places and configurations appropriate to their structural properties.			
	1. Where walls use masonry finish materials (e.g. stone, brick, CMU), any openings spanned by the material must be either:	No masonry. Does not apply	
	a. Arched, with each arch defined by a continuous series of voussoirs and a single keystone at the apex; or	No masonry. Does not apply	
	b. Rectangular, with a continuous lintel spanning the opening and extending beyond by 4 to 6 inches at each end. Vertical dimensions of the lintel shall be no less than 1/2 of the clear span. Steel lintels are exempt from this minimum vertical dimension.	No masonry. Does not apply	
	2. When used, exterior timber posts, beams, rafters, purlins, brackets, etc. shall be joined according to structural principles.	Noted	
	3. Where a change in material is desired, all façade materials shall turn the corner and terminate into a vertical element of the façade composition.	Noted	
	4. Materials Defining Building Elements		
	a. Base. For multistory elements, the base of the building shall be defined by a distinct material selected from among the following: Stone, brick, concrete, CMU, or stucco ("base material").	Wood serves as distinct material. Wood and storefront glazing proposed at the base.	Waiver
	b. Body. Typical materials for the main body of the building include wood, fiber cement, brick, stone, or stucco. If brick is used, it must extend vertically to the base; if stone is used, it must extend vertically to the foundation.	Stucco proposed for body	
	c. Parapet. Parapets shall terminate in a parapet cap of stone, concrete tile, metal, or molded stucco.	Noted	

330 Distel Circle Los Altos, CA **Objective Standards Compliance Chart (September 2021)**		5.25.22	
14.50.170	Design Control (CT)	Comment	Waiver/Concession/Density Bonus Permitted/Council Discussion
	d. Bays. Horizontal changes in finish material shall occur at the boundaries between bays rather than within a bay.	Noted. Comply	
	e. Arcades. Arcades shall be supported by columns or piers in concrete/cast stone, fiberglass, or stucco. Archivolts and imposts shall be expressed using similar materials/appearance.	Arcades not proposed	
	f. Structural elements. Structural elements visible on the building exterior (e.g. rafters, purlins, posts, beams, balconies, brackets, trusses, columns, arches, etc.), even when ornamental, shall be sized and spaced according to their corresponding structural role, and arterials shall be selected accordingly (see A. architectural integrity).	Noted	
	5. Materials allowed for Building Details/Ornament	Noted	
	a. Wood	Noted	
	b. Metal (wrought iron, copper, aluminum, tin)	Noted	
	c. Glass fiber reinforced concrete (GFRC)/fiberglass	Noted	
	d. Terra Cotta	Noted	
	e. Tile	Noted	
	f. Plaster	Noted	
E. Colors		Noted	
	1. A maximum of 4 colors shall be applied to be the building façade:		
	a. 1 primary color comprising 50 percent or more of the façade excluding	Comply: Blue/Green primary	
	b. 1 secondary color comprising no more than 30 percent of the façade excluding transparent surfaces.	Comply: Secondary insets are gray	
	c. 1 tertiary color comprising no more than 20 percent of the façade excluding transparent surfaces.	Noted. No other color suggested	
	d. 1 accent color for use of trim and architectural details.	Balconies are composite wood color	
	2. Materials with intrinsic, naturally-occurring coloration shall not count towards this maximum. Such materials are limited to copper, Corten steel, unpainted wood, tile, and brick. Materials with prefinished color (stucco, cement fiberboard, colorized metal) shall count towards the maximum.	Mass timber applies here	
	3. Changes in color may occur:		
	a. To articulate changes between base, body, and top portions of a façade, which must be separated by a cornice or profile or a change in material and must remain consistent across the length of the façade by.	Noted. Comply	
	b. When a portion of the elevation is articulated as a separate building with a break in the roof form and a step back in the façade plan 5 feet or greater or step up in façade height at least 10ft.	Noted. Comply	
	c. On attached elements, such as bay windows, orioles, and balconies.	Noted. Comply.	
F. Façade Lighting: Façade lighting shall be incorporated into all storefront design and all facades facing an R-1 district. Fixtures shall be:		Not facing an R-1 district. Facing O and CT. We will be providing lighting along Distel along storefront and will review lighting in lighting design further as the design develops.	
	1. Shielded and directed onto the building façade.	Noted	
	2. Consistent in style with the primary building.	Noted	
G. Habitable Outdoor Space. Private, habitable outdoor space supported by the building structure.			
	1. Pergola: Posts supporting beams with brackets, which in turn support purlins and/or rafters. Posts shall be no narrower in any dimension than 3.5" or 1/20 of the unbraced post length, whichever is greater.	Does not apply	
	2. Trabeation: Post or columns supporting beams with or without brackets, which in turn support either an additional floor level (for multi-story porches/balconies) or a full roof system based on rafters and or purlins with decking and finish material. Posts shall be no narrower in any dimension than 3.5" or 1/20 of the unbranched post length, whichever is greater. The distance between posts shall be no wider than the total post height.	Does not apply	

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	3. Arcuation: Encompassed by walls that are penetrated by arched openings bounded by either columns or piers. The ratio of the column diameter [at lowest part of shaft] to column height shall be no less than 1:10 and no greater than 1:7. Width of piers at corners [abutments] shall be no less than 1/3 of the opening width; piers between multiple arched openings may be narrower.	Does not apply	
	4. Rectilinear: Bounded by square/rectangular piers framing rectilinear wall openings. If lintels are expressed on the façade, they shall extend over the piers by 4"-6" at each end. Piers shall be no narrower in any dimension than 15.5" or 1/6 of the opening width, whichever is greater. Piers at corners shall be wider than the piers between openings.	Does not apply	
	5. Fabric Shading: Shaded by fabric elements such as awnings or stretched canvas, secured to the building structure, sheltered by Main Roof Form, supported by other building volumes.	Does not apply	
	a. Cantilevered balconies shall be secured architecturally to the wall below by brackets.	The floor system and brackets above will support the cantilevering balconies.	
	b. Bracket material shall be consistent with that of the balcony's floor structure	No brackets proposed	
H. Historic Preservation	Not applicable		
I. Sustainability in Design			
	1. All new construction shall incorporate landscaping and fenestration to passively cool the building; energy-efficient HVAC; and energy efficient lighting.	Noted	
	2. All energy generation devices must blend with the building color.	Noted	
	3. All on-site landscaping shall be drought-resistant and require minimal irrigation.	Noted	
J. On-site landscaping			
	1. Trees proposed within street-facing setbacks must be selected from the Los Altos Street Tree Planting List	Noted	
	2. Trees planted on the south side of the building must be deciduous.	Noted	
	3. Species shall be selected and located according to direct sunlight needs.	Noted	
	4. Vegetation shall be installed along all exposed east and west facing walls.	Noted	
	5. Groundcovers shall be planted over a minimum 50 percent of landscaped areas to prevent ground reflection and keep surfaces cool.	Noted	
	6. When parking is tucked under a building, landscape planters must be provided to break up the continuous paving at the building's edge.	Parking in structure, not tuck under	
K. Screening			
	1. Rooftop mechanical equipment must be screened from public view.	Noted	
	2. Barbed wire, chain-link, and razor wire are not permitted.	Noted. Not proposed	

ATTACHMENT H

Preliminary Arborist Report

330 Distel Circle
Los Altos, CA

PREPARED FOR
EAH Housing
22 Pelican Way
San Rafael, CA 94901

PREPARED BY
HortScience | Bartlett Consulting
325 Ray Street
Pleasanton, CA 94566

September 2021
Revised February 3, 2022

HORT SCIENCE
BARTLETT CONSULTING
A Division of The I.A. Bartlett Tree Expert Company

Preliminary Arborist Report
330 Distel Circle, Los Altos

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Exhibits

Tree Assessment Form

Tree Assessment Plan

Preliminary Arborist Report
330 Distel Circle, Los Altos CA

Introduction and Overview
EAH Housing is proposing to redevelop the property located at 330 Distel Circle, in Los Altos. The plan proposes to construct affordable housing using modern, flexible and sustainable building approaches. HortScience | Bartlett Consulting (HBC), Divisions of The F. A. Bartlett Tree Expert Co. was asked to prepare a **Preliminary Arborist Report** to meet the City of Los Altos' requirements.

This report provides the following information:

1. An assessment of trees within and immediately adjacent to the project site.
2. An assessment of the impacts of constructing the proposed project on the trees.
3. Preliminary recommendations for tree preservation and removal.
4. Preliminary guidelines for tree preservation during the design, construction and maintenance phases.

Assessment Methods
Trees were assessed on July 29, 2021. All trees measuring 6" or greater in diameter, within the project area or with portions of their crowns extending into the project area, were included (per City of Los Altos Chapter 11.08, Tree Protection Regulations). The assessment procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 48" above grade;
4. Evaluating the health and structural condition using a scale of 1–5:
   - ***5*** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
   - ***4*** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
   - ***3*** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
   - ***2*** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   - ***1*** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
5. Rating the suitability for preservation as "high", "moderate" or "low". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.
   - ***High***: Trees with good health and structural stability that have the potential for longevity at the site.
   - ***Moderate***: Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'good' category.
   - ***Low***: Tree in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

Twenty-seven (27) trees were assessed, representing 11 species (Table 1, following page). Eight (8) off-site trees with portions of their crowns extending onto the development site were included in the assessment (#449, 450 and 452-457). Descriptions of each tree are found in the ***Tree Assessment Form*** and locations are plotted on the ***Tree Assessment Plan*** (see Exhibits).

The site was a single-story office building, with perimeter landscaping. Vegetation at the site was primarily exotic species, with a handful of native coast live oaks and coast redwoods.

Nine (9) holly oaks made up the backbone of the landscaping, with #431-435 on the north side of the building and #440, 441, 445 and 450 (off-site) on the south side of the building. The majority of these were young to semi-mature, with trunk diameters from 7" to 15". Holly oak #433 was mature at 20" in trunk diameter and the only holly oak in good condition (**Photo 1**). Most had not been provided sufficient space for full development and were crowded by adjacent trees, producing one-sided crowns and leaning trunks. Seven holly oaks were in fair condition, #435 was in poor and #433 was in good condition.

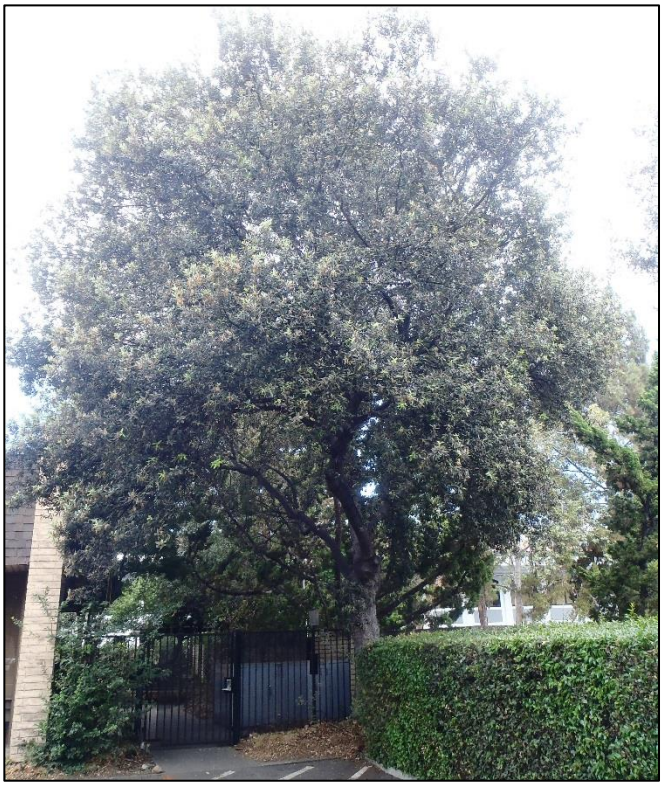


Photo 1: Looking north at holly oak #433. This was the only holly oak on the site that was mature (20" in diameter) and in good condition.

Four evergreen pears were growing adjacent to the building, with #437 and 438 on the west side and #443 and 444 on the east side. They were semi-mature (11" to 15" in trunk diameter) and primarily in fair condition, with #443 in good condition. Most leaned as a result of competition for light and #443 and 444 had been planted in close proximity to the existing building and parking lot, displacing the adjacent asphalt by an estimated 5".

Three coast live oaks were assessed, with #436 located in the northwest corner of the site and #449 (off-site) and 451 located to the south of the building. Coast live oak #436 was young (9" in diameter) and in fair condition. Coast live oaks #449 and 451 were both mature and in good condition.

Sweetgums #447 and 448 were growing in the planter behind the sidewalk along Distal Circle. Sweetgum #447 was young (10" in diameter) and #448 was semi-mature at 14" in diameter. Both were in fair condition, but #447 was in decline, with a very sparse crown.

Table 1. Tree condition and frequency of occurrence.
330 Distel Circle, Los Altos

Common Name	Scientific Name	Condition Rating			No. of trees
		Poor (1)	Fair (3)	Good (4-5)	
African fern pine	*Afrocarpus falcatus*	-	-	1	1
Hollywood juniper	*Juniperus chinensis 'Kaizuka'*	-	2	-	2
Sweetgum	*Liquidambar styraciflua*	-	2	-	2
Olive	*Olea europaea*	-	-	1	1
Calif. sycamore	*Platanus racemosa*	-	-	1	1
Callery pear	*Pyrus kawakamii*	-	3	1	4
Coast live oak	*Quercus agrifolia*	-	1	2	3
Holly oak	*Quercus ilex*	1	7	1	9
Coast redwood	*Sequoia sempervirens*	-	2	-	2
Mexican fan palm	*Washingtonia robusta*	-	-	1	1
Xylosma	*Xylosma congestum*	-	1	-	1
Total		**1**	**18**	**8**	**27**
		4%	66%	30%	100%

A row of off-site tree were assessed along the northern fence line and included the following. All of the trees had been planted too close to the wall, with the bases of trees #452 and 454 growing against the wall (**Photo 2**).

- Hollywood junipers #452 and 453. Both were in fair condition but leaned.
- Coast redwoods #454 and 456 were mature and in fair condition. Both had sparse canopies.
- Xylosma #455 was in fair condition, with a low canopy that extended W. over the fence.

Photo 2: Looking southwest at trees #452-456 (L to R). The row of off-site trees were in fair condition but had been planted close to the wall separating the two properties. Inset below shows the base of coast redwood #454, which was growing against the wall.

The remaining species were represented by the following individuals:

- Mexican fan palm #439 was growing on the west side of the building. It was mature and in excellent condition.
- African fern pine #442 was growing in the planter in front of the building, adjacent to evergreen pears #443 and 444. It was mature (22" in diameter) and in good condition. However, it too had been planted too close to the building and parking lot and was displacing the adjacent asphalt by an estimated 5".
- Olive #446 was multi-stemmed and growing in the landscape along the Distal Circ. Frontage. It was in good condition, with good form and structure and a slightly sparse canopy.
- Calif. sycamore #457 was located just off-site on the west side of the property. It was mature (24" in diameter) and leaned northwest. It had been planted in a very small space and the base was growing against both the wall and curb.

Average tree condition for the site was fair, with 18 trees or 66% of the population. Eight (8) trees were in good condition (30%) and holly oak #435 was the only tree in poor condition (4%). Table 1 (previous page) provides a summary of condition by species.

The City of Los Altos protects all trees with diameters of 15" or greater located on private property. Removal of any tree with a diameter of 15" or greater requires a permit issued by the City, per Chapter 11.08 (Tree Protection Regulations). Based on this definition, 13 of the trees assessed at the 330 Distal Circ. Site qualified as *Protected*. All *Protected* trees are identified in the ***Tree Assessment Form*** (see Exhibits).

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. Holly oak #435 is an examples of such a tree.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, holly oak, coast live oak and coast redwood are tolerant of site disturbance, while sweetgum is more sensitive to site disturbance.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Invasiveness**
  Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (http://www.cal-ipc.org/paf/) lists species identified as being invasive. Los Altos is part of the Central West Floristic Province. Olive was the only species assessed at the 330 Distal Circ. site considered to have 'Limited' invasiveness.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment. Table 2 provides a summary of suitability ratings. Suitability ratings for individual trees are provided in the ***Tree Assessment Forms*** (see Exhibits).

We consider trees with high suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Table 2: Tree Suitability for Preservation
330 Distel Circle, Los Altos

High	These are trees with good health and structural stability that have the potential for longevity at the site. Three (3) of the trees were highly suitable for preservation, including Mexican fan palm #439, olive #446 and coast live oak #451.
Moderate	Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the "high" category. Sixteen (16) of the trees were of moderate suitability for preservation, including 4 holly oaks, 3 evergreen pears, 2 coast live oaks, 2 Hollywood junipers, 2 coast redwoods and one each of: African fern pine, xylosma and Calif. sycamore.
Low	Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. Eight (8) trees were of low suitability for preservation, including 5 holly oaks, sweetgums #447 and 448 and evergreen pear #437.

Preliminary Evaluation of Impacts and Recommendations

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The ***Tree Assessment*** was the reference point for tree condition and quality. Impacts from construction were evaluated using the Preliminary Grading & Utility Plan C3.0, prepared by BKF Engineers dated October 18, 2021.

The plans were preliminary however, included utilities and accurate trunk locations. However, a final assessment is based on final plans.

The plan proposes to redevelop the site into 90 residential units in 5-stories, with ground floor amenities and vertical/mechanical lift parking. Site amenities would include a courtyard, community room, laundry facility and lounge. The main entry would be located along the northeast property boundary, providing access to parking in the north corner of the building. A utility box will be located at the south corner of the site.

Impacts from construction were estimated for each tree. Based on my review of the plans, all of the on-site trees will be removed to accommodate development plan, including eight *Protected* trees (#432, 433, 438-440, 442, 443, and 451). Table 3 (following page) provides the recommendations for each tree along with a description of the impacts and their *Protected* status.

Eight trees have been identified for preservation, all of which are off-site. Five of the trees identified for preservation qualified as *Protected*. Preservation of trees is predicated on following the ***Tree Preservation Guidelines*** provided on the following page.

Some amount of root and canopy pruning of off-site trees may be required for construction clearance. Recommendations for Tree Protection Zones are provided in the ***Tree Preservation Guidelines*** (following page).

Table 3. Recommendations for preservation and removal.
330 Distel Circle, Los Altos

Tag #	Species	Diameter	Protected	Impacts
431	Holly oak	10	No	Remove, within drive isle
432	Holly oak	15	Yes	Remove, within drive isle
433	Holly oak	20	Yes	Remove, within drive isle
434	Holly oak	7	No	Remove, within drive isle
435	Holly oak	9	No	Remove, within drive isle
436	Coast live oak	9	No	Remove, within building footprint
437	Evergreen pear	11	No	Remove, within building footprint
438	Evergreen pear	15	Yes	Remove, within building footprint
439	Mexican fan palm	16	Yes	Remove, within building footprint
440	Holly oak	15	Yes	Remove, within building footprint
441	Holly oak	13	No	Remove, within building footprint
442	African fern pine	22	Yes	Remove, within building footprint
443	Evergreen pear	15	Yes	Remove, within building footprint
444	Evergreen pear	14	No	Remove, within building footprint
445	Holly oak	8	No	Remove, within building footprint
446	Olive	9,9,8,7,7	No	Remove, in area of impact
447	Sweetgum	10	No	Remove, low suitability
448	Sweetgum	14	No	Remove, low suitability
449	Coast live oak	15,15,13	Yes	**Preserve**, off-site
450	Holly oak	14	No	**Preserve**, off-site
451	Coast live oak	20	Yes	Remove, In utility box area

Tag #	Species	Diameter	Protected	Impacts
452	Hollywood juniper	8,7	No	**Preserve**, off-site
453	Hollywood juniper	16	Yes	**Preserve**, off-site
454	Coast redwood	18	Yes	**Preserve**, off-site
455	Xylosma	9	No	**Preserve**, off-site
456	Coast redwood	22	Yes	**Preserve**, off-site
457	Calif. sycamore	24	Yes	**Preserve**, off-site

Preliminary Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods.

The following recommendations will help reduce impacts to trees from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

Design recommendations

1. Any plan affecting trees should be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans and demolition plans.

2. A **TREE PROTECTION ZONE** must be established for trees to be preserved, in which no disturbance is permitted. No trenching, excavation, construction or storage of materials shall occur within that zone. No underground services including utilities, sub-drains, water or sewer shall be placed in the **Tree Protection Zone**. Spoil from trench, footing, utility or other excavation shall not be placed within the **Tree Protection Zone**, either temporarily or permanently. For design purposes, **TREE PROTECTION ZONES** for trees identified for preservation should be established at the dripline in all directions. As plans are refined, more specific **TREE PROTECTION ZONES** will be developed.

3. ***Tree Preservation Guidelines*** prepared by the Consulting Arborist should be included on all plans.

4. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**. To minimize impacts to trees, locate underground services to provide as much room as possible from trees identified for preservation.

5. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.

6. Irrigation systems must be designed to avoid trenching within the **TREE PROTECTION ZONE**.

7. Do not apply lime to soil for stabilization within 25' of trees to be preserved. Lime is toxic to tree roots.

Pre-construction treatments and recommendations

1. The demolition contractor and construction superintendent shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.

2. Fence all trees to be retained to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6' chain link anchored firmly in the ground or on stanchions. Fences are to remain until all grading and construction is completed. Place weather proof signs, 2' x 2', on the fencing that read "**Tree Protection Zone** Keep Out" (eg. one sign for each of the four compass points).

3. Where possible, cap and abandon all existing underground utilities within the **TPZ** in place. Removal of utility boxes by hand is acceptable but no trenching should be performed within the **TPZ** in an effort to remove utilities, irrigation lines, etc.

4. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain must be removed by a qualified arborist and not by demolition or construction contractors. The qualified arborist shall remove the tree in a manner that causes no damage to the tree(s) and understory to remain. Stumps shall be ground below grade.

5. Any brush clearing required within the **TREE PROTECTION ZONE** shall be accomplished with hand-operated equipment.

6. Any work within the **TREE PROTECTION ZONE** shall be approved and monitored by the Consulting Arborist.

7. Prune trees to be preserved to provide adequate clearance and correct any existing defects in structure. All pruning shall be completed by a Certified Arborist or Tree Worker and adhere to the latest edition of the ANSI Z133 and A300 standards as well as the *Best Management Practices -- Tree Pruning* published by the International Society of Arboriculture.

8. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

9. Apply and maintain 4-6" of wood chip mulch within the **TREE PROTECTION ZONE.**

Recommendations for tree protection during construction

1. Prior to beginning work, all contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.

2. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.

3. Fences have been erected to protect trees to be preserved. Fences define a specific **TREE PROTECTION ZONE** for each tree or group of trees. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Consulting Arborist.

4. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.

5. Prior to grading, pad preparation, excavation for foundations/footings/walls, trenching, trees may require root pruning outside the **TREE PROTECTION ZONE** by cutting all roots cleanly to the depth of the excavation. Roots shall be cut by manually digging a trench

and cutting exposed roots with a saw, with a vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment. The Consulting Arborist will identify where root pruning is required and monitor all root pruning activities

6. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.

7. All underground utilities, drain lines or irrigation lines shall be routed outside the **TREE PROTECTION ZONE**. If lines must traverse through the protection area, they shall be tunneled or bored under the tree as directed by the Consulting Arborist.

8. No materials, equipment, spoil, waste or wash-out water may be deposited, stored, or parked within the **TREE PROTECTION ZONE** (fenced area).

9. Any additional tree pruning needed for clearance during construction must be performed by a qualified arborist and not by construction personnel.

Maintenance of impacted trees
Trees preserved at the 330 Distel Circ. site may experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of failure of branches or entire trees increases. Therefore, annual inspection for structural condition is recommended.

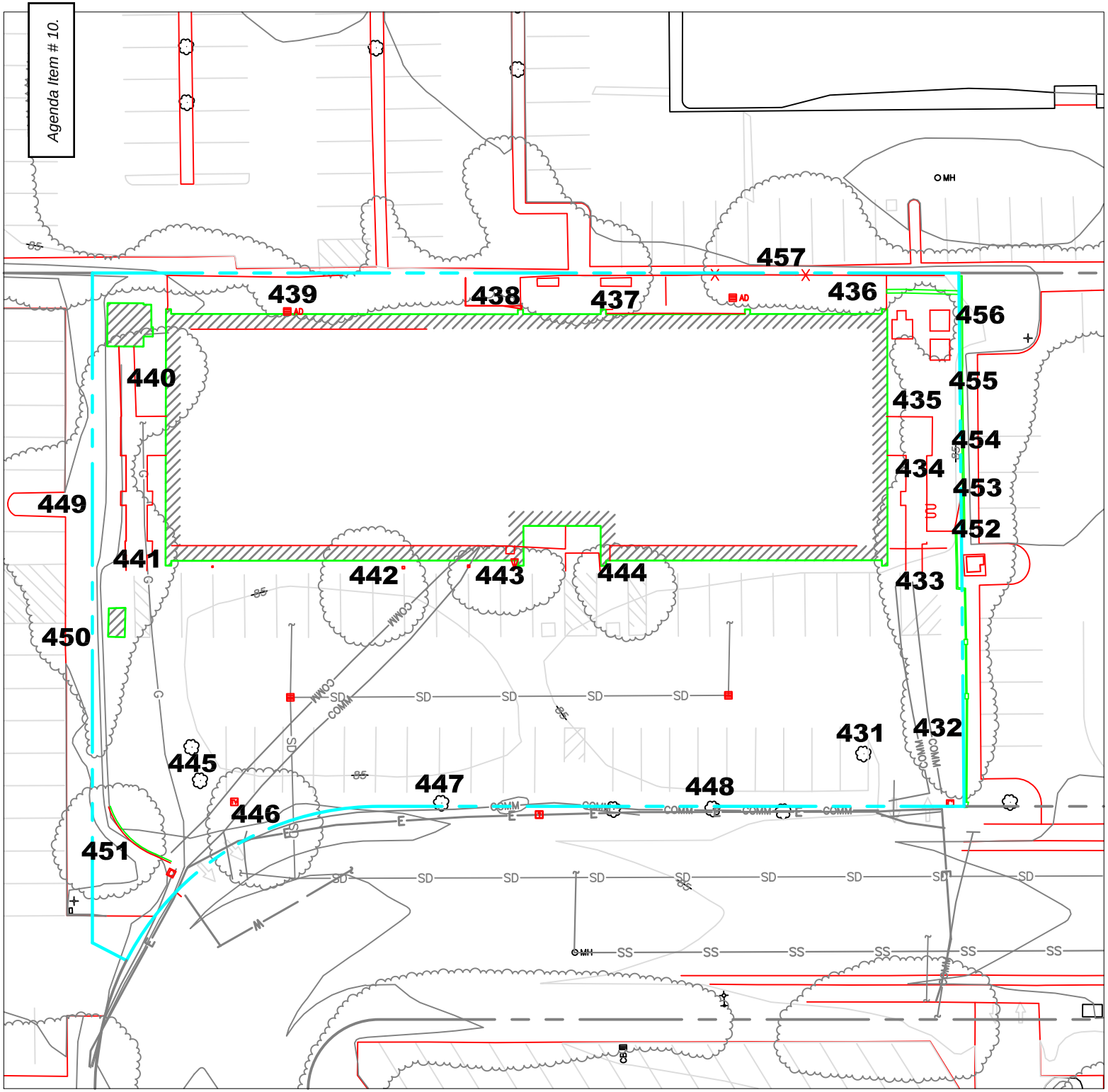
HortScience | Bartlett Consulting

Certified Arborist WE-6757A
Registered Consulting Arborist #693

Exhibits

Tree Assessment Form

Tree Assessment Plan



Tree Assessment Pl

2528

330 Distel Circle
Los Altos, CA

Prepared for:
EAH Housing
San Rafael, CA

September 2021

No Scale

Notes:
Base map provided by:
BKF
San Jose, CA

Numbered tree locations with no survey point were approximately located in the field.

HORT SCIENCE
BARTLETT CONSULTING
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325 Ray Street
Pleasanton, CA 94566
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www.hortscience.com

Tree Assessment

330 Distal Circle
Los Altos, California
July 2021

HORT SCIENCE
BARTLETT CONSULTING
Divisions of The F.A. Bartlett Tree Expert Company

TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
431	Holly oak	10	No	3	Low	Multiple attachments at 10’; one sided NW.; trunk wound; in very narrow island.
432	Holly oak	15	Yes	3	Low	Multiple attachments at 5’; a little one sided NW.; base growing against wall.
433	Holly oak	20	Yes	4	Moderate	Multiple attachments at 10’; good form; sapsucker damage; base w/ in 1’ of wall.
434	Holly oak	7	No	3	Low	Suppressed; leans & one sided W.; base w/ in 1.5’ of wall.
435	Holly oak	9	No	1	Low	All but dead; only basal sprouts remain; strong lean E.
436	Coast live oak	9	No	3	Moderate	Multiple attachments at 10’; fused stems at attachment; fair form and structure.
437	Evergreen pear	11	No	3	Low	Codominant trunks at 10’; wide attachment; poor form and structure.
438	Evergreen pear	15	Yes	3	Moderate	Multiple attachments at 7’; crown bowed N.; long laterals.
439	Mexican fan palm	16	Yes	5	High	Good form and structure; slight pencilling in upper crown; 45’ of brown trunk.
440	Holly oak	15	Yes	3	Moderate	Codominant trunks at 10’; good form; moderate dieback; trunk w/ in 3’ of bldg.
441	Holly oak	13	No	3	Moderate	Multiple attachments at 6’; crown bowed E.; moderate dieback.
442	African fern pine	22	Yes	4	Moderate	Multiple attachments at 6’; slight lean S.; trunk w/ in 1’ of bldg.; displaced asphalt 5”.
443	Evergreen pear	15	Yes	4	Moderate	Multiple attachments at 7’; leans S.; trunk w/ in 3’ of bldg.; displaced asphalt 5”.

Tree Assessment

330 Distal Circle
Los Altos, California
July 2021

HORT SCIENCE
BARTLETT CONSULTING
Divisions of The F.A. Bartlett Tree Expert Company

TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
444	Evergreen pear	14	No	3	Moderate	Multiple attachments at 10'; leaning & one sided S.; trunk w/ in 3' of bldg.; displaced asphalt 5".
445	Holly oak	8	No	3	Low	Small crown; trunk wound; in very narrow island.
446	Olive	9,9,8,7,7	No	4	High	Multiple attachments at 2'; good form; a little sparse.
447	Sweetgum	10	No	3	Low	Poor form and structure; declining.
448	Sweetgum	14	No	3	Low	Upright form; moderate dieback.
449	Coast live oak	15,15,13	Yes	4	Moderate	Off-site, no tag; multiple attachments at 3'; one sided W.; ~5' W. of PL, crown 10' E.
450	Holly oak	14	No	3	Moderate	Off-site, no tag; multiple attachments at 7'; one sided S.; base ~2' W. of PL, crown 12' E.
451	Coast live oak	20	Yes	5	High	Codominant trunks at 5'; good form and structure.
452	Hollywood juniper	8,7	No	3	Moderate	Off-site, no tag; one sided E.; trunk growing against wall.
453	Hollywood juniper	16	Yes	3	Moderate	Off-site, no tag; slight lean S.; base w/ in 6" of wall.
454	Coast redwood	18	Yes	3	Moderate	Off-site, no tag; lost top; sparse; base growing against wall.
455	Xylosma	9	No	3	Moderate	Off-site, no tag; low canopy; extends 15' W. over fence; trunk w/ in 6" of wall.
456	Coast redwood	22	Yes	3	Moderate	Off-site, no tag; sparse canopy; base w/ in 4' of wall.
457	Calif. sycamore	24	Yes	4	Moderate	Off-site, no tag; corrected lean N.; growing in very small island w/ base against wall & curb.

ATTACHMENT I

MINUTES OF THE STUDY SESSION OF THE CITY COUNCIL AND PLANNING COMMISISON OF THE CITY OF LOS ALTOS, 5:00 P.M., TUESDAY, JANUARY 11, 2022, HELD VIA TELECONFERENCE

MEETING CASLLED TO ORDER

At 5:00 p.m., Mayor Enander called the meeting to order.

ESTABLISH QUORUM

PRESENT: Council Members Fligor, Lee Eng, Weinberg, Vice Mayor Meadows, and Mayor Enander

ABSENT: Planning Commissioners Ahi, Mensinger, Roche, Steinle, Vice Chairperson Doran Planning Commissioner Marek and Planning Chairperson Bodner

PUBLIC COMENTS ON AGENDA ITEM

Mayor Enander reordered the agenda to hear Public Comments following the project presentation

DISCUSSION ITEM

1. **330 Distel Circle Project Pre-Application Submittal:** Review the submitted material and provide preliminary feedback to the applicant to address before submitting the formal development application. (R. Hayagreev)

Planning Consultant Hayagreev provided project information to the Council and introduced the development team of Welton Jordan of EAH Housing, Lily Ciammaichella of KTGY and Bruce Jett of Jett Landscaping. Each presented information on the proposed development and answered questions from the Council and Planning Commissioners.

PUBLIC COMENTS ON AGENDA ITEM

The following individuals provided public comment: County Supervisor Simitian, Salim, Anne Paulson, David Law, Jeanine Valadez, Roberta Phillips, Elaine Haight, Pierre Beddard, Jon Baer, Lois Bear Kelsey, Susan Russell representing the League of Women Voters, Ellen D., Scott Spielman and Donna Poulos

Councilmembers and Commissioners discussed various details of the design and offered several suggestions relative to the design, exterior color, bike storage access, potential green elements and garage and parking access for the applicants to consider.

ADJOURNMENT

Mayor Enander adjourned the meeting at 6:29 p.m.

Anita Enander, MAYOR

Andrea M. Chelemengos, MMC, CITY CLERK

Expanding the range of opportunities for all by developing, managing and promoting quality affordable housing and diverse communities.

Distel Circle Apartments

PC/CC Study Session Responses – Planning Application

February 28, 2022

Project:	**90-Unit Multifamily Affordable Housing Community**
Location:	330 Distel Circle, Los Altos (APN# 170-04-051)
Current Landowner:	Midpen Regional Open Space District
Applicant/Developer:	EAH Housing

On January 11, 2022 the Los Altos Planning Commission and City Council held a Joint Study Session to review the proposed development for 330 Distel Circle. During the Study Session members of the City Council, the Planning Commission and the public made comments. The following is our response to the questions and comments we heard.

Comment: Bike access only accessible in garage?
Response: Bicycle room has been relocated along Distel Circle with access from the lobby.

Comment: Reduction in building height? Reduce the plate heights of any levels?
Response: Per density bonus law, we are permitted 78ft. We are proposing 64ft typically. We have reviewed with our manufacturers- modular and mechanized parking and have found the following:

- For Level 1: Ground level is 16 ft floor to floor to accommodate for the 2 level mechanized parking system, MEP, and floor/ceiling assembly.
- For Levels 2-5: This housing product type- multifamily residential- has nominal 9ft ceilings which also allows for 8ft in areas that are drop down for mechanical, electrical, and plumbing. In addition, as we are designing for modular units, the typical floor to floor height is 11ft which equates to a 9ft ceiling. Anything less than this dimension would have a significant financial impact as factories are set up for 9ft ceilings.
- For Parapet height: To account for roof drainage and guardrail we are accounting for 5ft. This would be to the highest point and accounts for variation in the roof parapet height.

Comment: The objective standards state that the courtyard should be open to the front.
Response: We are requesting a concession. Our massing is focused towards Distel and further from the single-family homes to provide more privacy for these neighbors. The courtyard would get Western sunlight and a more protected courtyard for the residents.

Comment: Look at massing and individuality on façade with more accents.
Response: Design has been revised to break up the building to have 5 primary bay elements of varying widths instead of 4 with the same width. Secondary façade elements between these blue-grey bays have been accentuated with warm composite panel, larger windows, and made white to break down the scale of the building.

Comment: How are trash and loading addressed?
Response: Designated loading area in front of building proposed for trash and loading. Trash containers will be moved by building staff using an electric pallet jack to the proposed staging area on Distel Circle. Only one container will be staged 4x per week for servicing by the hauler, once serviced staff will move containers back into the trash collection room.

Comment: Consider moving the vehicular driveway to the other side of the building
Response: We have reviewed moving the driveway entry and entering the building where Distel begins to turn is a difficult turning maneuver.

Comment: Provide more landscape along Distel
Response: Distel frontage revised to show additional green landscaping. See Landscape plans.

ATTACHMENT J

1900 Powell Street, Suite 220
Emeryville, CA 94608
(800) 488-7274 Toll Free USA
(415) 292-5400
(415) 292-5410 Fax
www.trashmanage.com

DRAFT -EAH Housing -DRAFT
330 Distel Circle
Los Altos, CA
Trash Management Plan

Task: Design a waste and recycling system for an affordable housing project with 90 residential units that minimizes costs, staffing requirements and environmental impacts, while providing convenient trash disposal for the building's residents. Please note the word "trash" when used in this plan covers waste, recycling, and compost.

Waste and Recycling Removal: The City of Los Altos has granted Mission Trail Waste System a license to provide residential and commercial Waste and Recycling services to residents and businesses located within the city and county. This license is a de facto exclusive franchise for trash removal for any property located within city limits. Mission Trail provides three types of service: waste, commingled recycling and compost collection. Garbage rates includes an appropriate level of recycling and organics service for no additional charge. Adequate garbage service is required.

State and Local Recycling Mandates: Statewide the passage of AB341 (July 1st, 2012) and subsequent AB1826 required all business that have more than 5 residential units or generate more than 4 cubic yards of municipal solid waste to separate recyclable and compostable materials from the waste stream. Finally, AB 1383 — although not fully implemented by all local governments — will lead to mandatory food waste diversion from residential, multi-family and commercial business by 2022. These laws directs local jurisdictions to implement recycling and composting regulations and programs.

Los Altos Ordinance No. 2015-417, Chapter 6 states:
6.12.050 Mandatory commercial and multi-family recycling and organic recycling.

A. Commercial generators responsible for compliance. Each commercial generators, as defined in Section 6.12.010.E, shall be responsible for ensuring and demonstrating its compliance with the requirements of this chapter, including all multi-family dwellings if four units or more, and also including all multi-family dwellings under four units that shared solid waste collection containers and service under one subscription with the franchised hauler.

B. Commercial recycling and organics collection required. Each commercial generator shall subscribe to a level of service with the franchised hauler that is sufficient to handle all volume of recycle materials and organic materials generated or accumulated on the premises, or complete and retain on-site self hauling form certifying that all self-hauling activities will be completed in accordance with Section 6.12.100.C. or any other applicable law or regulation. The commercial generator shall make a copy of such form avail to the city manager upon request. Additionally, each commercial generator shall ensure the proper separation of solid waste, as established by the franchised hauler, by placing each type of material in designated receptacles or containers, and ensure that employees, contractors, volunteers, customers, visitors, and other persons on-site conduct proper separation of solid waste.

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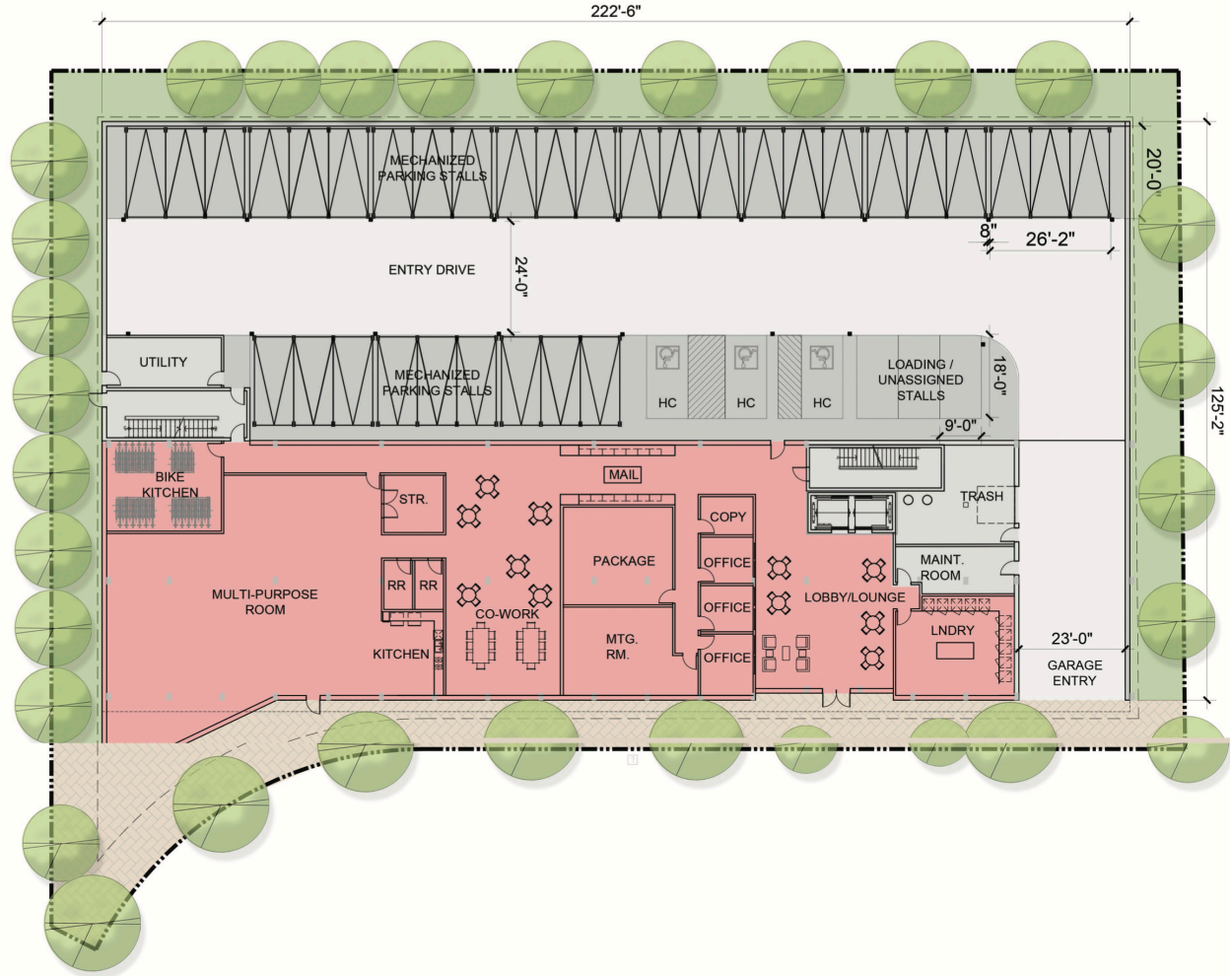
Site Plan:



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Specific Project Design Summary:

First, trash will be collected in 3 streams (waste, recycling, and compost) to meet the State requirements of AB341, AB 1826 and SB 1383 and the local Recycling and Composting Ordinance.

Second, **we recommend eliminating the proposed compost chute and collecting compost on each residential floor in Rubbermaid 'Slim Jim' containers.** These containers will be emptied by staff into toter carts for collection by Mission Trails. Alternative compost options include: 2-chute system with a bisorter in the waste chute, or a 3-chute system.

Third, due to the projected trash volumes and ground floor resident for the building, **waste and recycling will be collected in compacted 2CY bins on the Level 01. Compost will be collected in a 64 gallon toter cart.**

Fourth, **we recommend replacing the proposed double-swing doors at the entry/exit to the trash room with a roll-up door and separate egress door.** While this is a more expensive option at the outset, it is ATM's experience that in the long run this design change saves money and prevents maintenance problems. Due to the weight of the bins moving in and out of the trash room, a double door cannot have a threshold. Door sweeps will eventually degrade and let in bugs and vermin. Additionally, the doors will be damaged from getting hit by the unwieldy trash bins and will require repair or replacement long before a roll-up door will.

Fifth, **the residential trash waste and recycle chutes should be 30" diameter with automatic opening 15"x18" hopper-type intake doors.** NFPA 82 minimum required 24" chutes have a higher probability of chute jams due to large objects (super-size pizza boxes, Costco boxes, ironing boards, crutches, etc.) being thrown down the chute. NFPA 82 also requires that chutes vent at full diameter at least 36" above the finished roof.

Sixth, the chute core wall is shared with residential units. **We recommend installing double walls, sound dampening coating, or sound isolation padding to reduce sounds, vibration, and odors.**

Seventh, a safe and accessible location for staging needs to be determined. We recommend identifying a location on Distel Circle. **The waste hauler, Mission Trail has in the past, moved loose bins from the temporary staging area to the street at no additional cost, however we will need to confirm if they are able to move compacted bins.**

Eighth, **add 1 CFM/SF mechanical ventilation per CBC, floor drain, hose bib and odor control to the trash collection rooms.**

Ninth, due to the number of units, **this building is projected to generate about 315 cardboard boxes per week. To reduce the potential for chute jams, we recommend considering designating a convenient space for residents to place their flattened cardboard boxes.** These boxes will then be moved by building staff to the mixed recycling bin.

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Projected Residential Waste and Recycling Levels: The following metrics were used to project residential waste and recycling levels:

Residential Waste: 0.16 Cubic Yard (32 gallon) per week/unit. **NOTE: This is the equivalent of over 2 large kitchen garbage cans per unit week (~2.8 - 13 gallon bags).**

Residential Recycling: 0.16 Cubic Yard (32 gallon) per week/unit. **NOTE: This is the equivalent of 2 large kitchen garbage cans per unit week (~2.8 - 13 gallon bags).**

Residential Compost: 0.012 Cubic Yard (2.4 gallon) per week/unit. **NOTE: This is the equivalent of small compost pail per unit week.**

Below is a summary of projected LOOSE trash volumes. See detailed analysis on page 19.

Units	Loose Waste Volume CY/WK	Loose Recycle Volume CY/WK	Loose Compost Volume CY/WK	Loose 3CY Waste Bins/WK	Loose 3CY Recycle Bins/WK	Total # of Compost Carts/WK
90	14.4	14.4	1.08	5	5	4

Below is a summary of projected COMPACT trash volumes. See detailed analysis on page 19.

Units	Loose Waste Volume CY/WK	Loose Recycle Volume CY/WK	Loose Compost Volume CY/WK	COMPACT 2CY Waste Bins/WK	COMPACT 2CYRecycle Bins/WK	Total # of Compost Carts/WK
90	3.6	3.6	1.08	2	2	4

Proposed Residential Trash handling system:

To comply with City ordinances, the project's residential trash will be collected in 3 different streams: Waste, Mixed Recyclables (paper, cardboard & containers) and Compost (organic materials).

Chutes for Waste & Recycling. The single trash chute core per building can handle the volume of trash generated by the project. Residential waste and mixed recycling streams will be deposited by tenants on upper floors into dedicated gravity chutes. Compost will be collected in 64 G toter carts.

We recommend the trash core have two (2) 30" diameter trash chutes per core with 15 x 18 automatic opening (pneumatic) intake doors. Increasing the chute size to 30" will slightly increase the chute system cost but it will reduce the possibility of chute jams due to large objects (Amazon, super-size pizza and "Costco" boxes) being thrown down the chute and thereby reduce ongoing maintenance cost while increasing tenant convenience.

The chutes should be 16 gauge galvaneal or aluminized steel and be isolated from the building structure using Mason BR mounts or equivalent. The chute should be coated with a sound dampening compound (Soundcoat GP-1 or equivalent) equal to the thickness of the metal.

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Compactors. We recommend all residential waste and recycling be collected in 2CY chute fed compactors. Compactors will reduce disposal costs and on-site staffing requirements while minimizing property truck traffic thereby lowering the projects overall environmental impact. All compactor bins will incorporate locks on the lids and compactor opening so the containers cannot be accessed by vagrants. Compactor bins will be moved using an electric pallet jack.

Service	Compaction Ratio	Monthly Fee
3-CY loose bins 5 times per week	N/A	$2,286.54
2-CY compacted bin 2 times per week	4:1	$760.70

Lower Waste Disposal costs. Front-load compaction is less expensive than front-load loose waste services. (See cost benefit analysis on page 19).

Lower labor costs. A 3-cubic yard loose waste bins serviced Monday-through-Saturday must be moved from the trash chute to the trash staging locations 5x per week. Comparable compacted service is one 2-cubic yard bin picked up 2x per week. That represents 50% fewer times to move the bins from the trash areas to the street for pickup. More importantly compacted bins reduce the truck trips and thereby reducing the noise impact on the project's neighbors. Compactors also eliminate the need to rake or rotate loose bins and solve the problem of Sundays (one of the heaviest trash days of the week). (See cost benefit analysis on page 19).

Lower environmental costs. Less truck trips and less bin emptying results in cleaner air and quieter neighborhood.

Residential Compost. Food scrap diversion is not currently required for multi-family properties however, compost will be required in 2022 by SB1383. Compost can be handled in three ways:

Option 1: Eliminate the proposed compost chute. Residential compost can be collected in Rubbermaid 'Slim Jim' containers placed in each chute vestibule. The Slim Jim's should be emptied by building staff into a 64G toter cart for emptying by the trash hauler.

Advantage: Lowest upfront equipment cost.
Disadvantage: A full-time janitorial staff is typically required for this option hence, the long term labor costs are much higher. Compost should be emptied on a regular basis to prevent sanitation and odor issues.

Option 2: 3 Chute design system.

Advantage: Low upfront equipment cost.
Disadvantage: ATM does not recommended collecting apartment compostable materials using a gravity chutes due to the sanitation issues, the collection issues, the corrosive properties of the material, and odorous nature of putrefying household food waste, which is the primary component of organic waste from apartments

Option 3: Design a 30' stainless steel chute for waste with a bi-sorter to dispose of compost.

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Advantage: This option has lower labor costs.
Disadvantage: The additional piece of equipment increases upfront costs.
We recommend food scrap compost be collected in each chute vestibule in Rubbermaid "Slim Jim" containers. These containers would then need to be emptied by building staff into the collection container (typically a 64- or 96-gallon toter cart).

We recommend eliminating the proposed compost chute, and collecting compost in Rubbermaid 'Slim Jims' containers placed in each chute vestibule. The Slim Jims should be emptied by building staff into a 64G toter cart for emptying by the trash hauler.

ATM does not recommended collecting apartment compostable materials using a gravity chutes due to the sanitation issues, the collection issues, the corrosive properties of the material, and odorous nature of putrefying household food waste, which is the primary component of organic waste from apartments. The compostable materials will adhere to the sides of the chutes and require frequent chute wash downs. This will increase the project water usage and sewage loads. The acidic nature of fermenting compost will cause the chute to rust prematurely unless they are made of 304 stainless steel. It is important that proper sanitation protocols are followed since the compostable material that will adhere on the chutes wall is an excellent medium to grow fruit flies, maggots, molds, fungus, yeast and bacteria which can cause insect infestations, allergic reactions and malodors.

Cardboard. Multi-family dwellings generate a tremendous amount of cardboard due to online shopping and food delivery. Typically, half of the units will receive a delivery in a cardboard box every day. This building is projected to receive around **315** cardboard boxes per week. A space should be designated for residents to place flattened cardboard that will not fit in the mixed recycle chute to avoid chute jams. This cardboard will need to be moved by building staff to the recycling bin for disposal.

Odor Control. To mitigate malodors in the trash room(s), a four-pronged approach is recommended including cleaning, proper ventilation, and installing a deodorizer system.

1. Mechanical Exhaust of Trash Collection Room. The mechanical ventilation required rate is 1 CFM/SF, however, ATM recommends increasing this rate as needed, especially in areas with warmer climate. Exhaust should vent through the roof. ATM does not recommend a chilled/refrigerated trash room. A cooled space will not delay decomposition, and will have minimal impacts on odorous trash.
2. Cleaning the Trash Room. Trash rooms should be swept clean of debris on a weekly basis. Trash room wash-downs should be scheduled quarterly. These should include cleaning any trash equipment such as compactors, as well as floors and the walls. If possible, bins or compactor receiver containers should be cleaned at the same time, assuming the containers are empty.(Bins should be cleaned by onsite staff. If hauler-provided dumpsters become especially dirty, they should be replaced by the hauler.)

3. Cleaning the Trash Chute. Almost all trash chutes are equipped with deodorizing and sanitizing (D&S) units, located on the top floor behind an access door. These should be operated on a WEEKLY basis, for ~5 minutes. Trash chutes that are designed for a high level of food wastes often also have a "Chute Janitor" built-in wash down system. These should be operated less often, such as 1x per month. When turned on, they should be allowed to run through their normal Rinse-Wash-Rinse cycle. Even with the presence of the D&S and Chute Janitor systems, all trash chutes should be pressured washed at least once a year to clean materials that adhere to the sides of the chutes. In areas with warmer climate we recommend quarterly wash downs. The chute wash down service should include cleaning the trash discharge room, specifically the floors, walls and the trash compactor.

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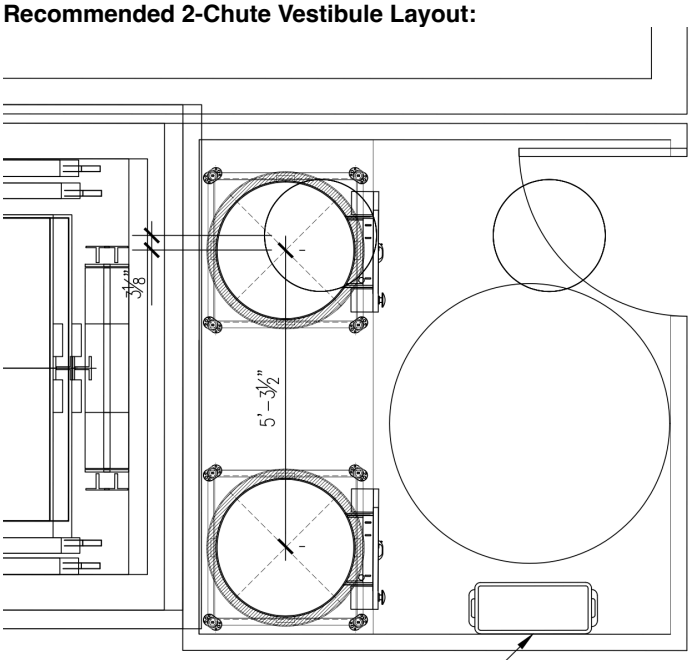
4. Odor Control Systems. Odor control systems can be helpful in controlling odors, but most have limited effectiveness or create other problems. Popular low-cost systems that spray a masking agent into the air, only serve to hide odors in the trash room and not eliminate them. Ozone generators are more effective, but the odor-destroying product they create — ozone — can have deleterious effect on human health and can also destroy compactor hoses and seals. One odor control system that avoids these problems is the Piian Mini Vaporizer. It creates a very fine 50-micron mist that bonds with — and ultimately destroys — odor causing molecules. And unlike ozone, the entirely natural blend of plant extracts, essential oils and emulsifiers which is safe and does not damage equipment.

Recommended Residential Trash System-Equipment:
Below is a summary of the recommended trash system equipment for compacted service.

Chutes	Size	Material	Bin Type	Bin Size Cubic Yards	# of Bins/ Carts
2	(2) 30”	(2) Galvaneal or Aluminized	Front Load	2CY waste 2CY recycle 64G compost	2 waste 2 recycle 4 compost

Recommended 2-Chute Vestibule Layout:



RUBBERMAID SLIM JIM FOR COMPOST. TO BE EMPTIED DAILY INTO TRASH COLLECTION ROOM COMPOST CONTAINER.

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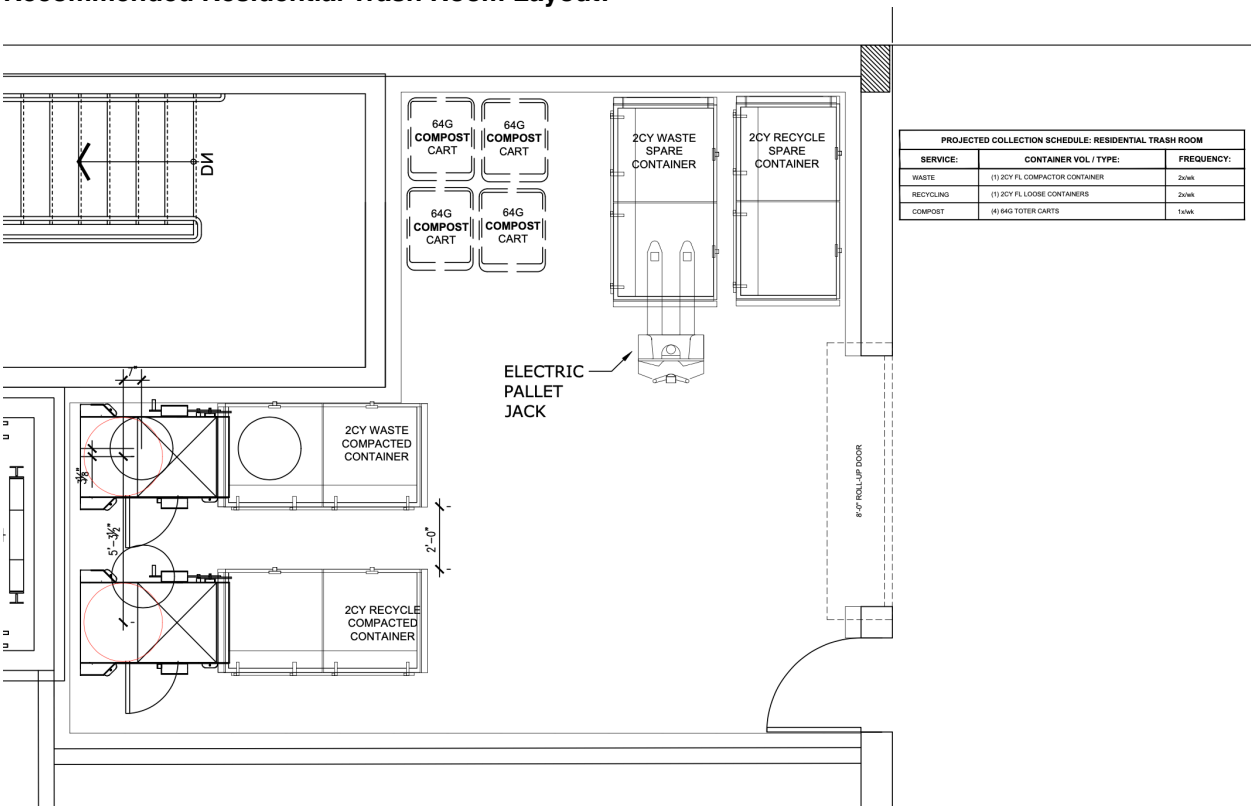
Recommended Residential Trash Room Layout:



PROJECTED COLLECTION SCHEDULE: RESIDENTIAL TRASH ROOM		
SERVICE:	CONTAINER VOL / TYPE:	FREQUENCY:
WASTE	(1) 2CY FL COMPACTOR CONTAINER	2x/wk
RECYCLING	(1) 2CY FL LOOSE CONTAINERS	2x/wk
COMPOST	(4) 64G TOTER CARTS	1x/wk

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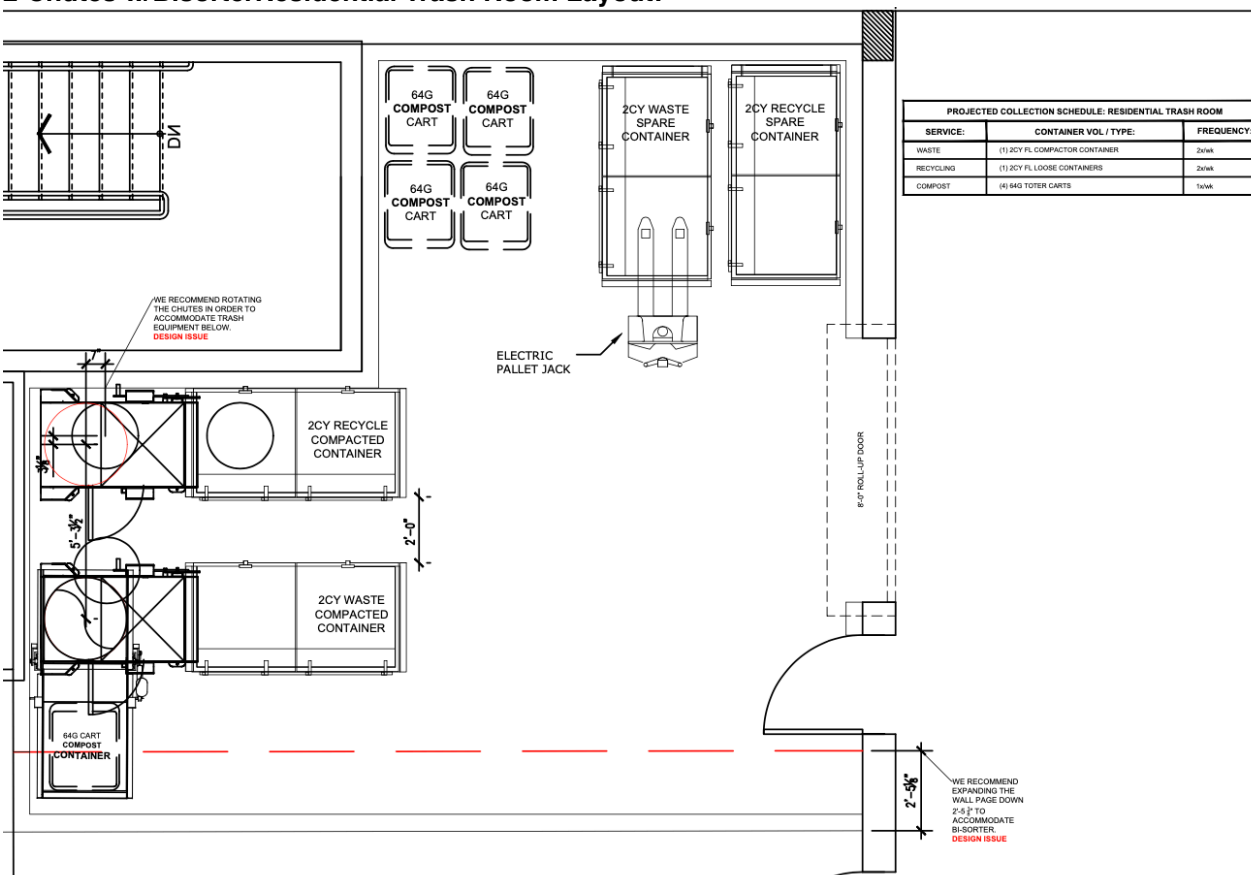
2-Chutes w/BisorterResidential Trash Room Layout:



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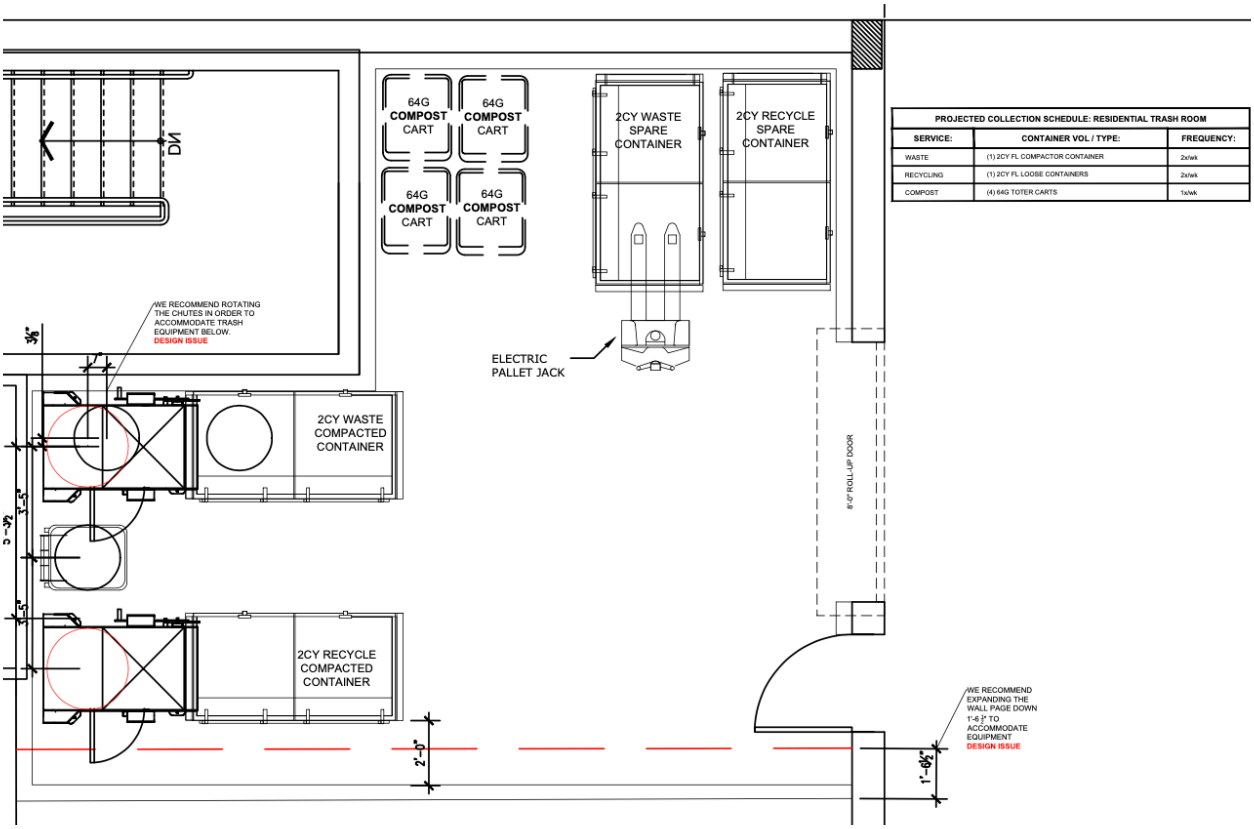
3-Chute Layout Residential Trash Room Layout:



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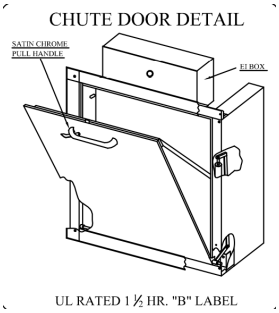
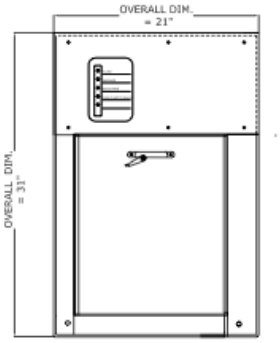
Residential Trash Systems:
Automatic Opening (Pneumatic) Chute Intake Door Recommended to meet Housing Accessibility Section 1138A.4.4.

Manual Chute Intake Door	Air Assist Recycling Chute Intake Door
	

Chute Intake Doors and the Americans' with Disabilities Act of 1990 (ADA)

This is a summary of the current state as we understand it. This is not intended to be legal advice and should not be relied upon with out seeking advice of an ADA expert and your legal counsel.

Per most building codes and FHA requirements, “common use” building areas and building elements, such as a trash rooms and trash chutes are required to be accessible. Specifically, the trash chute door is required to comply with accessibility requirements:

- Clear floor space for a wheel chair at the chute door
- Chute door hardware within reach range
- Chute door hardware complying with operability requirements.

The operability requirements mandate that the chute door hardware must not involve any of the following:

- Two handed operation (such as depressing a button while turning a door handle)
- Tight grasping or pinching
- Twisting of the wrist
- Force to activate the hardware that exceeds 5.0 pounds.

The majority of manual chute intake chute door installations do not comply with the accessibility requirements. Lower quality chute doors require grasping, twisting of the wrist and more than 5 pounds of force to open the chute door. Regardless of what has been installed for the chute door, the chute door is still required by both Code and FHA requirements to comply with accessibility requirements. In the cases where non-compliant chutes have been installed, the building Owner has made management decision to handle the accessibility requirement using other means.

Residential and other buildings are subject to the progressively revised provisions of Federal and Local ADA laws and regulations. To meet the current ADA Standards as they apply to Gravity Trash Chute Intake Doors, the person using the door must not have to grasp, twist, or pinch the control mechanism in

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order to operate the intake door. ADA Standards also limits the maximum operating force required to open an interior door (without specificity to size) to 5 pounds of force. The maximum allowable mounting height of the operating mechanisms (i.e. door handle, etc) of an ADA compliant device is 48" (for side reach revised as of July 1, 2012 from 54") or 48" (for front reach when hopper door is open). The maximum allowable projection of an ADA compliant device is 4" off the projection surface of the wall.

The Wilkinson Signature Series and IDC-2000 Recycling Manually operated doors require the person operating the door to push a membrane selector switch (waste, recycling or compost) and grasp the u-shaped handle, push down on the thumb latch with a finger and pull open the door. This type of intake doors meets the mounting height, the projection, the twist and the pinch requirements but it does not meet the pulling force or the grasp requirement.

Lower quality manual chute intake doors from other manufacturers all use a T-handle or L-handle operating mechanism. These doors fail on 3 counts. They do not meet the pulling force, the grasp and twist requirements. These door are especially hard to operate for persons with arthritis due to the required simultaneously grasping, twisting and pulling motion.

The Wilkinson Signature Series and IDC 2000 Pneumatic Assist door meet all the above requirements since it is operated by pushing a palm button which opens the door automatically. The door closes after a set time and latches so it meets all the current fire code requirements. The air assist mechanism is designed to preclude the need to grasp, twist, or pinch the control mechanism in order to operate the intake door. The push button meets the height, projection and force requirements too. It is conceivable, however that certain disabled persons will still not be able to operate this type of door. ADA law requires one to accommodate all persons with disabilities.

The supra-majority of all new construction within the US still uses manually operated chute intake doors due to the extra upfront (~ $900 per floor) and higher maintenance costs of the Pneumatic Assist Chute Intake type of doors. Many building owners have chosen to only install the pneumatic assist doors in facilities with a high senior or disabled population and in order to meet the above ADA requirements make it their policy to provide a staff person to assist any individual with disabilities who need assistance in operating the manual operated door.

Trash chute systems have been designed to meet the fire and life safety found within Building Codes. All trash chute intake doors are required to be behind a rated fire-barrier and any door in these walls is required to be a fire-rated door.

This fire-rated-door is required to be self-closing (or automatic-closing upon the detection of smoke), so it has a closer mechanism and positive latch. Because this door is designated as a “fire-door”, per most codes and accessibility standards (including ANSI A117.1 used for FHA compliance), the door opening force for this door is exempt from typical accessibility requirements (maximum 5 pounds) and allowed to have a minimum opening force allowed by the authority having jurisdiction (typically a maximum of 15 pounds). The opening force for the required fire-rated doors in front of trash chute intake doors routinely exceeds 5 pounds and is more typically in the 14-18 pound range.

Requiring the chute intake door to meet accessibility requirements while allowing the fire-rated door in front of the trash chute intake door to not meet the pull force and grasp requirements is illogical. If an individual with accessibility needs cannot open the fire door in front of the trash chute intake then they will not be able to access the non compliant chute. Owners should always have a policy in place to provide assistance to any person who can not access the trash chute (with or without automatic opening doors).

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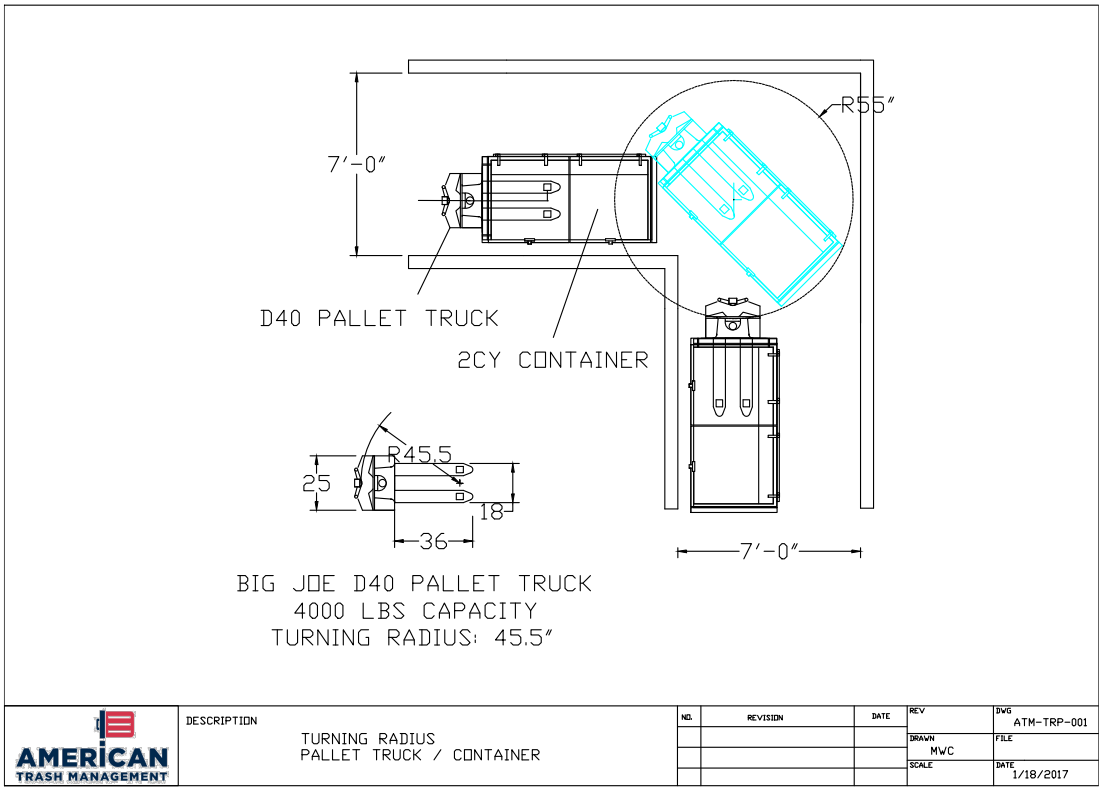
Bin Moving - Electric Pallet Jack



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Optional Rubbermaid "Slim Jim". If compost is collected in the trash vestibules.

3540 Slim Jim® Waste Container

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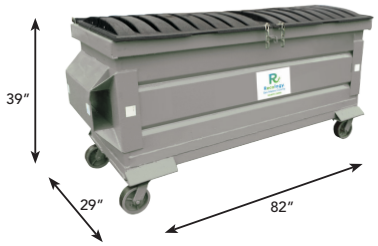
Residential Trash System Equipment:
Note bins provided by Mission Trail are approximately the same dimensions.

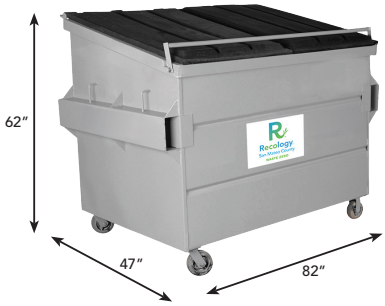
Front Load Bins

1-yard



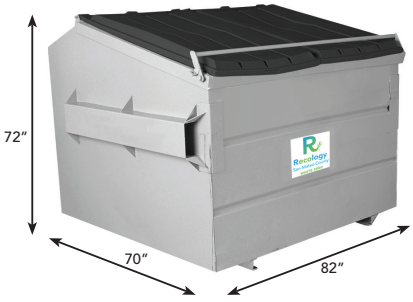
2-yard

3-yard



4-yard

6-yard



8-yard

Dimensions may vary slightly. Measurements shown are exterior dimensions.
Not all bins are available with wheels.

Recology
San Mateo County
WASTE ZERO

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Sample Residential Service Schedule (actual schedule to be determined by hauler and building management)

Recommended Compacted Sample Collection Schedule

Bin Type	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2CY Compacted Waste	1				1	
2CY Compacted Recycle		1				1
64G Compost Cart					4	
Total Bins	**1**	**1**	**0**	**0**	**1**	**1**

Loose Sample Collection Schedule

Bin Type	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3CY Loose Waste	2		1		2	
3CY Loose Recycle	2		1		2	
64G Compost Cart					4	
Total Bins	**4**	**0**	**2**	**0**	**4**	**0**

TRASH SYSTEM SPECIFICATIONS: Provided separately.
1. Section 14 91 82 - Trash Chutes & Intake Doors
2. Section 25 30 00 - Compactor Monitoring System (compacted option)
3. Section 44 31 00 - Odor Control

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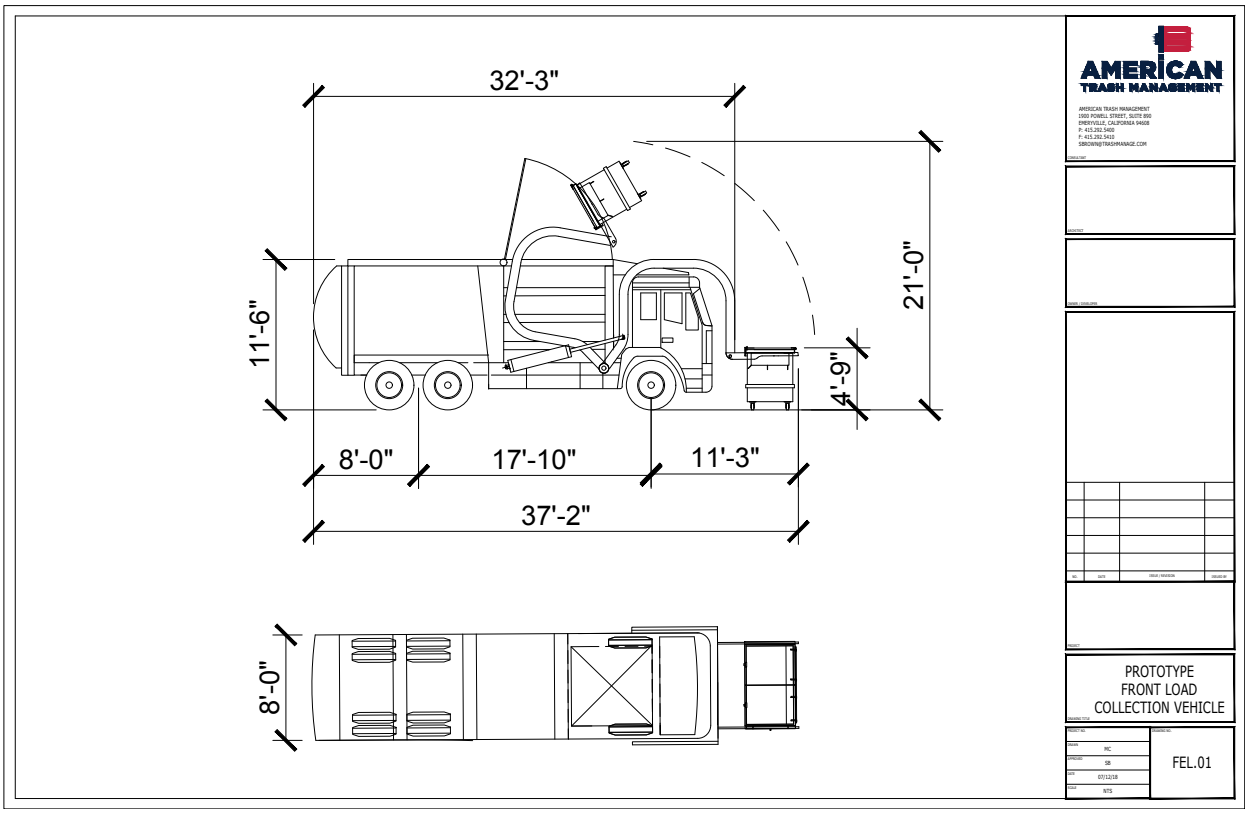
Front Load Trash Truck Noise Levels

Location	Decibel Levels
Banging on Bins when Emptying	100
Behind Garbage Truck (while compacting)	89



AMERICAN TRASH MANAGEMENT

1900 Powell Street, Suite 220
Emeryville, CA 94608
(800) 488-7274 Toll Free USA
(415) 292-5400
(415) 292-5410 Fax
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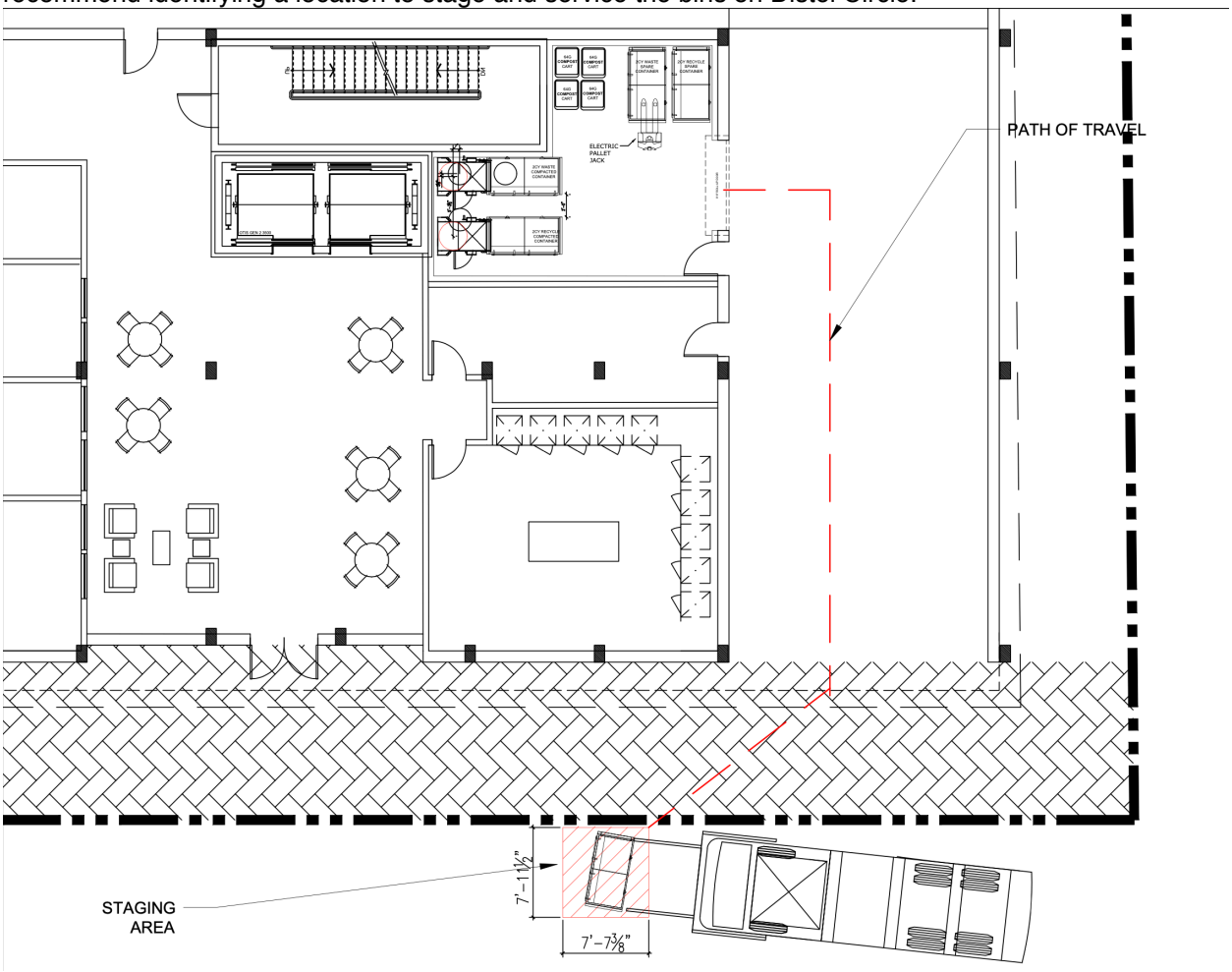
Staging Area: Front load service front load bins requires 25' Clear height (no lights, sprinklers or other items within the service area. This is not possible within the building given the current FF to heights). We recommend identifying a location to stage and service the bins on Distel Circle.



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Waste, Recycling and Compost Analysis: (Rates reflect the rate increase effective July 1, 2020)
Below is a comparative analysis of the disposal and labor costs of handling waste and recycling in loose versus compacted bins. We recommend installing gravity chute-fed compactors under the waste chutes and serious consideration should be given to compacting the recycling stream so as to reduce disposal costs, space requirements and onsite labor costs. The effective service life of a quality compactor can be over 10 years. Please note that the projections below are estimates derived from actual audits of comparable multifamily complexes in California. They are not guaranteed. They are to be used for planning purposes only and may be higher or lower than projected.

TOTAL RESIDENTIAL WASTE AND RECYCLING SYSTEM ANALYSIS

		Units:	**90**		
	Volume Waste:		0.16	cubic yard/week/unit	32.32
	Volume Recycling:		0.16	cubic yard/week/unit	32.32
	Volume Compost:		0.012	cubic yard/week/unit	2.424
	Compaction Ratio		4	to 1	
	Staff Labor Rate		$20.00	per hour - 1 person	
	Time move bins		0.5	hr to move to unloading area & back	
	Rake-Rotate bins		0.15	hr to go to each bin rake or rotate	
ASSUMPTIONS:	# of Trash Rooms		1		
	Compacted Service		2	cubic yard front load bins	
	Loose Waste Service		3	cubic yard front load bins	
	Loose Recycling Service		3	cubic yard front load bins	
	Loose Compost Service		0.32	cubic yard carts (64 G Toter Carts)	

COST BENEFIT CALCULATIONS:	PROJECTED	PROJECTED	PROJECTED
SERVICE-Waste	Loose	Compacted	Compacted
SERVICE-Recycling	Loose	Loose	Compacted
Loose Waste Volume - CY	14.4	3.6	
Compacted Waste Volume - CY			3.6
Loose Recycling Volume - CY	14.4	14.4	
Compacted Recycling Volume - CY			3.6
Loose Compost Volume - CY	1.1	1.1	1.1
Waste Bins/week	5	2	2
Recycling Bins/week	5	5	2
Compost carts/week	4	4	4
Containers/week/trash room	14	11	8
SYSTEM CAPITAL COST	$0.00	$25,000.00	$50,000.00
WASTE COST/MONTH	$2,286.54	$760.70	$760.70
RECYCLING COST/MONTH	$0.00	$0.00	$0.00
COMPOST COST/MONTH	$0.00	$0.00	$0.00
TRASH COST/MONTH	$2,286.54	$760.70	$760.70
COMPACTION SAVINGS/MONTH	$0.00	$1,525.84	$1,525.84
STAFF LABOR COST/MONTH	$788.06	$619.19	$450.32
STAFF SAVINGS/MONTH	$0.00	$168.87	$337.74
NET MONTHLY TRASH COSTS	$3,074.60	$1,379.89	$1,211.02
Monthly Trash Cost per Unit	$34.16	$15.33	$13.46
PAYBACK-MONTHS	N/A	15	27

CARDBOARD ANALYSIS 315 BOXES/WK

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WASTE AND RECYCLING RATES (PARTIAL) CURRENT RATES - REFLECT CHANGES EFFECTIVE 1/2022

City:	Los Altos			
Franchise:	Mission Trail			
Multi-Family/Commercial Loose Front Load Waste Rates*:				
Frequency/Size: x/wk-CY Size	1	2	3	64 Gallon
1 x Week	$165.35	$330.75	$457.29	$84.28
2 x Week	$330.75	$661.45	$914.60	$168.58
3 x Week	$496.08	$992.16	$1,371.93	$252.85
4 x Week	$661.45	$1,322.89	$1,829.23	$337.18
5 x Week	$826.82	$1,653.62	$2,286.54	$421.44
6 x Week	$992.16	$1,984.34	$2,743.83	$505.74
Bin Push Rates Up to 4CY loose	**0-25 feet**	**Per month for each 25 feet over**		
	No Charge	$31.13		
*Rate includes an appropriate level of recycling and organics service for no additional charge.				
2018 Multi-family/Commercial Compacted Front Load Waste Volume*:				
Container Size-CY	2			
1 x Week	$383.87			
2 x Week	$760.70			
3 x Week	$1,151.57			
4 x Week	$1,535.43			
5 x Week	$1,919.26			
6 x Week				
*There is no charge for compacted recycling.				
Chute Fed Compactor Cost	$25,000.00	A500, 2-2CY Towable bins-Thru-wall intakes, tax, ship Ins		
Chute Fed Compactor Cost	$25,000.00	A500, 2-3CY Towable bins-Thru-wall intake door, tax, shi		

Recommended Trash System Budget

Estimate $TBD.

Trash System Equipment Specifications: - Provided separately, listed below:
4. Section 44 31 00 - Odor Control

ATTACHMENT K

Expanding the range of opportunities for all by developing, managing and promoting quality affordable housing and diverse communities.

Distel Circle Apartments

Proposal Statement – Planning Application

February 28, 2022

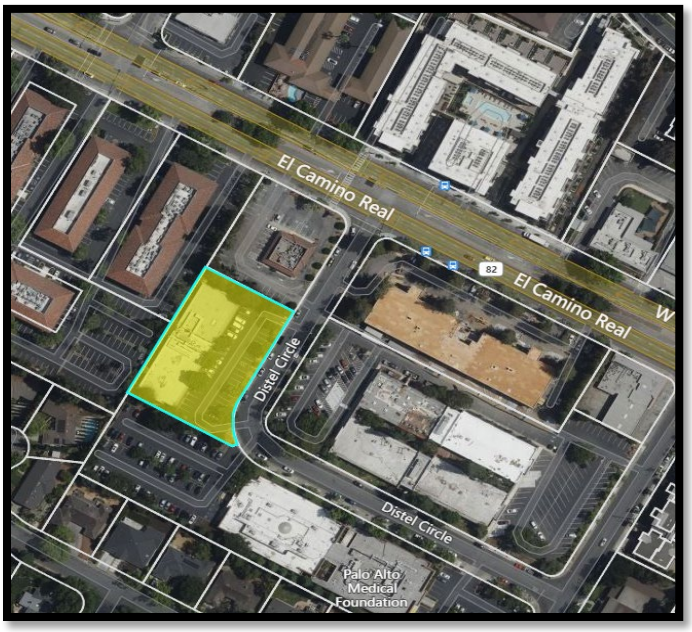
Project:	**90-Unit Multifamily Affordable Housing Community**
Location:	330 Distel Circle, Los Altos
Current Landowner:	Midpen Regional Open Space District
Applicant/Developer:	EAH Housing

BACKGROUND

The County of Santa Clara is under contract to purchase 330 Distel Circle (APN# 170-04-051), a 0.87-acre site containing a 12,120 sq ft single story office building ("Property"). EAH proposes to demolish existing office building and to develop a 90 unit, permanently affordable deed-restricted multifamily community. The proposed development will also have about 10,130 sq ft of amenity space, 90 parking stalls and 45 bicycle stalls.

In alignment with the MOU between the City of Los Altos and the County of Santa Clara, we are in a public-private partnership between EAH, the County, and the City of Los Altos that will create a beautiful, inclusive, and healthy rental community offering permanently affordable housing to income and program-eligible residents.

PROPERTY CHARACTERISTICS



The Property is located a half block from the El Camino Real corridor and is within the El Camino Real Special Planning Area delineated within the current City of Los Altos General Plan. The site is conveniently located in proximity to the Sutter Health-affiliated Palo Alto Medical Foundation and within safe walking distance to public transit and commercial, service, and recreational amenities along the El Camino corridor. The Property is located within a Transit Priority Area, as identified by The Metropolitan Transportation Commission (MTC) and is within one-half mile from a Major Transit Stop located at El Camino Real and Showers Drive. The Property is a generally flat parcel bounded by Distel Circle to the East, and commercial properties to the North, South, and West. Single family homes are along Marich Way to the South and Southwest of the Property but do not directly abut the subject parcel.

Our proposal seeks to achieve the following key outcomes:

- A community comprised of diverse tenants who qualify under CA Low Income Housing Tax Credit guidelines, and which creatively integrates affirmative set asides for households meeting the program criteria for Permanent Supportive Housing
- An environmentally sustainable building program designed to LEED Silver or comparable certification
- An economically viable and intentionally flexible building program designed to factory-built modular or panelized specification and incorporates a mechanical parking system which maximizes ground floor uses and site efficiency.

The site is not in a very high fire severity zone, or wetlands and is not considered a hazardous waste site. The subject parcel is in Flood Zone X (0.2% chance of flooding). The parcel is not in a delineated earthquake fault zone nor does the subject parcel have a stream or other resource that may be subject to a streamed alteration agreement.

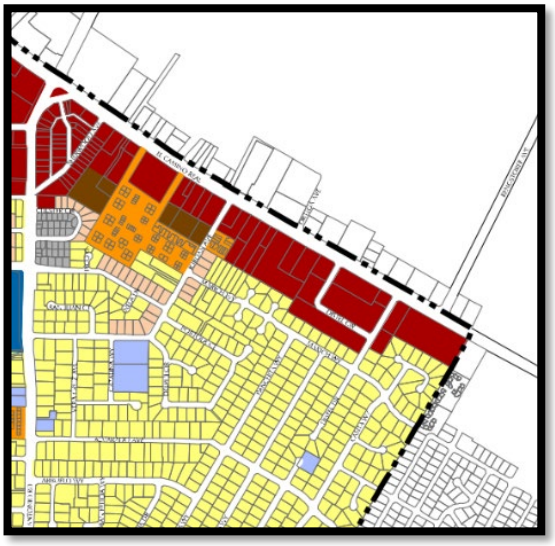
DEVELOPMENT PROPOSAL

Note: On January 11, 2022, the City held a publicly notified Joint Study Session with the City Council, the Planning Commission, EAH and its design team. This current Proposal Statement and its associated plans and materials incorporate various edits in response to comments and direction received through the Joint Study Session.

The development proposal delivers measurable outcomes in relation to neighborhood densification and diversification, sustainable and affordable housing, and mass transit use and mobility. EAH proposes:

- A public-private partnership with the City of Los Altos which efficiently streamlines entitlement approvals, as necessary to promptly secure commitments of local, State and Federal financing that will move the project to shovel-ready status
- Demolish the existing building for the development of a 5-story, Type III building containing 90 apartments (a mix of studio, 1-, 2-, and 3-bedrooms) and ground floor residential serving amenity space. The amenity space will include lobby, community common area, laundry room, mail/package area, bicycle storage, and offices for property management and resident services.
- A permanently affordable rental community incorporating a mix of unit types and a range of rent tiers that supports a diversity of income-eligible tenants earning incomes from 30% to no more than 80% of Area Median Income (AMI).

***Land-Use*:**



As proposed, the 330 Distel Circle development will advance a great number of plans, policies, and objectives adopted by the City of Los Altos and other regional agencies, including:

- Los Altos General Plan - Land Use Element Goals
- Los Altos General Plan - Housing Element Goals:
- Los Altos Climate Action Plan
- Los Altos Reach Codes
- Affordable Housing Ordinance
- Santa Clara County Office of Supportive Housing
- ABAG Plan Bay Area 2050

Los Altos Land Use Element encourages a variety of residential housing opportunities by allowing residential uses with adequate parking in appropriate commercial areas, including sections along El Camino Real. The Land Use Element also identifies the Special Planning Area of El Camino Real with a

specific goal to improve the land use mix along El Camino Real to ensure fiscal stability, encourage affordable housing, and allow for development intensification along this corridor in a manner that is compatible with the adjacent residential neighborhoods and the local circulation system.

The Property carries a General Plan designation of Thoroughfare Commercial which permits affordable residential opportunities along El Camino Real Corridor. The Property is zoned CT – Commercial Thoroughfare District which has the specific purpose to encourage a variety of residential developments, including affordable housing developments. Per Los Altos Zoning Code, upon granting of a use permit, Multiple-family housing shall be permitted in the CT District. The proposed development is consistent with the underlying land-use.

We anticipate that the proposed development will either comply with the CEQA Class 32 Infill Development criteria and requirement for a categorical exemption or will meet CEQA approval through a Mitigated Negative Declaration.

Design:

The development proposed for 330 Distel Circle is designed as a walkable, equitable, and integral addition to a lively and thriving El Camino Real corridor. This project includes 90 rental units in a single 5 story building. As previously noted, the project as proposed is consistent with existing land use designations. The apartments include a range of studios (465 sq ft), One-Bedroom (645 sq ft), Two-Bedroom (965 sq ft) and Three-Bedroom Plans (1,105 to 1,175 sq ft.). The Gross Building Area is 114,970 sf with 96,840 sf dedicated to net rentable residential area. Planned amenities include Residential Community Center, exterior courtyards, a co-working area, Bike Storage, and secured parking. The building will include

elevator access to all floors. The project will include vehicular access to a private and secure 90-stall parking area with access provided by a gated entry located on Distel Circle.

AFFORDABILITY PROGRAM

The proposed development is designed to provide a beautiful and healthy rental community and is currently modeled to provide affordable rents ranging from 30% AMI up to 80% AMI. As currently structured, the project provides rents affordable to households earning incomes ranging from ELI to LI, with an average affordability of approximately 45% AMI. Rental rates and regulatory use restrictions are proposed to be consistent with the terms, conditions, and underwriting requirements of the County of Santa Clara Measure A program, the County of Santa Clara Sect. 8 Project Based Voucher program, CA HCD soft-loan programs, and the 4% Low Income Housing Tax Credit program. Accordingly, regulatory agreements will be recorded against the property to ensure continued affordability and restricted use over no less than a 55-year term.

As currently modeled, 45 units (or 50% of the total units) will have rents affordable to families or individuals earning no more than 30% AMI, 12 units will have rents up to 50% AMI, 25 units will have rents up to 60% AMI and 6 units will have rents up to 80% AMI. Based on these proposed rent levels, the proposed development will comply with the Los Altos Affordable Housing Ordinance.

1. Distel Drive Elevation

PROJECT CONTACTS

Development, Management, Resident Services
EAH Housing

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welton.jordan@eahhousing.org

Steve Pratt
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Design Consultants
Architect/Urban Design
KTGY Architecture
Lily Ciammaichella AIA, LEED BD+C
(510) 463-2045
lciammaichella@ktgy.com

Civil Engineering
BKF Engineers
Scott Schork, PE
(408) 467-9126
sschork@BKF.com

ATTACHMENT L

Agenda Item # 10.

SANTA CLARA COUNTY FIRE DEPARTMENT
14700 Winchester Blvd., Los Gatos, CA 95032 | (408) 378-4010 | www.sccfd.org

PLAN REVIEW No. 22 2476

BLDG PERMIT No.

DEVELOPMENTAL REVIEW COMMENTS

Plans and Scope of Review:

This project shall comply with the following:

The California Fire (CFC) & Building (CBC) Code, 2019 edition, as adopted by the City of Los Altos Municipal Code (LAMC), California Code of Regulations (CCR) and Health & Safety Code.

The scope of this project includes the following:

Proposed new 116,040 SF five-story 90 unit multifamily residential facility with one-level of underground parking and one level of commercial space.

Plan Status:

Plans are **APPROVED** with the following conditions.

Plan Review Comments:

1. **Review of this Developmental proposal is limited to acceptability of site access, water supply and may include specific additional requirements as they pertain to fire department operations, and shall not be construed as a substitute for formal plan review to determine compliance with adopted model codes. Prior to performing any work, the applicant shall make application to, and receive from, the Building Department all applicable construction permits.**

2. **Fire Sprinklers Required:** *(As noted on Sheet A0.4)* Approved automatic sprinkler systems in new and existing buildings and structures shall be provided in the locations described in this Section or in Sections 903.2.1 through 903.2.18.

3. **Fire Alarm Requirements:** *(As noted on Sheet A0.4)* Refer to CFC Sec. 907 and the currently adopted edition of NFPA 72. Submit shop drawings (3 sets) after planning permit approval and a permit application to the SCCFD for approval before installing or altering any system. Call (408) 341 -4420 for more information.

City	PLANS	SPECS	NEW	RMDL	AS	OCCUPANCY	CONST. TYPE	ApplicantName	DATE	PAGE
LOS	☒	☐	☒	☐	☒	B/R2/S	IIIA	Ktgy Architecture	07/11/2022	1 OF 5

SEC/FLOOR	AREA	LOAD	PROJECT DESCRIPTION	PROJECT TYPE OR SYSTEM
5+1UG	116,040		Commercial Development	Design Review

NAME OF PROJECT	LOCATION
EAH HOUSING	330 Distel Circle Los Altos

TABULAR FIRE FLOW	REDUCTION FOR FIRE SPRINKLERS	REQUIRED FIRE FLOW @ 20 PSI	BY
5000	75%	1250	Flanagan, Caleb

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PLAN REVIEW No. 22 2476

BLDG PERMIT No.

DEVELOPMENTAL REVIEW COMMENTS

4. **Two-way communication system:** *(As noted on Sheet A0.4)* Two-way communication systems shall be designed and installed in accordance with NFPA 72, the California Electrical Code, the California Fire Code (2019 edition), the California Building Code (2019 edition), and the city ordinances where two way system is being installed, policies, and standards. Other standards also contain design/installation criteria for specific life safety related equipment. These other standards are referred to in NFPA 72.

5. **Emergency responder radio coverage in new buildings:** *(As noted on Sheet A0.4)* All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems.

6. **Required Aerial Access:** Where required: Buildings or portions of buildings or facilities exceeding 30 feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with approved fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway. 2. Width: *Fire apparatus access roads shall have a minimum unobstructed width of 26 feet* (7925) in the immediate vicinity of any building or portion of building more than 30 feet (9144 mm) in height. 3. *Proximity to building: At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572) and a maximum of 30 feet (9144mm) from the building, and shall be positioned parallel to one entire side of the building, as approved by the fire code official.* [CFC Chp. 5 and SCCFD SD&S A-1]. *Aerial access is required for this building.*

-Show on the plans that the area not compliant with aerial apparatus requirements will be red curbed and/or that signs stating "fire lane" will be installed ***(Shown on Sheet A0.4)****.*

-Provide building/street section view showing how the aerial ladder access will be achieved and any landscaping that may obstruct access ***(Shown on Sheet A0.5)****.*

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PLAN REVIEW No. 22 2476

BLDG PERMIT No.

DEVELOPMENTAL REVIEW COMMENTS

7. **Buildings and Facilities Access:** Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or with the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. [CFC, Section 503.1.1]. *Distances up to 300 feet are justified on Sheet A0.4. Elements conductive to firefighter safety include a NFPA 13 fire sprinkler system, 4 foot navigable path around the exterior of the building, narrow canopied trees and landscaping, and standpipes on the West side of the building.*

8. **Required Fire Flow:** The fire flow for this project is 5,000 GPM at 20 psi residual pressure. Since an automatic fire sprinkler system will be installed, the fire flow will be reduced by 75%, establishing a required adjusted fire flow of 1,250 GPM at 20 psi residual pressure. Note: The minimum required number and spacing of the hydrants shall be in accordance with CFC Table C102.1. *Will serve letter provided by CalWater.*

9. **Public Fire Hydrant Proposed:** Provide a public fire hydrant at a final location to be determined jointly by the Fire Department and CalWater. Fire hydrants shall be provided along required fire apparatus access roads and adjacent public streets. CFC Sec. 507, and Appendix B and associated Tables, and Appendix C. *A new public fire hydrant is proposed on Sheet A0.4 and A1.1. Prior to installation, applicant shall submit fire hydrant spotting plans to SCCFD to confirm final location. Will serve letter provided by CalWater.*

10. **Standpipes Required:** Standpipe systems shall be provided in new buildings and structures where the floor level of the highest story is located more than 30 feet above the lowest level of fire department vehicle access. Fire hose threads used in connection with standpipe systems shall be approved and shall be compatible with fire department hose threads. The location of fire department hose connections shall be approved. Standpipes shall be manual wet type. In buildings used for high-piled combustible storage, fire hose protection shall be in accordance with Chapter 32. Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14 as amended in Chapter 47. CFC Sec. 905.

City	PLANS	SPECS	NEW	RMDL	AS	OCCUPANCY	CONST. TYPE	ApplicantName	DATE	PAGE
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SEC/FLOOR	AREA	LOAD	PROJECT DESCRIPTION	PROJECT TYPE OR SYSTEM
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PLAN REVIEW No. 22 2476

BLDG PERMIT No.

DEVELOPMENTAL REVIEW COMMENTS

11. **Fire Department Connection:** The fire department connection (FDC) for the structure in support of the sprinkler system shall be installed at the street on the street address side of the building. It shall be located within 100 feet of a public fire hydrant and within ten (10) feet of the main PIV (unless otherwise approved by the Chief due to practical difficulties). FDC's shall be equipped with a minimum of two (2), two-and-one-half (2- 1/2") inch national standard threaded inlet couplings. Orientation of the FDC shall be such that hose lines may be readily and conveniently attached to the inlets without interference. FDC's shall be painted safety yellow [SCCFD, SP-2 Standard]. **FDC shall be located within 100 feet of the public hydrant.**

12. **Emergency Gate/Access Gate Requirements:** Gate installations shall conform with Fire Department Standard Details and Specification G-1 and, when open shall not obstruct any portion of the required 20' width for emergency access roadways. Locks, if provided, shall be fire department approved prior to installation. Gates across the emergency access roadways shall be equipped with an approved access device. If the gates are operated electrically, an approved Knox key switch shall be installed; if they are operated manually, then an approved Knox padlock shall be installed. CFC Sec. 503.6 and 506. *As shown on Sheet A0.4.*

13. Roof access, pathways and spacing is required around solar photovoltaic power systems in accordance with CFC 1204. Review of required pathways will be completed as part of the building permit plan review.

14. **Construction Site Fire Safety:** All construction sites must comply with applicable provisions of the CFC Chapter 33 and our Standard Detail and Specification S1-7. Provide appropriate notations on subsequent plan submittals, as appropriate to the project. CFC Chp. 33.

15. **Timing of installation**: When fire apparatus access roads or a water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2. Construction documents. Construction documents for proposed fire apparatus access, location of fire lanes, security gates across fire apparatus access and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction. CFC Sec. 501.3, 501.4.

City	PLANS	SPECS	NEW	RMDL	AS	OCCUPANCY	CONST. TYPE	ApplicantName	DATE	PAGE
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PLAN REVIEW No. 22 2476

BLDG PERMIT No.

DEVELOPMENTAL REVIEW COMMENTS

16. **Water Supply Requirements:** Potable water supplies shall be protected from contamination caused by fire protection water supplies. It is the responsibility of the applicant and any contractors and subcontractors to contact the water purveyor supplying the site of such project, and to comply with the requirements of that purveyor. Such requirements shall be incorporated into the design of any water-based fire protection systems, and/or fire suppression water supply systems or storage containers that may be physically connected in any manner to an appliance capable of causing contamination of the potable water supply of the purveyor of record. Final approval of the system(s) under consideration will not be granted by this office until compliance with the requirements of the water purveyor of record are documented by that purveyor as having been met by the applicant(s). 2019 CFC Sec. 903.3.5 and Health and Safety Code 13114.7.

17. **Address identification:** New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained. CFC Sec. 505.1.

This review shall not be construed to be an approval of a violation of the provisions of the California Fire Code or of other laws or regulations of the jurisdiction. A permit presuming to give authority to violate or cancel the provisions of the fire code or other such laws or regulations shall not be valid. Any addition to or alteration of approved construction documents shall be approved in advance [CFC, Ch.1, 105.3.6].

City	PLANS	SPECS	NEW	RMDL	AS	OCCUPANCY	CONST. TYPE	ApplicantName	DATE	PAGE
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TABULAR FIRE FLOW	REDUCTION FOR FIRE SPRINKLERS	REQUIRED FIRE FLOW @ 20 PSI	BY
5000	75%	1250	Flanagan, Caleb

RESOLUTION NO. 2022-13

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS GRANTING AN EXCEPTION FROM THE CITY'S STORY POLE POLICY TO THE PROPOSED DEVELOPMENT AT 330 DISTEL CIRCLE AND MAKING FINDINGS OF CEQA EXEMPTION

WHEREAS, on March 22, 2022 the City Council adopted an Open Government Policy that included a requirement for all multi-story commercial, multiple-family, mixed-use and public facility development projects subject to Planning Commission and City Council review to erect story poles as part of the application and public review process (the "Story Pole Policy"); and

WHEREAS, the City Council may grant exceptions to the Story Pole Policy due to a public health or safety concern, or if such an installation would impair the use of existing structure(s) or the site to the extent it would not be able to be occupied and the existing business and/or residential use would be infeasible; and

WHEREAS, by letter February 17, 2022 the applicant for the proposed development at 330 Distel Circle submitted a request for an exception from the City's Story Pole Policy due to public health and safety concerns, impairment of the existing structures and site related to placement of story poles in close proximity to drive aisles and affordable housing expediated timeline request; and

WHEREAS, this action The approval of the story poll exception is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15061(b)(3) in that it can be seen with certainty that not erecting temporary structures would not result in a significant environmental effect, and none of the circumstances set forth in CEQA Guidelines Section 15300.2 applies.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Los Altos hereby approves the applicant's request for an exception from the installation of story poles per the City's Story Pole Policy based on the following finding:

1. There is a public health and safety concern or impairment of the existing site or buildings due to the placement of the story poles and guy wires posing a threat of physical harm to users and a safety concern if a story pole or guy wire were to cause damage to personal property or result in personal injury to an individual attempting to access the site; and

2. Installation of story poles per the City's Story Pole Policy would require additional time and resources, including impediment to current operations of the Mid-Peninsula Open Space District and cause significant delay in transfer of current ownership to be able to access and install the poles; and

3. The installation of the Story Poles causing significant delay in the timelines of approval of the 100 % affordable housing project seeking density bonus and concession causing delays in securing affordable housing funding in a timely manner; and

4. To direct staff to work with the applicant to create alternatives that show different angles of the building including dimensions at pedestrian eye level renderings, particularly to include a rendering from the residential neighborhood behind the proposed parcel to be showcased on the on-site billboard for noticing.

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a meeting thereof on the 22nd day of March, 2022 by the following vote:

AYES:	Council Members Fligor, Weinberg and Vice Mayor Meadows
NOES:	Council Member Lee Eng and Mayor Enander
ABSENT:	None
ABSTAIN:	None

Anita Enander, MAYOR

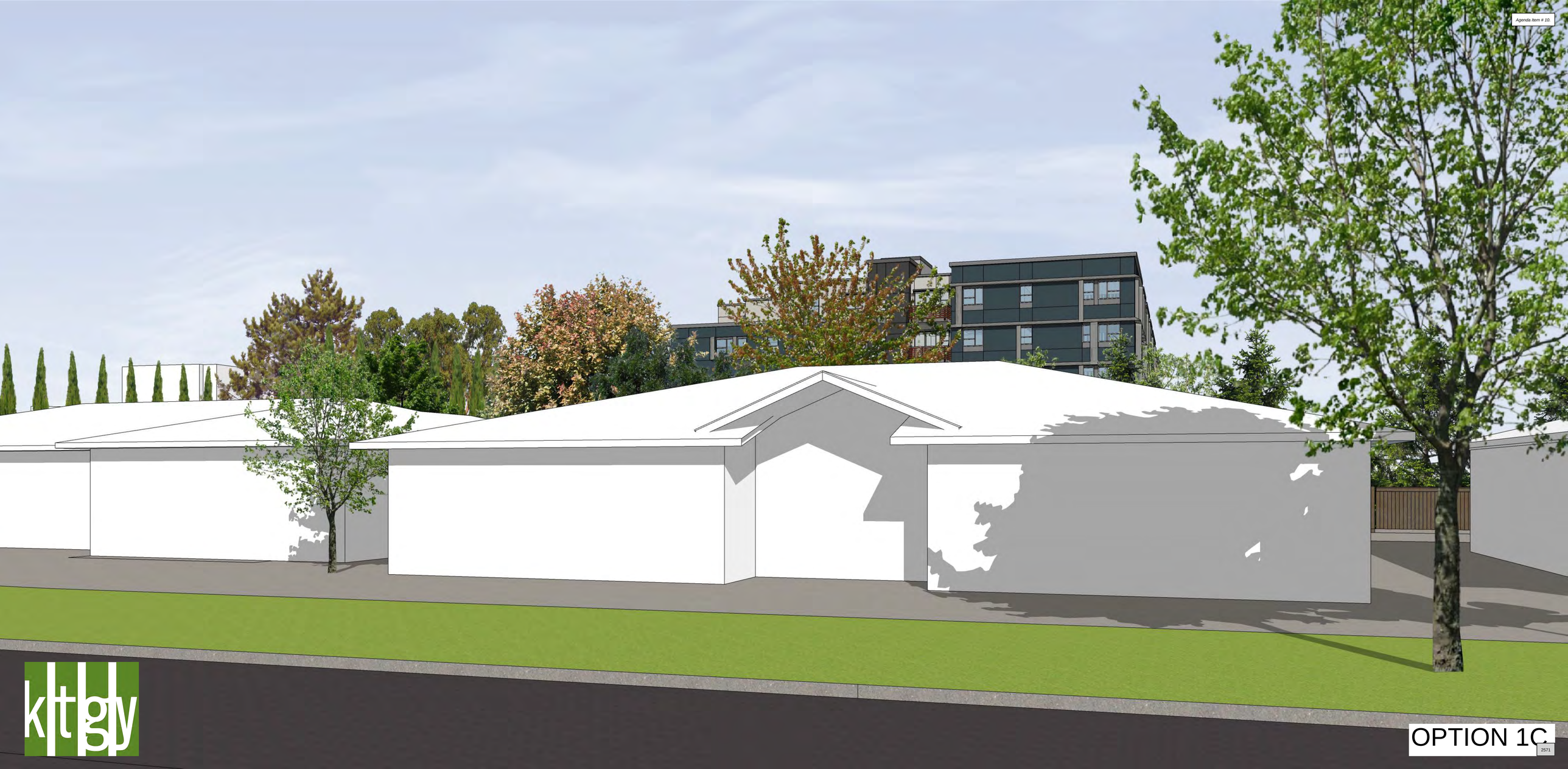
Attest:

Andrea Chelemengos, MMC, CITY CLERK

1A
1B
1C
2
3
4
March Way
Panchita Way
Distel Circle
El Camino Real
10'-11"
222'-6"
10'-8"
11'-0"
0
16
32
64
KEY MAP
2568

OPTION 1A

OPTION 1B



OPTION 1C

VIEW 2 -
DISTEL CIRCLE STREETSCAPE

VIEW 3 -
DISTEL CIRCLE BUILDING ENTRY

VIEW 4 -
DISTEL CIRCLE AERIAL VIEW

Marich Way
1
Marich Way
Distel Circle
KEY M
VIEW 1
ALONG MARICH WAY
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Landscape Architecture + Design
BKF

EAH HOUSING

VIEW 2
DISTEL CIRCLE STREETSCAPE

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THE COUNTY OF SANTA CLARA

VIEW 4
DISTEL CIRCLE AERIAL VIEW

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NOTICE OF DEVELOPMENT PROPOSAL: 330 DISTEL CIRCLE

PROJECT DESCRIPTION:

The proposed building is 5 stories with a stepdown in the building to 4 levels at the western corner of the site. The building is 100% affordable with 90 units and 90 parking stalls.

Key sustainable features include: mass timber at the ground level, solar shading, water efficient landscape, and the potential for solar photovoltaics.

APPLICANT:
Welton Jordan, Chief Real Estate Development Officer
415-295-8876
welton.jordan@eahhousing.org

OWNER:
Allen Ishibashi, Sr. Real Property Agent
650-625-6546
aishibashi@openspace.org

PROJECT PLANNER:
Radha Hayagreev, Senior Consulting Planner / Urban Designer
rhayagreev@losaltosca.gov

WE WOULD LIKE TO HEAR FROM YOU!

WEBPAGE: www.eahhousing.org/330distelcircle
EMAIL: 330distelcircle@eahhousing.org

Meeting Notice

Meeting Notice

DISTEL CIRCLE ELEVATION

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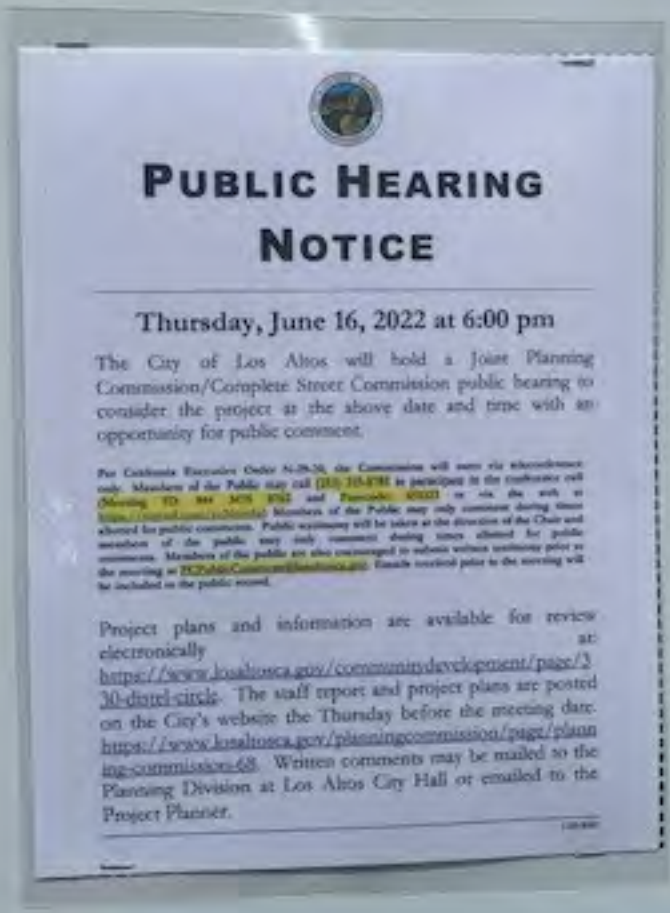
VIEW 3
DISTEL CIRCLE BUILDING ENTRY

NOTICE OF DEVELOPMENT PROPOSAL: 330 DISTEL CIRCLE

GE: www.eahhousing.org/330distelcircle

330distelcircle@eahhousing.org

Agenda Item # 10.



PUBLIC HEARING NOTICE

Thursday, June 16, 2022 at 6:00 pm

The City of Los Altos will hold a Joint Planning Commission/Complete Street Commission public hearing to consider the project at the above date and time with an opportunity for public comment.

Per California Executive Order N-29-20, the Commission will meet via teleconference only. Members of the Public may call [illegible] to participate in the conference call (Meeting ID: [illegible]) and Passcode: [illegible] or via the web at [illegible]. Members of the Public may only comment during times allotted for public comments. Public testimony will be taken at the direction of the Chair and members of the public may only comment during times allotted for public comments. Members of the public are also encouraged to submit written testimony prior to the meeting at [illegible]. Emails received prior to the meeting will be included in the public record.

Project plans and information are available for review electronically at: https://www.losaltosca.gov/communitydevelopment/page/330-distel-circle. The staff report and project plans are posted on the City's website the Thursday before the meeting date. https://www.losaltosca.gov/planningcommission/page/planning-commission-68. Written comments may be mailed to the Planning Division at Los Altos City Hall or emailed to the Project Planner.

Meeting Notice

330 DISTEL CIRCLE

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330 DISTEL CIRCLE
LOS ALTOS # 2021-0042

SUBMITTAL #3
JUNE 3, 2022

COVER SHEET

A0.0

330 DISTEL CIRCLE, LOS ALTOS

PROJECT DATA

330 Distel Circle

Site Area	0.87 Acres
Density	103.45 d.u./acre
Lot Coverage	75%

UNIT MIX

Unit	Description	NRSF	TYPE III Level 1	Level 2	Level 3	Level 4	Level 5	Studio	1Bd	2Bd	3Bd	Unit Mix % of Mix	Total % of Mix	Total Unit Area (*NRSF)
P0-1	Studio / 1Ba	465	0	6	6	6	6	24				27%	26.7%	11,160
P1-0	1Bd / 1Ba	645	0	5	5	5	5		20			22%	22.2%	12,900
P2-0	2Bd / 2Ba	965	0	5	6	6	6			23		26%	25.6%	22,195
P3-0	3Bd / 2Ba	1175	0	4	4	4	3				15	17%	25.6%	17,625
P3-1	3Bd / 2Ba	1105	0	2	2	2	2				8	9%		8,840
Total			**0**	**22**	**23**	**23**	**22**	**24**	**20**	**23**	**23**	**100%**	**100%**	**72,720**

*NRSF: To outside face of stud + 1" air gap; does not include balcony — **90 Total Units**** — **808** AVG NRSF

**100% of units are below market rate, exluding managers units (2).

Building Amenity	
Level 1: Ground Level Amenity	9,260 SF
Level 2: Amenity	870 SF
Total	**10,130 SF***

* Indicates net square footage, to inside face of stud, includes amenity, operations, laundry, bike storage and repair. Does not include circulation, cores, lobby

Gross Building Areas	Residential	Garage	
Level 1	9,730 SF	18,130 SF	
Level 2	22,340 SF	0 SF	
Level 3	22,340 SF	0 SF	
Level 4	22,340 SF	0 SF	
Level 5	21,160 SF	0 SF	
Total	97,910 SF**	18,130 SF**	**116,040 SF****

** Indicates gross square footage, measured to the outside surfaces of exterior walls, including halls, stairways, elevator shafts, ducts, service and mechanical equipment rooms. Does not include: porches, verandas, balconies, alcoves, or other similar elements, which are open on at least one side

Parking Summary

Parking Required	Stalls
Standard Stalls	0
Total	**0** TOTAL STALLS REQUIRED*
	0.00 STALLS/UNIT

* Per Density Bonus Ordinance in Los Altos Municipal Code, Chapter 14.28

Parking Provided	Stalls
Mechcanical parking lift stalls- 2 above + 1pit	69
Mechcanical parking lift stalls- 2 above	13
Unassigned/EV Stalls* (3 Accessible stall,5 Standard)	8
Total	**90** TOTAL STALLS PROVIDED
	1.00 STALLS/UNIT

* See A2.1 - Building Plan Level 1 for EV ready parking information

Required Bike Parking	Stalls
Class I (long-term secured bike parking)	30
Class II (short-term racks)	6
Total	**36** TOTAL STALLS PROVIDED
	0.4 STALLS/UNIT

Provided Bike Parking	Stalls
Provided	45
Total	**45** TOTAL STALLS PROVIDED
	0.5 STALLS/UNIT

Open Space Summary

Required Open space	SF
Private Open Space	4,500
Common Open Space	3,200
Total	**7,700** SF

Provided Open space	SF
Private Open Space	2,550
Open Space @ Ground Level*	3,690
Courtyard @ Level 2	5,530
Total	**11,770** SF

* Ground level open space includes area from building to property line. Excludes Utility area, driveway.

SHEET INDEX

SHEET INDEX		
Architecture	A0.0	Cover
	A0.1	Project Data
	A0.2	Site Context
	A0.3	Solar Study
	A0.4	Fire Access Diagram - Level 1
	A0.5	Fire Access Diagram - Level 2
	A0.6	F.A.R. Diagram
	A1.0	Concepts
	A1.1	Site Plan - Mechanized Parking
	A1.2	Proposed Design - Mass Timber
	A1.3	Proposed Design - Modular Units
	A1.4	Proposed Design - Sustainability
	A2.0	Building Plan - Subterranean Level
	A2.1	Building Plan - Level 1
	A2.2	Building Plan - Level 2
	A2.3	Building Plan - Level 3-4
	A2.4	Building Plan - Level 5
	A2.5	Roof Plan
	A3.0	Building Sections
	A4.0	Building Elevations
	A4.1	Building Elevations
	A5.0	Color and Materials Board
Landscape	L1.1	Landscape Plan
	L1.2	Podium Landscape Plan
	L2.1	Planting Plan
	L2.2	Podium Planting Plan
	L3.1	Plant Imagery + Details
Civil	C1.0	Title Sheet
	C2.0	Existing Conditions
	C3.0	Preliminary Grading Plan
	C4.0	Preliminary Utility Plan
	C5.0	Preliminary Stormwater Control Plan
	C6.0	Fire Hose Reach Plan
Waste Management	TR0.0	Site Plan
	TR0.1	Upper Floor Chute Vestibule
	TR1.0	Residential Trash Room & Chute Vestibule

PROJECT TEAM

Developer — EAH Housing
A: 22 Pelican Way, San Rafael, CA 94901
C: Welton Jordan
T: 415.295.8876
E: welton.jordan@eahhousing.org

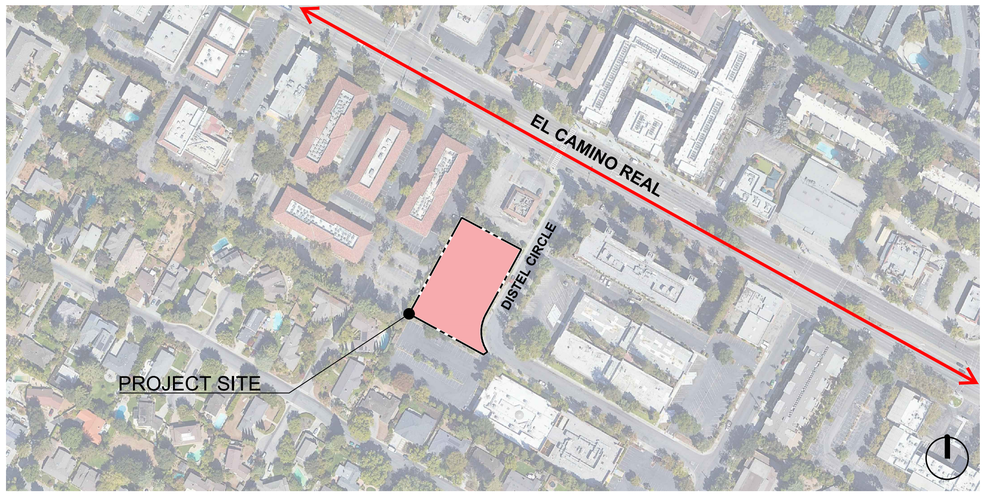
Architecture — KTGY Architecture + Planning
A: 1814 Franklin St., Suite 400 Oakland, CA 94612
C: Jessica Musick
T: 510.282.2910
E: jmusick@ktgy.com

Landscape — JETT Landscape Architecture + Design
A: 2 Theatre Square, Suite 218 Orinda, CA 94563
C: Bruce B. Jett
T: 510.502.8500
E: brucej@jett.land

Civil — BKF Engineers
A: 1730 N. First Street, Suite 600 San Jose, CA 95112
C: Scott Schork, P.E.
T: 408.467.9126
E: sschork@bkf.com

Trash — American Trash Management
A: 1900 Powell Street, Suite 220 Emeryville, CA, 94608
C: Scott Brown
T: 415.292.5401
E: sbrown@trashmanage.com

VICINITY MAP (N.T.S.)



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JUNE 3, 2022

SITE CONTEXT

A0.2

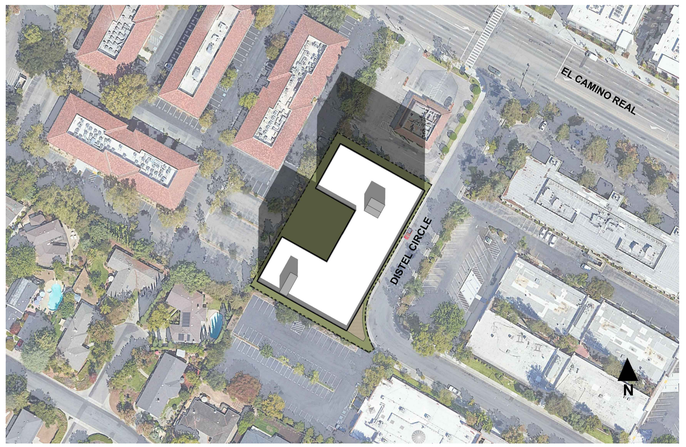
March + September: 9 am

June: 9 am

December: 9 am

March + September: 12 pm

June: 12 pm



December: 12 pm

March + September: 3 pm

June: 3 pm

December: 3 pm

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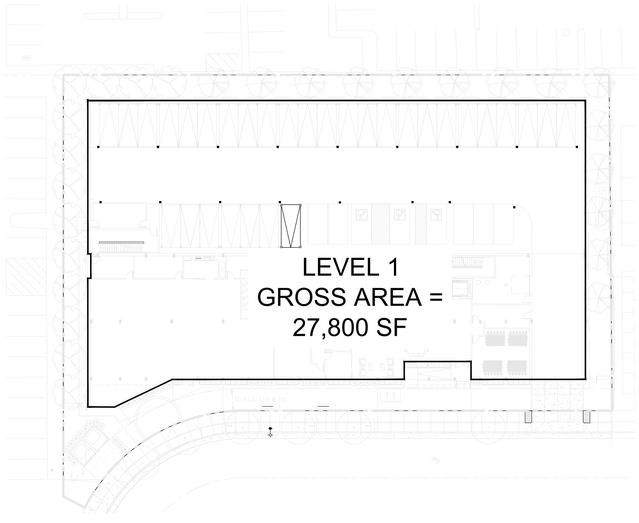
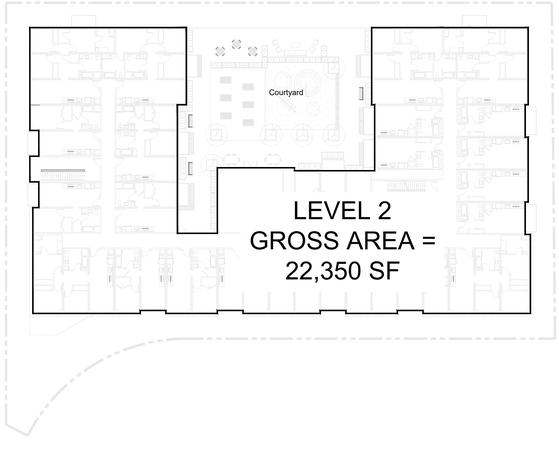
SOLAR STUDY

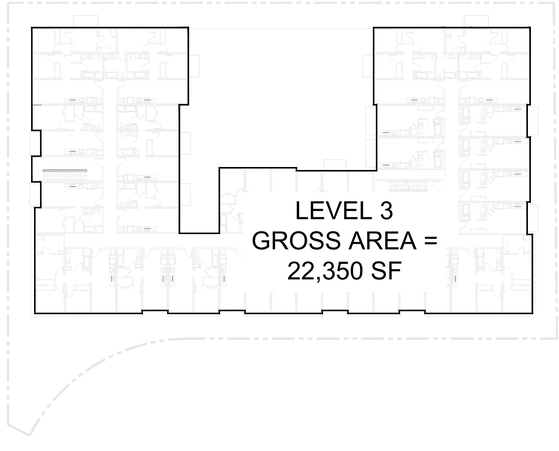
A0.3



LEVEL 1



LEVEL 2



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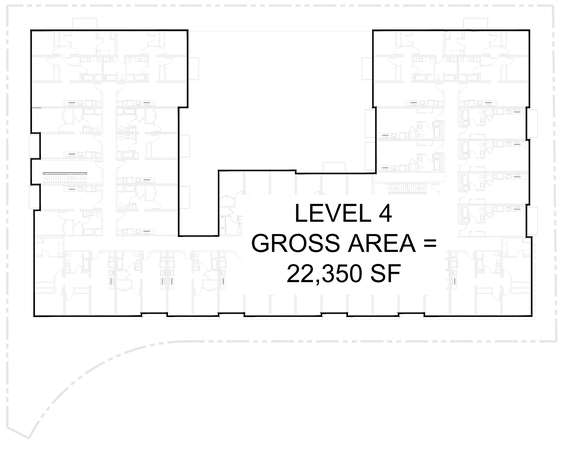

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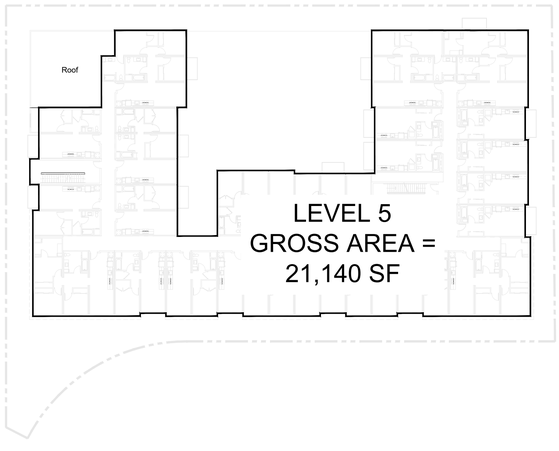

LEVEL 5

DEFINITIONS: (as per Los Altos Municipal Code Secn 14.02.070)

- **Floor Area Ratio** means the maximum ratio of *gross floor area* on a site to the *total site area*.
- **Gross Floor Area** means the total floor space under roof of all floors of a building measured to the outside surfaces of exterior walls, including halls, stairways, elevator shafts, ducts, service and mechanical equipment rooms, interior courts, garages, enclosed accessory structures, and carports.
- **Total Site Area** means the total horizontal area included within the property lines of a single site.

LEVEL 1	=	27,800 SF
LEVEL 2	=	22,350 SF
LEVEL 3	=	22,350 SF
LEVEL 4	=	22,350 SF
LEVEL 5	=	21,140 SF
TOTAL	=	115,990 SF
TOTAL SITE AREA	=	38,050 SF

FAR = 115,998 / 38,050 = 3

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SUBMITTAL #3
JUNE 3, 2022

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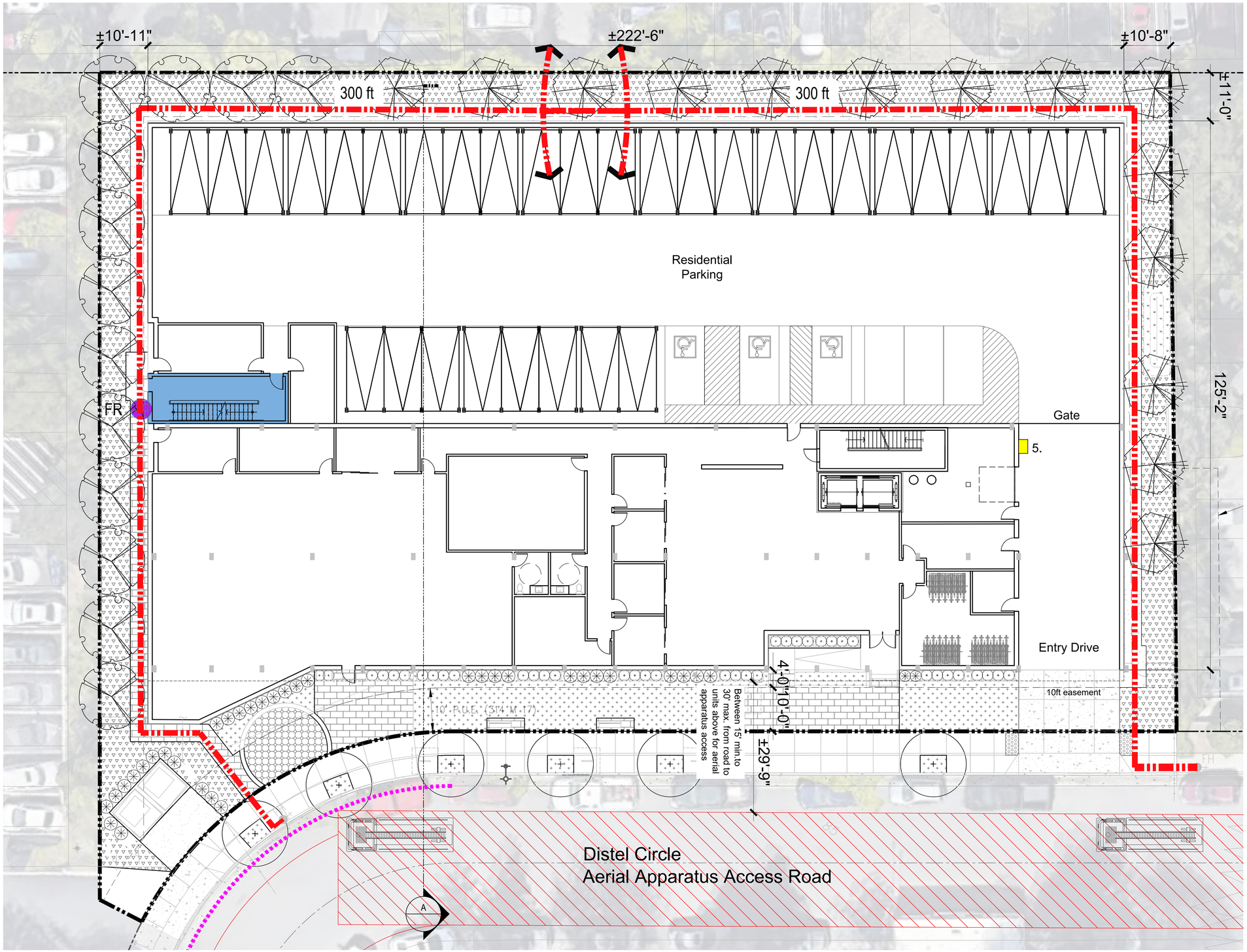
F.A.R. DIAGRAM

A0.6



Project Summary

Site Area	.87 acres
Dwelling Units	90 Units
Proposed Use	Multifamily Residential
Construction Type	Type IIIA 5 stories
Parking	Surface + Mechanized Parking

Fire Access Plan

- 26' aerial apparatus access road
- 300' maximum. See request below per Exception 1 of 503.1.1 of Santa Clara County code.
- Stair Fire Riser
- Wet Standpipe
- Stair with roof access
- Ladder: Maximum 75 degree laddering angle to meet 15-30ft requirement from building to fire staging area.
- Red curbed area and/or fire lane signage to be installed
- Knox box for garage gate

Project is requesting for 300ft hose reach from Distel per Exception 1 of 503.1.1 Santa Clara County code below.

-NFPA 13 Fire sprinkler system proposed.
-4ft gravel path around the building for fire access.
-3 sides are surrounded on the other side of our property line with parking so access from adjacent parcels are available.
-Main frontage has aerial apparatus access.
-A narrow canopied variety of tree proposed on the West, North, East sides. See Landscape Drawings.
-Western stair goes to the roof.
-Western stair has standpipe connection at ground level from exterior.
-Wet standpipe proposed on the Courtyard - Level 2

NOTES

1. NFPA 13 Sprinkler system proposed. To be deferred submittal.
2. Fire alarm system to be submitted as a deferred submittal.
3. A two-way communication system shall be provided as a deferred submittal.
4. Emergency responder radio coverage shall be provided as a deferred submittal.
5. Knox key for automatic gates per section CFC Sec. 503.6 and 506.

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JUNE 15, 2022

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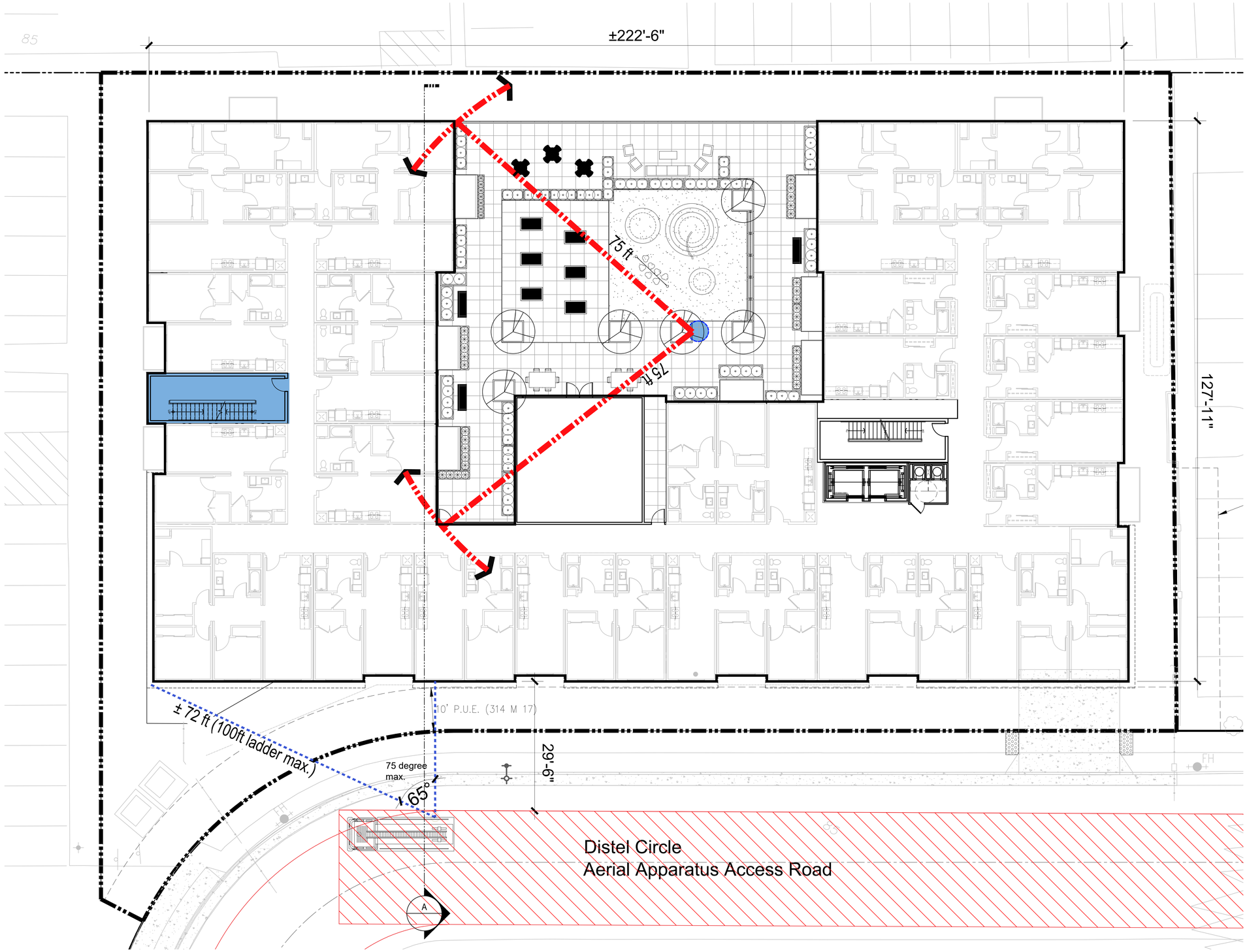
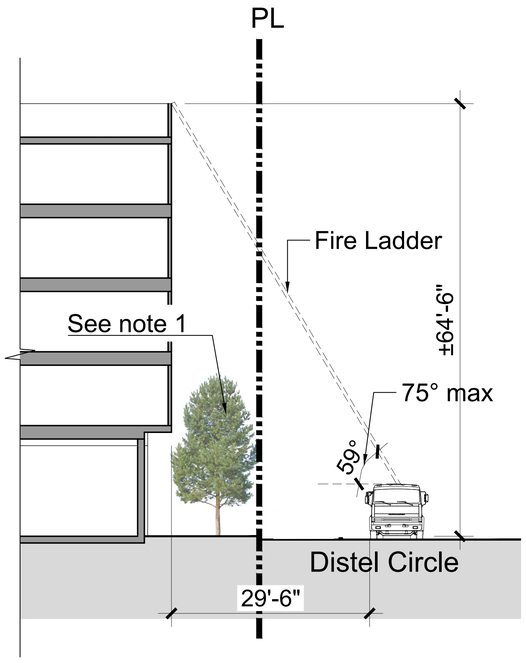
FIRE ACCESS DIAGRAM
LEVEL 1

A0.4





Section A

Note:
1. Tree shown as ±20' height x ±15' width. See Landscape drawings for more information. Regquirement is for trees to be clear of 75 degree max. laddering angle.

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JUNE 15, 2022

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FIRE ACCESS DIAGRAM
LEVEL 2

A0.5

330 DISTEL CIRCLE

We propose an innovative solution to the housing and parking needs for today and the future through four design concepts while providing an inclusionary and healthy community:

1. **Mechanized Parking Solution**
2. **Mass Timber**
3. **Modular Units**
4. **Sustainabilty**

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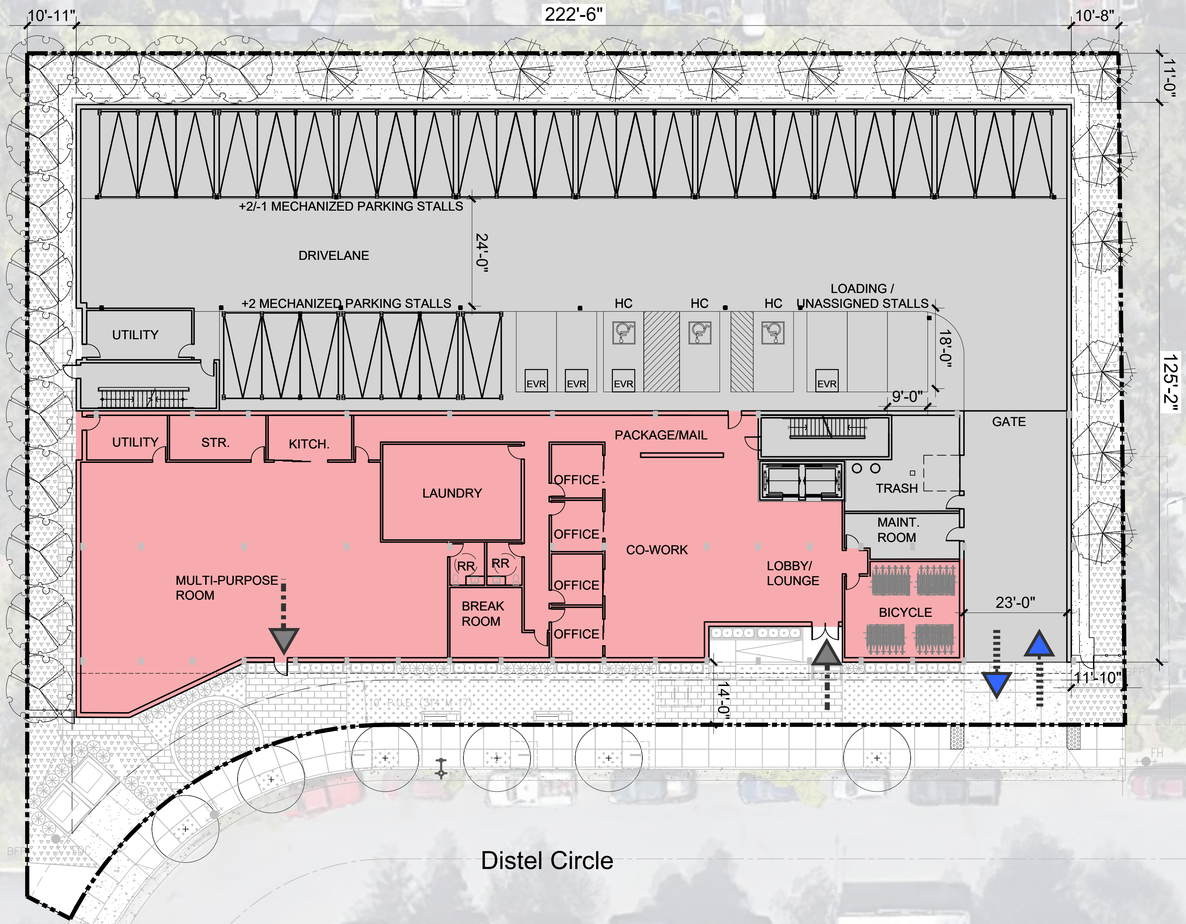
JUNE 3, 2022

CONCEPTS

A1.0

MECHANIZED PARKING SOLUTION

The efficient parking design and space optimization of a mechanized parking solution allows for 90 parking spaces. A long entry drive has been designed into the ground level plan to allow for a generous queuing area.



LEGEND

Vehicular flow

Pedestrian flow

EVR - EV Ready Stalls

HC - Accessible Stalls

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SUBMITTAL #3
JUNE 3, 2022

0 8 16 32

SITE PLAN
GROUND LEVEL

A1.1

MASS TIMBER

Our project team anticipates several key benefits from utilizing mass timber as opposed to concrete to construct the ground level of the project.

- **Renewable Resource**
- **Reduced Carbon Footprint**
- **Faster Construction**
- **Less disruptive construction process**
- **Natural warm wood aesthetic**

DISTEL CIRCLE BUILDING ENTRY

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SUBMITTAL #3
JUNE 3, 2022

PROPOSED DESIGN
MASS TIMBER

A1.2

MODULAR UNITS

90 Residential units located at level 2-5 are envisioned to be built of modular manufactured units. Modular units allow for:

- **Reduced construction noise and disruption**
- **Minimal material waste**
- **Faster construction**

DISTEL CIRCLE STREETSCAPE

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PROPOSED DESIGN
MODULAR UNITS

A1.3

SUSTAINABILITY

Environmentally healthy features include the following:

SITE

- Stormwater control
- Resource Efficient Landscapes
- Courtyard
- Bicycle Storage

MATERIALS

- Low VOC paints
- Environmentally preferred materials
- Wood

ENERGY + WATER

- Solar PV
- Energy star appliances
- High efficacy lighting
- EV charging stations
- Water efficient fixtures
- High Efficiency Irrigation System

BUILDING ENVELOPE

- Passive Solar Shading
- Construction material efficiencies
- Double glazed windows

DISTEL CIRCLE PROPOSED ELEVATION

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SUSTAINABLE STRATEGIES

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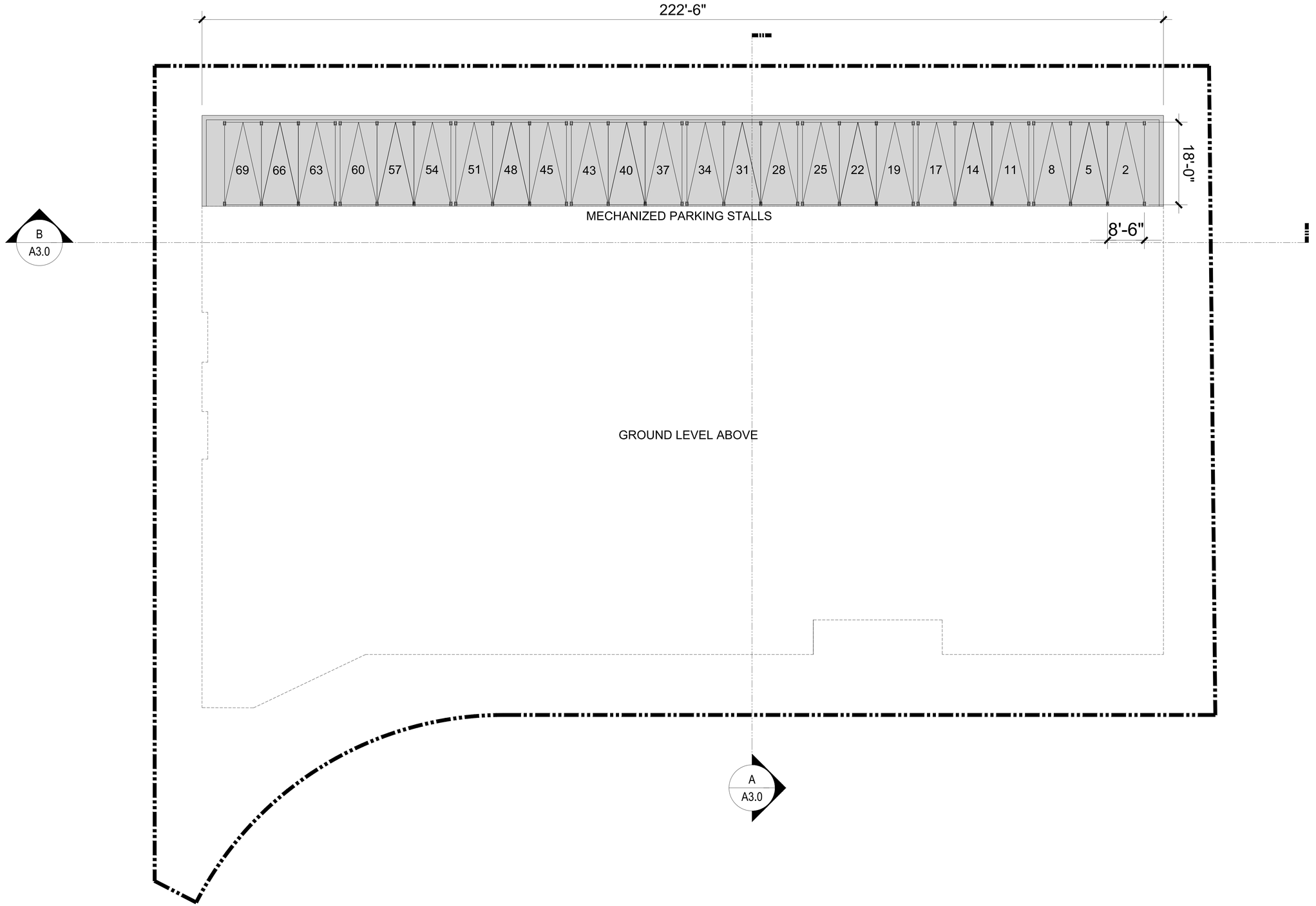

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330 DISTEL CIRCLE
LOS ALTOS # 2021-0042

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JUNE 3, 2022

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BUILDING PLAN
SUBTERRANEAN LEVEL

A2.0

LEGEND

* # EVR = EV Ready Stalls

* = Accessible Stalls

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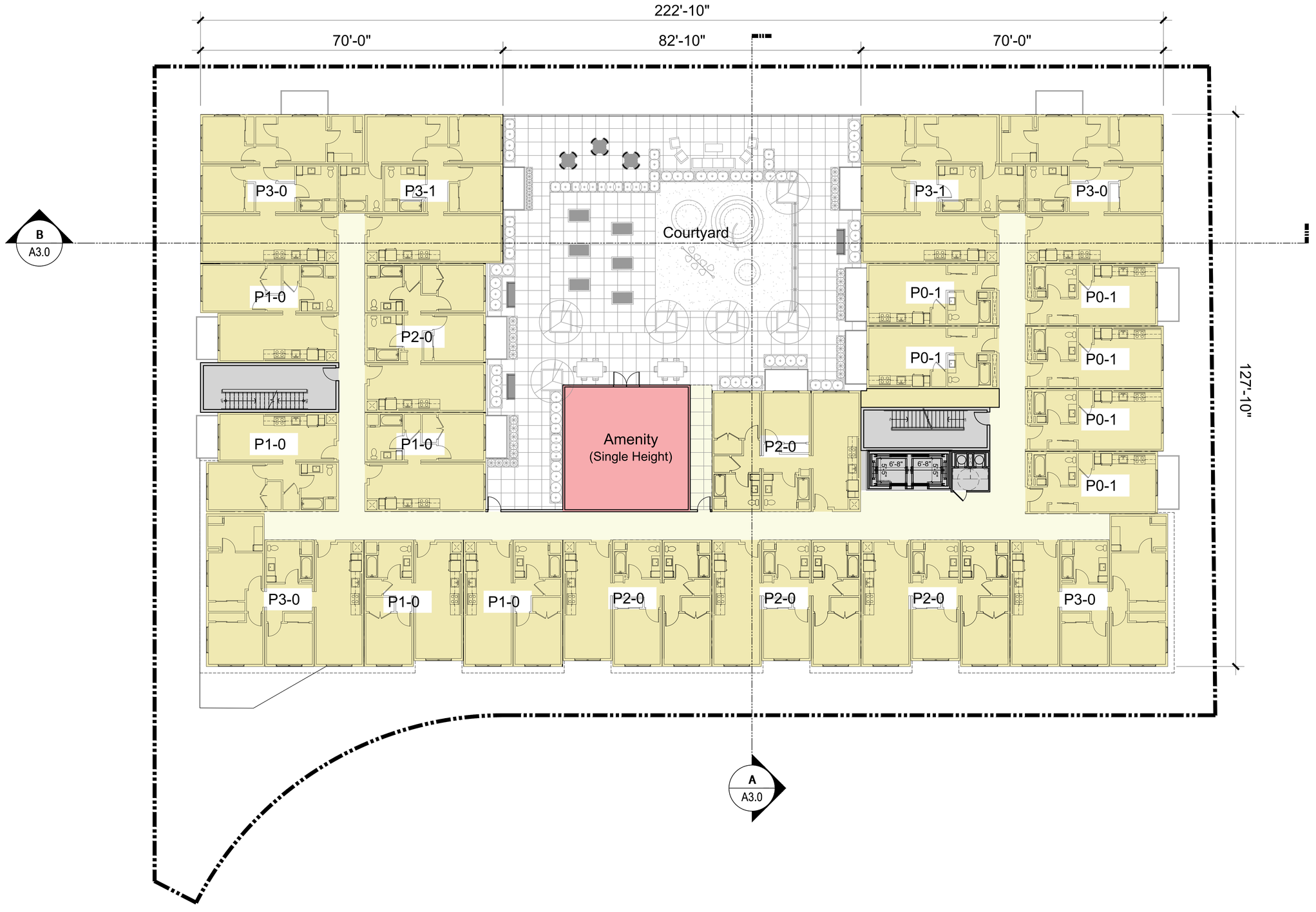
BUILDING PLAN
LEVEL 1

A2.1



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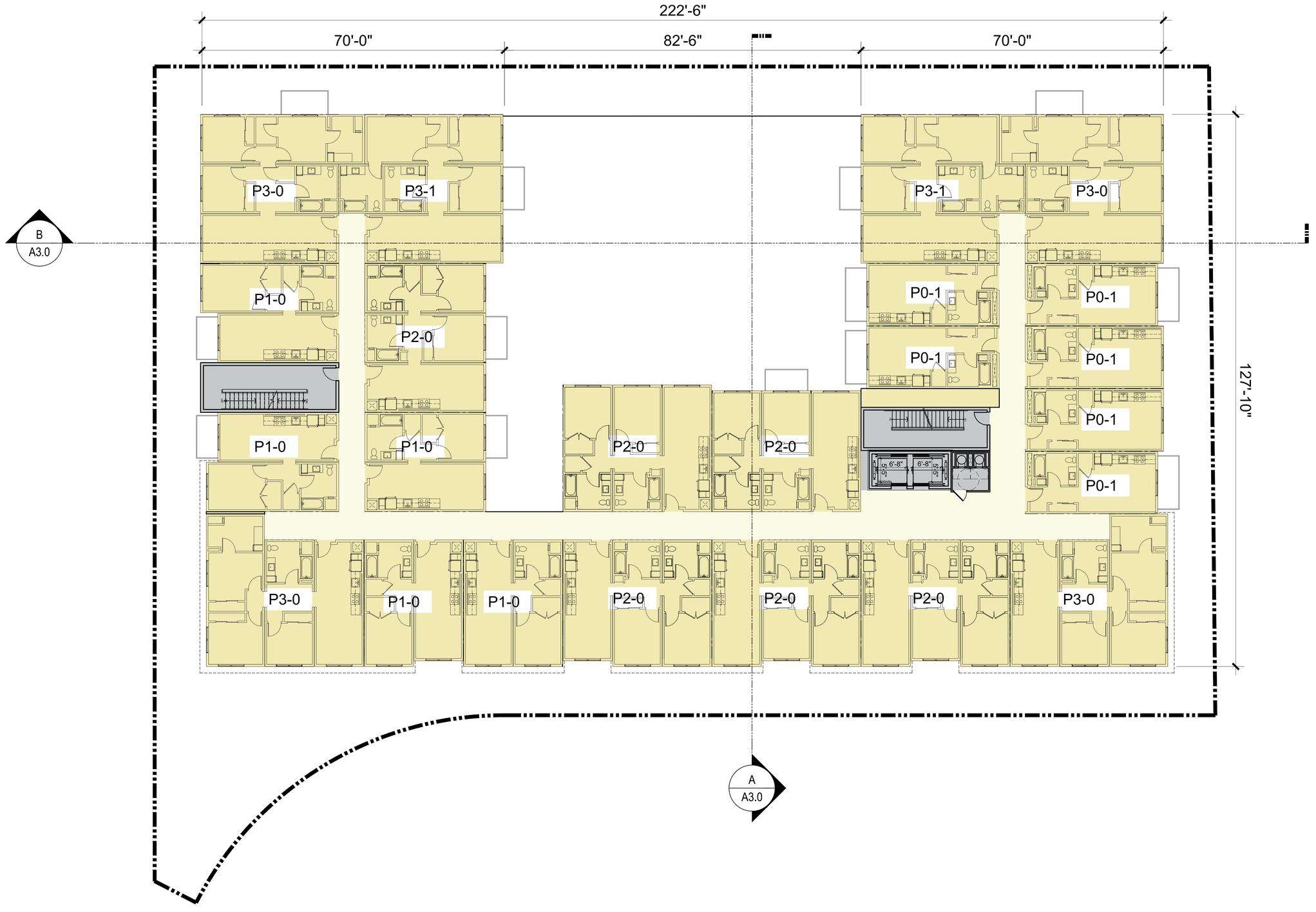
BUILDING PLAN
LEVEL 2

A2.2



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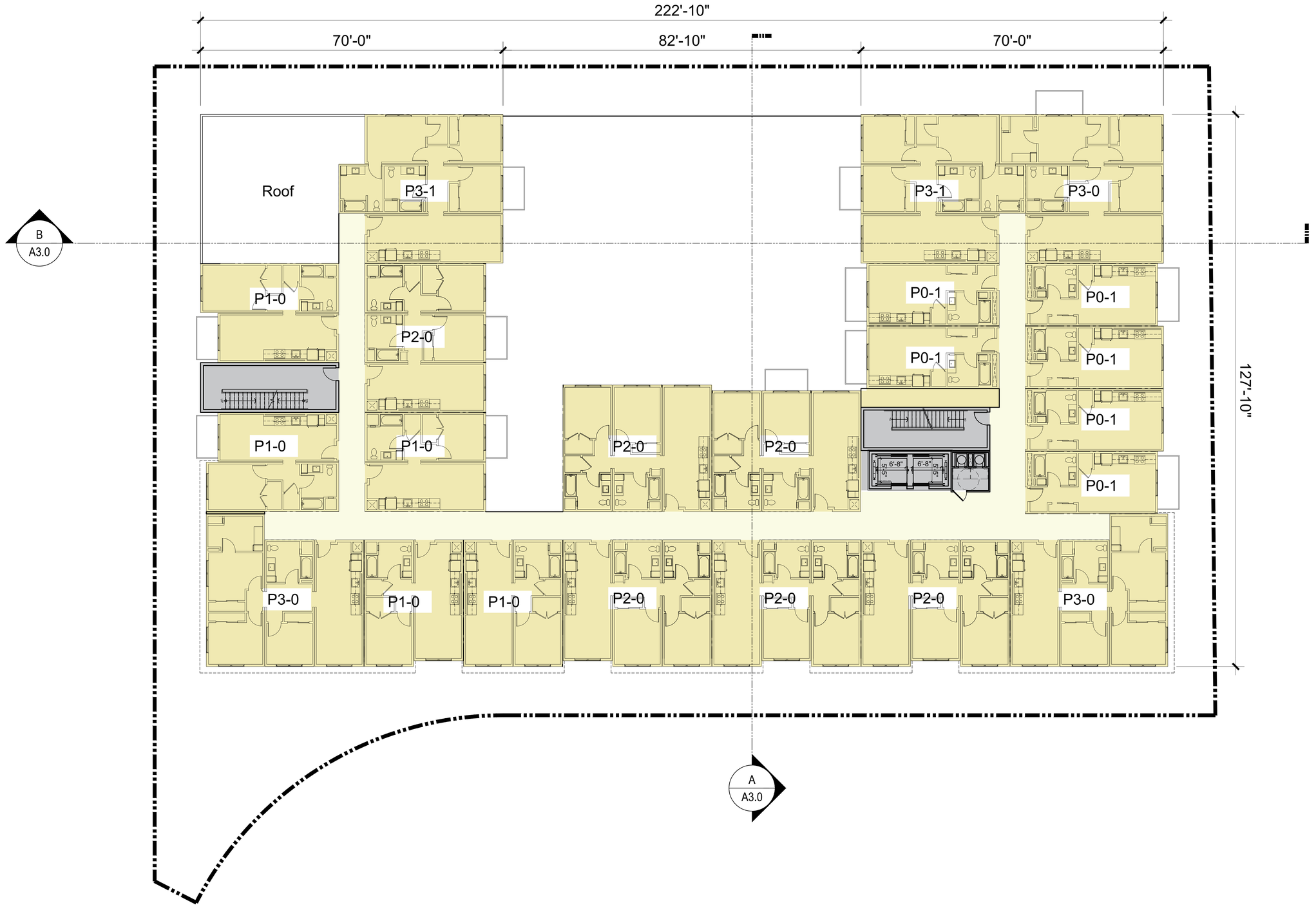
BUILDING PLAN
LEVELS 3-4

A2.3



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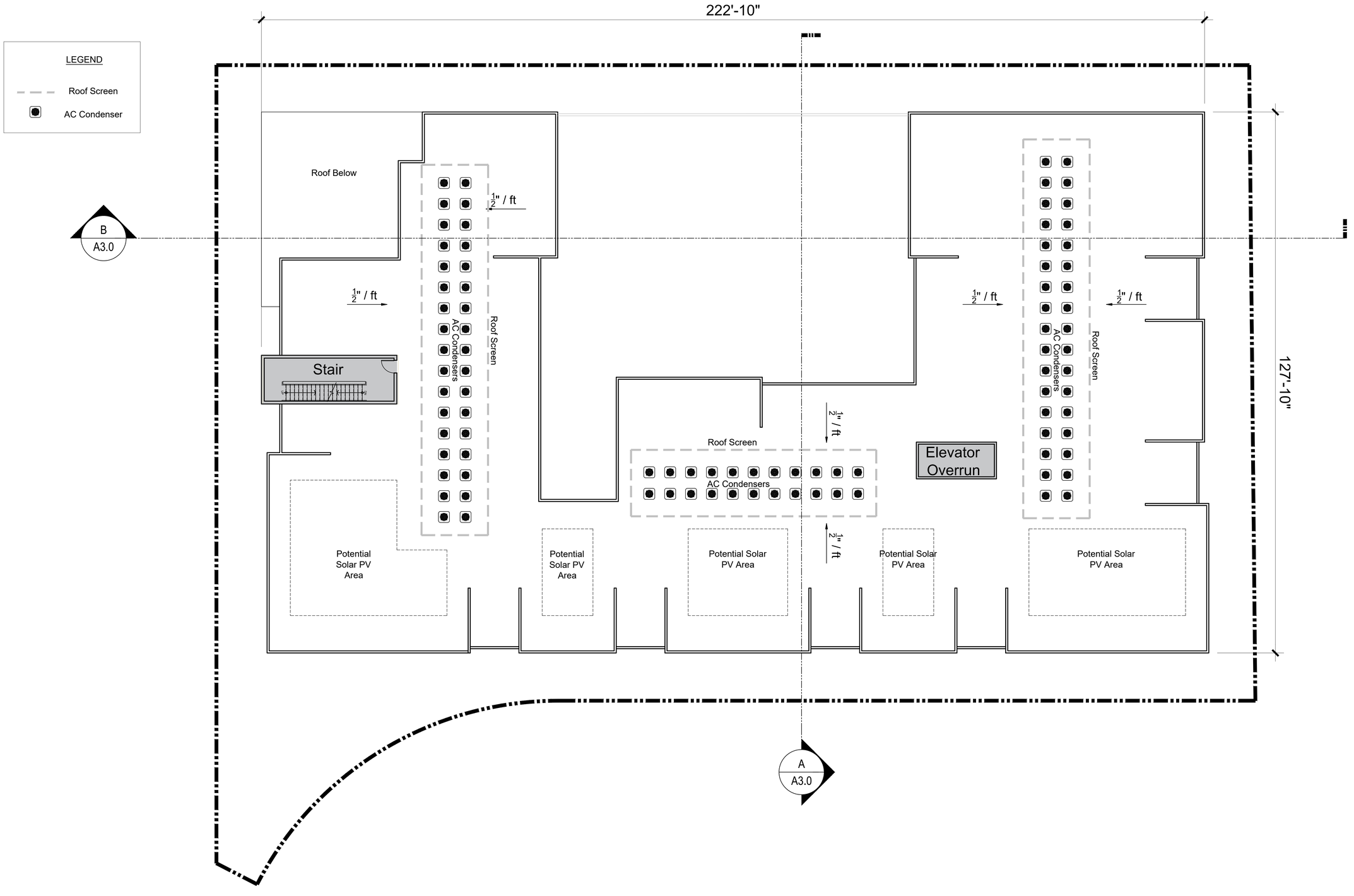
BUILDING PLAN
LEVEL 5

A2.4



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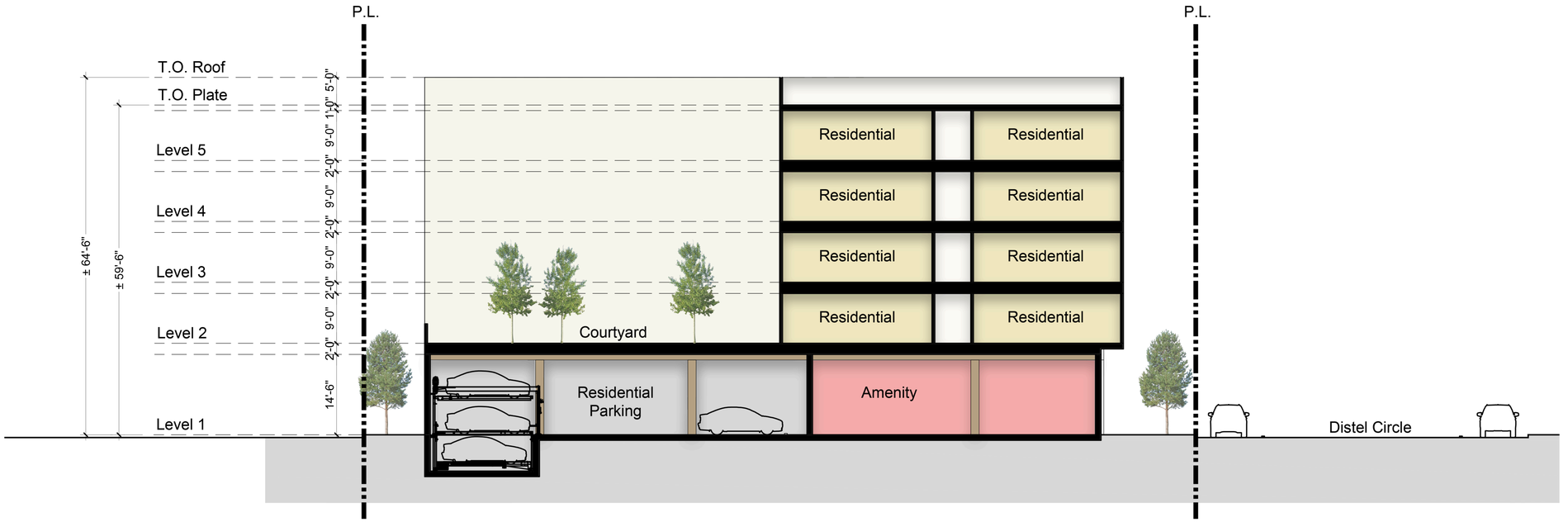
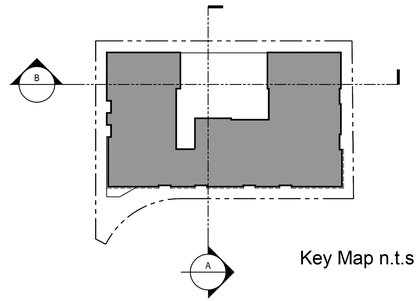
ROOF PLAN

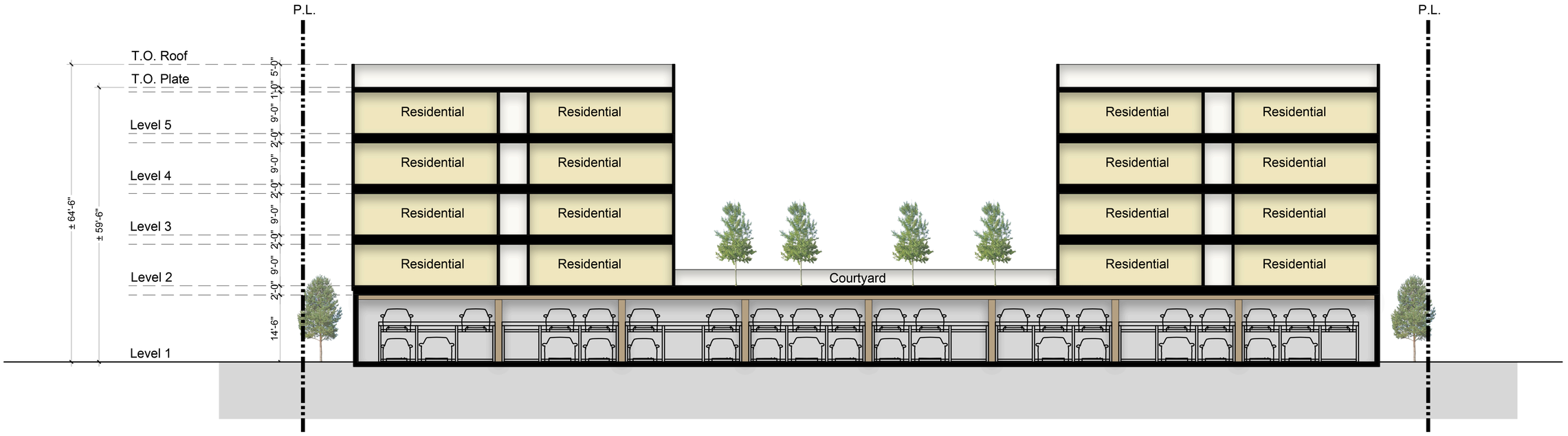
A2.5



Section A



Key Map n.t.s



Section B

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JUNE 3, 2022

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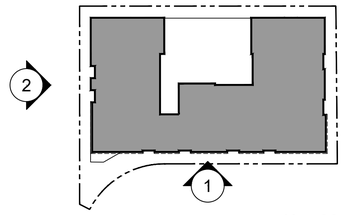
BUILDING SECTIONS

A3.0

2. Side Elevation



Key Map n.t.s

Material Legend:

1. Stucco
2. Wood
3. Metal Window
4. Wood Composite Railing
5. Metal Solar Shade
6. Metal Awning
7. Metal Screen
8. Vinyl Window
9. Wood Composite Panel

1. Distel Drive Elevation

*Reference landscape sheets L1.1 - L3.1 for fencing details.

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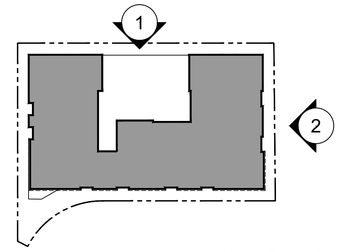
BUILDING ELEVATIONS

A4.0

2. Side Elevation



Key Map n.t.s

Material Legend:

1. Stucco
2. Wood
3. Metal Window
4. Wood Composite Railing
5. Metal Solar Shade
6. Metal Awning
7. Metal Screen
8. Vinyl Window
9. Wood Composite Panel

1. Rear Elevation

*Reference landscape sheets L1.1 - L3.1 for fencing details.

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BUILDING ELEVATIONS

A4.1

1. Stucco

2. Stucco

3. Stucco

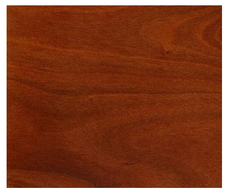
4. Stucco

5. Wood

6. Metal Window - White

7. Storefront

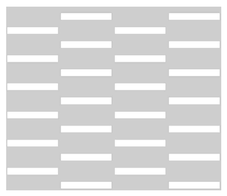
8. Vinyl Window - White



9. Wood Composite Railing / Panel

10. Metal Solar Shade

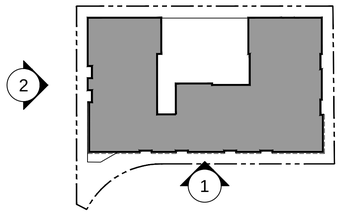
11. Metal Awning



12. Metal Screen

13. Metal Screen

2. Side Elevation



Key Map n.t.s

1. Distel Drive Elevation

*Reference the Los Altos Objective Design Standards

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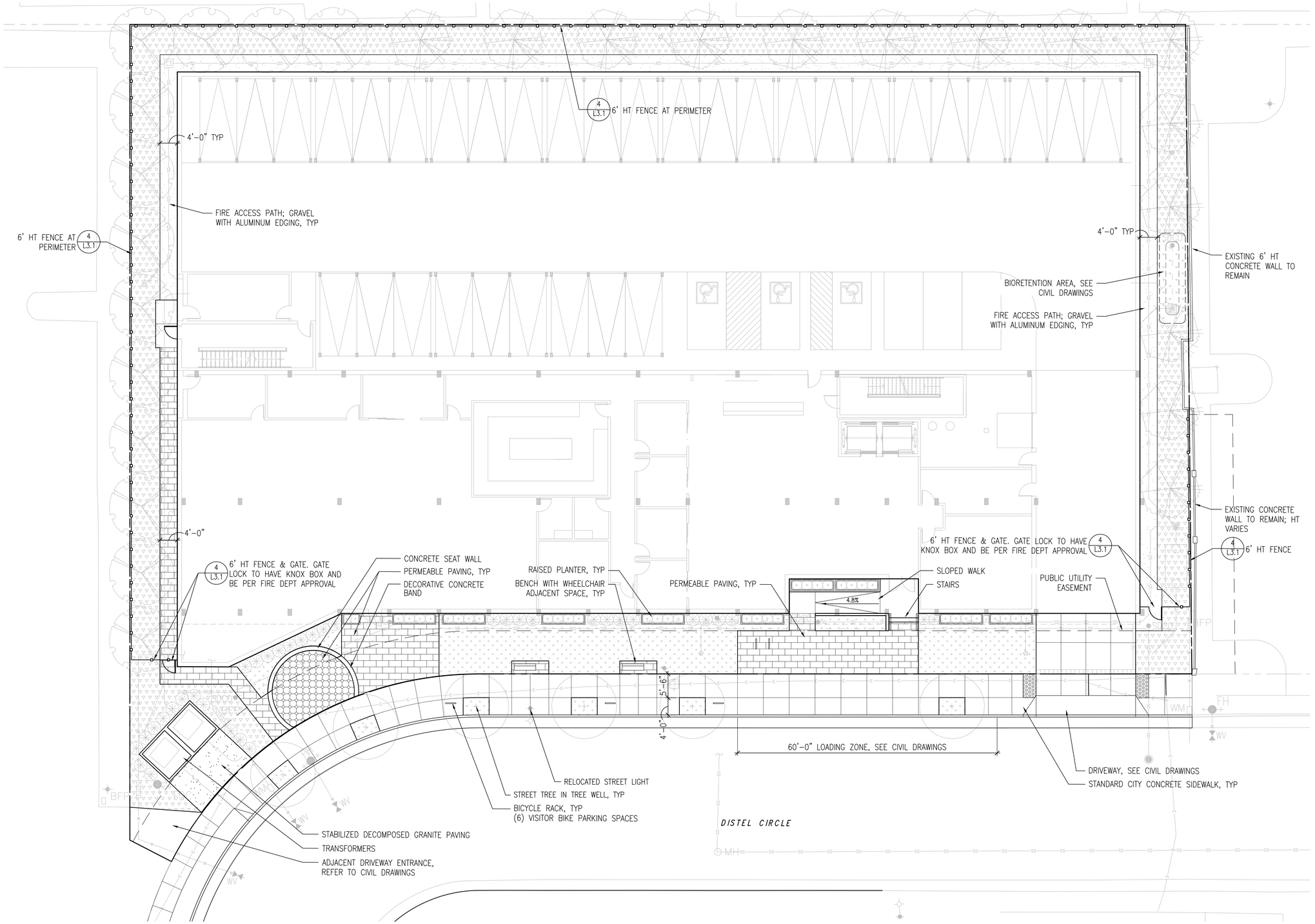
COLOR AND MATERIALS BOARD

A5.0



HARDSCAPE/SOFTSCAPE CALCULATIONS

SURFACE TYPE	AREA (SF)	% TOTAL SURFACE AREA
TOTAL LANDSCAPE AREA	9491 SF	–
TOTAL SOFTSCAPE	5740 SF	60%
TOTAL HARDSCAPE	3751 SF	40%
NON-PERMEABLE HARDSCAPE	421 SF	11%
PERMEABLE HARDSCAPE	3,330 SF	89%

NOTE: CALCULATIONS ABOVE DO NOT INCLUDE OFF-PROPERTY SIDEWALK OR STREET TREES/STREET TREE WELLS

NOTES

1. ALL ON-SITE AND OFF-SITE LANDSCAPE AND IRRIGATION SHALL BE APPROVED BY THE COMMUNITY DEVELOPMENT DIRECTOR AND CITY ENGINEER.
2. ALL PROPOSED PLANTING AND IRRIGATION SHALL COMPLY WITH THE CRITERIA OF THE CITY AND STATE MODEL WATER EFFICIENCY ORDINANCES AND APPLY THOSE CRITERIA FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

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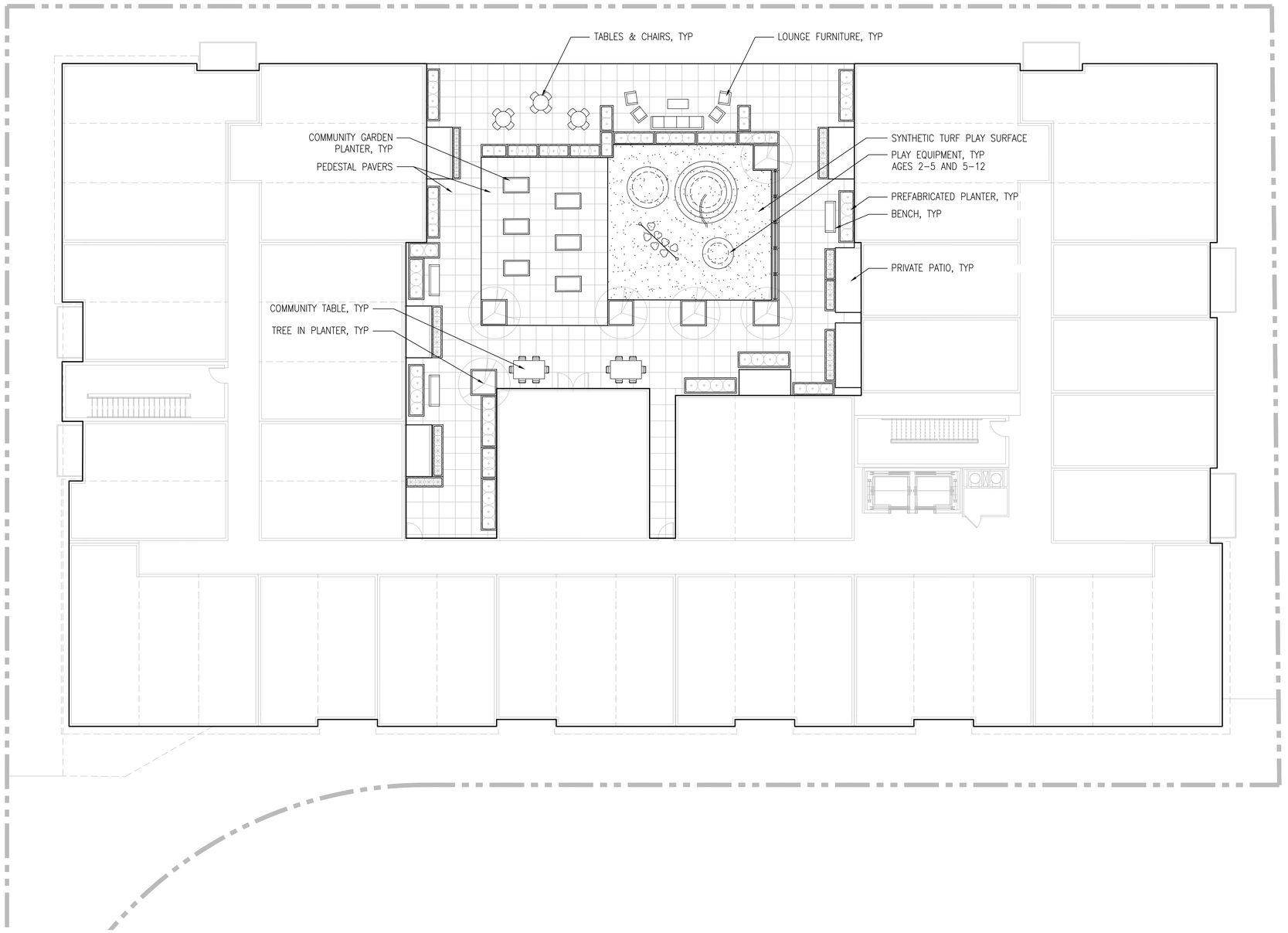
LANDSCAPE PLAN
LEVEL 1

L1.1



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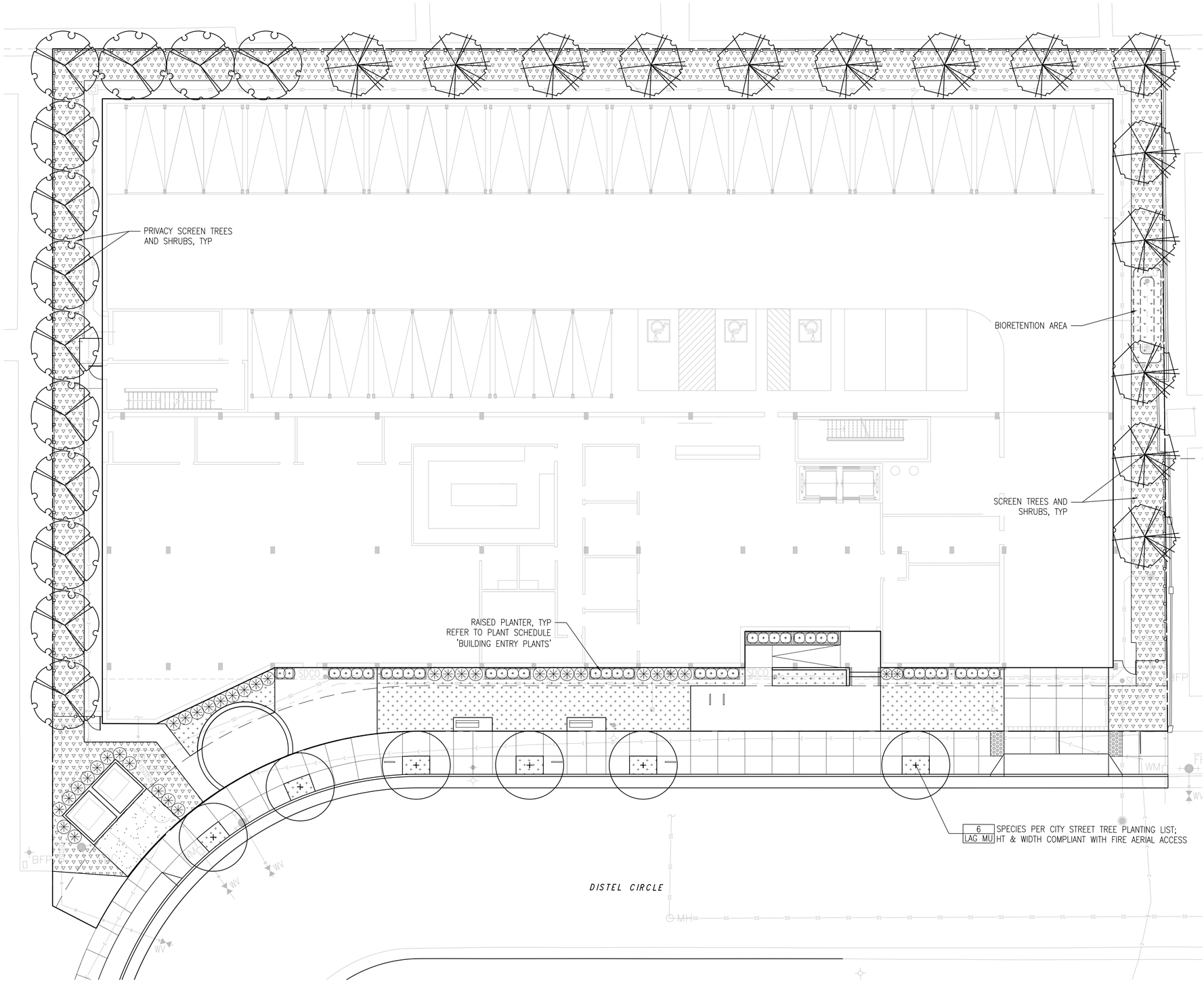
PODIUM LANDSCAPE PLAN
2nd FLOOR

L1.2



IRRIGATION DESIGN INTENT

1. THIS PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE BOTH THE STATE OF CALIFORNIA AND CITY OF LOS ALTOS WATER EFFICIENT LANDSCAPE ORDINANCES (MWELO) AS WELL AS LOCAL WATER PURVEYOR REQUIREMENTS.
2. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE THE MINIMUM AMOUNT OF WATER NECESSARY TO SUSTAIN GOOD PLANT HEALTH.
3. THE IRRIGATION SYSTEM IS TO BE A FULLY AUTOMATIC, WEATHER-BASED SYSTEM USING RAIN SENSOR, LOW FLOW DRIP AND BUBBLER DISTRIBUTION.
4. ALL SELECTED COMPONENTS SHALL BE PERMANENT, COMMERCIAL GRADE, SELECTED FOR DURABILITY, VANDAL RESISTANCE AND MINIMUM MAINTENANCE REQUIREMENT, INSTALLED BELOW-GRADE, AND DESIGNED FOR 100% COVERAGE.
5. THE SYSTEM SHALL INCLUDE A MASTER CONTROL VALVE AND FLOW SENSING CAPABILITY WHICH WILL SHUT DOWN ALL OR PART OF THE SYSTEM IF LEAKS ARE DETECTED.
6. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO DELIVER WATER TO HYDROZONES BASED ON MOISTURE REQUIREMENTS OF THE PLANT GROUPING.
7. POINT OF CONNECTION (P.O.C.) AFTER BACKFLOW PREVENTER FOR IRRIGATION, SCD. IRRIGATION DEMAND: **18 GPM** AT **65 PSI** STATIC PRESSURE AFTER BACKFLOW ASSEMBLY. CONTRACTOR TO FIELD VERIFY WATER PRESSURE & FLOW BEFORE ANY NEW WORK IS STARTED AND NOTIFY THE LANDSCAPE ARCHITECT IF THE PRESSURE IS DIFFERENT THAN NOTED.
8. RECYCLED WATER READY: ALL ONSITE PLUMBING FOR NON-DOMESTIC WATER USES (E.G. IRRIGATION, INDUSTRIAL PROCESSES, COOLING, ECT.) SHALL BE DESIGNED FOR RECYCLED WATER USE AND SHALL COMPLY WITH ALL RECYCLED WATER REGULATIONS IN SANTA CLARA MUNICIPAL CODE CHAPTER 13.15, WATER, ARTICLE IV. REGULATION OF RECYCLED WATER SERVICE AND USE.

PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	MATURE SIZE (HxW)	SPACING
STREET TREE				
LAG MU	LAGERSTROEMIA INDICA 'MUSKOGEE'	LAVENDER CREPE MYRTLE	20'X15'	PER PLAN
SCREEN TREES				
	ACER RUBRUM 'BOWHALL'	NARROW BOWHALL MAPLE	40'X15'	PER PLAN
	LAURUS NOBILIS	BAY LAUREL	40'X20'	PER PLAN
	TRISTANIOPSIS LAURINA 'ELEGANT'	WATER GUM	30'X20'	PER PLAN
LANDSCAPE TREES				
	QUERCUS LOBATA	VALLEY OAK	60'X30'	PER PLAN
	ARBUTUS MARINA	STRAWBERRY TREE	30'X30'	PER PLAN
	CERCIS OCCIDENTALIS	WESTERN REDBUD	20'X25'	PER PLAN
SHRUBS AND PERENNIALS				
	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	3'-0" OC
	RIBES SANGUINEUM V. GLUTINOSUM	PINK CURRANT	5 GAL	5'-0" OC
	LEUCADENDRON 'JESTER'	SUNSHINE CONEBUSH	5 GAL	4'-0" OC
	ARCTOSTAPHYLOS 'HOWARD MCMINN'	H. MCMINN MANZANITA	5 GAL	5'-0" OC
	GREVILLEA R. 'SCARLET SPRITE'	ROSEMARY GREVILLEA	5 GAL	4'-0" OC
	RHAMNUS CALIFORNICA	COFFEEBERRY	5 GAL	5'-0" OC
BUILDING ENTRY PLANTS				
	ACHILLEA M. 'SONOMA COAST'	WHITE YARROW	1 GAL	2'-0" OC
	ANIGOZANTHOS 'BIG RED'	RED KANGAROO PAW	1 GAL	2'-0" OC
	CISTANTHE GRANDIFLORA 'JAZZ TIME'	ROCK PURSLANE	5 GAL	2'-0" OC
	DIETES GRANDIFLORA 'VARIEGATA'	VARIEG. FORTNIGHT LILY	5 GAL	3'-0" OC
	ERIOGONUM GRANDE	RED BUCKWHEAT	1 GAL	2'-0" OC
	FESTUCA CALIFORNICA	CALIFORNIA FESCUE	1 GAL	1'-0" OC
	HEUCHERA SANGUINEA	CORAL BELLS	1 GAL	1'-6" OC
	LANTANA CAMARA 'NEW GOLD'	YELLOW LANTANA	5 GAL	2'-0" OC
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	5 GAL	3'-0" OC
	SALVIA LEUCOPHYLLA	PURPLE SAGE	5 GAL	3'-0" OC
PERIMETER PLANTS - BUFFER				
	ARCTOSTAPHYLOS SPP	MANZANITA	5 GAL	5'-0" OC
	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	SUMMERSWEET	1 GAL	3'-0" OC
	IRIS DOUGLASIANA, INNOMINATA	PACIFIC COAST IRIS	1 GAL	1'-0" OC
	LOROPETALUM CHINENSE 'BLUSH'	RED FRINGE FLOWER	5 GAL	4'-0" OC
	HOLODISCUS DISCOLOR	CREAM BUSH	1 GAL	5'-0" OC
	PHYSOCARPUS CAPITUS	PACIFIC NINEBARK	5 GAL	5'-0" OC
	RIBES SANGUINEUM V. GLUTINOSUM	PINK CURRANT	5 GAL	5'-0" OC
	TRICHOSTEMMA LANATUM	WOOLY BLUE CURLS	5 GAL	5'-0" OC
BIORETENTION AREA PLANTS				
	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	2'-0" OC
	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	2'-0" OC

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LOS ALTOS # 2021-0042

SUBMITTAL #3
JUNE 3, 2022

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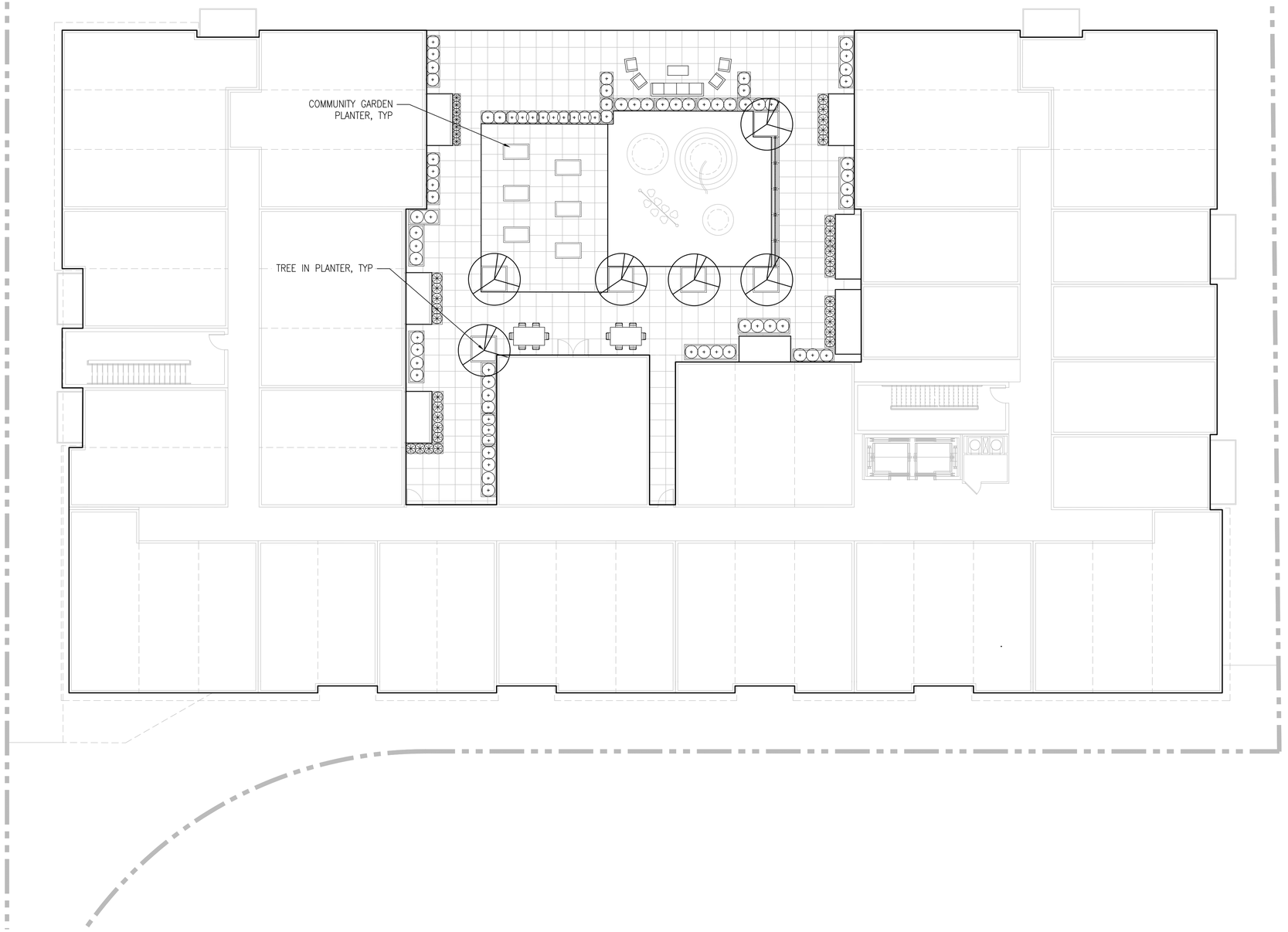
PLANTING PLAN
LEVEL 1

L2.1



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LAG MU	LAGERSTROEMIA INDICA 'MUSKOGEE'	LAVENDER CREPE MYRTLE	20'X15'	PER PLAN
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	LEUCADENDRON 'JESTER'	SUNSHINE CONEBUSH	5 GAL	4'–0" OC
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	GREVILLEA R. 'SCARLET SPRITE'	ROSEMARY GREVILLEA	5 GAL	4'–0" OC
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	DIETES GRANDIFLORA 'VARIEGATA'	VARIEG. FORTNIGHT LILY	5 GAL	3'–0" OC
	ERIOGONUM GRANDE	RED BUCKWHEAT	1 GAL	2'–0" OC
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	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	2'–0" OC

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SUBMITTAL #3
JUNE 3, 2022

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PODIUM PLANTING PLAN
2nd FLOOR

L2.2

PRELIMINARY TREE PALETTE

ARBUTUS MARINA
STRAWBERRY TREE

CERCIS OCCIDENTALIS
WESTERN REDBUD

LAGERSTROEMIA SPP.
CREPE MYRTLE

ARBUTUS MARINA
STRAWBERRY TREE

CERCIS OCCIDENTALIS
WESTERN REDBUD

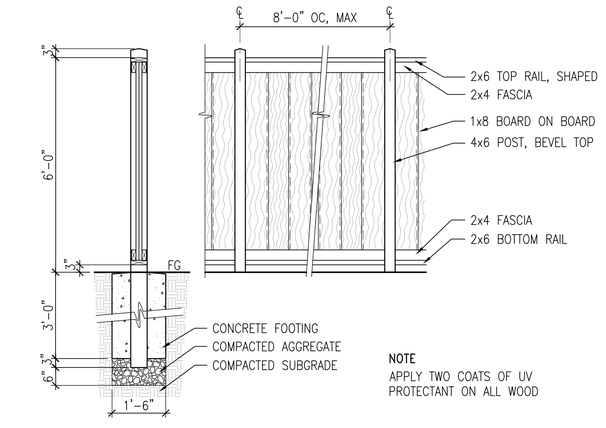
LAGERSTROEMIA SPP.
CREPE MYRTLE

PRELIMINARY SHRUB PALETTE

1 **BICYCLE RACK**

2 **PLAY MOUNDS** OR COMPARABLE

3 **WATERLILY BALANCE** OR COMPARABLE



SCALE: 1/2"=1'–0"

4 **WOODEN FENCE**

Architecture + Planning
1814 Franklin St., Ste. 400
Oakland, CA 94612
510.272.2910
ktgy.com

EAH HOUSING
A roof is just the beginning

330 DISTEL CIRCLE
LOS ALTOS # 2021-0042

SUBMITTAL #3
JUNE 3, 2022

0 8 16 24

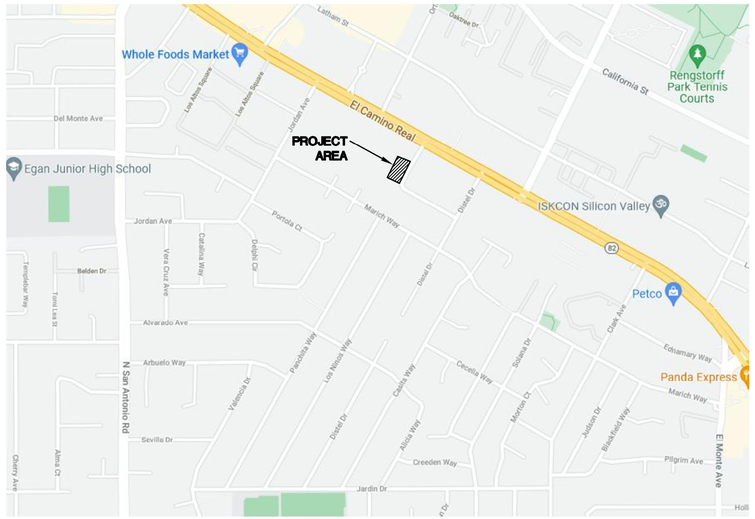
PLANT IMAGERY AND DETAILS

L3.1

330 DISTEL CIRCLE
LOS ALTOS, CA

SITE INFORMATION

OWNER:	EAH HOUSING
CONTACT:	STEVE PRATT
ADDRESS:	330 DISTEL CIRCLE
ASSESSORS PARCEL NO:	170–04–051
NUMBER OF LOTS:	EXISTING – ONE PROPOSED – ONE
GROSS AREA:	38,030 SQUARE FEET
NET AREA:	38,030 SQUARE FEET
CIVIL ENGINEER:	BKF ENGINEERS 1730 N. FIRST STREET, SUITE 600 SAN JOSE, CA 95112 CONTACT: SCOTT SCHORK (408) 467–9126
EXISTING ZONING:	COMMERCIAL THOROUGHFARE
PROPOSED USE:	AFFORDABLE MULTI–FAMILY
FLOOD ZONE:	THIS PROPERTY IS LOCATED WITHIN ZONE X AS SHOWN IN FLOOD INSURANCE RATE MAP COMMUNITY PARCEL NO. 06085C0038H
WATER:	CALIFORNIA WATER SERVICE COMPANY
SANITARY SEWER:	CITY OF LOS ALTOS
STORM DRAIN:	CITY OF LOS ALTOS
GAS/ELECTRIC:	PACIFIC GAS & ELECTRIC
TELEPHONE:	AT&T
CABLE TV:	COMCAST



VICINITY MAP
N.T.S.

BENCHMARK

CITY OF LOS ALTOS BENCHMARK NO. 03

3–1/2" BRASS DISK AT TOP OF CURB AT SOUTH SIDE OF EL CAMINO REAL AND NORTHERLY EDGE OF DRIVEWAY AT 4984 EL CAMINO REAL. HALF WAY BETWEEN ORTEGA AVENUE AND DISTEL CIRCLE.

ELEVATION = 82.125 FEET (NAVD88 DATUM)

BASIS OF BEARINGS

THE BEARING NORTH 29°23'20" EAST OF THE CENTERLINE OF DISTEL CIRCLE, FORMERLY RUSHMORE DRIVE, BETWEEN FOUND MONUMENTS, AS SAID MONUMENTS ARE SHOWN ON TRACT NO. 5060 ENTITLED "PLAZA WEST", FILED FOR RECORD ON DECEMBER 26, 1972 IN BOOK 314 OF MAPS AT PAGE 17, RECORDS OF SANTA CLARA COUNTY, WAS HELD AS THE BASIS OF BEARINGS FOR THE SURVEY.

SHEET INDEX

C1.0	TITLE SHEET
C2.0	EXISTING CONDITIONS
C3.0	PRELIMINARY GRADING PLAN
C4.0	PRELIMINARY UTILITY PLAN
C5.0	PRELIMINARY STORMWATER CONTROL PLAN
C6.0	FIRE HOSE REACH PLAN

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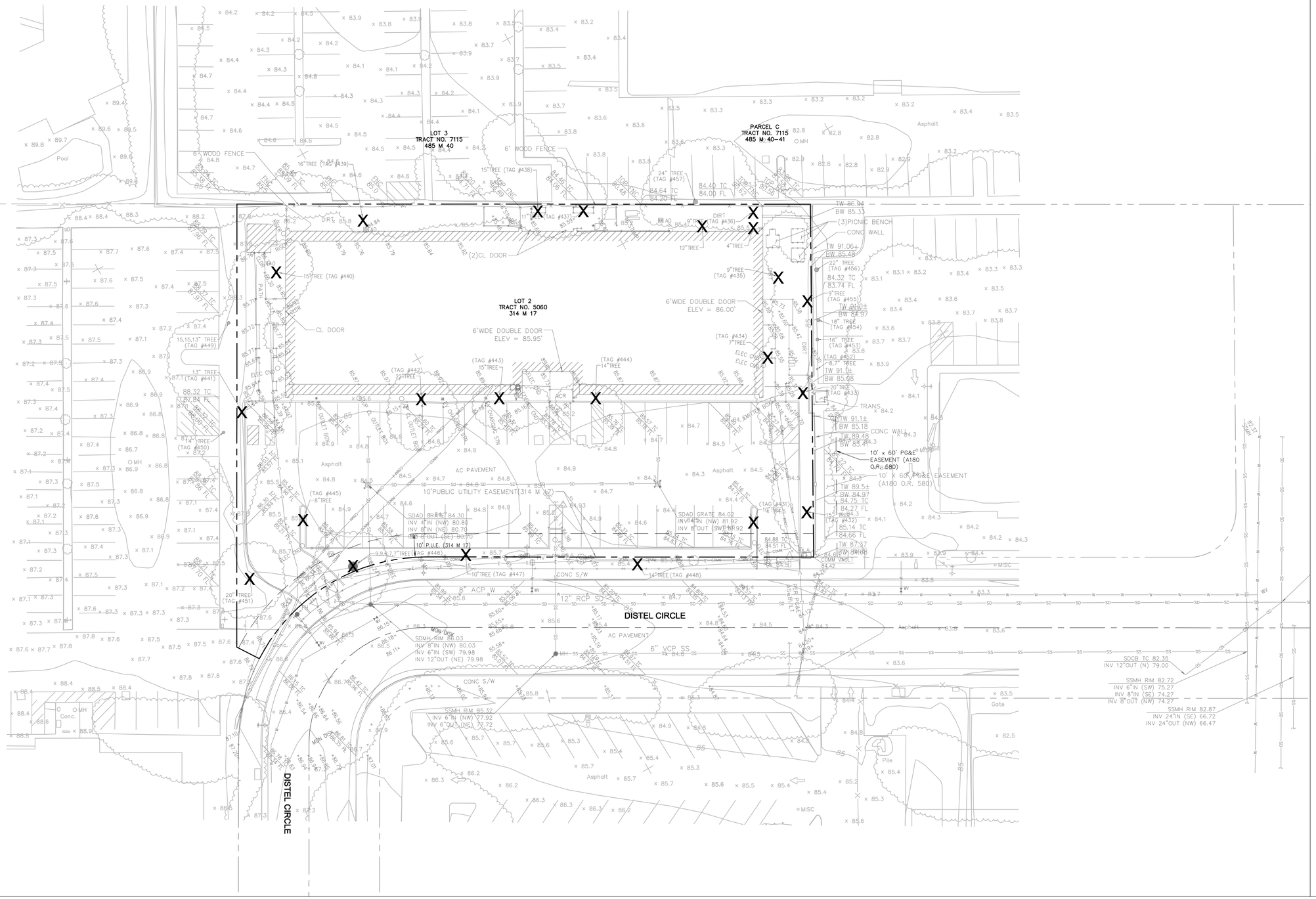
JUNE 3, 2022

REGISTERED PROFESSIONAL ENGINEER
SCOTT SCHORK
PE 47813
12-31-23
CIVIL
STATE OF CALIFORNIA

0 10 20 40
(IN FEET)
1 INCH = 20 FEET

TITLE SHEET

C1.0



ABBREVIATIONS

AC	ASPHALT CONCRETE
BFP	BACK FLOW PREVENTER
BW	BACK OF WALK
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
DW	DOMESTIC WATER
EX	EXISTING
FDC	FIRE DEPARTMENT CONTROL
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FW	FIRE WATER
PUE	PUBLIC UTILITY EASEMENT
PV	PAVEMENT
RWL	RAIN WATER LEADER
SD	STORM DRAIN
SDAD	STORM DRAIN AREA DRAIN
SDDI	STORM DRAIN DRAINAGE INLET
SDJB	STORM DRAIN JUNCTION BOX
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
TC	TOP OF CURB
TW	TOP OF WALL
W	WATER
WH	WHARF HYDRANT
WM	WATER METER
WV	WATER VALVE

LEGEND

- PROPERTY LINE
- EASEMENT
- CURB & GUTTER
- X EXISTING TREE REMOVAL

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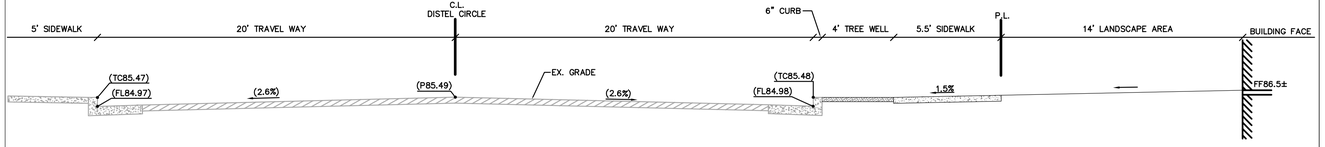
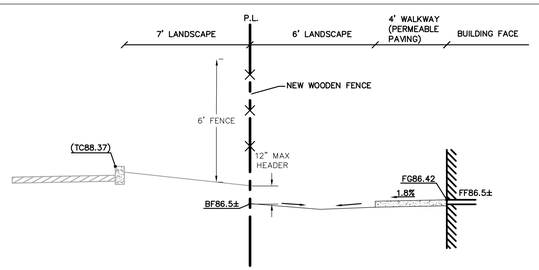
0 10 20 40
(IN FEET)
1 INCH = 20 FEET

EXISTING CONDITIONS

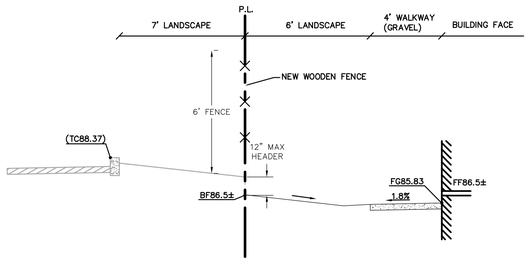
C2.0



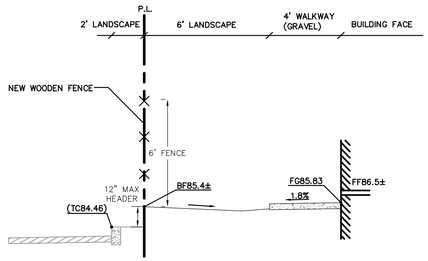
SECTION A – DISTEL CIRCLE
SCALE: 1"=4'



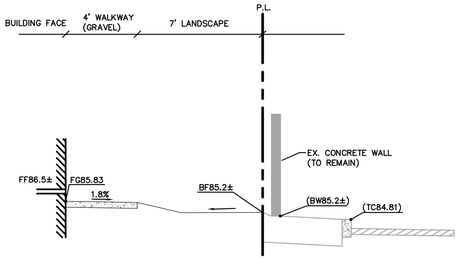
SECTION B
SCALE: 1"=4'



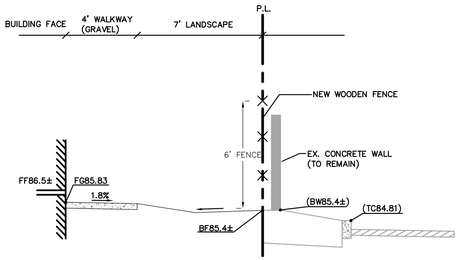
SECTION C
SCALE: 1"=4'



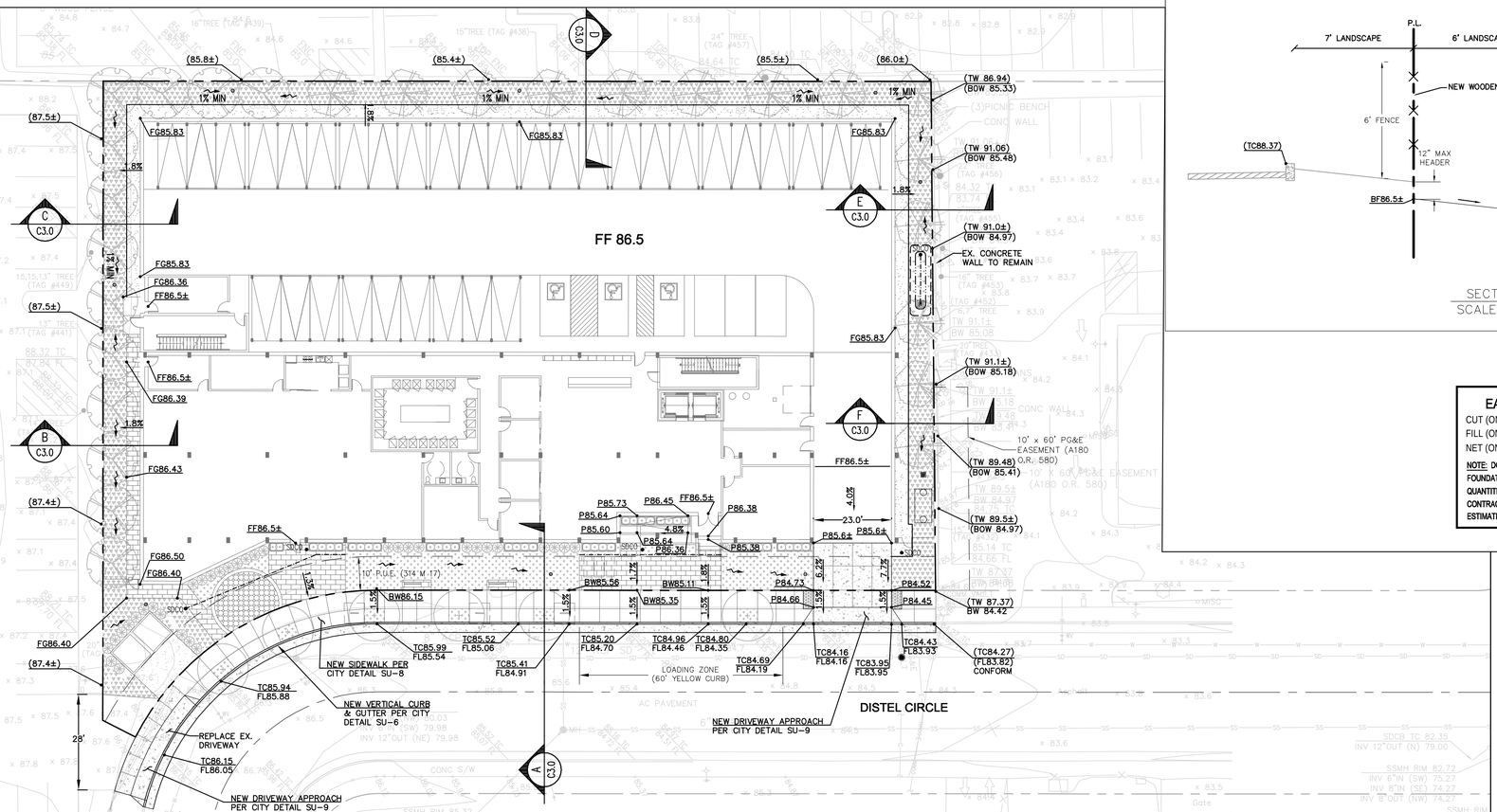
SECTION D
SCALE: 1"=4'



SECTION E
SCALE: 1"=4'



SECTION F
SCALE: 1"=4'



EARTH WORK QUANTITIES

CUT (ON & OFF SITE): 350 CY
FILL (ON & OFF SITE):: 900 CY
NET (ON & OFF SITE):: 550 CY (IMPORT)

NOTE: DOES NOT INCLUDE PAVEMENT AND CONCRETE FOUNDATIONS REMOVED DURING DEMOLITION. EARTHWORK QUANTITIES SHOWN ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INDEPENDENTLY ESTIMATE QUANTITIES FOR HIS/HER OWN USE.

LEGEND

- PROPERTY LINE
- EASEMENT
- CURB & GUTTER
- (XX.XX) EXISTING GRADE
- NEW CONCRETE
- PERMEABLE PAVERS (S.L.D.)
- DECOMPOSED GRANITE
- TREES (S.L.D.)
- TREE WELL (S.L.D.)
- 6' WOOD FENCE (S.L.D.)

ABBREVIATIONS

AC	ASPHALT CONCRETE
BF	BOTTOM OF FENCE
BFP	BACK FLOW PREVENTER
BOW	BOTTOM OF WALL
BW	BACK OF WALK
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
DW	DOMESTIC WATER
EX	EXISTING
FDC	FIRE DEPARTMENT CONTROL
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FW	FIRE WATER
P	PAVEMENT
PUE	PUBLIC UTILITY EASEMENT
RWL	RAIN WATER LEADER
SD	STORM DRAIN
SDAD	STORM DRAIN AREA DRAIN
SDDI	STORM DRAIN DRAINAGE INLET
SDJB	STORM DRAIN JUNCTION BOX
SDMH	STORM DRAIN MANHOLE
S.L.D.	SEE LANDSCAPE DRAWINGS
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
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TC	TOP OF CURB
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LOS ALTOS # 2021-0042

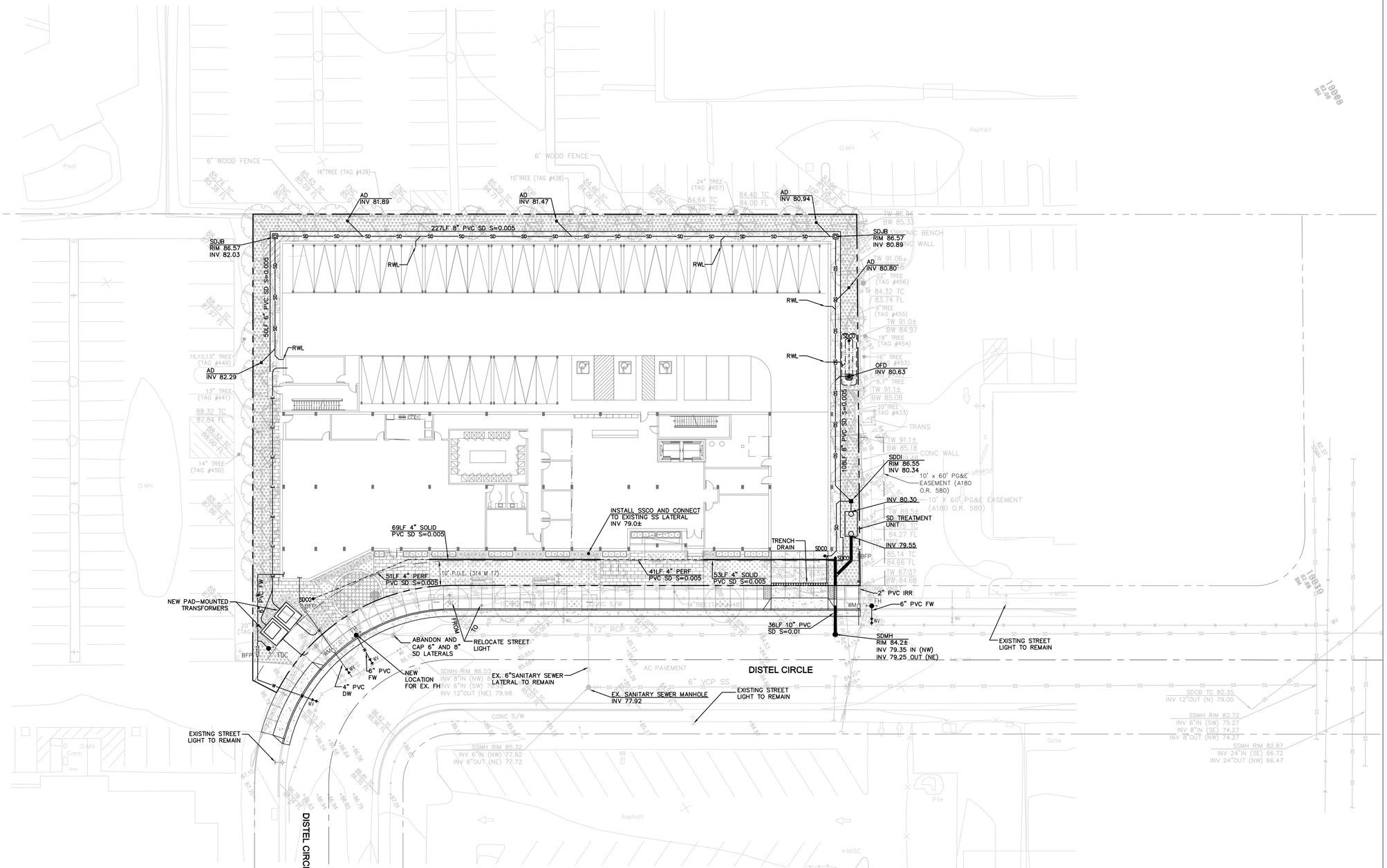
SUBMITTAL #3
JUNE 3, 2022

REGISTERED PROFESSIONAL ENGINEER
SCOTT SCHORZMAN
PE 47813
12-31-23
CIVIL
STATE OF CALIFORNIA

0 10 20 40
(IN FEET)
1 INCH = 20 FEET

PRELIMINARY GRADING PLAN

C3.0



ABBREVIATIONS

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TW	TOP OF WALL
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WH	WHARF HYDRANT
WM	WATER METER
WV	WATER VALVE

LEGEND

- PROPERTY LINE
- EASEMENT
- CURB & GUTTER
- SANITARY SEWER LINE
- STORM DRAIN LINE (PERFORATED)
- STORM DRAIN LINE (UNTREATED)
- STORM DRAIN LINE (TREATED)
- GAS LINE
- COMMUNICATIONS LINE
- WATER LINE
- ELECTRICAL LINE
- MANHOLE
- WV WATER VALVE
- SSCO SANITARY SEWER CLEANOUT
- SDCO STORM DRAIN CLEANOUT
- BFP BACKFLOW PREVENTER
- WM WATER METER
- STORM DRAIN JUNCTION BOX
- STORM DRAIN TREATMENT UNIT
- ELECTRICAL TRANSFORMER
- STORM DRAIN AREA DRAIN
- FDC FIRE DEPARTMENT CONTROL
- FH FIRE HYDRANT
- STORM DRAIN DRAINAGE INLET
- STORM DRAIN TRENCH DRAIN

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PE 47813
12-31-23
CIVIL
STATE OF CALIFORNIA

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(IN FEET)
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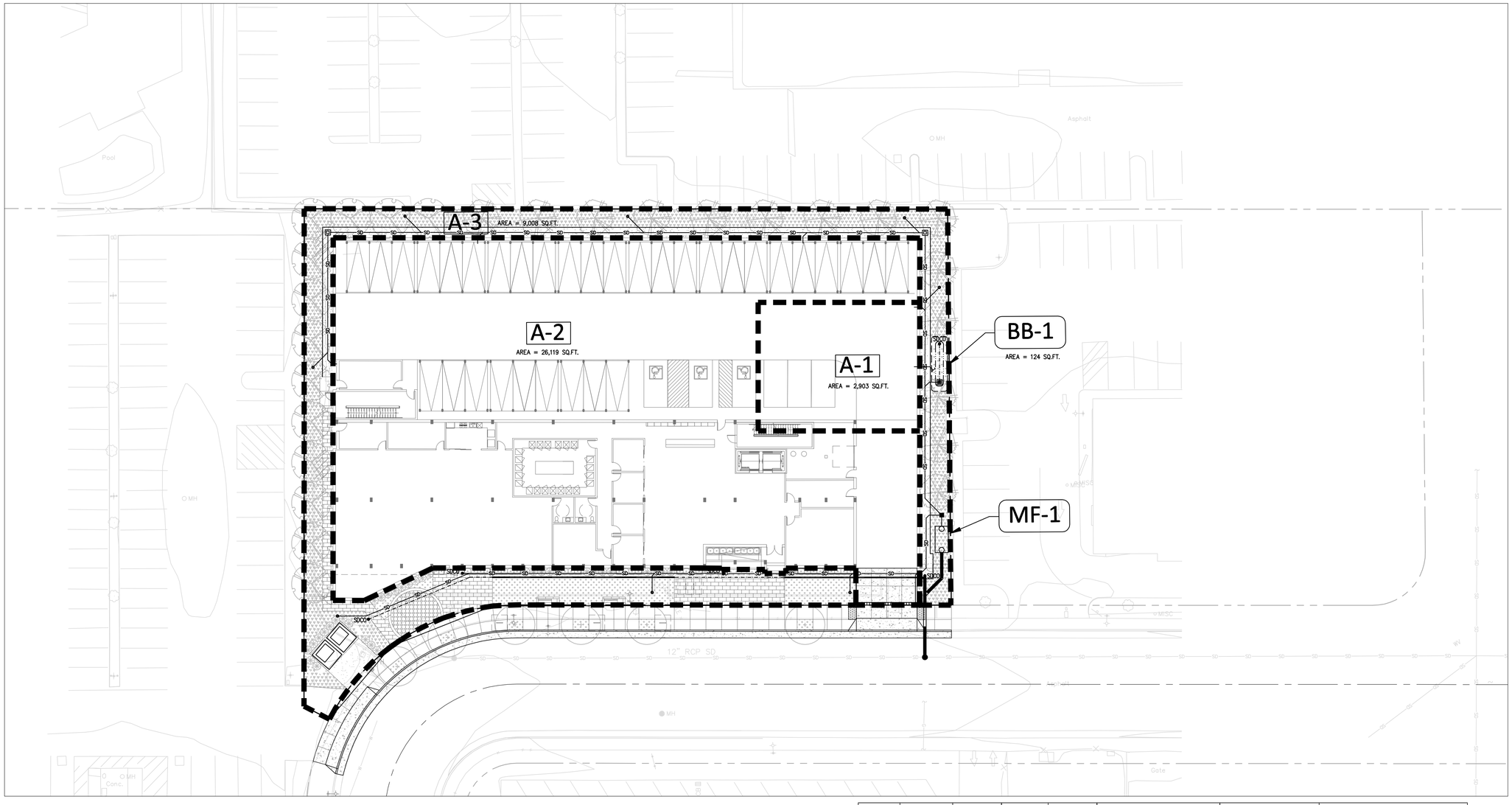
PRELIMINARY UTILITY PLAN

C4.0



ABBREVIATIONS

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BFP	BACK FLOW PREVENTER
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TC	TOP OF CURB
TW	TOP OF WALL
W	WATER
WH	WHARF HYDRANT
WM	WATER METER
WV	WATER VALVE

LEGEND

- PROPERTY LINE
- EASEMENT
- DRAINAGE AREA BOUNDARY
- STORM DRAIN LINE (PERFORATED)
- STORM DRAIN LINE (UNTREATED)
- STORM DRAIN LINE (TREATED)
- MANHOLE
- SDCO • STORM DRAIN CLEANOUT
- STORM DRAIN JUNCTION BOX
- STORM DRAIN TREATMENT UNIT
- STORM DRAIN AREA DRAIN
- STORM DRAIN DRAINAGE INLET
- STORM DRAIN TRENCH DRAIN
- A-1 DRAINAGE AREA
- BB-1 BIORETENTION BASIN TREATMENT AREA
- MF-1 MEDIA FILER TREATMENT AREA

C.3 TREATMENT FACILITIES CONSTRUCTION NOTES:

1. DURING THE BEGINNING OF THE CONSTRUCTION, THE PROJECT APPLICANT SHALL ARRANGE FOR A SITE VISIT (INSPECTION) BY A THIRD-PARTY REVIEWER ACCEPTABLE TO THE CITY OF LOS ALTOS THAT THE INSTALLED STORMWATER TREATMENT MEASURES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED BUILDING PLANS. THE THIRD-PARTY REVIEWER WILL RECOMMEND THE REQUIRED NUMBER OF SITE INSPECTIONS AT DIFFERENT INTERVALS OF CONSTRUCTION. THE THIRD-PARTY REVIEWER MUST BE A CIVIL ENGINEER, ARCHITECT OR LANDSCAPE ARCHITECT REGISTERED IN THE STATE OF CALIFORNIA AND MUST HAVE A CURRENT TRAINING ON STORMWATER TREATMENT DESIGN. A LIST OF QUALIFIED THIRD-PARTY REVIEWERS CAN BE FOUND ON THE SANTA CLARA VALLEY URBAN RUNOFF POLLUTION PREVENTION PROGRAM (SCVURPPP) WEBSITE AT WWW.SCVURPPP-W2K.COM/CONSULTANTS_LIST.SHTML
2. INSTALLATION OF POROUS PAVEMENT AND/OR VAULTS SHALL BE DONE PER STANDARD DETAILS AND SPECIFICATIONS. THIRD PARTY REVIEWER OR VENDOR SHALL INSPECT THE POROUS PAVEMENT AND/OR VAULTS INSTALLATION (INCLUDING IF NECESSARY, PERFORMING PERCOLATION TEST) AND SUBMIT THEIR CONCURRENCE LETTER TO THE CITY OF LOS ALTOS.

DRAINAGE AREA	DRAINAGE AREA SIZE (SF)	PERVIOUS SURFACE (SF)	TYPE OF PERVIOUS SURFACE	IMPERVIOUS SURFACE (SF)	TYPE OF IMPERVIOUS SURFACE	4% RULE		PROPOSED TREATMENT CONTROLS
						REQUIRED	PROVIDED	
A1	2,903	0	LANDSCAPE	2903	ROOF	116	124	BB-1
A2	26,119	0	LANDSCAPE	26119	CONCRETE/ROOF	-	-	MF-1*
A3	9,008	9008	LANDSCAPE	0	LANDSCAPE/PERMEABLE PAVERS	-	-	-
TOTALS	**38030**	**9008**		**29022**		**116**	**124**	

* THIS PROJECT MEETS THE SPECIAL PROJECT C: AFFORDABLE HOUSING DEVELOPMENT CRITERIA FROM THE MUNICIPAL REGIONAL PERMIT 3.0, WHICH IS TENTATIVELY SCHEDULED TO GO INTO EFFECT JULY 2022. THIS PROJECT IS ALLOWED UP TO 90% LID REDUCTION CREDITS.

STORMWATER TREATMENT AREA DATA

TOTAL SITE AREA =38,030 SQ. FT.
TOTAL SITE IMPERVIOUS AREA = 29,022 SQ. FT.

% IMPERVIOUS AREA TREATED BY MEDIA FILTERS = 90%
% IMPERVIOUS AREA TREATED BY LID TREATMENT = 10%

SPECIAL PROJECT C: AFFORDABLE HOUSING PROJECT CREDIT SUMMARY:

AFFORDABLE HOUSING CREDIT: 70%

DENSITY CREDIT: 15%
- THIS PROJECT IS PROJECTED TO HAVE AT LEAST 100 DU/AC

MINIMIZED SURFACE PARKING CREDITS: 5%
- THIS PROJECT HAS NO SURFACE PARKING.

LOCATION CREDIT: N/A
- THIS PROJECT IS NOT LOCATED WITHIN A ½ MILE RADIUS OF AN EXISTING OR PLANNED TRANSIT HUB.
- THIS PROJECT IS NOT LOCATED WITHIN A PLANNED PRIORITY DEVELOPMENT AREA (PDA).

TOTAL LID REDUCTION CREDIT: 90%

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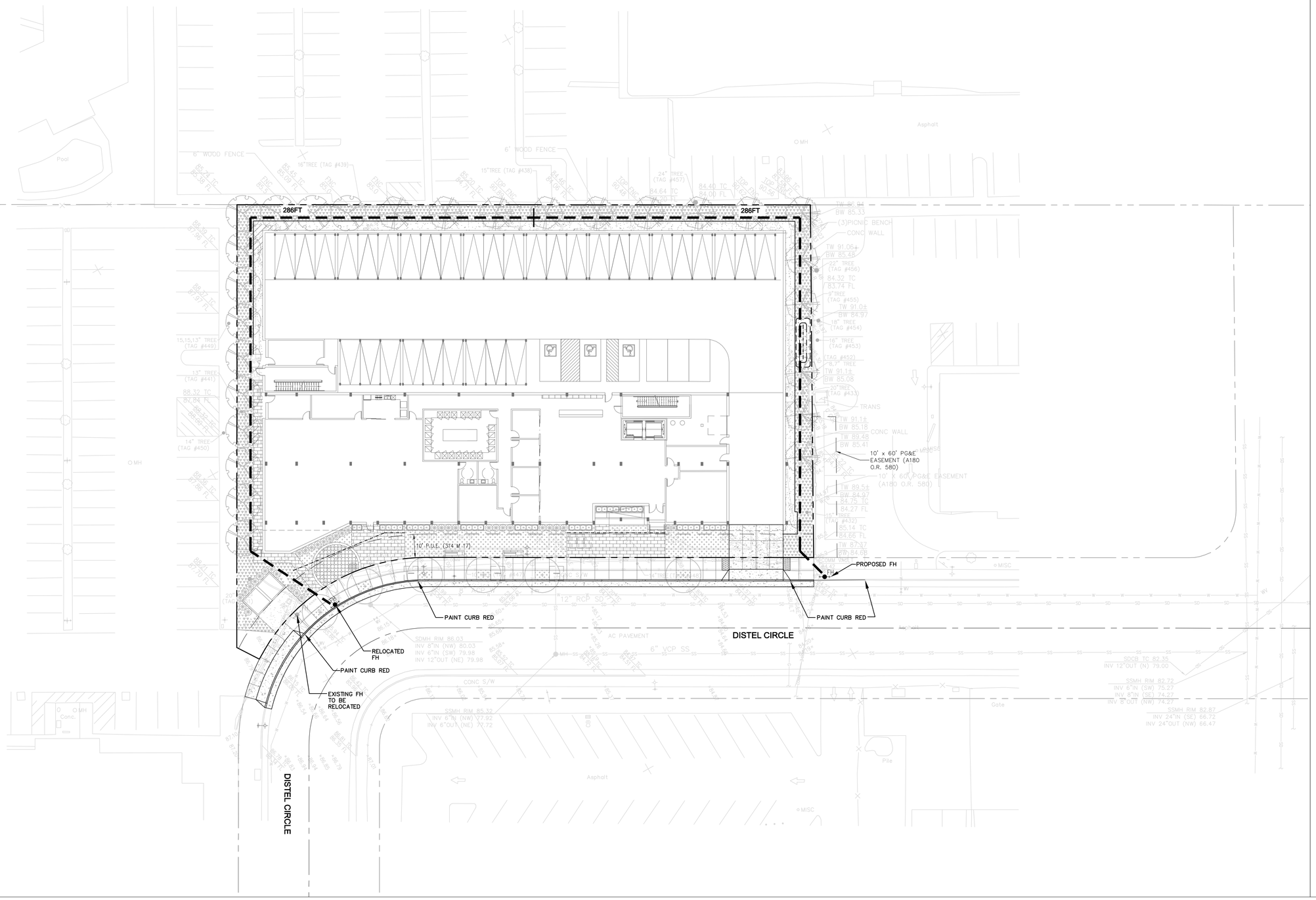
PE 47813
12-31-23
CIVIL
STATE OF CALIFORNIA

0 10 20 40
(IN FEET)
1 INCH = 20 FEET

PRELIMINARY STORMWATER CONTROL PLAN

C5.0



LEGEND

- PROPERTY LINE
- EASEMENT
- CURB & GUTTER
- FIRE HOSE REACH

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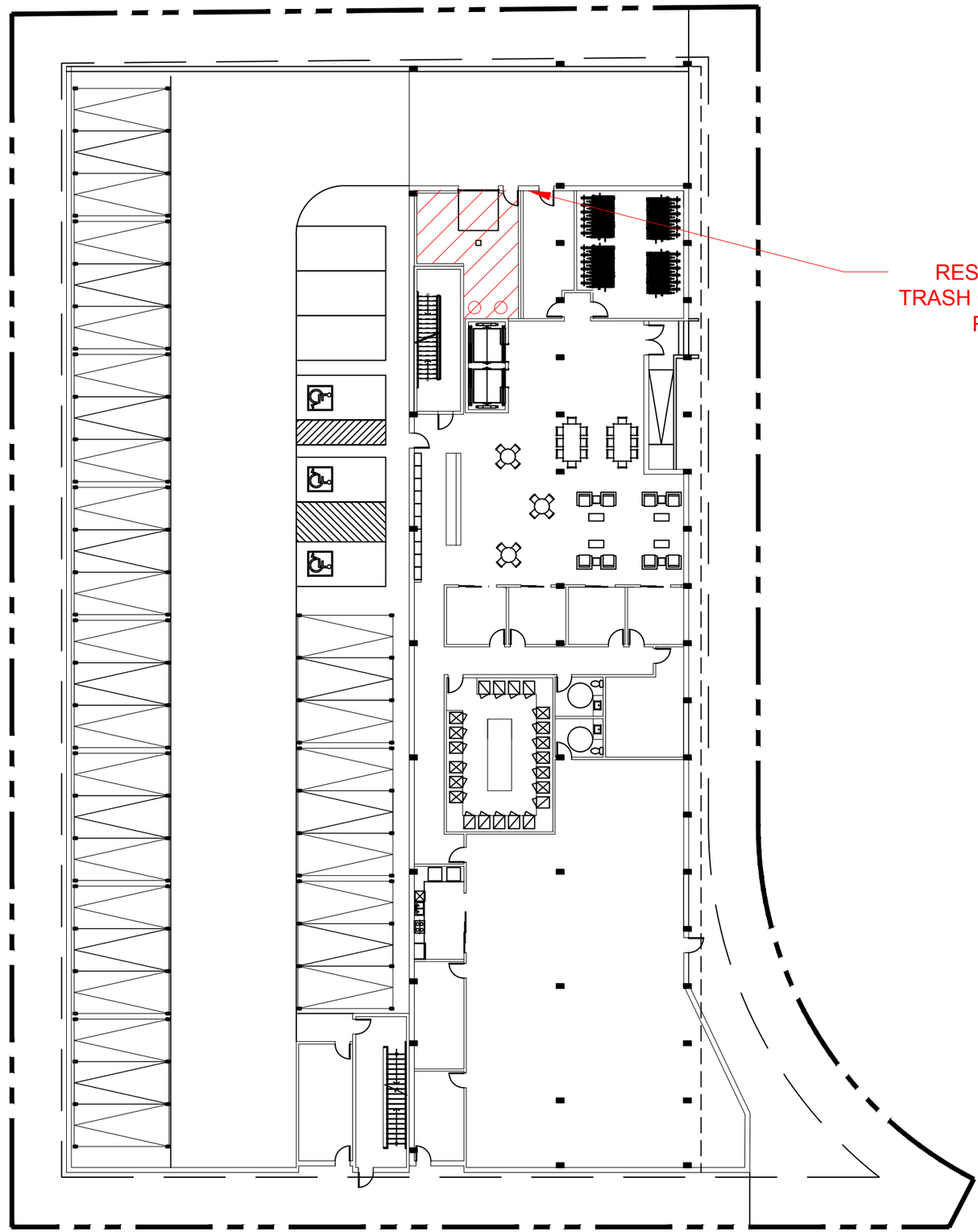
FIRE HOSE REACH PLAN

C6.0



RESIDENTIAL
TRASH COLLECTION
ROOM

AMERICAN TRASH MANAGEMENT
1900 POWELL STREET, SUITE 220
EMERYVILLE, CALIFORNIA 94608
P: 415.292.5400
F: 415.292.5410
SBROWN@TRASHMANAGE.COM

CONSULTANT

KTGY

ARCHITECT

EAH HOUSING

OWNER / DEVELOPER

NO.	DATE	ISSUE / REVISION	ISSUED BY

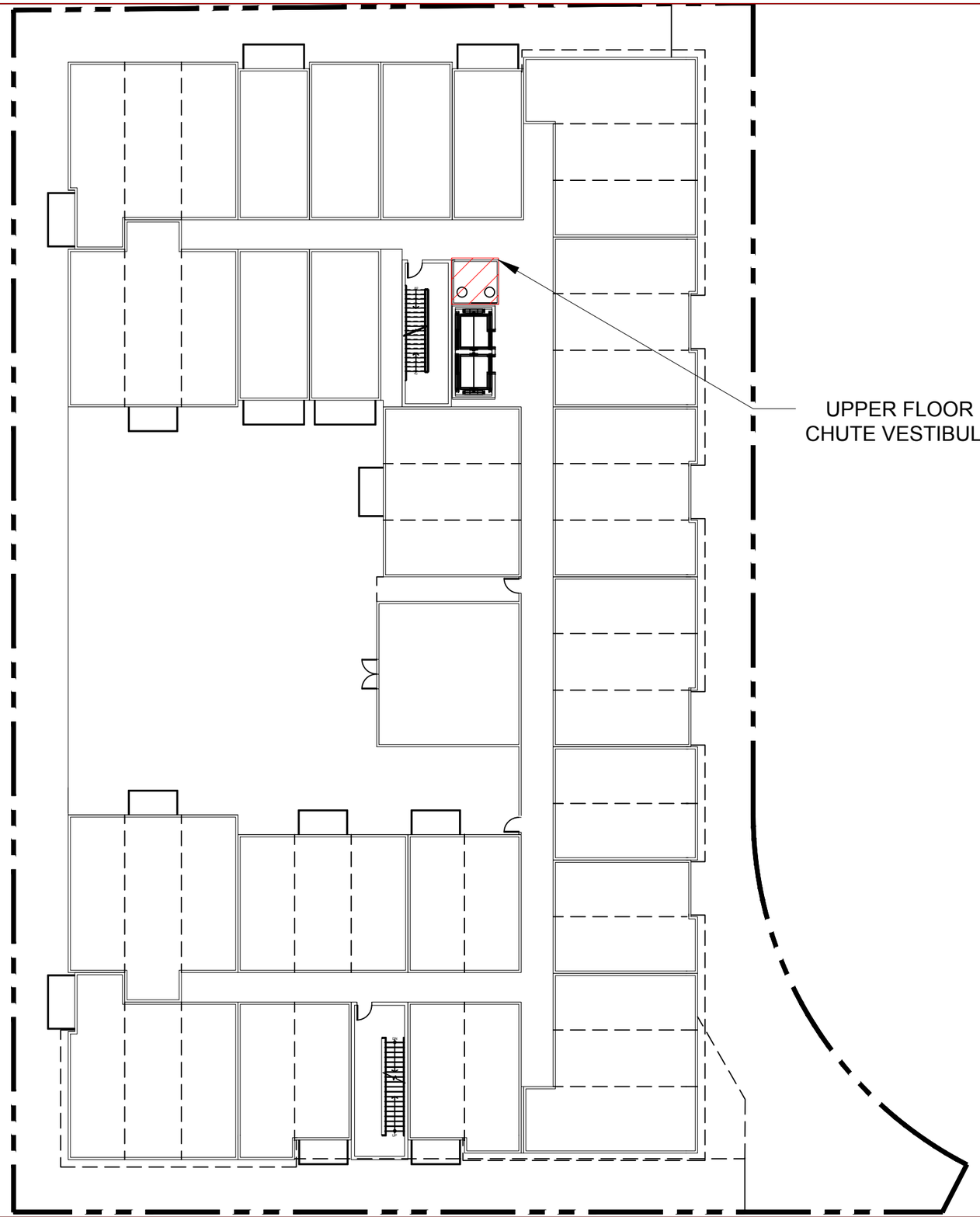
330 DISTEL CIRCLE
LOS ALTOS

PROJECT

SITE PLAN

DRAWING TITLE

PROJECT NO.	DRAWING NO. TR0.0
DRAWN CS	
APPROVED SB	
DATE 03/02/2022	
SCALE AS SHOWN	



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CONSULTANT

KTGY
ARCHITECT

EAH HOUSING
OWNER / DEVELOPER

NO.	DATE	ISSUE / REVISION	ISSUED BY

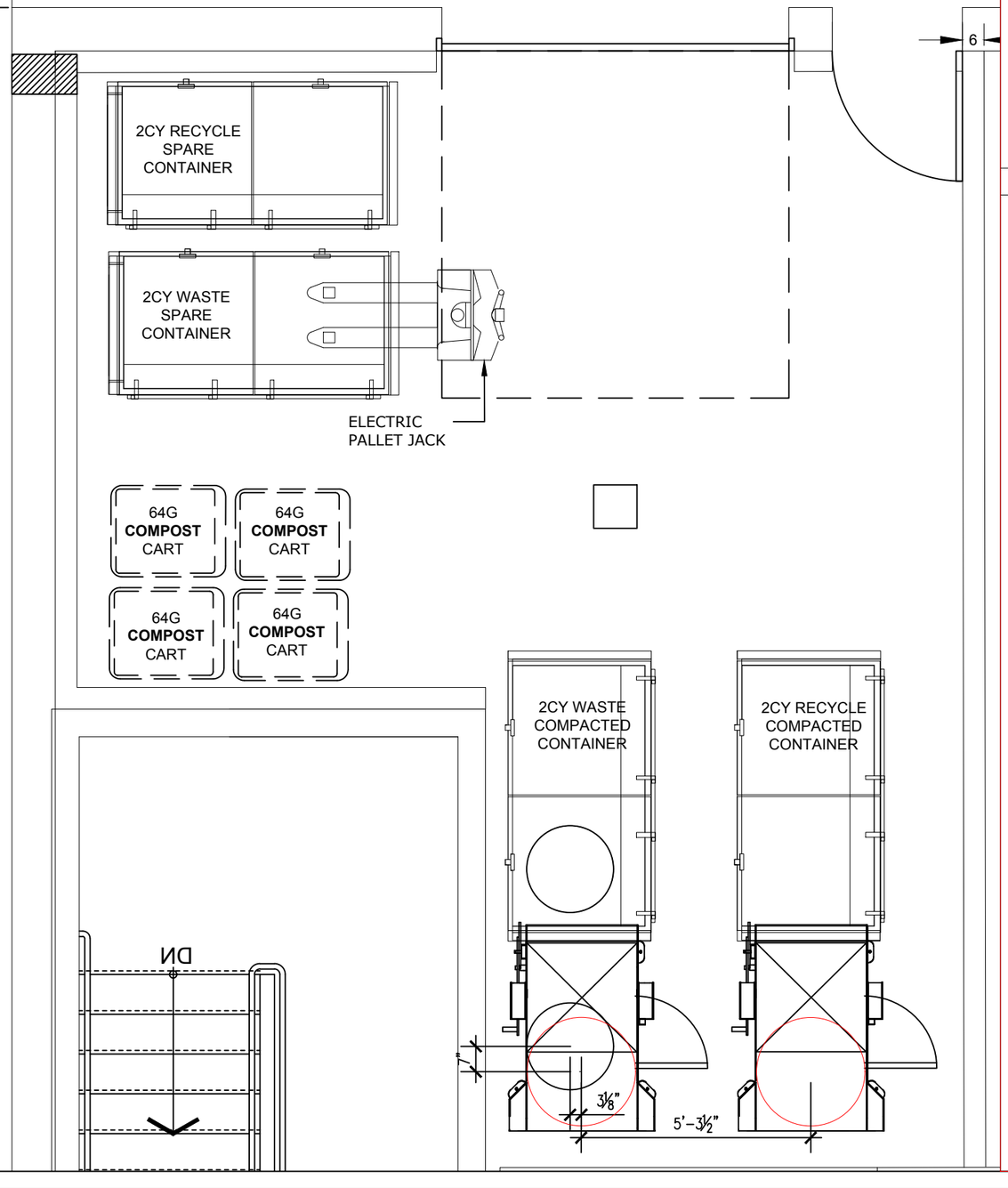
330 DISTEL CIRCLE
LOS ALTOS
PROJECT

UPPER FLOOR
CHUTE VESTIBULE
(TYP.)
DRAWING TITLE

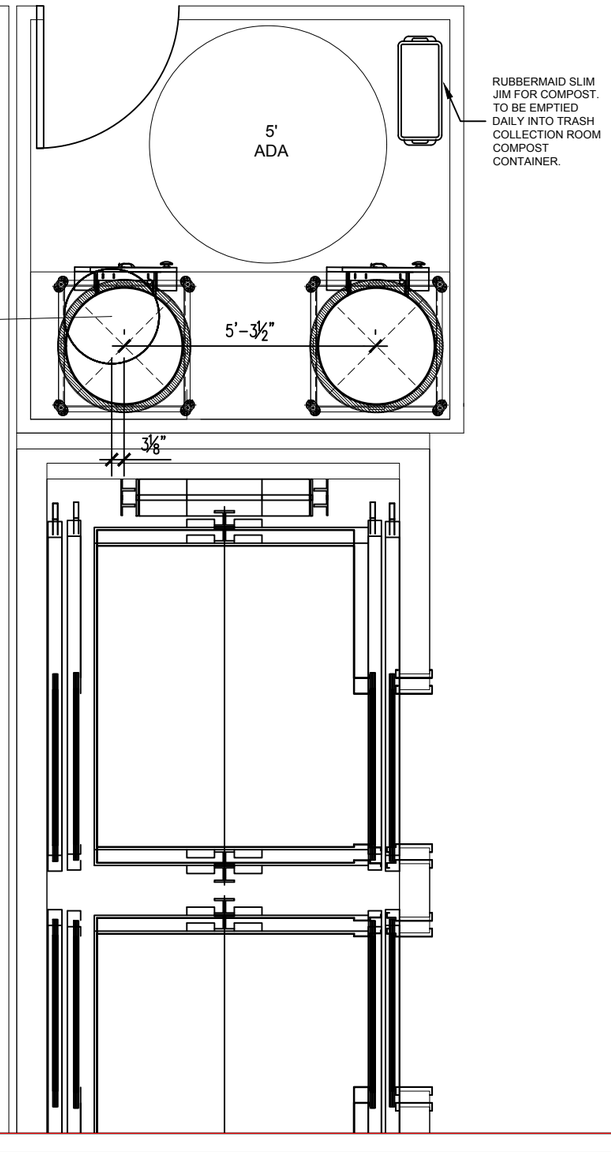
PROJECT NO.	
DRAWN	CS
APPROVED	SB
DATE	03/02/2022
SCALE	AS SHOWN

DRAWING NO.
TR0.1

PROJECTED COLLECTION SCHEDULE: RESIDENTIAL TRASH ROOM		
SERVICE:	**CONTAINER VOL / TYPE:**	**FREQUENCY:**
WASTE	(1) 2CY FL COMPACTOR CONTAINER	2x/wk
RECYCLING	(1) 2CY FL LOOSE CONTAINERS	2x/wk
COMPOST	(4) 64G TOTER CARTS	1x/wk



WE RECOMMEND ROTATING THE CHUTES IN ORDER TO ACCOMMODATE TRASH EQUIPMENT BELOW.
DESIGN ISSUE



RUBBERMAID SLIM JIM FOR COMPOST. TO BE EMPTIED DAILY INTO TRASH COLLECTION ROOM COMPOST CONTAINER.

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EMERYVILLE, CALIFORNIA 94608
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F: 415.292.5410
SBROWN@TRASHMANAGE.COM
CONSULTANT

KTGY
ARCHITECT

EAH HOUSING
OWNER / DEVELOPER

NO.	DATE	ISSUE / REVISION	ISSUED BY

330 DISTEL CIRCLE
LOS ALTOS
PROJECT

RESIDENTIAL TRASH ROOM & CHUTE VESTIBULE
(2 CHUTES W/ SLIM JIM)
DRAWING TITLE

PROJECT NO.	DRAWING NO. TR1.0
DRAWN CS	
APPROVED SB	
DATE 03/02/2022	
SCALE AS SHOWN	

PUBLIC CORRESPONDENCE

The following is public correspondence received by the City Clerk's Office after the posting of the original agenda. Individual contact information has been redacted for privacy. This may *not* be a comprehensive collection of the public correspondence, but staff makes its best effort to include all correspondence received to date.

To send correspondence to the City Council, on matters listed on the agenda please email PublicComment@losaltosca.gov

From: Gabriel Engeland
To: Public Comment
Cc: Nick Zornes
Subject: Fw: 330 Distel Circle Privacy Concern
Date: Monday, September 12, 2022 8:28:37 PM

Thanks,

Gabe

Gabriel Engeland
City Manager
City of Los Altos
(650) 947-2740 | www.losaltosca.gov

From: Damian H <[redacted]
Sent: Monday, September 12, 2022 6:31 PM
To: City Council <council@losaltosca.gov>; Anita Enander <aenander@losaltosca.gov>; Sally Meadows <smeadows@losaltosca.gov>; Neysa Fligor <nfligor@losaltosca.gov>; Lynette Lee Eng <lleeeng@losaltosca.gov>; Jonathan Weinberg <jweinberg@losaltosca.gov>
Subject: 330 Distel Circle Privacy Concern

Los Altos City Council, the 5-story building to be developed on 330 Distel Circle will impact the privacy of several homes located in the Marich Way neighborhood (see diagram below). This is due to the fact that the 5-story building windows facing Marich Way will be overlooking the various homes' backyards, swimming pools, and (bedroom) windows. The current trees provide little coverage due to the height of this new development (existing trees on 330 Distel Circle will be removed)

I moved to my house about 2-years ago and I followed all the laws to remodel it. We even reduced the size of the roof on the backyard (which would have provided extra privacy) to meet the Los Altos city code. None of the houses developed on Marich Way or in the neighborhood, expected such a tall construction to be developed. With this in mind, I would like to request the developer of this property to come up with a proposal to avoid endangering the privacy of the current homes, such as: 1) Reducing the height of the development, 2) Plant additional trees (or equivalent tall vegetation) closer to the actual impacted homes so privacy can be respected, 3) The windows of the building facing Marich should be reduced to small windows close to the ceiling of the apartment units so people inside the unit cannot see down while light can still go through.

I have been working with the developers on this issue but little progress is happening. Though I attended the last council meeting on August 18th, I did not feel that neighbors had enough time to voice their concerns (we had 2 mins on a full 2-hour presentation). In other words, we spendt almost 2 hours discussing the property in question but less than 2 mins to voice concerns and we were not able to be part of the overall discussion (i.e. the approach does not seem fair necessarily).

Lastly, the City of Los Altos seems to not be willing/able to properly enforce parking codes (which impact RVs as well as vehicles parked overnight). Case in point, I reported an RV parked on 330 Distel Circle and it took more than 5 attempts to get it handled. More concerning, the 330 Distel Circle property will only have 90 mechanical parking spaces for the 90-units being proposed (which will be insufficient since in general most units will have 2 cars each) In addition, there is no reassurance that the actual mechanical parking unit will be required to be used, stay functional, etc. As such, there is a very high chance that cars from this new building will be parked on the streets for days and/or overnight. Based on https://www.losaltosca.gov/cityclerk/page/los-altos-municipal-code, "The Los Altos City Code contains provisions and laws adopted by the City Council to maintain a healthy and safe community and to preserve the quality-of-life in Los Altos. The Code includes Zoning and Building regulations as well as administrative regulations." As such, why does the City enforces certain codes, while not others (such as "8.20.090 - Parking for more than 72 hours" and "8.20.220 - All night parking prohibited."? How would these City codes be enforced for this new building? How does the City determine which codes to enforce while maintaining a safe community and good quality-of-life? We need to ensure that we are consistent on how we enforce the City code or change them accordingly to reflect changes. I have emailed these concerns to the planning committed in July, but I have yet to get a proper response.

I am in favor of affordable housing, however we should be mindful of the privacy implications for the current residents as well. We need to find a balanced approach.

What do you recommend as next steps? I will be attending the meeting on 9/20.

Thanks

September 14, 2022

Dear Mayor Enander, Vice Mayor Meadows, and members of the Los Altos City Council,

On behalf of Los Altos Community Voices (LACV), we urge you to approve the design and issue a conditional use permit for the proposed all-affordable, 90-unit development at 330 Distel Circle. The applicant has conducted extensive outreach to inform the community about their plans and has been very responsive to suggested modifications.

Robin Abrams, Curtis Cole, Kim Cranston, Bill Sheppard, Marie Young
LACV Steering Committee

PUBLIC CORRESPONDENCE

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LEAGUE OF WOMEN VOTERS®
OF LOS ALTOS-MOUNTAIN VIEW AREA

September 18, 2022

Mayor Enander and Members of the City Council
City of Los Altos
1 N. San Antonio Road
Los Altos, CA 94022

Re: Agenda Item #2, City Council Meeting Sept. 20th – 330 Distel Circle

Dear Mayor and Members of the City Council:

As we have written earlier to both the Planning Commission and the Council, the LWV enthusiastically supports the EAH development at 330 Distel Circle, the first all-affordable housing to be built in Los Altos. The LWV supports action at all levels of government for the provision of affordable housing for all Californians. We compliment the Staff on its comprehensive report explaining the concessions and waivers allowed by State law including State Density Bonus Law.

We also compliment EAH for working with the community, as well as with the City and County, to design a project that meets neighborhood concerns but still provides the 90 units of affordable housing originally projected for this site. The location is ideal for lower-income households, near transit and services. We are also pleased to see that the percentage of very low-income units (including extremely low income) has increased from the 55% anticipated in the original MOU with the County to over 63%, as these households are the most in need of affordable housing. We urge the Council to approve this project on September 20th.

Thank you for considering our input,

(Please send any questions about this email to Sue Russell at [redacted]

Karin Bricker, President LWV of Los Altos/Mountain View

Cc: Gabe Engeland Nick Zornes Radha Hayagreev Steve Golden Jolie Houston
Erik Ramakrishnan. Angel Rodriguez

September 17, 2022

Dear Councilmembers,

For over half a century in California, we have had the legal right to make decisions about our reproductive health care, including whether to continue a pregnancy or have an abortion, and whether to choose or refuse contraceptives, based on our personal life circumstances, beliefs, and health concerns. These are among the most private, consequential, and complex decisions we make in our lives.

Physicians and other health care providers have also had legal protection to serve our reproductive health needs without being prosecuted or second-guessed by unqualified, unaffected, and often politically motivated forces.

This year, the Supreme Court of the United States, in "Dobbs v. Jackson Women's Health Organization", removed the federal protection of Roe v. Wade and left it to each state to determine whether we will retain, or lose, these fundamental reproductive rights.

As a result, individuals, organizations, and government entities all over California are joining together to support **Proposition 1, "Right to Reproductive Freedom Amendment (2022)",** which would protect these rights in our state. Prop 1 is just three sentences:

> SEC. 1.1. The state shall not deny or interfere with an individual's reproductive freedom in their most intimate decisions, which includes their fundamental right to choose to have an abortion and their fundamental right to choose or refuse contraceptives. This section is intended to further the constitutional right to privacy guaranteed by Section 1, and the constitutional right to not be denied equal protection guaranteed by Section 7. Nothing herein narrows or limits the right to privacy or equal protection.[4]

Since 1879, California's constitution has been amended over 500 times. There have been few cases where the need for a state constitutional amendment has been so clear, so urgent, and so widely supported as with Proposition 1. The bill to put Proposition 1 on our November ballot passed with overwhelming majorities in our state legislature, and is supported by the California Medical Association, the League of Women Voters, and the Santa Clara County Board of Supervisors, among many others.

As the tragic real-life consequences of the Supreme Court decision become clear in headlines across our country, it is up to us to protect the right of all Californians to make decisions about their reproductive lives, in private, based on their own beliefs and circumstances, and with the guidance of health care professionals who are able to practice to the highest ethical standards of care.

We urge the City of Los Altos to join us in supporting Proposition 1 "Right to Reproductive Freedom Amendment (2022)".

Sincerely,

Los Altos Women's Caucus

Los Altos Mountain View Community Foundation

Los Altos/Mountain View Chapter,
American Association of University Women

Los Altos Community Voices

From: Peter Robertson
To: City Council
Cc: Radha Hayagreev
Subject: EAH Housing
Date: Friday, September 16, 2022 7:36:12 AM

Dear Members of the Los Altos City Council,

I understand that EAH Housing has requested approval of the proposed development at 330 Distel Circle. This approval should not be granted. EAH Housing has not been honest in their statements concerning this development and EAH Housing is not an organization with which the city and county should do business.

For example, EAH Housing has stated that any person can walk a distance of one half mile radius (that is, 0.7 miles) in 8 minutes. This is laughable false any they are using this and similar false claims to promote the proposed development site. EAH Housing has stated that 45 parking spaces is perfectly adequate for a development of 90 units, which is again false. The 90 families in this unit would have at least 150 vehicles, and most of these would be parked on the street, or nearby streets, considering that an additional 200 families (with 400 vehicles) would live at the (mostly non-subsidized, with inadequate parking) housing a block away, at 5150 El Camino Real.

EAH Housing has not bothered to assess the impact of this development on the neighboring residents. I know this for a fact, because I am a neighboring resident. They have evidently tricked some city officials into thinking that this development is some kind of “asset” to the community. If this is true, why not move the development to a better location, such as University Avenue? But one answer is, that EAH Housing is not proposing any public space, such as a children’s playground, to go with this development.

EAH housing has also flooded my inbox with spam. This is another sign of an organization that exists only for marketing (that is, profit) rather than public service. Their proposed construction methodology is to use low cost, pre-fabricated modules, such as can be seen in similar aesthetically undesirable developments in Mountain View. It is simply not right for Los Altos.

Sincere regards,
Peter Robertson

330 Distel Circle – Affordable Housing Project City Council Meeting

Radha Hayagreev, Consulting Senior Planner

September 20, 2022

Project Team

City of Los Altos

- **Nick Zornes –** Development Services Director
- **Steve Golden –** Interim Planning Services Manager
- **Radha Hayagreev –** Consulting Senior Planner

Environmental Consultants

(David J Powers & Associates)

- **Natalie Noyes**
- **Adam Garcia**
- **Transportation Consultant – Hexagon**

Applicant / Project Sponsor Team

Developer

- **Welton Jordan and Steve Pratt –**EAH housing

Architect

- **Lily Ciammaichella, Jessica Musick, Kevin Aviles** – KTGY architects

330 Distel - SB330 project

The proposal is an SB 330 project and with the intention to stay within the limit of total 5 public meetings

1. March 22, 2022 - Story Pole Exemption hearing
2. August 18, 2022 – Joint Planning Commission / Complete Streets Commission hearing - Design Review and Conditional Use Permit, Multi-modal Transportation Review
3. September 20, 2022 – *tonight* City Council Hearing

Project Overview – 330 Distel Circle

- General Plan Designation- Thoroughfare Commercial (TC)
- Zoning – Commercial Thoroughfare (CT)

Project Overview – 330 Distel Circle

- New multi-family residential development
- 0.87 acres at 330 Distel Circle
- 90 for –rent condominium units
- 88 units – 100 % affordable housing
- 2 units – Manager units at Market rate.
- 64’ – 6” tall, five-story building
- First floor of amenities and parking
- Common open space in the rear

Housing Accountability Act

Because at least 20 percent of the units in the project would provide housing for households at or below 60 percent of Area Median Income, Per Government Code Section 65589.5 (d), the City cannot deny the project or approve it subject to conditions of approval that would make the project infeasible for housing at the levels of affordability proposed, unless one of the following findings can be made:

1.The City has met its RHNA targets for the current housing cycle at each of the affordability levels proposed for this project;

2.Denial or the imposition a condition of approval that would have the effect of rendering the project infeasible for affordable housing is necessary to avoid a violation of state or federal law;

3.The project site is located on land for agriculture or resource preservation and either: (1) the site lacks adequate water or wastewater facilities, or (2) the project site is surrounded on at least two sides by land used for agriculture or resource preservation;

4.The project would have a specific, adverse, and unmitigable impact on public health or safety; or

5.All the following are true: (1) the project is inconsistent with the zoning ordinance; (2) the project is inconsistent with the applicable general plan land use designation; (3) the City has a certified Housing Element; and (4) the project site is not identified in the Housing Element inventory or is proposed at a greater density than projected in the inventory.

Design Review Permit (D22-0002) and Conditional Use Permit (CUP22-0001)

Multiple-Family Design Review (application D22-0002) and Conditional Use Permit (application CUP22-0001) with a Density Bonus and Development Incentives and Development Waivers for a 90-unit residential development at 330 Distel Circle per the findings and conditions contained in the resolution.

Affordable Housing project

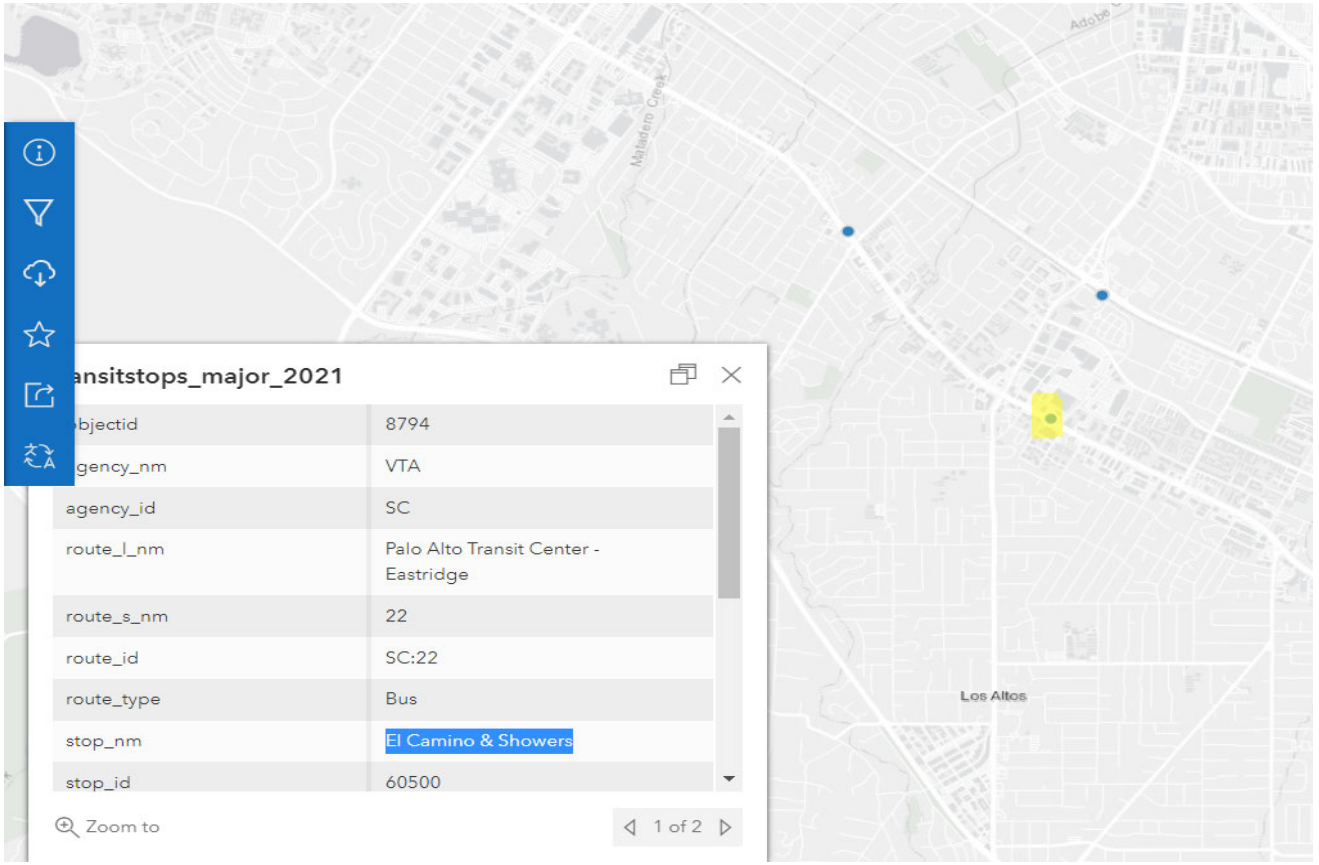
Density Bonus for Affordable housing within ½ mile of a major transit stop

The Density Bonus law definitions of **major transit stop** is:

The intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods;

El Camino and Showers drive has route 22, rapid 522 and route 40 at the frequency of service to qualify as major transit stop

MTC recognizes El Camino and Showers as a major transit stop



Source: https://opendata.mtc.ca.gov/datasets/transit-stops-major-2021-1/explore?location=37.400347%2C-122.099160%2C13.78

Density Bonus and Affordable Housing

Residential Projects that are:

- 100 percent affordable units
- Located within ½ mile of major transit stop

Are Eligible for:

- No maximum density
- No parking restriction
- Height exception of three stories or 33 feet
- Up to Four concessions

Project Density	
Lot Size	37,890 square feet, or 0.87 acres
General Plan	Thoroughfare Commercial (38 units per acre)
Zoning	Commercial Thoroughfare (38 units per acre)
Allowed Density	Base Density 33 units
Affordable Housing Requirement (LAMC)	(15%) 5 units
Affordable Housing Provided	88 units (31 Low income, 12 Very low income, 45 Extremely low income)
Eligible State Density Bonus	***No density maximum*** *(owing to affordable housing located within ½ mile of major transit stop)*
Eligible Gross Density	46 units (if using 38.75% density bonus provisions)
Additional Density Bonus Units Proposed	44 units
Total Number Dwelling Units Proposed	90 units
Percent Density Bonus proposed	274%

BMR distribution – 330 Distel Circle

Unit Mix – 330 Distel		AMI					
	SQFT PU	30%	50%	60%	80%	**Unit Total**	**Unit Mix**
SRO/Efficiency	465	14	3	7	-	24	27%
1-BR	645	9	3	7	1	20	22%
2-BR	965	12	3	4	2	21	23%
3-BR	1140	10	3	7	3	23	26%
MGR	965					2	2%
Unit Total		45	12	25	6	**90**	100%
Affordability Dist.		50%	13%	28%	7%	100%	

Concessions

Per State Density Bonus Law and the Los Altos Density Bonus Ordinance (Chapter 12.28 LAMC, Article 2), projects providing 100 percent affordable units including total units and density bonus units, exclusive of manager's units, are entitled to four development concessions

In addition, when located within ½ mile of major transit stop, the project is entitled to a building height increase up to 33 feet

	Standard (in CT zone)	Proposed	Concessions and Waivers
Front Setback LAMC 14.50.090	25ft	10ft	Concession -1
Private Open Space LAMC 14.50.150	Not required for every unit, average 50 sq. Ft. shall be provided for the total number of dwelling units. For 90 units 4,500 sq. ft	25 sq. Ft. Average 2,550 sq. ft.	Concession - 2
Design Control 14.50.170 B (1) Building Massing and articulation. Upper Story Step-Back	Min 10ft from ground floor façade for stories above 45ft in height (top story)	No step back	Concesssion-3
Reduced Standards for Los Altos REACH codes for EV Ready charging points for affordable housing projects to meet reduced requirement which is 10% EV2 ready spaces of total of 9 spaces in total.	EV2 ready spaces – 9 EV1 ready spaces – 81	Meets affordable housing 10% EV2 ready spaces. (2019 code) Proposed EV2 ready - 9	Concession – 4

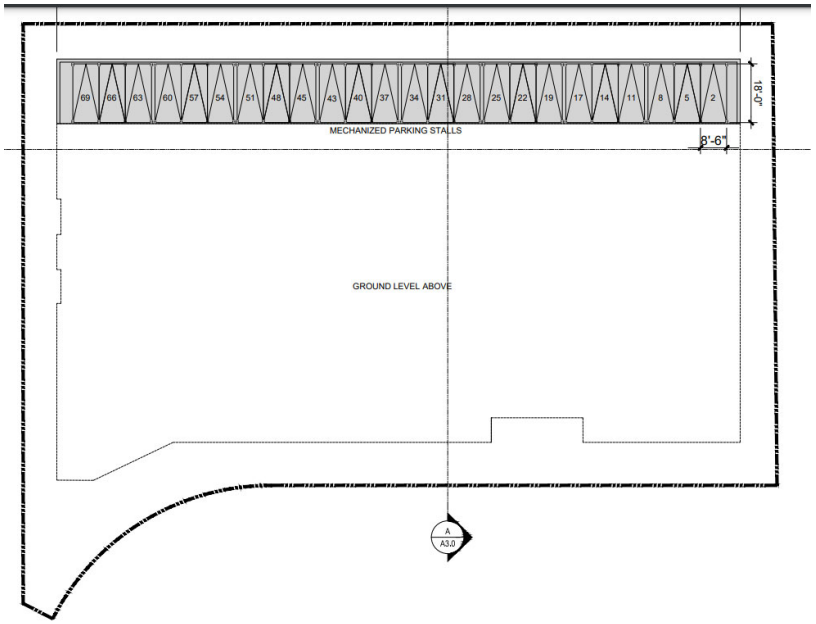
Waivers

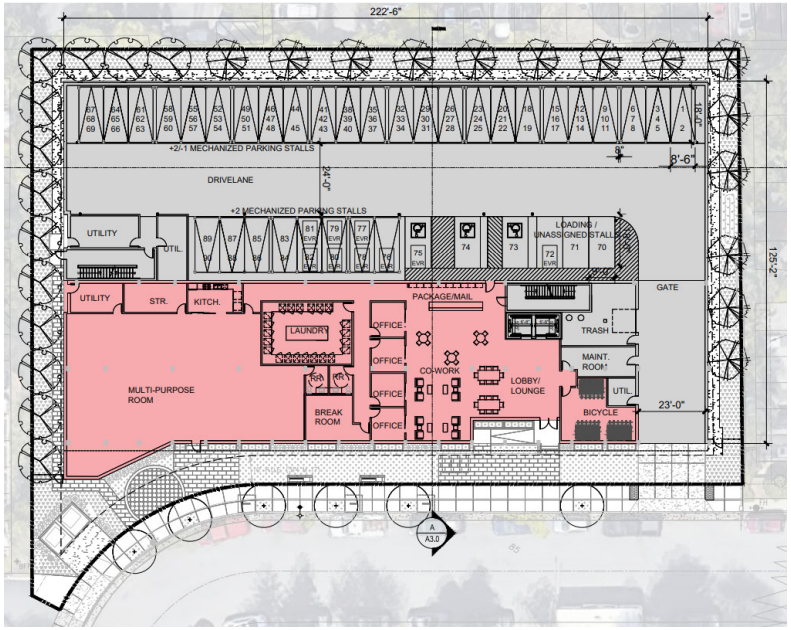
In addition to requesting concessions, density bonus projects are typically eligible for waivers of any development standards that would physically preclude the construction of a project with the density bonus and the incentives or concessions to which the development is entitled.

However, waivers are discretionary for this project.

	Standard (in CT zone)	Proposed	Waivers
Design Control 14.50.170 C (5) a. Building Design. Interior Courtyard.	Interior courtyard must be partially visible from the street and linked to the street by a clear accessible path of travel	Raised courtyard on level 2 not visible from the street. Access to courtyard and exit via stair.	Waiver-1
Design Control 14.50.170 D (4) a. Materials. Materials Defining Building Elements.	For multistory elements, the base of the building shall be defined by a distinct material selected from among the following: stone, brick, concrete, CMU, or stucco (“base material”)	Wood serves as a distinct material	Waiver-2
CT required conditions 14.50.060 C. 2. Access and screening of refuse collection	Every development will be required to provide suitable space on-site for solid waste separation, collection, storage and pick up and shall site these in locations that facilitate access, collection, and minimize any negative impact on persons occupying the development site, neighboring properties, or public right-of-way	Solid waste separation, collection and storage are on-site, but the pickup is proposed to be in the service staging area on the public right-of-way	Waiver-3

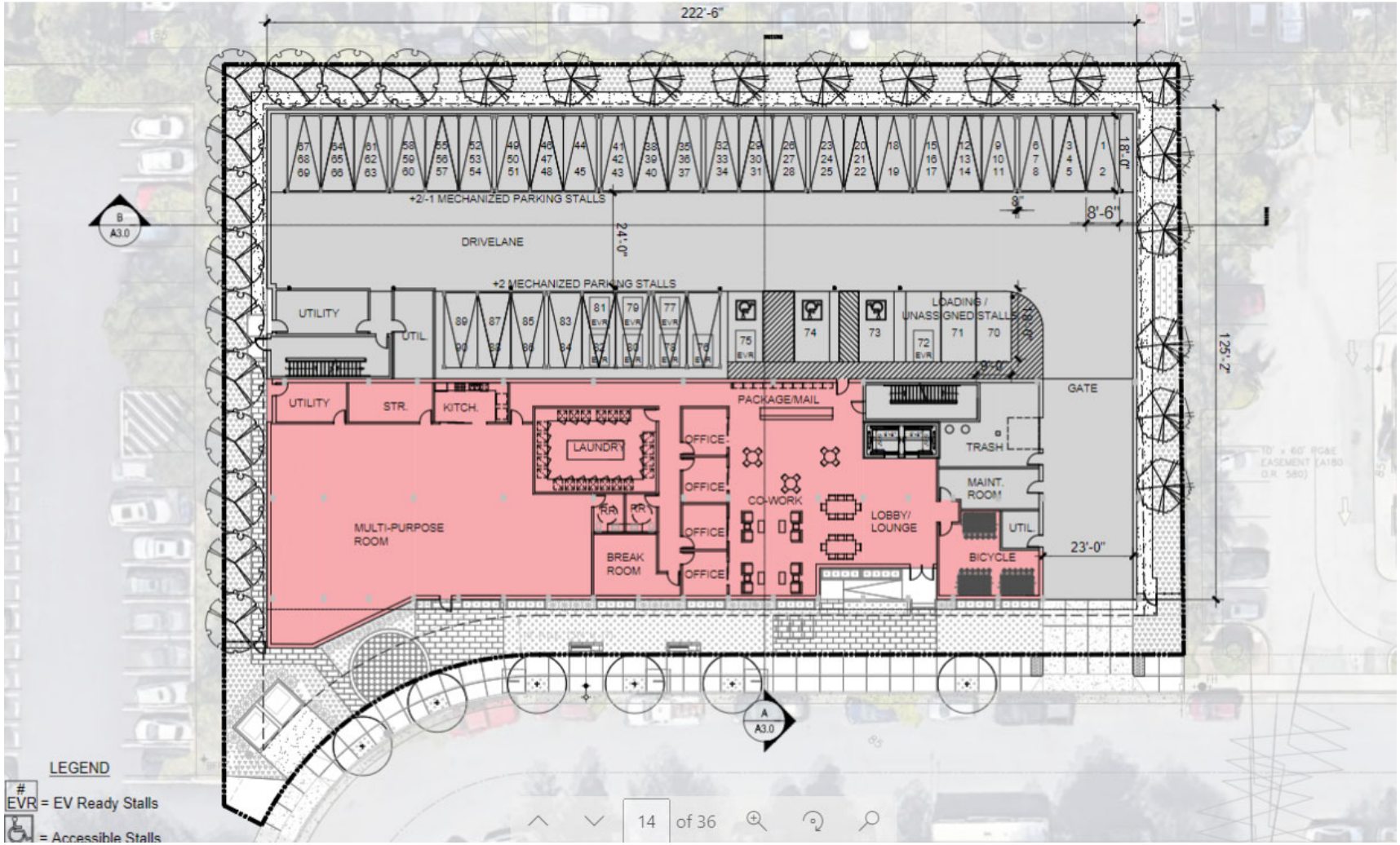
Parking



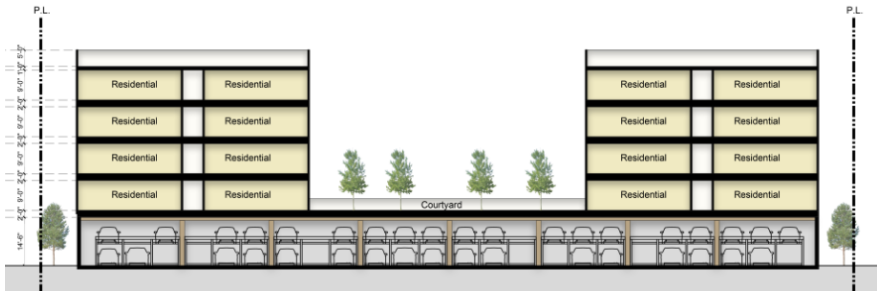


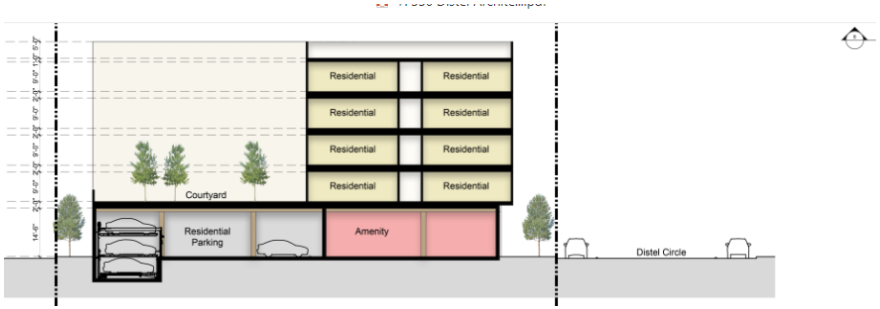
Density Bonus Parking Requirement = 0
Project Proposal = 87 parking spaces with 3 spaces designated for loading/unloading

Site Plan
First Floor



Second floor





3D renderings

3D renderings

Environmental Review (CEQA)

330 Distel Circle is categorically exempt from environmental review pursuant to Section 15332 (Class 32), Infill Exemption of the California Environmental Quality Act (CEQA) Guidelines

RH0

Findings

Design Review and Conditional Use Permit findings

Slide 20

RH0 Merge findings slides and say the details are in attachmet 2

Qualifies Class 32 exempt
Radha Hayagreev, 2022-09-14T21:10:20.719

Staff Recommendation

Recommend to the City Council approval of Multiple-Family Design Review (application D22-0002) and Conditional Use Permit (application CUP22-0001) with a Density Bonus and Development Incentives and Development Waivers for a 90-unit residential development at 330 Distel Circle per the findings and conditions contained in the resolution.

Recommend to the City Council approval of Multi-modal transportation requirement for the proposed project based on the findings and analysis found in the agenda report and resolution attached.

Recommend the City Council consider the Project categorically exempt from environmental review pursuant to Section 15332 (Class 32), Infill Exemption of the California Environmental Quality Act (CEQA) Guidelines

Presentation by applicant

- Followed by Q/A

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To send correspondence to the City Council, on matters listed on the agenda please email PublicComment@losaltosca.gov

From: Los Altos Affordable Housing Alliance
To: Public Comment
Subject: Public Comment Agenda Item #10 - 9/20/22
Date: Monday, September 19, 2022 6:10:11 PM
Attachments: LAAHA letter to CC in support of 330 Distel.pdf

Hello Councilmembers and City Staff,

Please see attached a letter in support of 330 Distel Circle.

Thank you,
LAAHA Steering Committee

--
Los Altos Affordable Housing Alliance
To educate and inspire the Los Altos community to build housing that is affordable for our workforce.

Los Altos Affordable Housing Alliance

September 19, 2022

Dear Mayor Enander, Vice Mayor Meadows, and Councilmembers,

The Los Altos Affordable Housing Alliance continues to enthusiastically support the project at 330 Distel Circle. Creating more housing at affordable levels is a huge challenge for our city, and 330 Distel Circle is a huge opportunity. Our city will benefit greatly from welcoming new neighbors at this all-affordable project.

It bears repeating that EAH Housing has done an outstandingly thorough job to engage the community and incorporate feedback into its final plan. City staff have clearly worked very hard with the developer and the County throughout the process to keep the project on track and progressing through the necessary steps.

We urge the Council to approve the 330 Distel Circle project.

Respectfully,
The Los Altos Affordable Housing Alliance

From: Courtney Welch
To: Public Comment
Cc: Dylan Casey; Greg Magofña
Subject: [External Sender]PUBLIC COMMENT: AGENDA ITEM 10 - 9/20/2022
Date: Tuesday, September 20, 2022 10:30:52 AM
Attachments: Los Altos - Distel Circle HAA Letter.pdf

Greetings Los Altos City Council,

Attached you will find a letter in regards to the proposed 330 Distel Circle Affordable Housing Development.

Thank you.

--
Courtney Welch
Planning and Investigations Director
California Renters Legal Advocacy and Education Fund

CALIFORNIA RENTERS LEGAL ADVOCACY AND EDUCATION FUND

September 19, 2022

City of Los Altos
1 North San Antonio Road
Los Altos, CA 94022

Re: Proposed 330 Distel Circle Affordable Housing Development.

Dear City Council and City Attorney:

The California Renters Legal Advocacy and Education Fund (CaRLA) submits this letter to inform the Los Altos City Council that they have an obligation to abide by all relevant state housing laws when evaluating the proposed 330 Distel Circle Multiple Family Affordable Housing Development Project. The Housing Accountability Act (GOV 65589.5) requires approval of zoning and general plan compliant projects unless findings can be made regarding specific, objective, written health and safety hazards.

As you are well aware, California remains in the throes of a statewide crisis-level housing shortage. New housing such as this is a public benefit; it will bring increased tax revenue, new customers to local businesses, decarbonization in the face of climate crisis, but most importantly it will reduce displacement of existing residents into homelessness or carbon-heavy car commutes.

CaRLA is a 501(c)3 non-profit corporation whose mission includes advocating for increased access to housing for Californians at all income levels, including low-income households. Consistent with the general plan, the proposed development will provide badly needed housing and contribute to the creation of a harmonious neighborhood through architectural integrity with neighboring structures. In addition, the proposed development will further Los Altos' affordable housing stock, thus enhancing community comfort, prosperity, and welfare.

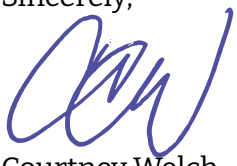
While no one project will solve the regional housing crisis, the proposed 330 Distel Road development is the kind of housing Los Altos needs to mitigate displacement, provide shelter for its growing population, and arrest unsustainable housing price appreciation. You may learn more about CaRLA at www.carlaef.org.

360 Grand Ave #323, Oakland 94610
hi@carlaef.org

Sincerely,

Dylan Casey
CaRLA Executive Director

Sincerely,



Courtney Welch
CaRLA Director of Planning and Investigation

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject **AB 481 Military Equipment Use Policy**

Prepared by: Katie Krauss, Captain of Operations
Reviewed by: Angela Averiett, Chief of Police
Approved by: Gabriel Engeland, City Manager

Attachment(s):
1. Los Altos Police Department Draft Policy 709, Military Equipment Use
2. Assembly Bill No. 481 Full Text Version
3. Ordinance NO. 22-_____

Initiated by:
Police Department, per requirements of Assembly Bill 481

Previous Council Consideration:
N/A

Fiscal Impact:
None

Environmental Review:
This Ordinance is not subject to the California Environmental Quality Act ("CEQA") pursuant to Sections 15060(c)(2) of the CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations) (the activity will not result in a direct or reasonable foreseeable indirect physical change in the environment) and 15060(c)(3) (the activity is not a project as defined in Section 15378 of the CEQA Guidelines because it has no potential for resulting in physical change to environment, directly or indirectly).

Policy Question(s) for Council Consideration:
- Does the Council wish to approve Los Altos Police Lexipol Policy 709 by ordinance in order to continue the use of this previously acquired military equipment?

Reviewed By:

City Manager	City Attorney	Finance Director
GE	JH	JF

Subject: AB 481 Military Equipment Use Policy

Summary:

- California Assembly Bill 481 requires the Los Altos Police Department to obtain City Council approval by the adoption of a military equipment use policy prior to taking certain actions relating to the funding, acquisition, or use of military equipment as defined by the legislature.

Staff Recommendation:
Staff recommends adoption of Los Altos Police Department Draft Policy 709, Military Equipment Use.

Purpose

To adopt an ordinance approving Los Altos Police Lexipol Policy 709 pertaining to the funding, acquisition, and use of military equipment.

Background

On September 30, 2021, Governor Newsom signed a series of eight (8) policing reform legislation aimed at increasing transparency of peace officer misconduct records and creates a system to decertify peace officers for serious misconduct, improving policing responsibility and accountability guidelines, raising eligibility standards, banning harmful restraint techniques, and creates a public forum for the funding, acquisition and use of military equipment. Assembly Bill 481 (AB 481) was authored by Assemblymember David Chiu (D-San Francisco) to address the funding, acquisition and use of military equipment.

California Government Section 7071 requires a law enforcement agency's military equipment policy, which includes the type of equipment the department may acquire and use, to be approved by the governing body. "Military equipment" is not related to whether or not the equipment was acquired through military sources. The Los Altos Police Department does not possess any equipment specifically designed for military use, nor has the department acquired any equipment through a military surplus program, commonly known as the 1033 Program. Our "military equipment" is included in the attached policy under inventory, and includes items such as patrol rifles, several less lethal force options, and training flash bangs utilized as diversionary devices by our SWAT team.

As part of the approval process outlined in Assembly Bill 481, the proposed military equipment policy was made available on the department website at least 30 days prior to any public hearing concerning the military equipment at issue (Government Code § 7071). The police department also hosted a community meeting to discuss AB 481 on May 12th.

Subject: AB 481 Military Equipment Use Policy

Pursuit to Government Code 7072, upon approval of a military equipment policy, the Chief of Police or the authorized designee will submit a military equipment report to the governing body for each type of military equipment approved within one year of approval, and annually thereafter for as long as the military equipment is available for use. The first annual report will be presented in September 2023.

Discussion/Analysis

California Assembly Bill 481, signed into law on September 30, 2021, requires police agencies to obtain City Council approval by the adoption of a military equipment use policy prior to taking certain actions relating to the funding, acquisition, or use of military equipment as defined by the legislature. The bill requires an annual report to the governing board regarding the military equipment.

Recommendation

The staff recommends Council adopt the attached policy by ordinance, allowing for the Police Department to continue the utilization of their military equipment.

Military Equipment

709.1 PURPOSE AND SCOPE

The purpose of this policy is to provide guidelines for the approval, acquisition, and reporting requirements of military equipment (Government Code § 7070; Government Code § 7071; Government Code § 7072). Assembly Bill 481 (AB 481), signed into law on September 30, 2021, requires law enforcement agencies to create a policy establishing guidelines and requirements for the funding, acquisition, and use of "military equipment" (Government Code § 7070, 7071, and 7072), including requirements to host informational meetings with the public, generate annual "military equipment" use reports, and seek annual approval from their respective governing bodies. The purpose of this policy is to make sure that safeguards exist, including transparency, governing body oversight, and accountability measures, to ensure the funding, acquisition, and use of "military equipment" is consistent with the provisions set forth by the governing body and as outlined in AB 481. This policy will also provide the public with a transparent view of the "military equipment" utilized by the Los Altos Police Department.

709.1.1 DEFINITIONS

Definitions related to this policy include (Government Code § 7070):

Governing body – The Los Altos City Council for the adoption of this ordinance and the approval of the annual report ~~elected or appointed body that oversees the~~ .

POST - Peace Officer Standards and Training

SWAT - Special Weapons and Tactics

Military equipment – Per AB 481, military equipment i ~~I~~ncludes but is not limited to the following:

(1) Unmanned, remotely piloted, powered aerial or ground vehicles.

(2) Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers. However, police versions of standard consumer vehicles are specifically excluded from this subdivision.

(3) High mobility multipurpose wheeled vehicles (HMMWV), commonly referred to as Humvees, two and one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached. However, unarmored all-terrain vehicles (ATVs) and motorized dirt bikes are specifically excluded from this subdivision.

(4) Tracked armored vehicles that provide ballistic protection to their occupants and utilize a tracked system instead of wheels for forward motion.

(5) Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.

(6) Weaponized aircraft, vessels, or vehicles of any kind.

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(7) Battering rams, slugs, and breaching apparatuses that are explosive in nature. However, items designed to remove a lock, such as bolt cutters, or a handheld ram designed to be operated by one person, are specifically excluded from this subdivision.

(8) Firearms of.50 caliber or greater. However, standard issue shotguns are specifically excluded from this subdivision.

(9) Ammunition of.50 caliber or greater. However, standard issue shotgun ammunition is specifically excluded from this subdivision.

(10) Specialized firearms and ammunition of less than.50 caliber, including assault weapons as defined in Sections 30510 and 30515 of the Penal Code, with the exception of standard issue service weapons and ammunition of less than.50 caliber that are issued to officers, agents, or employees of a law enforcement agency or a state agency.

(11) Any firearm or firearm accessory that is designed to launch explosive projectiles.

(12) "Flashbang" grenades and explosive breaching tools, "tear gas," and "pepper balls," excluding standard, service-issued handheld pepper spray.

(13) Taser Shockwave, microwave weapons, water cannons, and the Long Range Acoustic Device (LRAD).

(14) The following projectile launch platforms and their associated munitions: 40mm projectile launchers, "bean bag," rubber bullet, and specialty impact munition (SIM) weapons.

(15) Any other equipment as determined by a governing body or a state agency to require additional oversight.

(16) Not withstanding paragraphs (1) through (15), "military equipment" does not include general equipment not designated as prohibited or controlled by the federal Defense Logistics Agency.

~~Unmanned, remotely piloted, powered aerial or ground vehicles.~~

- ~~Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers.~~
- ~~High mobility multipurpose wheeled vehicles (HMMWV), two-and-one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached.~~
- ~~Tracked armored vehicles that provide ballistic protection to their occupants.~~
- ~~Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.~~
- ~~Weaponized aircraft, vessels, or vehicles of any kind.~~
- ~~Battering rams, slugs, and breaching apparatuses that are explosive in nature. This does not include a handheld, one-person ram.~~
- ~~Firearms and ammunition of .50 caliber or greater, excluding standard-issue shotguns and standard-issue shotgun ammunition.~~

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- ~~Specialized firearms and ammunition of less than – .50 caliber, including firearms and accessories identified as assault weapons in Penal Code § 30510 and Penal Code § 30515, with the exception of standard-issue firearms.~~
- ~~Any firearm or firearm accessory that is designed to launch explosive projectiles.~~
- ~~Noise-flash diversionary devices and explosive breaching tools.~~
- ~~Munitions containing tear gas or OC, excluding standard, service-issued handheld pepper spray.~~
- ~~TASER® Shockwave, microwave weapons, water cannons, and long-range acoustic devices (LRADs).~~
- ~~Kinetic energy weapons and munitions.~~
- ~~Any other equipment as determined by a governing body or a state agency to require additional oversight.~~

709.2 POLICY

It is the policy of the Los Altos Police Department that members of the department comply with the provisions of Government Code § 7071 with respect to qualifying "military equipment". "Military equipment" shall be used by members of the Department who have completed applicable training, including training required by the Commission on Peace Officer Standards and Training (POST). See the Military Equipment Inventory List (section 709.4) for associated "military equipment" training requirements.

"Military equipment", which has been approved for use by the governing body, shall be used in accordance with all other applicable department policies and laws. These policies and laws include, but are not limited to:

- ~~•~~ Los Altos Police Department Policy 300 (Use of Force)
- Los Altos Police Department Policy 308 (Control Devices and Techniques) ~~It is the policy of the that members of this comply with the provisions of Government Code § 7071 with respect to military equipment.~~
- Los Altos Police Department Policy 312 (Firearms)
- Los Altos Police Department Policy 414 (Hostage and Barricade Incidents)
- California Assembly Bill No. 48 (Use of Kinetic Energy Projectiles and Chemical Agents-Assemblies, Protests, and Demonstrations)
- California Penal Code Section 13652 (Use of Kinetic Energy Projectiles and Chemical Agents)

This policy expressly prohibits the use of "military equipment" on individuals or groups solely based on actual or perceived characteristics, such as race, ethnicity, national origin, religion, sex, sexual orientation, gender identity or expression, economic status, age, cultural group, or disability.

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709.3 MILITARY EQUIPMENT COORDINATOR

The Chief of Police should designate a member of this department to act as the military equipment coordinator. The responsibilities of the military equipment coordinator include but are not limited to:

(a) Acting as liaison to the governing body for matters related to the requirements of this policy.

(b) Identifying department equipment that qualifies as military equipment in the current possession of the Department, or the equipment the Department intends to acquire that requires approval by the governing body.

(c) Conducting an inventory of all military equipment at least annually.

(d) Collaborating with any allied agency that may use military equipment within the jurisdiction of Los Altos Police Department (Government Code § 7071).

(e) Preparing for, scheduling, and coordinating the annual community engagement meeting to include:

1. Publicizing the details of the meeting.
2. Preparing for public questions regarding the department's funding, acquisition, and use of equipment.

(f) Preparing the annual military equipment report for submission to the Chief of Police and ensuring that the report is made available on the department website (Government Code § 7072).

(g) Establishing the procedure for a person to register a complaint or concern, or how that person may submit any questions about the use of a type of military equipment, and how the Department will respond in a timely manner.

709.4 MILITARY EQUIPMENT INVENTORY

The following constitutes a list and description of qualifying equipment for the Department:

(a) **40 MM Launchers and Rounds:** 40mm Launchers are utilized by department personnel as a less lethal tool to launch impact rounds.

(a) Description, quantity, capabilities, and purchase cost

i. PENN ARMS GL-140-C, 40MM SINGLE SHOT LAUNCHER, cost: $1,000, quantity: 3. The 40mm Single Launcher is a tactical single shot launcher that features a collapsible stock. It will fire standard 40mm less lethal ammunition, up to 6.0 inches in cartridge length. 40mm launchers are capable of firing a variety of munitions with a maximum effective range of one hundred twenty (120) feet.

ii. SAGE CONTROL ORDINANCES INC K041 STANDARD ENERGY IMPACT BATON PROJECTILE, cost: $21.00, quantity: 14. A less lethal 40mm impact baton projectile fired from a single 40mm grenade launcher with a rifled barrel at 51-72 MPS (meters per second). The projectile provides accurate and effective performance when fired from the recommended firing distances of not less than 10 feet and no greater than 75 feet.

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(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use: Subject to subsection (g) below, s Situations for use of the less lethal weapon systems may include, but are not limited to the following: however, other situations not listed here may also be deemed authorized use cases under applicable penal codes ad case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems: :

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

v. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of less lethal weapon system.

(d) – Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(e) Lifespan:

i. Penn Arms GL-140-C- No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear

ii. K041 Standard Energy Impact Batons-5 years

(f) Fiscal Impact: Annual maintenance is approximately $100 for each launcher.

(g) Legal and Procedural Rules: Use of the 40mm launcher and 40mm baton rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the 40mm only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(b) **Less Lethal Shotgun and Rounds**: Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round.

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 LESS LETHAL SHOTGUN, cost: $950, quantity: 11. The Remington 870 Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round up to a distance of 75 feet. The range of the weapon system helps to maintain space between officers

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and a suspect reducing the immediacy of the threat which is a principle of deescalation. The less lethal 12- gauge shotgun is distinguishable by an orange butt stock and fore grip.

ii. 12-GAUGE SUPER-SOCK BEANBAG ROUND 2581, cost: $6, quantity: 90. A less lethal 2.4-inch 12-gauge shotgun round firing a ballistic fiber bag filled with 40 grams of lead shot at a velocity of 270-290 feet per second (FPS). CTS (Combined Tactical Systems) Super-Sock rounds are discharged from a dedicated 12- gauge shotgun that is distinguishable by an orange butt stock and fore grip. This round provides accurate and effective performance when fired from the approved distance of not fewer than five (5) feet. The maximum effective range of this munition is up to 75 feet from the target. The Model 2581 Super-Sock is in its deployed state immediately upon exiting the barrel. It does not require a minimum range to "unfold" or "stabilize." The Super-Sock is an aerodynamic projectile. However, accuracy is relative to the shotgun, barrel length, environmental conditions, and the operator. The Super-Sock is very accurate. However, effectiveness depends on many variables, such as distance, clothing, stature, and the point where the projectile impacts.

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use - Subject to subsection (g) below, s Situations for use of the less lethal weapon systems may include, but are not limited to the following: :

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

v. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of less lethal weapon system.

(d) Lifespan:

i. Remington 970 Less Lethal Shotgun-25 years

ii. Super Sock Round Model 2581: No listed expiration date

(e) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(f) Fiscal Impact: Annual maintenance is approximately $100 per shotgun.

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(g) Legal and Procedural Rules: Use of the less lethal shotgun and Super Sock rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the less lethal shotgun only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(c) **5.56mm Semi-Automatic Rifles and Ammunition:** The Colt AR-15/M4 5.56 mm/.223 semiautomatic rifles are used for both patrol and the SWAT Team.

(a) Description, quantity, capabilities, and purchase cost

i. COLT AR RIFLES ~~/M4 RIFLES~~, cost: $1200, quantity: 27. These rifles, equipped and locked in each patrol car or police motorcycle, offer a higher degree of accuracy at a longer distance. The ammunition used in rifles are also more effective at penetrating body armor (as some suspects have worn during high-profile shooting events in the country). They are normally kept secured in patrol cars or in the Police station and are only deployed on specific incidents where officers believe guns or weapons are involved.

ii. .223 CALIBER or 5.56MM RIFLE AMMUNITION, cost: $280 per case of 500 rounds, quantity: 10,800 rounds. This rifle ammunition used in conjunction with an AR-15 type rifle provides officers the ability to engage hostile suspects at distances generally greater than the effective distance of their handguns. Rifle ammunition fired from AR-15 rifles offer advantages over handguns, such as increased accuracy potential and the ability to defeat soft body armor but are not appropriate for every situation.

(b) Purpose: To be used as precision weapon to address a threat with more precision and/or greater distances than a handgun, if present and feasible.

(c) Authorized Use - Members may deploy the patrol rifle in any circumstance where the member can articulate a reasonable expectation that the rifle may be needed. Subject to subsection (g) below), s ~~S~~ituations for use of these ~~e less lethal~~ weapon systems may include, but are not limited to the following: ~~:~~

i. Situations where the member reasonably anticipates an armed encounter.

ii. When a member is faced with a situation that may require accurate and effective fire at long range.

iii. Situations where a member reasonably expects the need to meet or exceed a suspect's firepower.

iv. When a member reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage.

v. When a member reasonably believes that a suspect may be wearing body armor.

vi. When authorized or requested by a supervisor.

vii. When needed to euthanize an animal.

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viii. When an officer is training at an approved range or other approved facility

ix. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan:

i. Colt AR~~/M4~~ Rifles: Approximately 15-20 years

ii. 223 Caliber or 5.56mm rifle ammunition: No expiration

(e) Training: Officers must successfully complete a 24-hour patrol rifle course as well as regular Department firearms training and qualifications as required by law and policy. Firearm Instructors attend a 40-hour POST-approved rifle instructor class, and SWAT personnel must attend an 80-hour basic SWAT Team course.

(f) Fiscal Impact: Annual maintenance is approximately $100 per rifle.

(g) Legal and Procedural Rules: Use of the patrol rifles and ammunition are subject to the requirements of Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(d) **.308 Caliber Remington 700 and Heckler & Koch HK-91 Sniper Rifles and Ammunition:** The sniper rifles are capable of firing a.308 caliber bullet. This rifle may only be used by a SWAT Officer trained and certified to be a sniper (LAPD currently has two such officers) and may be deployed to assist the SWAT Team in a critical incident or emergency.

(a) Description, quantity, capabilities, and purchase cost

i. .308 CALIBER REMINGTON 700 AND 700 LTR RIFLE, cost: $1,000, quantity: 2. Remington 700: No cost, surveyed, Remington 700LTR $1,000.

ii. .308 CALIBER HECKLER & KOCH HK-91 RIFLE, cost: No cost, surveyed, , quantity: 1.

iii. .308 AMMUNITION, cost: $1.50 per round, quantity: 3, ~~.~~040 rounds. These nickel-plated bonded soft-point 308/7.62 cartridges from Speer Gold-Dot are resistant to corrosion, capable of expansion from barrels as short as 10", and retain accuracy from a variety of barrels lengths.

(b) Purpose: This rifle may only be used by a SWAT Officer trained and certified to be a sniper and may be deployed to assist the SWAT Team in a critical incident or emergency. The main use of this weapon system is for observation of an incident and to be able to accurately and immediately be able to stop a threat to life.

(c) Authorized Use: Subject to subsection (g) below, e ~~E~~xamples of situations for deploying the sniper rifle may include, but are not limited to the following: ~~:~~

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i. where the Officer reasonably anticipates an armed encounter;

ii. when the Officer is faced with a situation that may require accurate and effective fire at a long distance;

iii. where an Officer reasonably expects the need to meet or exceed the firearms and ammunition that a suspect is reported or believed to possess;

iv. when an Officer reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage;

v. when an Officer reasonably believes that a suspect may be wearing body armor.

vi. When an officer is training at an approved range or other approved facility

vii. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan:

i. .308 Caliber Remington 700/700LTR: Approximately 15 years

ii. .308 Caliber Heckler & Koch HK-91: Approximately 15 years

iii. .308 Ammunition: No expiration

(e) Training: In addition to patrol rifle and standard SWAT operator training, SWAT snipers must successfully complete a California POST-certified sniper course as well as regular SWAT sniper training and qualifications as required by law and policy.

(f) Fiscal Impact: Annual maintenance is approximately $100 per Remington rifle. The HK is not used.

(g) Legal and Procedural Rules: Use of the sniper rifles and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos, Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), Policy 312 (FIREARMS), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(e) **Benelli M3Super90 12 gauge shotgun and ammunition: This firearm is not currently used by the department and is stored in the armory.** The Benelli M3 is a dual-mode (hybrid pump-action and semi-automatic) shotgun The ammunition for the shotgun is 00 Buck and slug rounds.

(a) Description, quantity, capabilities, and purchase cost

i. BENELLI M3SUPER90 12 GAUGE SHOTGUN, cost $500, quantity: 1. The Benelli M3 is a combination Pump-Action and Semi-Automatic Shotgun. The shotgun can be chambered for 12 GA shells with a 20 inch barrel.

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ii. 00 BUCK AMMUNITION, cost: $1.80 per round, quantity: 600 rounds. A typical 12-gauge, 2 ¾-inch 00 Buckshot shell holds 8 pellets that are 0.33" in diameter. A 3-inch shell most often contains 12 of these same sized pellets.

iii. SLUG AMMUNITION, cost: $1.40 per round, quantity: 100. The Foster-type shotgun slug features exterior rifled grooves which contact the shotgun's bore to give it spin; and, the slug's hollow-point design initiates expansion to augment stopping power.

(b) Purpose: This shotgun is not currently utilized by the department. The only shotguns used by the Department are the less lethal shotguns. The ammunition is purchased solely for recruits in the police academy, where shotgun instruction occurs.

(c) Authorized Use: There is currently no authorized use for the shotgun in our policy.

(d) Lifespan:

i. Benelli M3Super90 12 gauge shotgun: Approximately 15 years

ii. OO Buck Ammunition: No expiration

iii. Slug ammunition: No expiration

(e) Training: Officers receive training in shotgun use in the police academy, and have to pass firearm qualifications. There is no further training with the Benelli shotgun or ammunition.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of all firearms fall under the following policies: Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize firearms only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(f) **Remington 870 MCS 12 Gauge Breaching shotgun and breaching rounds: This firearm/ammunition is not currently used by the department and is stored in the SWAT armory.**

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 MCS 12 GAUGE BREACHING SHOTGUN, cost: $1,400, quantity: 1. Extremely compact breaching model 12 gauge with a ten inch cylinder bore breaching barrel with parkerized finish, a Knoxx recoil reducing breacher pistol grip stock, and synthetic modular fore-end.

ii. 12 GAUGE BREACHING ROUNDS, cost: $5.00 per round, quantity: 25 rounds. The 12-Gauge TKO Breaching Round is a 12-Gauge shell loaded with a compressed zinc slug, utilizing smokeless powder as a propellant. The is a widely used method to breach door locks or hinges for entry during tactical operations.

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(b) Purpose: The breaching shotgun is used to safely gain entry into a structure. When properly deployed, the TKO breaching round is capable of defeating door lock mechanisms, door knobs, hinges, dead bolts, safety chains, and pad locks on both wooden or hollow core doors. Upon impact with the target, the zinc slug disintegrates in to a fine powder eliminating fragmentation. The Explosive Breaching Program, conducted in conjunction with the Mountain View Police Department, was established to provide the joint SWAT Team the ability to quickly create an opening in a wall or window to quickly enter a building for an emergency rescue of hostages. It is reserved for rescue operations only.

(c) Authorized Use: Subject to subsection (g) below, t ~~T~~his equipment would only be deployed during a SWAT incident, and its use would need specific authorization from the Incident Commander. The equipment may only be used by a "tactical breacher" on the SWAT team. We currently do not have any authorized users at the Department.

(d) Lifespan:

i. Remington 870 MCS 12 Gauge Breaching shotgun: Approximately 15 years

ii. 12-Gauge TKO Breaching Round: Approximately 5 years

(e) Training: The training consists of an 80-hour course for a member of the SWAT Team specifically designated as the "breacher." At the conclusion of the course, the breacher must pass a test proctored by CAL/OSHA. The OSHA certification is valid for 5 years. Before the expiration of the certification, the breacher must retake and pass the test.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of the breaching shotgun and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(g) **Kaiser Precision Vulcan II Munitions Pole: Telescoping tool utilized by SWAT personnel to safely deliver approved noise/diversionary devices.**

(a) Description, quantity, capabilities, and purchase cost

i. KAISER PRECISION VULCAN II MUNITIONS POLE, cost: $2,000, quantity: 1. The munitions pole is a multi-purpose breaching tool, constructed of lightweight aluminum square tubing used to deploy distraction devices and chemical munitions in order to gain entrance into a building, structure or even a vehicle.

(b) Purpose: The munitions pole is used to safely deploy diversionary devices, chemical munitions, or other objects (cell phones, cameras) during SWAT operations.

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(c) Authorized Use: Subject to subsection (g) below, t ~~T~~his equipment would be deployed during primarily during a SWAT incident, but could be utilized to gain entry into a residence during other high- ~~-~~risk operations on patrol.

(d) Lifespan: Approximately 10 years

(e) Training: Kaiser Precision provided an instructional video for individual and team training.

(f) Fiscal Impact: None, does not require annual maintenance

(g) Legal and Procedural Rules: Use of the munitions pole are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(h) **CTS Flash-bang Training Kit:** The training flash-bangs are built and weigh exactly the same as it's equivalent live Flash-Bang, but have no flash charge.

(a) Description, quantity, capabilities, and purchase cost

i. CTS FLASH-BANG TRAINING KIT, cost: $964, Quantity 1 kit (comes with 70 reload Training Fuzes, 1 body), current fuze inventory is 25. The training bodies are painted with a bright blue coating, and can be used an unlimited number of times. The M201FB fuze for this system has 10 times the output of a normal M201 fuze and it is threaded with a left hand thread so it can not be accidentally used in any other munitions. The training devices produce an output of about 120db.

(b) Purpose: Flash-bangs are used to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. The distraction gives Officers time to seize a moment and create an opportunity to take control of high-risk or dangerous situations.

(c) Authorized Use: Subject to subsection (g) below, SWAT operators may utilize the training flash-bangs as a training tool to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. Los Altos Police Department does not have any live flash-bangs in the inventory. Our operators use live flash-bangs while on SWAT events or at training with Mountain View Police Department.

(d) Lifespan: 5 years

(e) Training: These are a training tool. SWAT operators must attend and pass an 80-hour SWAT training class. Flash-bang training is provided by an instructor who has completed an 8-hour noise flash diversionary device course.

(f) Legal and Procedural Rules: Use of the **live** flash-bangs are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS

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PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(i) **Specialty Impact Munition (SIM) weapons and ammunition:** Simunition® is the pioneer and world leader in providing military, law enforcement and approved range members with the most realistic and non-lethal force-on-force, short range, simulation training system.

(a) Description, quantity, capabilities, and purchase cost

i. SIMUNITION GLOCK 17T, cost: $500 each, quantity: 8. The GLOCK Training Pistols were developed with the purpose of enabling reality-based tactical operations training using color marking or plastic projectile ammunition. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

ii. SIM CONVERTED BERETTA 92, cost: $500 each, quantity: 4. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

iii. HK MP5 CONVERSION KITS, cost: $500 each, quantity 2. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

iv. SIMUNITION COLT AR-15 CARBINE RIFLE UPPERS, cost: $1,000 each, quantity: 3. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

v. FX MARKING CARTRIDGES, cost: $350 for 500 rounds, quantity: 3,500 rounds. The reduced-energy, non-lethal cartridges leave a detergent-based, water-soluble color-marking compound. The visible impacts allow accurate assessment of simulated lethality. They feature tactical accuracy up to 25 feet (7.6 meters).

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(b) Purpose: Enabling reality-based, force-on-force tactical operations training using color marking or plastic projectile ammunition.

(c) Authorized Use: Subject to subsection (g) below, s Simunition weapons and marking rounds are non-operational rounds and non-operational weapons systems. These munitions provide for realistic close quarters firearms training while allowing the shooter to visually assess shot placement and accuracy in force on force training scenarios. These items are used for training purposes for all sworn staff members.

(d) Lifespan:

i. Simunition Glock 17T: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

ii. Sim Converted Beretta: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iii. HK MP5 Conversion Kits: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iv. Simunition Colt AR-15 Rifle Uppers: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

v. FX Marking Cartridges: Shelf life five (5) years.

(e) Training: These are a training tool. Simunition Instructors attend an informative, three-day (24-hour) course designed to provide students with substantial hands-on experience with Simunition® FX® training ammunition technology, weapons conversion kits, and the Simunition® line of protective equipment. The course provides in-depth, hands-on instruction in scenario-based training program development and training methodology, and gives critical practical experience to students on the best use of Simunition® training products in a highly effective, realistic, extremely safe training program. Sworn staff members are given extensive firearms handling courses and weapons safety instruction to include the use of SIMs for training purposes.

(f) Legal and Procedural Rules: Use of the Simunition firearms and marking rounds are subject to the requirements of Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS) while training. It is the policy of the Los Altos Police Department to utilize Simunition equipment only for official law enforcement training purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

709.5 APPROVAL

The Chief of Police or the authorized designee shall obtain approval from the governing body by way of an ordinance adopting the military equipment policy. As part of the approval process, the Chief of Police or the authorized designee shall ensure the proposed military equipment policy is submitted to the governing body and is available on the department website at least 30 days

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prior to any public hearing concerning the military equipment at issue (Government Code § 7071). The military equipment policy must be approved by the governing body before the Department engages in any of the following ~~prior to engaging in any of the following~~ (Government Code § 7071):

(a) Requests ~~ing~~ military equipment made available pursuant to 10 USC § 2576a.

(b) Seeki~~s~~ ~~ng~~ funds for military equipment, including but not limited to applying for a grant, soliciting or accepting private, local, state, or federal funds, in-kind donations, or other donations or transfers.

(c) Acquir~~es~~ ~~ing~~ military equipment either permanently or temporarily, including by borrowing or leasing.

(d) Collaborat~~es~~ ~~ing~~ with another law enforcement agency in the deployment or other use of military equipment within the jurisdiction of this department.

(e) Usi~~es~~ ~~ng~~ any new or existing military equipment for a purpose, in a manner, or by a person not previously approved by the governing body.

(f) Solicit~~s~~ ~~ing~~ or respond~~s~~ ~~ing~~ to a proposal for, or enter~~s~~ ~~ing~~ into an agreement with, any other person or entity to seek funds for, apply to receive, acquire, use, or collaborate in the use of military equipment.

(g) Acquiri~~es~~ ~~ng~~ military equipment through any means not provided above.

709.6 COORDINATION WITH OTHER JURISDICTIONS

Military equipment used by other law enforcement agencies that are providing mutual aid to this jurisdiction or otherwise engaged in law enforcement operations within this jurisdiction shall comply with their respective military equipment policies in rendering mutual aid.

709.7 ANNUAL REPORT

Upon approval of a military equipment policy, the Chief of Police or the authorized designee should submit a military equipment report to the governing body for each type of military equipment approved within one year of approval, and annually thereafter for as long as the military equipment is available for use (Government Code § 7072).

The Chief of Police or the authorized designee should also make each annual military equipment report publicly available on the department website for as long as the military equipment is available for use. The report shall include all information required by Government Code § 7072 for the preceding calendar year for each type of military equipment in department inventory.

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709.8 POLICY COMPLIANCE AND SUBMITTING COMPLAINTS

The Chief of Police or the authorized designee will ensure that all Los Altos Police Department employees comply with this policy. Suspected violations of the provisions set forth in this policy, or in other laws or policies governing the use of "military equipment", shall be handled in accordance with Los Altos Police Department Policy 340 (Standards of Conduct). Additionally, violations of the provisions set forth in this policy, or in other laws or policies governing the use of "military equipment", will be reported to the governing body via the annual Military Equipment Report.

Any member of the community can submit a complaint regarding the use of "military equipment" to any Los Altos Police Department employee or the Independent Intake Official. Complaints can be submitted in any form (e.g., in person, online, telephone, email, etc.). Once a complaint is received, it will be handled in accordance with Los Altos Police Department Policy 340 (Standards of Conduct) and LAPD Policy 1020 (Personnel Complaints). Formal complaints regarding alleged violations of this policy will be handled by an independent investigator.

Complaints may be made directly to the Los Altos Police Department in one of the following ways (for online options, please visit https://www.losaltosca.gov/police/page/how-are-we-doing-0):

In Person:

Los Altos Police Department
1 N. San Antonio Road, Los Altos, CA 94022

Online Submission:
Complaint PD WEBFORM

By Email:
Fill out the appropriate Civilian Complaint Submission form (online), save it to your computer and email as an attachment to **PoliceFeedback@losaltosca.gov**

By Phone:
(650) 947-2770

Complaints may be made directly to the Independent Intake Official (IIO) Stephanie Atigh in one of the following ways:

Online Submission:
Complaint IIO WEBFORM (online)

By Email:
Fill out the appropriate Civilian Complaint Submission form (located online**)**, save it to your computer and email as an attachment to **stephatigh@sbcglobal.net**

By Phone:
(831) 915-4643

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709.9 COMMUNITY ENGAGEMENT

Within 30 days of submitting and publicly releasing the annual report, the Department shall hold at least one well-publicized and conveniently located community engagement meeting, at which the Department should discuss the report and respond to public questions regarding the funding, acquisition, or use of military equipment.

~~Pursuant to California Government Code 7070(d)(7), members of the public may register complaints or concerns or submit questions about the use of each specific type of listed equipment in this policy by any of the following means:~~

(a) ~~Via email to: policefeedback @losaltosca.gov~~

(b) ~~Via phone call to : 650-947-2672~~

(c) ~~Via mail sent to:~~

~~Los Altos Police Department~~

~~Attention Operations Captain~~

~~1 North San Antonio Rd~~

~~Los Altos CA 94022~~

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STATE OF CALIFORNIA
AUTHENTICATED
ELECTRONIC LEGAL MATERIAL

Assembly Bill No. 481

CHAPTER 406

An act to add Chapter 12.8 (commencing with Section 7070) to Division 7 of Title 1 of the Government Code, relating to military equipment.

[Approved by Governor September 30, 2021. Filed with Secretary of State September 30, 2021.]

LEGISLATIVE COUNSEL'S DIGEST

AB 481, Chiu. Law enforcement and state agencies: military equipment: funding, acquisition, and use.

Existing law designates the Department of General Services as the agency for the State of California responsible for distribution of federal surplus personal property, excepting food commodities, and requires the department to, among other things, do all things necessary to the execution of its powers and duties as the state agency for the distribution of federal personal surplus property, excepting food commodities, in accordance with specified federal law. Existing law, the Federal Surplus Property Acquisition Law of 1945, authorizes a local agency, as defined, to acquire surplus federal property without regard to any law which requires posting of notices or advertising for bids, inviting or receiving bids, or delivery of purchases before payment, or which prevents the local agency from bidding on federal surplus property. Existing federal law authorizes the Department of Defense to transfer surplus personal property, including arms and ammunition, to federal or state agencies for use in law enforcement activities, subject to specified conditions, at no cost to the acquiring agency.

This bill would require a law enforcement agency, defined to include specified entities, to obtain approval of the applicable governing body, by adoption of a military equipment use policy, as specified, by ordinance at a regular meeting held pursuant to specified open meeting laws, prior to taking certain actions relating to the funding, acquisition, or use of military equipment, as defined. The bill would also require similar approval for the continued use of military equipment acquired prior to January 1, 2022. The bill would allow the governing body to approve the funding, acquisition, or use of military equipment within its jurisdiction only if it determines that the military equipment meets specified standards. The bill would require the governing body to annually review the ordinance and to either disapprove a renewal of the authorization for a type, as defined, of military equipment or amend the military equipment use policy if it determines, based on an annual military equipment report prepared by the law enforcement agency, as provided, that the military equipment does not comply with the above-described standards for approval. The bill would specify these provisions do not preclude a county or local municipality from implementing

additional requirements and standards related to the purchase, use, and reporting of military equipment by local law enforcement agencies.

This bill would also require a state agency, as defined, to create a military equipment use policy before engaging in certain activities, publish the policy on the agency's internet website, and provide a copy of the policy to the Governor or the Governor's designee, as specified. The bill would also require a state agency that seeks to continue use of military equipment acquired prior to January 1, 2022, to create a military equipment use policy.

This bill would also include findings that the changes proposed by this bill address a matter of statewide concern rather than a municipal affair and, therefore, apply to all cities, including charter cities.

By adding to the duties of local officials with respect to the funding, acquisition, and use of military equipment, this bill would impose a state-mandated local program.

The California Constitution requires local agencies, for the purpose of ensuring public access to the meetings of public bodies and the writings of public officials and agencies, to comply with a statutory enactment that amends or enacts laws relating to public records or open meetings and contains findings demonstrating that the enactment furthers the constitutional requirements relating to this purpose.

This bill would make legislative findings to that effect.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) The acquisition of military equipment and its deployment in our communities adversely impacts the public's safety and welfare, including increased risk of civilian deaths, significant risks to civil rights, civil liberties, and physical and psychological well-being, and incurment of significant financial costs. Military equipment is more frequently deployed in low-income Black and Brown communities, meaning the risks and impacts of police militarization are experienced most acutely in marginalized communities.

(b) The public has a right to know about any funding, acquisition, or use of military equipment by state or local government officials, as well as a right to participate in any government agency's decision to fund, acquire, or use such equipment.

(c) Decisions regarding whether and how military equipment is funded, acquired, or used should give strong consideration to the public's welfare, safety, civil rights, and civil liberties, and should be based on meaningful public input.

(d) Legally enforceable safeguards, including transparency, oversight, and accountability measures, must be in place to protect the public's welfare, safety, civil rights, and civil liberties before military equipment is funded, acquired, or used.

(e) The lack of a public forum to discuss the acquisition of military equipment jeopardizes the relationship police have with the community, which can be undermined when law enforcement is seen as an occupying force rather than a public safety service.

SEC. 2. Chapter 12.8 (commencing with Section 7070) is added to Division 7 of Title 1 of the Government Code, to read:

Chapter 12.8. Funding, Acquisition, and Use of Military Equipment

7070. For purposes of this chapter, the following definitions shall apply:

(a) "Governing body" means the elected body that oversees a law enforcement agency or, if there is no elected body that directly oversees the law enforcement agency, the appointed body that oversees a law enforcement agency. In the case of a law enforcement agency of a county, including a sheriff's department or a district attorney's office, "governing body" means the board of supervisors of the county.

(b) "Law enforcement agency" means any of the following:

(1) A police department, including the police department of a transit agency, school district, or any campus of the University of California, the California State University, or California Community Colleges.

(2) A sheriff's department.

(3) A district attorney's office.

(4) A county probation department.

(c) "Military equipment" means the following:

(1) Unmanned, remotely piloted, powered aerial or ground vehicles.

(2) Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers. However, police versions of standard consumer vehicles are specifically excluded from this subdivision.

(3) High mobility multipurpose wheeled vehicles (HMMWV), commonly referred to as Humvees, two and one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached. However, unarmored all-terrain vehicles (ATVs) and motorized dirt bikes are specifically excluded from this subdivision.

(4) Tracked armored vehicles that provide ballistic protection to their occupants and utilize a tracked system instead of wheels for forward motion.

(5) Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.

(6) Weaponized aircraft, vessels, or vehicles of any kind.

(7) Battering rams, slugs, and breaching apparatuses that are explosive in nature. However, items designed to remove a lock, such as bolt cutters,

or a handheld ram designed to be operated by one person, are specifically excluded from this subdivision.

(8) Firearms of .50 caliber or greater. However, standard issue shotguns are specifically excluded from this subdivision.

(9) Ammunition of .50 caliber or greater. However, standard issue shotgun ammunition is specifically excluded from this subdivision.

(10) Specialized firearms and ammunition of less than .50 caliber, including assault weapons as defined in Sections 30510 and 30515 of the Penal Code, with the exception of standard issue service weapons and ammunition of less than .50 caliber that are issued to officers, agents, or employees of a law enforcement agency or a state agency.

(11) Any firearm or firearm accessory that is designed to launch explosive projectiles.

(12) "Flashbang" grenades and explosive breaching tools, "tear gas," and "pepper balls," excluding standard, service-issued handheld pepper spray.

(13) Taser Shockwave, microwave weapons, water cannons, and the Long Range Acoustic Device (LRAD).

(14) The following projectile launch platforms and their associated munitions: 40mm projectile launchers, "bean bag," rubber bullet, and specialty impact munition (SIM) weapons.

(15) Any other equipment as determined by a governing body or a state agency to require additional oversight.

(16) Notwithstanding paragraphs (1) through (15), "military equipment" does not include general equipment not designated as prohibited or controlled by the federal Defense Logistics Agency.

(d) "Military equipment use policy" means a publicly released, written document governing the use of military equipment by a law enforcement agency or a state agency that addresses, at a minimum, all of the following:

(1) A description of each type of military equipment, the quantity sought, its capabilities, expected lifespan, and product descriptions from the manufacturer of the military equipment.

(2) The purposes and authorized uses for which the law enforcement agency or the state agency proposes to use each type of military equipment.

(3) The fiscal impact of each type of military equipment, including the initial costs of obtaining the equipment and estimated annual costs of maintaining the equipment.

(4) The legal and procedural rules that govern each authorized use.

(5) The training, including any course required by the Commission on Peace Officer Standards and Training, that must be completed before any officer, agent, or employee of the law enforcement agency or the state agency is allowed to use each specific type of military equipment to ensure the full protection of the public's welfare, safety, civil rights, and civil liberties and full adherence to the military equipment use policy.

(6) The mechanisms to ensure compliance with the military equipment use policy, including which independent persons or entities have oversight

authority, and, if applicable, what legally enforceable sanctions are put in place for violations of the policy.

(7) For a law enforcement agency, the procedures by which members of the public may register complaints or concerns or submit questions about the use of each specific type of military equipment, and how the law enforcement agency will ensure that each complaint, concern, or question receives a response in a timely manner.

(e) "State agency" means the law enforcement division of every state office, officer, department, division, bureau, board, and commission or other state body or agency, except those agencies provided for in Article IV (except Section 20 thereof) or Article VI of the California Constitution.

(f) "Type" means each item that shares the same manufacturer model number.

7071. (a) (1) A law enforcement agency shall obtain approval of the governing body, by an ordinance adopting a military equipment use policy at a regular meeting of the governing body held pursuant to the Bagley-Keene Open Meeting Act (Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2) or the Ralph M. Brown Act (Chapter 9 (commencing with Section 54950) of Part 1 of Division 2 of Title 5), as applicable, prior to engaging in any of the following:

(A) Requesting military equipment made available pursuant to Section 2576a of Title 10 of the United States Code.

(B) Seeking funds for military equipment, including, but not limited to, applying for a grant, soliciting or accepting private, local, state, or federal funds, in-kind donations, or other donations or transfers.

(C) Acquiring military equipment either permanently or temporarily, including by borrowing or leasing.

(D) Collaborating with another law enforcement agency in the deployment or other use of military equipment within the territorial jurisdiction of the governing body.

(E) Using any new or existing military equipment for a purpose, in a manner, or by a person not previously approved by the governing body pursuant to this chapter.

(F) Soliciting or responding to a proposal for, or entering into an agreement with, any other person or entity to seek funds for, apply to receive, acquire, use, or collaborate in the use of, military equipment.

(G) Acquiring military equipment through any means not provided by this paragraph.

(2) No later than May 1, 2022, a law enforcement agency seeking to continue the use of any military equipment that was acquired prior to January 1, 2022, shall commence a governing body approval process in accordance with this section. If the governing body does not approve the continuing use of military equipment, including by adoption pursuant to this subdivision of a military equipment use policy submitted pursuant to subdivision (b), within 180 days of submission of the proposed military equipment use policy to the governing body, the law enforcement agency shall cease its use of

the military equipment until it receives the approval of the governing body in accordance with this section.

(b) In seeking the approval of the governing body pursuant to subdivision (a), a law enforcement agency shall submit a proposed military equipment use policy to the governing body and make those documents available on the law enforcement agency's internet website at least 30 days prior to any public hearing concerning the military equipment at issue.

(c) The governing body shall consider a proposed military equipment use policy as an agenda item for an open session of a regular meeting and provide for public comment in accordance with the Bagley-Keene Open Meeting Act (Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2) or the Ralph M. Brown Act (Chapter 9 (commencing with Section 54950) of Part 1 of Division 2 of Title 5), as applicable.

(d) (1) The governing body shall only approve a military equipment use policy pursuant to this chapter if it determines all of the following:

(A) The military equipment is necessary because there is no reasonable alternative that can achieve the same objective of officer and civilian safety.

(B) The proposed military equipment use policy will safeguard the public's welfare, safety, civil rights, and civil liberties.

(C) If purchasing the equipment, the equipment is reasonably cost effective compared to available alternatives that can achieve the same objective of officer and civilian safety.

(D) Prior military equipment use complied with the military equipment use policy that was in effect at the time, or if prior uses did not comply with the accompanying military equipment use policy, corrective action has been taken to remedy nonconforming uses and ensure future compliance.

(2) In order to facilitate public participation, any proposed or final military equipment use policy shall be made publicly available on the internet website of the relevant law enforcement agency for as long as the military equipment is available for use.

(e) (1) The governing body shall review any ordinance that it has adopted pursuant to this section approving the funding, acquisition, or use of military equipment at least annually and, subject to paragraph (2), vote on whether to renew the ordinance at a regular meeting held pursuant to the Bagley-Keene Open Meeting Act (Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2) or the Ralph M. Brown Act (Chapter 9 (commencing with Section 54950) of Part 1 of Division 2 of Title 5), as applicable.

(2) The governing body shall determine, based on the annual military equipment report submitted pursuant to Section 7072, whether each type of military equipment identified in that report has complied with the standards for approval set forth in subdivision (d). If the governing body determines that a type of military equipment identified in that annual military equipment report has not complied with the standards for approval set forth in subdivision (d), the governing body shall either disapprove a renewal of the authorization for that type of military equipment or require modifications

to the military equipment use policy in a manner that will resolve the lack of compliance.

(f) Notwithstanding subdivisions (a) to (e), inclusive, if a city contracts with another entity for law enforcement services, the city shall have the authority to adopt a military equipment use policy based on local community needs.

7072. (a) A law enforcement agency that receives approval for a military equipment use policy pursuant to Section 7071 shall submit to the governing body an annual military equipment report for each type of military equipment approved by the governing body within one year of approval, and annually thereafter for as long as the military equipment is available for use. The law enforcement agency shall also make each annual military equipment report required by this section publicly available on its internet website for as long as the military equipment is available for use. The annual military equipment report shall, at a minimum, include the following information for the immediately preceding calendar year for each type of military equipment:

(1) A summary of how the military equipment was used and the purpose of its use.

(2) A summary of any complaints or concerns received concerning the military equipment.

(3) The results of any internal audits, any information about violations of the military equipment use policy, and any actions taken in response.

(4) The total annual cost for each type of military equipment, including acquisition, personnel, training, transportation, maintenance, storage, upgrade, and other ongoing costs, and from what source funds will be provided for the military equipment in the calendar year following submission of the annual military equipment report.

(5) The quantity possessed for each type of military equipment.

(6) If the law enforcement agency intends to acquire additional military equipment in the next year, the quantity sought for each type of military equipment.

(b) Within 30 days of submitting and publicly releasing an annual military equipment report pursuant to this section, the law enforcement agency shall hold at least one well-publicized and conveniently located community engagement meeting, at which the general public may discuss and ask questions regarding the annual military equipment report and the law enforcement agency's funding, acquisition, or use of military equipment.

7073. (a) A state agency shall create a military equipment use policy prior to engaging in any of the following:

(1) Requesting military equipment made available pursuant to Section 2576a of Title 10 of the United States Code.

(2) Seeking funds for military equipment, including, but not limited to, applying for a grant, soliciting or accepting private, local, state, or federal funds, in-kind donations, or other donations or transfers.

(3) Acquiring military equipment either permanently or temporarily, including by borrowing or leasing.

(4) Collaborating with a law enforcement agency or another state agency in the deployment or other use of military equipment within the territorial jurisdiction of the governing body.

(5) Using any new or existing military equipment for a purpose, in a manner, or by a person not previously approved by the governing body pursuant to this chapter.

(6) Soliciting or responding to a proposal for, or entering into an agreement with, any other person or entity to seek funds for, or to apply to receive, acquire, use, or collaborate in the use of, military equipment.

(7) Acquiring military equipment through any means not provided by this subdivision.

(b) No later than May 1, 2022, a state agency seeking to continue the use of any military equipment that was acquired prior to January 1, 2022, shall create a military equipment use policy.

(c) A state agency that is required to create a military equipment use policy pursuant to this section shall do both of the following within 180 days of completing the policy:

(1) Publish the military equipment use policy on the agency's internet website.

(2) Provide a copy of the military equipment use policy to the Governor or the Governor's designee.

7074. The Legislature finds and declares that ensuring adequate oversight of the acquisition and use of military equipment is a matter of statewide concern rather than a municipal affair as that term is used in Section 5 of Article XI of the California Constitution. Therefore, this chapter applies to all cities, including charter cities and shall supersede any inconsistent provisions in the charter of any city, county, or city and county.

7075. Nothing in this chapter shall preclude a county or local municipality from implementing additional requirements and standards related to the purchase, use, and reporting of military equipment by local law enforcement agencies.

SEC. 3. The Legislature finds and declares that Section 1 of this act, which adds Chapter 12.8 (commencing with Section 7070) to Division 7 of Title 1 of the Government Code, furthers, within the meaning of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the purposes of that constitutional section as it relates to the right of public access to the meetings of local public bodies or the writings of local public officials and local agencies. Pursuant to paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the Legislature makes the following findings:

Requiring local agencies to hold public meetings prior to the acquisition of military equipment further exposes that activity to public scrutiny and enhances public access to information concerning the conduct of the people's business.

SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district under this act would

result from a legislative mandate that is within the scope of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution.

O

ORDINANCE NO.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS ADDING A NEW CHAPTER 7.30, ENTITLED "MILITARY EQUIPMENT POLICY," TO THE LOS ALTOS CITY CODE IN COMPLIANCE WITH ASSEMBLY BILL 481

WHEREAS, on September 30, 2021, Governor Gavin Newsom signed into law Assembly Bill 481 ("AB 481") (creating Government Code, Section 7070, et seq.), relating to the use of military equipment by California law enforcement agencies; and

WHEREAS, AB 481 seeks to provide transparency, oversight, and an opportunity for meaningful public input on decisions regarding whether and how military equipment is funded, acquired, or used; and

WHEREAS, the Los Altos Police Department is in possession of certain items of equipment that qualify as "military equipment" under AB 481; and

WHEREAS, AB 481 requires that a law enforcement agency possessing and using such qualifying equipment prepare a publicly released, written military equipment use policy document covering the inventory, description, purpose, use, acquisition, maintenance, fiscal impacts, procedures, training, oversight, and complaint process applicable to the Los Altos Police Department's use of such equipment; and

WHEREAS, the Policy and supporting information must be approved by the governing body by ordinance and reviewed annually; and

WHEREAS, the City Council of the City of Los Altos, having received the information required under AB 481 regarding the Los Altos Police Department's use of military equipment as defined in said law, deems it to be in the best interest of the City to approve the Military Equipment Policy as set forth herein.

NOW THEREFORE, the City Council of the City of Los Altos does hereby ordain as follows:

SECTION 1. AMENDMENT TO CHAPTER 7 OF THE MUNICIPAL CODE. Section 7.30.010 is hereby added to the Los Altos Municipal Code to read as follows:

"7.30.010. Military equipment policy.

A. The City Council has made the following determinations:

1. The military equipment inventoried and presented to the City Council is necessary because there is no reasonable alternative that can achieve the same objective of officer and civilian safety.

2. The proposed military equipment use policy ("Policy") will safeguard the public's welfare, safety, civil rights and civil liberties (said Policy is attached hereto as Exhibit "A" and incorporated by this reference).

3. The equipment is reasonably cost-effective compared to available alternatives that can achieve the same objective of officer and civilian safety (if any).

4. Prior military equipment use complied with the applicable equipment use policy (which included equipment now defined as military equipment) that was in effect at the time, or if prior uses did not comply with the accompanying military equipment use policy, corrective action has been taken to remedy nonconforming uses and ensure future compliance.

B. The Policy was considered by the City Council as an agenda item in an open session of regular meeting and noticed in accordance with the Ralph M. Brown Act, at which public comment was permitted.

C. The Policy shall be made publicly available on the Los Altos police department's website for as long as the military equipment is available for use.

D. The Los Altos police department shall submit an annual military equipment report to the city council containing the information required in California Government Code, Section 7072, and the city council shall determine whether each type of military equipment identified in that report has complied with the standards for approval set forth in Paragraphs (a)(1)-(4) above.

E. The City Council shall review this ordinance and vote on whether renew it, on an annual basis at a regular meeting, in accordance with California Government Code Section 7071(e)(2).

F. The City Council approves the use of the Policy and finds that it satisfies the requirements of California Government Code Section 7070(d)."

SECTION 2. This Ordinance is not subject to the California Environmental Quality Act ("CEQA") pursuant to Sections 15060(c)(2) of the CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations) (the activity will not result in a direct or reasonable foreseeable indirect physical change in the environment) and 15060(c)(3) (the activity is not a project as defined in Section 15378 of the CEQA Guidelines because it has no potential for resulting in physical change to environment, directly or indirectly).

SECTION 3. CONSTITUTIONALITY. If any section, subsection, sentence, clause or phrase of this code is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

SECTION 4. PUBLICATION. This Ordinance shall be published as provided in Government Code section 36933.

SECTION 5. EFFECTIVE DATE. This Ordinance shall be effective upon the commencement of the thirty-first day following the adoption date.

The foregoing Ordinance was duly and properly introduced at a regular meeting of the City Council of the City of Los Altos held on _____, 2022 and was thereafter, at a regular meeting held on _____, 2022 passed and adopted by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Anita Enander, MAYOR

Attest:

_____
Angel Rodriguez, INTERIM CITY CLERK

Military Equipment

709.1 PURPOSE AND SCOPE

The purpose of this policy is to provide guidelines for the approval, acquisition, and reporting requirements of military equipment (Government Code § 7070; Government Code § 7071; Government Code § 7072).

709.1.1 DEFINITIONS

Definitions related to this policy include (Government Code § 7070):

Governing body – The elected or appointed body that oversees the Department.

Military equipment – Includes but is not limited to the following:

- Unmanned, remotely piloted, powered aerial or ground vehicles.
- Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers.
- High mobility multipurpose wheeled vehicles (HMMWV), two-and-one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached.
- Tracked armored vehicles that provide ballistic protection to their occupants.
- Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.
- Weaponized aircraft, vessels, or vehicles of any kind.
- Battering rams, slugs, and breaching apparatuses that are explosive in nature. This does not include a handheld, one-person ram.
- Firearms and ammunition of .50 caliber or greater, excluding standard-issue shotguns and standard-issue shotgun ammunition.
- Specialized firearms and ammunition of less than .50 caliber, including firearms and accessories identified as assault weapons in Penal Code § 30510 and Penal Code § 30515, with the exception of standard-issue firearms.
- Any firearm or firearm accessory that is designed to launch explosive projectiles.
- Noise-flash diversionary devices and explosive breaching tools.
- Munitions containing tear gas or OC, excluding standard, service-issued handheld pepper spray.
- TASER® Shockwave, microwave weapons, water cannons, and long-range acoustic devices (LRADs).
- Kinetic energy weapons and munitions.
- Any other equipment as determined by a governing body or a state agency to require additional oversight.

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709.2 POLICY

It is the policy of the Los Altos Police Department that members of this department comply with the provisions of Government Code § 7071 with respect to military equipment.

709.3 MILITARY EQUIPMENT COORDINATOR

The Chief of Police should designate a member of this department to act as the military equipment coordinator. The responsibilities of the military equipment coordinator include but are not limited to:

(a) Acting as liaison to the governing body for matters related to the requirements of this policy.

(b) Identifying department equipment that qualifies as military equipment in the current possession of the Department, or the equipment the Department intends to acquire that requires approval by the governing body.

(c) Conducting an inventory of all military equipment at least annually.

(d) Collaborating with any allied agency that may use military equipment within the jurisdiction of Los Altos Police Department (Government Code § 7071).

(e) Preparing for, scheduling, and coordinating the annual community engagement meeting to include:

1. Publicizing the details of the meeting.
2. Preparing for public questions regarding the department's funding, acquisition, and use of equipment.

(f) Preparing the annual military equipment report for submission to the Chief of Police and ensuring that the report is made available on the department website (Government Code § 7072).

(g) Establishing the procedure for a person to register a complaint or concern, or how that person may submit a question about the use of a type of military equipment, and how the Department will respond in a timely manner.

709.4 MILITARY EQUIPMENT INVENTORY

The following constitutes a list and description of qualifying equipment for the Department:

1. **40 MM Launchers and Rounds:** 40mm Launchers are utilized by department personnel as a less lethal tool to launch impact rounds.

   (a) Description, quantity, capabilities, and purchase cost

      i. PENN ARMS GL-140-C, 40MM SINGLE SHOT LAUNCHER, cost: $1,000, quantity: 3. The 40mm Single Launcher is a tactical single shot launcher that features a collapsible stock. It will fire standard 40mm less lethal ammunition, up to 6.0 inches in cartridge length. 40mm launchers are capable of firing a variety of munitions with a maximum effective range of one hundred twenty (120) feet.

      ii. SAGE CONTROL ORDINANCES INC K041 STANDARD ENERGY IMPACT BATON PROJECTILE, cost: $21.00, quantity: 14. A less

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lethal 40mm impact baton projectile fired from a single 40mm grenade launcher with a rifled barrel at 51-72 MPS (meters per second). The projectile provides accurate and effective performance when fired from the recommended firing distances of not less than 10 feet and no greater than 75 feet.

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use: Situations for use of the less lethal weapon systems may include, but are not limited to:

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

(d) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(e) Lifespan:

i. Penn Arms GL-140-C- No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear

ii. K041 Standard Energy Impact Batons-5 years

(f) Fiscal Impact: Annual maintenance is approximately $100 for each launcher.

(g) Legal and Procedural Rules: Use of the 40mm launcher and 40mm baton rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the 40mm only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

2. **Less Lethal Shotgun and Rounds**: Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round.

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 LESS LETHAL SHOTGUN, cost: $950, quantity: 11. The Remington 870 Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round up to a distance of 75 feet. The range of the weapon system helps to maintain space between officers and a suspect reducing the immediacy of the threat which is a principle of

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deescalation. The less lethal 12- gauge shotgun is distinguishable by an orange butt stock and fore grip.

ii. 12-GAUGE SUPER-SOCK BEANBAG ROUND 2581, cost: $6, quantity: 90. A less lethal 2.4-inch 12-gauge shotgun round firing a ballistic fiber bag filled with 40 grams of lead shot at a velocity of 270-290 feet per second (FPS). CTS Super-Sock rounds are discharged from a dedicated 12- gauge shotgun that is distinguishable by an orange butt stock and fore grip. This round provides accurate and effective performance when fired from the approved distance of not fewer than five (5) feet. The maximum effective range of this munition is up to 75 feet from the target. The Model 2581 Super-Sock is in its deployed state immediately upon exiting the barrel. It does not require a minimum range to "unfold" or "stabilize." The Super-Sock is an aerodynamic projectile. However, accuracy is relative to the shotgun, barrel length, environmental conditions, and the operator. The Super-Sock is very accurate. However, effectiveness depends on many variables, such as distance, clothing, stature, and the point where the projectile impacts.

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use - Situations for use of the less lethal weapon systems may include, but are not limited to:

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

(d) Lifespan:

i. Remington 970 Less Lethal Shotgun-25 years

ii. Super Sock Round Model 2581: No listed expiration date

(e) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(f) Fiscal Impact: Annual maintenance is approximately $100 per shotgun.

(g) Legal and Procedural Rules: Use of the less lethal shotgun and Super Sock rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the less lethal shotgun only for official

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law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

3. **5.56mm Semi-Automatic Rifles and Ammunition:** The Colt AR-15/M4 5.56 mm/.223 semiautomatic rifle are used for both patrol and the SWAT Team.

   (a) Description, quantity, capabilities, and purchase cost

      i. COLT AR/M4 RIFLES, cost: $1200, quantity: 27. These rifles, equipped and locked in each patrol car or police motorcycle, offer a higher degree of accuracy at a longer distance. The ammunition used in rifles are also more effective at penetrating body armor (as some suspects have worn during high-profile shooting events in the country). They are normally kept secured in patrol cars or in the Police station and are only deployed on specific incidents where officers believe guns or weapons are involved.

      ii. .223 CALIBER or 5.56MM RIFLE AMMUNITION, cost: $280 per case of 500 rounds, quantity: 10,800 rounds. This rifle ammunition used in conjunction with an AR-15 type rifle provides officers the ability to engage hostile suspects at distances generally greater than the effective distance of their handguns. Rifle ammunition fired from AR-15 rifles offer advantages over handguns, such as increased accuracy potential and the ability to defeat soft body armor but are not appropriate for every situation.

   (b) Purpose: To be used as precision weapon to address a threat with more precision and/or greater distances than a handgun, if present and feasible.

   (c) Authorized Use - Members may deploy the patrol rifle in any circumstance where the member can articulate a reasonable expectation that the rifle may be needed. Situations for use of the less lethal weapon systems may include, but are not limited to:

      i. Situations where the member reasonably anticipates an armed encounter.

      ii. When a member is faced with a situation that may require accurate and effective fire at long range.

      iii. Situations where a member reasonably expects the need to meet or exceed a suspect's firepower.

      iv. When a member reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage.

      v. When a member reasonably believes that a suspect may be wearing body armor.

      vi. When authorized or requested by a supervisor.

      vii. When needed to euthanize an animal.

   (d) Lifespan:

      i. Colt AR/M4 Rifles: Approximately 15-20 years

      ii. 223 Caliber or 5.56mm rifle ammunition: No expiration

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(e) Training: Officers must successfully complete a 24-hour patrol rifle course as well as regular Department firearms training and qualifications as required by law and policy. Firearm Instructors attend a 40-hour POST-approved rifle instructor class, and SWAT personnel must attend an 80-hour basic SWAT Team course.

(f) Fiscal Impact: Annual maintenance is approximately $100 per rifle.

(g) Legal and Procedural Rules: Use of the patrol rifles and ammunition are subject to the requirements of Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

4. .**308 Caliber Remington 700 and Heckler & Koch HK-91 Sniper Rifles and Ammunition:** The sniper rifles are capable of firing a.308 caliber bullet. This rifle may only be used by a SWAT Officer trained and certified to be a sniper (LAPD currently has two such officers) and may be deployed to assist the SWAT Team in a critical incident or emergency.

(a) Description, quantity, capabilities, and purchase cost

i. .308 CALIBER REMINGTON 700 AND 700 LTR RIFLE, cost: $1,000, quantity: 2. Remington 700: No cost, surveyed, Remington 700LTR $1,000.

ii. .308 CALIBER HECKLER & KOCH HK-91 RIFLE, cost: No cost, surveyed, , quantity: 1.

iii. .308 AMMUNITION, cost: $1.50 per round, quantity: 3.040 rounds. These nickel-plated bonded soft-point 308/7.62 cartridges from Speer Gold-Dot are resistant to corrosion, capable of expansion from barrels as short as 10", and retain accuracy from a variety of barrels lengths.

(b) Purpose: This rifle may only be used by a SWAT Officer trained and certified to be a sniper and may be deployed to assist the SWAT Team in a critical incident or emergency. The main use is for observation of an incident and to be able to accurately and immediately be able to stop a threat to life.

(c) Authorized Use: Examples of situations for deploying the rifle may include, but are not limited to the following:

i. where the Officer reasonably anticipates an armed encounter;

ii. when the Officer is faced with a situation that may require accurate and effective fire at a long distance;

iii. where an Officer reasonably expects the need to meet or exceed the firearms and ammunition that a suspect is reported or believed to possess;

iv. when an Officer reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage;

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v. when an Officer reasonably believes that a suspect may be wearing body armor.

(d) Lifespan:

i. .308 Caliber Remington 700/700LTR: Approximately 15 years

ii. .308 Caliber Heckler & Koch HK-91: Approximately 15 years

iii. .308 Ammunition: No expiration

(e) Training: In addition to patrol rifle and standard SWAT operator training, SWAT snipers must successfully complete a California POST-certified sniper course as well as regular SWAT sniper training and qualifications as required by law and policy.

(f) Fiscal Impact: Annual maintenance is approximately $100 per Remington rifle. The HK is not used.

(g) Legal and Procedural Rules: Use of the sniper rifles and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos, Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), Policy 312 (FIREARMS), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

5. **Benelli M3Super90 12 gauge shotgun and ammunition: This firearm is not currently used by the department and is stored in the armory.** The Benelli M3 is a dual-mode (hybrid pump-action and semi-automatic) shotgun The ammunition for the shotgun is 00 Buck and slug rounds.

(a) Description, quantity, capabilities, and purchase cost

i. BENELLI M3SUPER90 12 GAUGE SHOTGUN, cost $500, quantity: 1. The Benelli M3 is a combination Pump-Action and Semi-Automatic Shotgun. The shotgun can be chambered for 12 GA shells with a 20 inch barrel.

ii. 00 BUCK AMMUNITION, cost: $1.80 per round, quantity: 600 rounds. A typical 12-gauge, 2 ¾-inch 00 Buckshot shell holds 8 pellets that are 0.33" in diameter. A 3-inch shell most often contains 12 of these same sized pellets.

iii. SLUG AMMUNITION, cost: $1.40 per round, quantity: 100. The Foster-type shotgun slug features exterior rifled grooves which contact the shotgun's bore to give it spin; and, the slug's hollow-point design initiates expansion to augment stopping power.

(b) Purpose: This shotgun is not currently utilized by the department. The only shotguns used by the Department are the less lethal shotguns. The ammunition is purchased solely for recruits in the police academy, where shotgun instruction occurs.

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(c) Authorized Use: There is currently no authorized use for the shotgun in our policy.

(d) Lifespan:

i. Benelli M3Super90 12 gauge shotgun: Approximately 15 years

ii. OO Buck Ammunition: No expiration

iii. Slug ammunition: No expiration

(e) Training: Officers receive training in shotgun use in the police academy, and have to pass firearm qualifications. There is no further training with the Benelli shotgun or ammunition.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of all firearms fall under the following policies: Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize firearms only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

6. **Remington 870 MCS 12 Gauge Breaching shotgun and breaching rounds: This firearm/ammunition is not currently used by the department and is stored in the SWAT armory.**

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 MCS 12 GAUGE BREACHING SHOTGUN, cost: $1,400, quantity: 1. Extremely compact breaching model 12 gauge with a ten inch cylinder bore breaching barrel with parkerized finish, a Knoxx recoil reducing breacher pistol grip stock, and synthetic modular fore-end.

ii. 12 GAUGE BREACHING ROUNDS, cost: $5.00 per round, quantity: 25 rounds. The 12-Gauge TKO Breaching Round is a 12-Gauge shell loaded with a compressed zinc slug, utilizing smokeless powder as a propellant. The is a widely used method to breach door locks or hinges for entry during tactical operations.

(b) Purpose: The breaching shotgun is used to safely gain entry into a structure. When properly deployed, the TKO breaching round is capable of defeating door lock mechanisms, door knobs, hinges, dead bolts, safety chains, and pad locks on both wooden or hollow core doors. Upon impact with the target, the zinc slug disintegrates in to a fine powder eliminating fragmentation. The Explosive Breaching Program, conducted in conjunction with the Mountain View Police Department, was established to provide the joint SWAT Team the ability to quickly create an opening in a wall or window to quickly enter a building for an emergency rescue of hostages. It is reserved for rescue operations only.

(c) Authorized Use: This equipment would only be deployed during a SWAT incident, and its use would need specific authorization from the Incident Commander. The equipment may only be used by a "tactical breacher" on the SWAT team. We currently do not have any authorized users at the Department.

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(d) Lifespan:

i. Remington 870 MCS 12 Gauge Breaching shotgun: Approximately 15 years

ii. 12-Gauge TKO Breaching Round: Approximately 5 years

(e) Training: The training consists of an 80-hour course for a member of the SWAT Team specifically designated as the "breacher." At the conclusion of the course, the breacher must pass a test proctored by CAL/OSHA. The OSHA certification is valid for 5 years. Before the expiration of the certification, the breacher must retake and pass the test.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of the breaching shotgun and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

7. **Kaiser Precision Vulcan II Munitions Pole: Telescoping tool utilized by SWAT personnel to safely deliver approved noise/diversionary devices.**

(a) Description, quantity, capabilities, and purchase cost

i. KAISER PRECISION VULCAN II MUNITIONS POLE, cost: $2,000, quantity: 1. The munitions pole is a multi-purpose breaching tool, constructed of lightweight aluminum square tubing used to deploy distraction devices and chemical munitions in order to gain entrance into a building, structure or even a vehicle.

(b) Purpose: The munitions pole is used to safely deploy diversionary devices, chemical munitions, or other objects (cell phones, cameras) during SWAT operations.

(c) Authorized Use: This equipment would be deployed during primarily during a SWAT incident, but could be utilized to gain entry into a residence during other high risk operations on patrol.

(d) Lifespan: Approximately 10 years

(e) Training: Kaiser Precision provided an instructional video for individual and team training.

(f) Fiscal Impact: None, does not require annual maintenance

(g) Legal and Procedural Rules: Use of the munitions pole are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to

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utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

8. **CTS Flash-bang Training Kit:** The training flash-bangs are built and weigh exactly the same as it's equivalent live Flash-Bang, but have no flash charge.

   (a) Description, quantity, capabilities, and purchase cost

      i. CTS FLASH-BANG TRAINING KIT, cost: $964, Quantity 1 kit (comes with 70 reload Training Fuzes, 1 body), current fuze inventory is 25. The training bodies are painted with a bright blue coating, and can be used an unlimited number of times. The M201FB fuze for this system has 10 times the output of a normal M201 fuze and it is threaded with a left hand thread so it can not be accidentally used in any other munitions. The training devices produce an output of about 120db.

   (b) Purpose: Flash-bangs are used to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. The distraction gives Officers time to seize a moment and create an opportunity to take control of high-risk or dangerous situations.

   (c) Authorized Use: SWAT operators may utilize the training flash-bangs as a training tool to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. Los Altos Police Department does not have any live flash-bangs in the inventory. Our operators use live flash-bangs while on SWAT events or at training with Mountain View Police Department.

   (d) Lifespan: 5 years

   (e) Training: These are a training tool. SWAT operators must attend and pass an 80-hour SWAT training class. Flash-bang training is provided by an instructor who has completed an 8-hour noise flash diversionary device course.

   (f) Legal and Procedural Rules: Use of the **live** flash-bangs are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

9. **Specialty Impact Munition (SIM) weapons and ammunition:** Simunition® is the pioneer and world leader in providing military, law enforcement and approved range members with the most realistic and non-lethal force-on-force, short range, simulation training system.

   (a) Description, quantity, capabilities, and purchase cost

      i. SIMUNITION GLOCK 17T, cost: $500 each, quantity: 8. The GLOCK Training Pistols were developed with the purpose of enabling reality-based tactical operations training using color marking or plastic projectile

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ammunition. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

ii. SIM CONVERTED BERETTA 92, cost: $500 each, quantity: 4. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

iii. HK MP5 CONVERSION KITS, cost: $500 each, quantity 2. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

iv. SIMUNITION COLT AR-15 CARBINE RIFLE UPPERS, cost: $1,000 each, quantity: 3. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

v. FX MARKING CARTRIDGES, cost: $350 for 500 rounds, quantity: 3,500 rounds. The reduced-energy, non-lethal cartridges leave a detergent-based, water-soluble color-marking compound. The visible impacts allow accurate assessment of simulated lethality. They feature tactical accuracy up to 25 feet (7.6 meters).

(b) Purpose: Enabling reality-based, force-on-force tactical operations training using color marking or plastic projectile ammunition.

(c) Authorized Use: Simunition weapons and marking rounds are non-operational rounds and non-operational weapons systems. These munitions provide for realistic close quarters firearms training while allowing the shooter to visually assess shot placement and accuracy in force on force training scenarios. These items are used for training purposes for all sworn staff members.

(d) Lifespan:

i. Simunition Glock 17T: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

ii. Sim Converted Beretta: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

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iii. HK MP5 Conversion Kits: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iv. Simunition Colt AR-15 Rifle Uppers: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

v. FX Marking Cartridges: Shelf life five (5) years.

(e) Training: These are a training tool. Simunition Instructors attend an informative, three-day (24-hour) course designed to provide students with substantial hands-on experience with Simunition® FX® training ammunition technology, weapons conversion kits, and the Simunition® line of protective equipment. The course provides in-depth, hands-on instruction in scenario-based training program development and training methodology, and gives critical practical experience to students on the best use of Simunition® training products in a highly effective, realistic, extremely safe training program. Sworn staff members are given extensive firearms handling courses and weapons safety instruction to include the use of SIMs for training purposes.

(f) Legal and Procedural Rules: Use of the Simunition firearms and marking rounds are subject to the requirements of Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS) while training. It is the policy of the Los Altos Police Department to utilize Simunition equipment only for official law enforcement training purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

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709.5 APPROVAL

The Chief of Police or the authorized designee shall obtain approval from the governing body by way of an ordinance adopting the military equipment policy. As part of the approval process, the Chief of Police or the authorized designee shall ensure the proposed military equipment policy is submitted to the governing body and is available on the department website at least 30 days prior to any public hearing concerning the military equipment at issue (Government Code § 7071). The military equipment policy must be approved by the governing body prior to engaging in any of the following (Government Code § 7071):

(a) Requesting military equipment made available pursuant to 10 USC § 2576a.

(b) Seeking funds for military equipment, including but not limited to applying for a grant, soliciting or accepting private, local, state, or federal funds, in-kind donations, or other donations or transfers.

(c) Acquiring military equipment either permanently or temporarily, including by borrowing or leasing.

(d) Collaborating with another law enforcement agency in the deployment or other use of military equipment within the jurisdiction of this department.

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(e) Using any new or existing military equipment for a purpose, in a manner, or by a person not previously approved by the governing body.

(f) Soliciting or responding to a proposal for, or entering into an agreement with, any other person or entity to seek funds for, apply to receive, acquire, use, or collaborate in the use of military equipment.

(g) Acquiring military equipment through any means not provided above.

709.6 COORDINATION WITH OTHER JURISDICTIONS

Military equipment used by other law enforcement agencies that are providing mutual aid to this jurisdiction or otherwise engaged in law enforcement operations within this jurisdiction shall comply with their respective military equipment policies in rendering mutual aid.

709.7 ANNUAL REPORT

Upon approval of a military equipment policy, the Chief of Police or the authorized designee should submit a military equipment report to the governing body for each type of military equipment approved within one year of approval, and annually thereafter for as long as the military equipment is available for use (Government Code § 7072).

The Chief of Police or the authorized designee should also make each annual military equipment report publicly available on the department website for as long as the military equipment is available for use. The report shall include all information required by Government Code § 7072 for the preceding calendar year for each type of military equipment in department inventory.

709.8 COMMUNITY ENGAGEMENT

Within 30 days of submitting and publicly releasing the annual report, the Department shall hold at least one well-publicized and conveniently located community engagement meeting, at which the Department should discuss the report and respond to public questions regarding the funding, acquisition, or use of military equipment.

Pursuant to California Government Code 7070(d)(7), members of the public may register complaints or concerns or submit questions about the use of each specific type of listed equipment in this policy by any of the following means:

(a) Via email to: policefeedback@losaltosca.gov

(b) Via phone call to : 650-947-2672

(c) Via mail sent to:

Los Altos Police Department

Attention Operations Captain

1 North San Antonio Rd

Los Altos CA 94022

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From: Angel Rodriguez
To: Adelina Del Real
Subject: FW: PUBLIC COMMENT AGENDA ITEM #TBD (MilEquipUse 709) 7/12/2022
Date: Monday, September 19, 2022 11:29:31 AM
Attachments: 2022_06_30 LAPD ME Use Policy key issues overview mtg with Katie Krauss.pdf
2022_07_12 City of Los Altos Policy 709 Military Equipment DRAFT redline V.5.pdf

[redacted]

[redacted]

From: Gabriel Engeland <gengeland@losaltosca.gov>
Sent: Monday, September 19, 2022 8:31 AM
To: Angel Rodriguez <arodriguez@losaltosca.gov>
Subject: Fw: PUBLIC COMMENT AGENDA ITEM #TBD (MilEquipUse 709) 7/12/2022

Angel,

Please see the below and attached. Can we make sure this is uploaded for public comment.

Thanks,

Gabe

Gabriel Engeland

City Manager

City of Los Altos

(650) 947-2740 | www.losaltosca.gov

From: Jeanine Valadez [redacted]
Sent: Monday, September 19, 2022 12:31 AM
To: Gabriel Engeland <gengeland@losaltosca.gov>
Subject: Fwd: PUBLIC COMMENT AGENDA ITEM #TBD (MilEquipUse 709) 7/12/2022

Gabe, here is the Public Comment email referenced in the other email I just sent. I sent the email below June 30 but it was somehow not read by the city. The PDFs I submitted with that Public Comment are hereby attached as well. Please advise as to anything I need to do to effect a corrected Public Comment posting for me to this 9/20 Council packet.

Thank you,

Jeanine Valadez
==========
>Date: Sun, 18 Sep 2022 22:50:48 -0700
>To: Angel Rodriguez <arodriguez@losaltosca.gov>
>From: Jeanine Valadez <j[redacted]
>Subject: Fwd: PUBLIC COMMENT AGENDA ITEM #TBD (MilEquipUse 709) 7/12/2022
>
>Angel, here is the Public Comment I sent June 30. Please note that
>the attached v5 redline filename is titled with date 2022_07_12
>because that was when I thought the agenda would discuss the topic -
>it was actually saved on June 30 (you can confirm this by checking
>the file's meta data). I also did not have an agenda item number
>for that 7/12 agenda so my subject line says "#TBD" -- perhaps
>that's why it got lost??
>
>Jeanine
>==========
>>Date: Thurs, 30 Jun 2022 10:32:20 -0700
>>To: PublicComment@losaltosca.gov
>>From: Jeanine Valadez <j9valadez@earthlink.net>
>>Subject: PUBLIC COMMENT AGENDA ITEM #TBD (MilEquipUse 709) 7/12/2022
>>
>>City Council, City Staff, Los Altos PD,
>>
>>I cannot support Policy 709 as written. It is missing key elements
>>of AB481 -- most notably the requirement for accountability,
>>consequences, and independent oversight -- and the vocabulary used
>>doesn't properly constrain authorized uses of ME in our city. I
>>have shared all my work with Captain Katie Krauss prior to this
>>comment. I thank her for the time she has shared with me to review
>>the attached content.
>>I am available to discuss the rationale behind each and every edit
>>or suggestion.
>>Please see attached redline of the MEUP 709 policy Version 5 (V5),
>>and the attached Key Issues Summary that justifies and explains the
>>edits comprising V5.
>>
>>Jeanine Valadez
>>Disclosure: I am a PARC commissioner but am writing this as a
>>member of the public.

Military Equipment (PUBLIC COMMENT V.5 JAV)

709.1 PURPOSE AND SCOPE

The purpose of this policy is to provide the Los Altos Police Department (Department) guidelines for conforming to ~~The purpose of this policy is to provide guidelines for the approval, acquisition, and reporting requirements of military equipment (~~Government Code~~s~~ § 7070; ~~Government Code~~ § 7071; and ~~Government Code~~ § 7072).

This policy fulfills the obligations set forth in Assembly Bill No. 481 (c.2021), enacting the foregoing statutes' Code sections. These obligations include, but are not limited to, seeking approval for the use and acquisition of specific items deemed to be military equipment, and requirements related to training, compliance, annual reporting, cataloging, community engagement, independent oversight, and complaints regarding these items. This policy also includes requirements and assessment criteria to achieve annual approval from the Department's governing body, the Los Altos City Council, as herein described.

The philosophy behind this policy recognizes that military equipment in our community may impact the public's safety and welfare, so this policy makes sure that safeguards exist, including transparency, ~~-~~governing body oversight, independent oversight, and accountability measures. These safeguards serve to ensure the public's right to know that the acquisition and use of military equipment by the Department is consistent with the provisions set forth by the City Council and as outlined in AB481.

This policy will also provide the public with a transparent view of the military equipment owned, used, and in some cases, not used, by the Department.

[Sources: amalgamations of Los Alamitos PD, Hayward PD, Long Beach PD, San Diego County Sheriff, Sacramento PD, and Culver City PD ME Use Policies, Purpose, Scope, and Philosophy sections (variously numbered), plus AB481 itself]

709.1.1 DEFINITIONS

Definitions related to this policy include (Government Code § 7070):

Governing body – ~~The elected or appointed body that oversees the Department~~The Los Altos City Council.

Military equipment – Includes but is not limited to the following:

- Unmanned, remotely piloted, powered aerial or ground vehicles.
- Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers.
- High mobility multipurpose wheeled vehicles (HMMWV), two-and-one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached.
- Tracked armored vehicles that provide ballistic protection to their occupants and utilize

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a tracked system instead of wheels for forward motion.

- Command and control vehicles that are either built or modified to facilita operational control and direction of public safety units.
- Weaponized aircraft, vessels, or vehicles of any kind.
- Battering rams, slugs, and breaching apparatuses that are explosive in nature. This does not include non-explosive items designed to remove a lock, or a handheld, one-person ram.
- Firearms and ammunition of .50 caliber or greater, excluding standard-issue shotguns and standard-issue shotgun ammunition.
- Specialized firearms and ammunition of less than .50 caliber, including firearms and accessories identified as assault weapons in Penal Code § 30510 and Penal Code § 30515, with the exception of standard-issue firearms and ammunition of less than .50 caliber.
- Any firearm or firearm accessory that is designed to launch explosive projectiles.
- Noise-flash diversionary devices and explosive breaching tools.
- Munitions containing tear gas or OC (Oleoresin capsicum), excluding standard, service-issued handheld pepper spray.
- TASER® Shockwave, microwave weapons, water cannons, and long-range acoustic devices (LRADs).
- Kinetic energy weapons and munitions, including, but not limited to, lethal and less-lethal implementations of 40mm projectile (baton) launchers, pellet bag- and rubber bullet-firing weapons, and specialty impact munition (SIM) weapons.
- Any other equipment as determined by a governing body or a state agency to require additional oversight.

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709.2 POLICY

It is the policy of the Los Altos Police Department that members of this department comply with the provisions of Government Codes § 7070, 7071, and 7072 with respect to military equipment.

(a) All approved inventory and uses pursuant to this policy shall be used in accordance with all applicable Department policies and laws.

(b) Compliance: The Chief of Police shall ensure that all Department members comply with this policy.

(c) Independent Oversight: Suspected or alleged violations of this policy or of any other applicable laws or policies governing the use of military equipment shall be referred to an independent oversight entity established for investigation (GC §7070 Subdiv (d) para (6)) in accordance with law and all applicable conduct policies within the Department.

(d) Consequences (sanctions) for violating policy will be in accordance with Department rules and regulations and escalated as necessary up to and including in consultation with the Office of the District Attorney. All confirmed violations shall be included in the annual report to the governing body.

(e) The Department acknowledges the historical use of certain police equipment to intimidate and oppress certain communities and groups more than others, including those that are defined by a common race, ethnicity, religion, national origin, cultural affiliation, income level, sexual orientation, gender identity/expression, disability, mental health condition, or political perspective. As such, this policy expressly prohibits the use of military equipment on individuals or groups solely based on such actual or perceived characteristics. [Sources: case law and case studies: https://www.dhs.gov/sites/default/files/publications/use-of-race-policy_0.pdf , Source of text: Hayward PD Policy 706 ME Use, abridged.]

709.3 MILITARY EQUIPMENT COORDINATOR

The Chief of Police should designate a member of this department to act as the military equipment coordinator. The responsibilities of the military equipment coordinator include but are not limited to:

(a) Acting as liaison to the governing body for matters related to the requirements of this policy.

(b) Identifying department equipment that qualifies as military equipment in the current possession of the Department, or the equipment the Department intends to acquire that requires approval by the governing body.

(c) Conducting an inventory of all military equipment at least annually.

(d) Collaborating with any allied agency that may use military equipment within the jurisdiction of Los Altos Police Department (Government Code § 7071).

(e) Preparing for, scheduling, and coordinating the annual community engagement meeting to include:

1. Publicizing the details of the meeting.
2. Preparing for public questions regarding the department's funding, acquisition, and use of equipment.

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(f) Preparing the annual military equipment report for submission to the Chief of Police and ensuring that the report is made available on the department website (Government Code § 7072).

(g) Establishing the procedure for a person to register a complaint or concern, or how that person may submit any questions about the use of a type of military equipment, including, but not limited to results of past tests conducted to verify efficacy of military equipment owned by Department, and how the Department will respond in a timely manner. [Source for redline: several LE members I know (all management) with whom I spoke; their experience was that such data are or should be gathered and archived regularly, especially in smaller agencies where use of ME, both weapons and munitions, is rare. The worst thing that can happen is malfunction of equipment due to age.]

709.4 MILITARY EQUIPMENT INVENTORY

The following constitutes a list and description of qualifying equipment for the Department:

1. **40 MM Launchers and Rounds:** 40mm Launchers are utilized by department personnel as a less lethal tool to launch impact rounds.

   (a) Description, quantity, capabilities, and purchase cost

      i. PENN ARMS GL-140-C, 40MM SINGLE SHOT LAUNCHER, cost: $1,000, quantity: 3. The 40mm Single Launcher is a tactical single shot launcher that features a collapsible stock. It will fire standard 40mm less lethal ammunition, up to 6.0 inches in cartridge length. 40mm launchers are capable of firing a variety of munitions with a maximum effective range of one hundred twenty (120) feet.

      ii. SAGE CONTROL ORDINANCES INC K041 STANDARD ENERGY IMPACT BATON PROJECTILE, cost: $21.00, quantity: 14. A less

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lethal 40mm impact baton projectile fired from a single 40mm grenade launcher with a rifled barrel at 51-72 MPS (meters per second). The projectile provides accurate and effective performance when fired from the recommended firing distances of not less than 10 feet and no greater than 75 feet.

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use: Situations for use of the less lethal weapon systems may include, but are not limited to the following; however, these and other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems:

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

(d) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(e) Lifespan:

i. Penn Arms GL-140-C- No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear

ii. K041 Standard Energy Impact Batons-5 years

(f) Fiscal Impact: Annual maintenance is approximately $100 for each launcher.

(g) Legal and Procedural Rules: Use of the 40mm launcher and 40mm baton rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the 40mm only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

2. **Less Lethal Shotgun and Rounds**: Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round.

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 LESS LETHAL SHOTGUN, cost: $950, quantity: 11. The Remington 870 Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round up to a distance of 75 feet. The range of the weapon system helps to maintain space between officers and

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a suspect reducing the immediacy of the threat which is a principle of

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deescalation. The less lethal 12- gauge shotgun is distinguishable by an orange butt stock and fore grip.

ii. 12-GAUGE SUPER-SOCK BEANBAG ROUND 2581, cost: $6, quantity: 90. A less lethal 2.4-inch 12-gauge shotgun round firing a ballistic fiber bag filled with 40 grams of lead shot at a velocity of 270-290 feet per second (FPS). CTS (Combined Tactical Systems) Super-Sock rounds are discharged from a dedicated 12- gauge shotgun that is distinguishable by an orange butt stock and fore grip. This round provides accurate and effective performance when fired from the approved distance of not fewer than five (5) feet. The maximum effective range of this munition is up to 75 feet from the target. The Model 2581 Super-Sock is in its deployed state immediately upon exiting the barrel. It does not require a minimum range to "unfold" or "stabilize." The Super-Sock is an aerodynamic projectile. However, accuracy is relative to the shotgun, barrel length, environmental conditions, and the operator. The Super-Sock is very accurate. However, effectiveness depends on many variables, such as distance, clothing, stature, and the point where the projectile impacts.

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use - Situations for use of the less lethal weapon systems may include, but are not limited to the following; however, these and other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems:

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

(d) Lifespan:

i. Remington 970 Less Lethal Shotgun-25 years

ii. Super Sock Round Model 2581: No listed expiration date

(e) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(f) Fiscal Impact: Annual maintenance is approximately $100 per shotgun.

(g) Legal and Procedural Rules: Use of the less lethal shotgun and Super Sock rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of

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the Los Altos Police Department to utilize the less lethal shotgun only for official

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law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

3. **5.56mm Semi-Automatic Rifles and Ammunition:** The Colt AR-15/M4 5.56 mm/.223 semiautomatic rifles are used for both patrol and the SWAT Team.

   (a) Description, quantity, capabilities, and purchase cost

      i. COLT AR/M4 RIFLES, cost: $1200, quantity: 27. These rifles, equipped and locked in each patrol car or police motorcycle, offer a higher degree of accuracy at a longer distance. The ammunition used in rifles are also more effective at penetrating body armor (as some suspects have worn during high-profile shooting events in the country). They are normally kept secured in patrol cars or in the Police station and are only deployed on specific incidents where officers believe guns or weapons are involved. [PROBLEM: This listing is vague. Do we actually include both AR15 (semi-auto) and M4 (burst and fully auto) rifles in our inventory? Or is the use of the descriptor "AR-15/M4" being used as a generic term and we actually only stock semi-auto rifles? It would be better to itemize by name/model what kinds of rifles we actually have because they have different capabilities, barrel lengths (and therefore different targeting-efficacy metrics and close-quarters suitability), and costs. Clarification is needed here.]

      ii. .223 CALIBER or 5.56MM RIFLE AMMUNITION, cost: $280 per case of 500 rounds, quantity: 10,800 rounds. This rifle ammunition used in conjunction with an AR-15 type rifle provides officers the ability to engage hostile suspects at distances generally greater than the effective distance of their handguns. Rifle ammunition fired from AR-15 rifles offer advantages over handguns, such as increased accuracy potential and the ability to defeat soft body armor but are not appropriate for every situation.

   (b) Purpose: To be used as precision weapon to address a threat with more precision and/or greater distances than a handgun, if present and feasible.

   (c) Authorized Use - Members may deploy the patrol rifle in any circumstance where the member can articulate a reasonable expectation that the rifle may be needed. Situations for use of ~~the less~~ this lethal weapon system~~s~~ may include, but are not limited to the following; however, these and other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems:

      i. Situations where the member reasonably anticipates an armed encounter.

      ii. When a member is faced with a situation that may require accurate and effective fire at long range.

      iii. Situations where a member reasonably expects the need to meet or exceed a suspect's firepower.

      iv. When a member reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage.

      v. When a member reasonably believes that a suspect may be wearing body

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armor.

vi. When authorized or requested by a supervisor.

vii. When needed to euthanize an animal (there will be situations where distance is required from an animal for safety or accessibility reasons, demanding the use of this equipment).

(d) Lifespan:

i. Colt AR/M4 Rifles: Approximately 15-20 years

ii. 223 Caliber or 5.56mm rifle ammunition: No expiration

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(e) Training: Officers must successfully complete a 24-hour patrol rifle course as well as regular Department firearms training and qualifications as required by law and policy. Firearm Instructors attend a 40-hour POST-~~approved~~ certified rifle instructor class, and SWAT personnel must attend an 80-hour basic SWAT Team course. (POST is the Peace Officer Standards and Training Council; SWAT is Special Weapons and Tactics.)

(f) Fiscal Impact: Annual maintenance is approximately $100 per rifle.

(g) Legal and Procedural Rules: Use of the patrol rifles and ammunition are subject to the requirements of Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

4. **.308 Caliber Remington 700 and Heckler & Koch HK-91 Sniper Rifles and Ammunition:** The sniper rifles are capable of firing a .308 caliber bullet. This rifle may only be used by a SWAT Officer trained and certified to be a sniper (LAPD currently has two such officers) and may be deployed to assist the SWAT Team in a critical incident or emergency.

(a) Description, quantity, capabilities, and purchase cost

i. .308 CALIBER REMINGTON 700 AND 700 LTR RIFLES, cost: $1,000, quantity: 2. Remington 700: No cost, surveyed, Remington 700LTR $1,000.

ii. .308 CALIBER HECKLER & KOCH HK-91 RIFLE, cost: No cost, surveyed, ~~,~~ quantity: 1.

iii. .308 AMMUNITION, cost: $1.50 per round, quantity: ~~3,040~~ 3,040 rounds. These nickel-plated bonded soft-point 308/7.62 cartridges from Speer Gold-Dot are resistant to corrosion, capable of expansion from barrels as short as 10", and retain accuracy from a variety of barrels lengths.

(b) Purpose: This rifle may only be used by a SWAT Officer trained and certified to be a sniper and may be deployed to assist the SWAT Team in a critical incident or emergency. The main use of this lethal weapon system is for observation of an incident and to be able to accurately and immediately be able to stop a threat to life.

(c) Authorized Use: Examples of situations for deploying the sniper rifle may include, but are not limited to the following; however, these and other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems:

i. where the Officer reasonably anticipates an armed encounter;

ii. when the Officer is faced with a situation that may require accurate and effective fire at a long distance;

iii. where an Officer reasonably expects the need to meet or exceed the firearms and ammunition that a suspect is reported or believed to possess;

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iv. when an Officer reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage;

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v. when an Officer reasonably believes that a suspect may be wearing body armor.

(d) Lifespan:

i. .308 Caliber Remington 700/700LTR: Approximately 15 years

ii. .308 Caliber Heckler & Koch HK-91: Approximately 15 years

iii. .308 Ammunition: No expiration

(e) Training: In addition to patrol rifle and standard SWAT operator training, SWAT snipers must successfully complete a California POST-certified sniper course as well as regular SWAT sniper training and qualifications as required by law and policy. The Department's SWAT snipers achieve team operational efficacy by training fully with Mountain View SWAT and are integrated with that team.

(f) Fiscal Impact: Annual maintenance is approximately $100 per Remington rifle. The HK is not used.

(g) Legal and Procedural Rules: Use of the sniper rifles and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos, Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), Policy 312 (FIREARMS), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

5. **Benelli M3Super90 12 gauge shotgun and ammunition: This firearm is not currently used by the department and is stored in the armory.** The Benelli M3 is a dual-mode (hybrid pump-action and semi-automatic) shotgun The ammunition for the shotgun is 00 Buck and slug rounds.

(a) Description, quantity, capabilities, and purchase cost

i. BENELLI M3SUPER90 12 GAUGE SHOTGUN, cost $500, quantity: 1. The Benelli M3 is a combination Pump-Action and Semi-Automatic Shotgun. The shotgun can be chambered for 12 GA shells with a 20 inch barrel.

ii. 00 BUCK AMMUNITION, cost: $1.80 per round, quantity: 600 rounds. A typical 12-gauge, 2 ¾-inch 00 Buckshot shell holds 8 pellets that are 0.33" in diameter. A 3-inch shell most often contains 12 of these same sized pellets.

iii. SLUG AMMUNITION, cost: $1.40 per round, quantity: 100. The Foster-type shotgun slug features exterior rifled grooves which contact the shotgun's bore to give it spin; and, the slug's hollow-point design initiates expansion to augment stopping power.

(b) Purpose: This shotgun is not currently utilized by the department. The only shotguns used by the Department are the less lethal shotguns. The ammunition is purchased solely for recruits in the police academy, where shotgun instruction occurs.

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(c) Authorized Use: There is currently no authorized use for the shotgun in our policy.

(d) Lifespan:

i. Benelli M3Super90 12 gauge shotgun: Approximately 15 years

ii. OO Buck Ammunition: No expiration

iii. Slug ammunition: No expiration

(e) Training: Officers receive training in shotgun use in the police academy, and have to pass firearm qualifications. There is no further training with the Benelli shotgun or ammunition.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of all firearms fall under the following policies: Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize firearms only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

6. **Remington 870 MCS 12 Gauge Breaching shotgun and breaching rounds: This firearm/ammunition is not currently used by the department and is stored in the SWAT armory.**

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 MCS 12 GAUGE BREACHING SHOTGUN, cost: $1,400, quantity: 1. Extremely compact breaching model 12 gauge with a ten inch cylinder bore breaching barrel with parkerized finish, a Knoxx recoil reducing breacher pistol grip stock, and synthetic modular fore-end.

ii. 12 GAUGE BREACHING ROUNDS, cost: $5.00 per round, quantity: 25 rounds. The 12-Gauge TKO Breaching Round is a 12-Gauge shell loaded with a compressed zinc slug, utilizing smokeless powder as a propellant. ~~The~~ This is a widely used method to breach door locks or hinges for entry during tactical operations.

(b) Purpose: The breaching shotgun is used to safely gain entry into a structure. When properly deployed, the TKO breaching round is capable of defeating door lock mechanisms, door knobs, hinges, dead bolts, safety chains, and pad locks on both wooden or hollow core doors. Upon impact with the target, the zinc slug disintegrates (explodes) in ~~–~~to a fine powder eliminating fragmentation. The Explosive Breaching Program, conducted in conjunction with the Mountain View Police Department, was established to provide the joint SWAT Team the ability to quickly create an opening in a wall or window to quickly enter a building for an emergency rescue of hostages. It is reserved for rescue operations only.

(c) Authorized Use: This equipment would only be deployed during a SWAT incident, and its use would need specific authorization from the Incident Commander. The equipment may only be used by a "tactical breacher" on the SWAT team. We currently do not have any authorized users at the Department.

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(d) Lifespan:

i. Remington 870 MCS 12 Gauge Breaching shotgun: Approximately 15 years

ii. 12-Gauge TKO Breaching Round: Approximately 5 years

(e) Training: The training consists of an 80-hour course for a member of the SWAT Team specifically designated as the "breacher." At the conclusion of the course, the breacher must pass a test proctored by CAL/OSHA. The OSHA certification is valid for 5 years. Before the expiration of the certification, the breacher must retake and pass the test.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of the breaching shotgun and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

7. **Kaiser Precision Vulcan II Munitions Pole: Telescoping tool utilized by SWAT personnel to safely deliver approved noise/diversionary devices.** **[This product does not come up in any Google or manufacturer's searches. I think I found its patent, though). Is it obsolete? Lots of court cases and settlements in favor of complainants who suffered injuries as a result of burns and impact by flash-bang deployment using poles similar to this one.]**

(a) Description, quantity, capabilities, and purchase cost

i. KAISER PRECISION VULCAN II MUNITIONS POLE, cost: $2,000, quantity: 1. The ~~–~~munitions pole is a multi-purpose breaching tool, constructed of lightweight aluminum square tubing used to deploy distraction devices and chemical munitions in order to gain entrance into a building, structure or even a vehicle.

(b) Purpose: The munitions pole is used to safely deploy diversionary devices, chemical munitions, or other objects (cell phones, cameras) during SWAT operations.

(c) Authorized Use: This equipment would be deployed ~~during~~ primarily during a SWAT incident, but could be utilized to gain entry into a residence during other high~~-~~risk operations on patrol; however, these and other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems~~.~~

(d) Lifespan: Approximately 10 years

(e) Training: Kaiser Precision provided an instructional video for individual and team training.

(f) Fiscal Impact: None, does not require annual maintenance

(g) Legal and Procedural Rules: Use of the munitions pole are subject to the

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requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to

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utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

8. **CTS Flash-bang Training Kit:** The training flash-bangs are built and weigh exactly the same as it's equivalent live Flash-Bang, but have no flash charge.

   (a) Description, quantity, capabilities, and purchase cost

      i. CTS FLASH-BANG TRAINING KIT, cost: $964, Quantity 1 kit (comes with 70 reload Training Fuzes, 1 body), current fuze inventory is 25. The training bodies are painted with a bright blue coating, and can be used an unlimited number of times. The M201FB fuze for this system has 10 times the output of a normal M201 fuze and it is threaded with a left hand thread so it can not be accidentally used in any other munitions. The training devices produce an output of about 120db.

   (b) Purpose: Flash-bangs are used to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. The distraction gives Officers time to seize a moment and create an opportunity to take control of high-risk or dangerous situations.

   (c) Authorized Use: SWAT operators may utilize the training flash-bangs as a training tool to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. Los Altos Police Department does not have any live flash-bangs in the inventory. Our operators use live flash-bangs while on SWAT events or at training with Mountain View Police Department.

   (d) Lifespan: 5 years

   (e) Training: These are a training tool. SWAT operators must attend and pass an 80-hour SWAT training class. Flash-bang training is provided by an instructor who has completed an 8-hour noise flash diversionary device course.

   (f) Legal and Procedural Rules: Use of the **live** flash-bangs are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

9. **Specialty Impact Munition (SIM) weapons and ammunition:** Simunition® ~~is the pioneer and world leader in providing~~provides military, law enforcement and approved range members with a ~~the most~~ realistic and non-lethal force-on-force, short range, simulation training system.

   (a) Description, quantity, capabilities, and purchase cost

      i. SIMUNITION GLOCK 17T, cost: $500 each, quantity: 8. The GLOCK Training Pistols ~~were developed with the purpose of enabling~~ enable reality- based tactical operations training using color marking or plastic projectile

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ammunition. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

ii. SIM CONVERTED BERETTA 92, cost: $500 each, quantity: 4. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

iii. HK MP5 CONVERSION KITS, cost: $500 each, quantity 2. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

iv. SIMUNITION COLT AR-15 CARBINE RIFLE UPPERS, cost: $1,000 each, quantity: 3. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

v. FX MARKING CARTRIDGES, cost: $350 for 500 rounds, quantity: 3,500 rounds. The reduced-energy, non-lethal cartridges leave a detergent-based, water-soluble color-marking compound. The visible impacts allow accurate assessment of simulated lethality. They feature tactical accuracy up to 25 feet (7.6 meters).

(b) Purpose: Enabling reality-based, force-on-force tactical operations training using color marking or plastic projectile ammunition.

(c) Authorized Use: Simunition weapons and marking rounds are non-operational rounds and non-operational weapons systems. These munitions provide for realistic close quarters firearms training while allowing the shooter to visually assess shot placement and accuracy in force-on-force training scenarios. These items are used for training purposes for all sworn staff members.

(d) Lifespan:

i. Simunition Glock 17T: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

ii. Sim Converted Beretta: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

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iii. HK MP5 Conversion Kits: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iv. Simunition Colt AR-15 Rifle Uppers: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

v. FX Marking Cartridges: Shelf life five (5) years.

(e) Training: These are a training tool. Simunition Instructors attend ~~an informative~~a, a three-day (24-hour) course ~~designed to provide students with substantial~~to obtain hands- on experience with Simunition® FX® training ammunition technology, weapons conversion kits, and the Simunition® line of protective equipment. The course provides in-depth, hands-on instruction in scenario-based training program development and training methodology, and gives critical practical experience to students on the best use of Simunition® training products in a highly effective, realistic, extremely safe training program. Sworn staff members are given extensive firearms handling courses and weapons safety instruction to include the use of SIMs for training purposes.

(f) Legal and Procedural Rules: Use of the Simunition firearms and marking rounds are subject to the requirements of Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS) while training. It is the policy of the Los Altos Police Department to utilize Simunition equipment only for official law enforcement training purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

709.5 APPROVAL

The Chief of Police or the authorized designee shall obtain approval from the governing body by way of an ordinance adopting the military equipment policy (Government Code §7071(a)(1)). As part of the approval process, the Chief of Police or the authorized designee shall ensure the proposed military equipment policy is submitted to the governing body and is available on the department website at least 30 days prior to any public hearing concerning the military equipment at issue (~~Government Code~~GC § 7071(b)). The military equipment policy must be approved by the governing body prior to the Department engaging in any of the following (~~Government Code~~GC § 7071(a)(1)(A)-(G)):

(a) Requesting military equipment made available pursuant to 10 USC § 2576a.

(b) Seeking funds for military equipment, including but not limited to applying for a grant, soliciting or accepting private, local, state, or federal funds, in-kind donations, or other donations or transfers.

(c) Acquiring military equipment either permanently or temporarily, including by borrowing or leasing.

(d) Collaborating with another law enforcement agency in the deployment or other use of military equipment within the jurisdiction of this department.

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(e) Using any new or existing military equipment for a purpose, in a manner, or by a person not previously approved by the governing body.

(f) Soliciting or responding to a proposal for, or entering into an agreement with, any other person or entity to seek funds for, apply to receive, acquire, use, or collaborate in the use of military equipment.

(g) Acquiring military equipment through any means not provided above.

The governing body shall only approve the military equipment use policy if all of the following are true (§7071 Subdiv (d) para (1) subpara (A)-(D)):

(a) Each military equipment is necessary for lack of a reasonable alternative.
(b) The military equipment use policy will safeguard the public's welfare, safety, civil rights, and civil liberties.
(c) The military equipment is reasonably cost effective.
(d) All current or prior non-confirming uses have been remedied to assure future compliance with policy
(e) All required components of the military equipment use policy are included in the policy presented for approval, including at least the following for each item of equipment (GC §7070 Subdiv (d) para (1)-(7)):
    a. Description
    b. Purpose(s) and authorized use(s)
    c. Fiscal impact, initial costs and maintenance costs
    d. Legal and procedural rules that govern authorized use(s)
    e. Training required
    f. Mechanisms to ensure compliance, independent oversight, and legal consequences (sanctions) for violation of policy
    g. Methods by which public engagement is achieved (complaints, concerns, questions, suggestions)

709.6 COORDINATION WITH OTHER JURISDICTIONS

Military equipment used by other law enforcement agencies that are providing mutual aid to this jurisdiction or otherwise engaged in law enforcement operations within this jurisdiction shall comply with their respective military equipment policies in rendering mutual aid.

The Department's policy in this regard best serves the public because it allows the providers of mutual aid to rely on the training and operational protocols with which they are familiar to achieve situational objectives. Requiring providers of mutual aid to change their operational parameters would introduce risk into the service of mutual aid. [Source: this is my opinion, but my LE associates agree.]

709.7 ANNUAL REPORT AND ANNUAL REVIEW

Upon approval of a military equipment policy, the Chief of Police ~~or the authorized designee should submit~~shall be responsible for the issuance of an annual ~~a~~ military equipment report to the governing body for each type of military equipment approved within one year of approval, and annually thereafter for as long as the military equipment is available for use (Government Code § 7072).

The Chief of Police or the authorized designee ~~should~~ shall also make each annual military

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equipment report publicly available on the department website for as long as the military equipment is available for use. The report shall include all information required by Government Code § 7072 for the preceding calendar year for each type of military equipment in department inventory.

The governing body shall review the ordinance it has adopted approving the military equipment use policy at least annually in combination with a review of the annual report generated by the Department. Should the governing body at any review cycle fail to approve any component(s) of military equipment (GC §7071 Subdiv (e) para (1)-(2) abridged) or the military equipment use policy or any element of the policy within 180 days of the commencement of said review cycle, the use of military equipment, or specific component(s) of military equipment, shall cease by the Department until that time that the governing body approves the military equipment policy (GC §7071 Subdiv (a) para (2) abridged).

709.8 COMMUNITY ENGAGEMENT

Within 30 days of submitting and publicly releasing the annual report, the Department shall hold at least one well-publicized and conveniently located community engagement meeting, at which the Department should discuss the report and respond to public questions regarding the funding, acquisition, or use of military equipment.

Pursuant to California Government Code 7070(d)(7), members of the public may register complaints or concerns or submit questions about the use of each specific type of listed equipment in this policy by any of the following means:

To Department:

(a) Via email to: policefeedback@losaltosca.gov

(b) Via phone call to: 650-947-2672

(c) Via mail sent to:

Los Altos Police Department

Attention Operations Captain

1 North San Antonio Rd

Los Altos CA 94022

To Independent Oversight (IO):
a) IO email
b) IO phone
c) IO mail address

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2022_06_30 Los Altos PD – Policy 709 Military Equipment Use

Key Issues Summary – refers to REDLINE of 709 generated by Jeanine Valadez, Version V.5

Prior publication: Public Comment to 6/14/2022 City Council Meeting – V.1

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Background: I conducted an extensive search through ME Use Policies and some contact with many other LE agencies and personnel throughout Calif. All agencies I accessed used Lexipol template as basis, though there was quite a bit of variance as to content, which sections of the template they chose to deploy, the decisions they made to expand upon or abridge template sections, etc. Anecdotally, I found that as many agencies were more expansive in their policy statements as those that were "bare-minimum" agencies. I would put our policy more towards the end of the spectrum of bare minimum with some actual missing elements of AB481. In the end, my recommendations constitute what I consider to be a best practices suggestion that balances PD's need for accuracy, justifiable use of the equipment, and necessity of ME to effect public safety, with the public's interest in transparency, explicitly abiding by the law (AB481), compliance and accountability, protection of civil rights, and empathy for those historically negatively affected by such equipment.

Key Issues (Not in order of Policy Outline)

1) Our current Policy 709 is missing a comprehensive introduction. It does not inform the public of the philosophy behind why the document exists, nor "what's in it for the public." **SOLUTION**: Expand Purpose and Scope chapter 709.1 as redlined.

2) The definitions section 709.1.1 is abridged excessively. **SOLUTION**: expand military equipment definitions using AB481 wording.

3) 709 does not recognize the overarching desire to protect people in classes of difference from harm simply because they are different; i.e., there is no anti-discrimination statement of any kind. Even AB481's preamble and Sec 1 intro both recognize the negative impact on people of color. **SOLUTION**: I added historical discriminatory use statement under the Policy chapter, 709.2 (e). It complies with the guidelines put out by the DOJ. Additionally, Constitutional Law (Whren v. United States, 517 U.S. 806, 813 (1996) assures this protection (see Dept of Justice website: https://www.dhs.gov/sites/default/files/publications/use-of-race-policy_0.pdf). I sourced the wording from Hayward PD after checking that it conformed to DOJ guidelines.

4) 709 does not show the assessment criteria AB481 requires (see citations in redline for 709.5). The general public does not typically read state bills, laws, or case law. Yet they read local policies. AB481 is deeply replicated in most agencies' ME policies. This informs the public what to expect and amplifies the purpose of the policy as well as the governing bodies' responsibilities therein. The most important duty of the governing body is to make sure they follow the assessment criteria set out by AB481. Those criteria are missing from here. This not only keeps the governing body in the dark, but keeps the public in the dark. **SOLUTION**: Include the full list of assessment criteria for the governing body in the Approval section 709.5.

5) The document insufficiently binds authorized uses throughout 709.4 because it uses the phrase, "included but not limited to" in an unconstrained fashion. This is the NUMBER ONE concern

from the public. While it is true that section (g) in each ME inventory item cites various Department policies that guide and/or constrain authorized use, leaving the phrase above alone continues to rile the public. It looks and smells like a loophole. Some agencies have ameliorated this concern in one of two ways:

a. By adding a few Prohibited Uses

b. By adding a few components of ME that will NOT be sought for funding, acquisition, or use. The most common here are launchers with explosive munitions (grenade launchers or munitions poles) and water cannons (the latter likely because they for so long have been used against protestors and historically against Black and Brown people.

c. **SOLUTION**: I am NOT proposing either mechanism above because I do not believe prohibited uses and prohibited equipment are within the scope of AB481. It is true that AB481 allows agencies to go beyond the min requirements of the bill (see AB481 preamble, end of 3rd paragraph), but I think doing so in the specific case leads us into murky waters. Therefore, my solution is to add ***obvious redundancy*** to this clause by adding the text in my redlines in 709.4 for each applicable item of ME in paragraphs under Section 709.4, understanding that section (g) of each item of ME, by listing applicable policy codes does the same, in effect. These *redundant* additions quell the public's concerns and do not dispute in any way the existing policies of the Department. My LE friends (again, all but one is a managerial officer or Asst chief or Chief) recommended to additionally use the phrase, "necessity, reasonableness, and proportional use" for each item of ME in the inventory as they have found this phrase calming to the public while still being consistent with any continuum of force, or use of force, or rubric of force policies that any agency in their experience has ever deployed operationally.

6) The document has typos and many acronyms. **SOLUTION**: correct them and spell out acronyms at least first time used. I hope my redlines have captured them all.

7) The semi-automatic rifle section 709.4 (3) (a) (i) is vague. Do we actually include both AR15 (semi-auto) and M4 (burst and fully auto) rifles in our inventory? Or is the use of the descriptor "AR-15/M4" being used as a generic term and we actually only stock semi-auto rifles? **SOLUTION**: It would be better to itemize by name/model, as has been done in all other sections, what kinds of rifles we actually have because they have different capabilities, barrel lengths (and therefore different targeting-efficacy metrics and close-quarters suitability), and costs. Clarification is needed here

8) The review mechanisms included in 709.7 do not meet the requirements of AB481. **SOLUTION**: Add the fact that the policy itself must be annually reviewed by law. The current policy 709 only states that an annual report must be issued. Expanded 709.7 to cover ANNUAL REPORT AND ANNUAL REVIEW. Redline was created by extracting cited clauses from AB481.

9) The Community Engagement section 709.8 lacks Independent Oversight contact information. **SOLUTION**: Add placeholders as shown in my redlines.

10) The policy does not take full advantage of what the law (AB481) allows. Specifically, AB481 allows agencies to add requirements and standards to their ME Use Policy that go beyond the minimum requirements of AB481: "The bill would specify these provisions [the specified standards in AB481] do not preclude a county or local municipality from implementing additional requirements and standards related to the purchase, use, and reporting of military equipment by local law enforcement agencies." **SOLUTIONS**: I have added the following as valuable to obtaining the public's buy-in to approval of the policy:

    a. add the explicit statement holding the Chief of Police accountable for members compliance with the policy in the spirit of part of the "accountability" and "compliance" requirements (added in 709.2)

    b. expand the Purpose and Scope section to give legislative background to policy and to elaborate the considerations given the public in creating the policy (in 709.1)

    c. spell out first use of all acronyms

    d. expand any statement of an individual authorized use case if doing so helps the public understand it better (example I have chosen: 709.4 (3) (c) (vii), added wording justifying use of semi-auto rifle to euthanize an animal)

    e. augment the description of training of authorized sniper rifle users in the Department with a statement that they undergo the same training with Mountain View SWAT team and are fully integrated therein. You have mentioned the MV team analogously in section 709.4. (6) with the breaching shotgun.

    f. clarify whether or not the flashbang munitions pole seems to be obsolete. I have added my commentary in the redline, 709.4 (7)

    g. delete marketing-oriented text from description of SIM weapons, 709.4 (9) for obvious reasons. See redline.

    h. add to 709.5 the assessment criteria the governing body must use to approve policy 709. Doing this more precisely clarifies PD's commitment to fulfill the criteria in the law, even though elements may not be completely implemented right now (for example, current Policy 709 does not have an independent oversight mechanism in the policy; yet, by committing to have one, the governing body could approve it pending the establishment of said mechanism to a date certain after which, if not implemented, the policy would be disapproved until that time the mechanism is implemented. In simple words, adding this section from AB481 to section 709.5 engenders the public's patience with the fact that certain elements are not completely implemented. (This redline was created by me by extracting wording from AB481 Sec 7071 Subdiv (d) para (1) subpara A-D, and wording from Sec 7070 Subdiv (d) para 1-7.

    i. Add rationale to 709.6 as to why our 709 policy allows agencies provide us mutual aid to conform to their ME use policies and NOT conform to ours. I found several agencies that require local conformance. **SOLUTION**: I do NOT believe in asking mutual aid providers to conform to our policies and support the policy as written in 709.6.

However, I know it will calm members of the public if a rationale is offered. I have included my rationale in the redline. I checked this text with several LE members I know and they all supported it.

==========END OF REDLINE OVERVIEW

The table below comprises a current collection of concerns or questions from many members of the public. I have gathered these without regard to source or frequency, though I have already said above that the #1 concern is the "included but not limited to" clause under authorized uses and the #2 concern was the non-compliance with AB481's requirements for accountability, independent oversight, and consequences. Many of these concerns have been addressed in my redlines IF you accept them. I have highlighted these in *italicized* text. I have lightened the concerns my redlines have not addressed. I believe these latter questions and concerns all require answers and the ones involving Independent Oversight and use of the Complaint Form need to be done soon. Please be aware that more concerns may arise as more people learn of policy 709.

lacks the independent oversight required in AB481
lacks statements about what happens when a member of LAPD violates the policy
the policy does not identify where the buck stops in PD
there are lots of typos in the document
the "included, but not limited to" opens the door to all kinds of corner cases and loopholes
AB481 requires mechanisms for accountability and this policy has none
some cities commit to not use certain types of ME, like water cannons or weapons that launch explosive materials. Why don't we do this? If you are saying nothing is off the table, I cannot endorse this, even with your changes!
We all know Black and Brown individuals, People of Color, people with disabilities, and those who are experiencing a mental crisis are more likely to be subject to lethal and less lethal weapons as has been shown throughout history and continues today. This policy says nothing about protecting these populations from use of this equipment based on perceived or unperceived biases; a statement should be added acknowledging this discrepancy and implicit bias training must be implemented.
some listings in the inventory list are vague or seem incomplete, for example, AR15s are NOT the same rifle as an M4 rifle; why are they combined?
AB481 explicitly requires the City Council to make sure that the ME Use Policy meets certain requirements for content, transparency, oversight, accountability, and complaint submission, yet this policy is missing whole sections. You cannot approve this!
Why can't we use the Independent Intake Official (IIO) for complaints like we do with other Police Complaints?
Why doesn't this policy refer complainants to the online Complaint Form?
We need prohibited uses in this policy; aren't there certain things we just won't do?
the Purpose Statement seems incomplete. There is no overview of what this policy is supposed to do. This policy is more than an inventory list. It's supposed to provide transparency to the public and agency to the city council to give a hoot about the equipment our PD uses. That opening statement needs improvement.

this policy says nothing about who is liable when an officer damages property, injures a person, or kills a person unjustly (as proven by an investigation). Who is liable, the officer, the PD, the City, the taxpayers? This policy needs more detail in this regard.
I read the list of what's considered military equipment at AB481. The list in this 709 ME use policy is highly abridged. For example, I thought a tracked vehicle was a vehicle with embedded GPS and visual tracking technology, but reading AB481, a tracked vehicle is a tank! This whole list needs to be put in compliance with AB481.
AB481 specifically says that while the bill specifies the minimum provisions for our ME Use policy, this (and I quote) "does not preclude a county or local municipality from implementing additional requirements and standards related to the purchase, use, and reporting of military equipment by local law enforcement agencies." Why are we doing the bare minimum to protect our residents?
I was looking at other cities' ME policies and some require mutual aid providers or contractors to conform to the city's ME policy (invoking 7071 (f)), and some allow collaborators to use their own policies for use of ME when they come onto our turf. Our policy cites the latter. WHY do we do this?

PUBLIC CORRESPONDENCE

The following is public correspondence received by the City Clerk's Office after the posting of the original agenda. Individual contact information has been redacted for privacy. This may *not* be a comprehensive collection of the public correspondence, but staff makes its best effort to include all correspondence received to date.

To send correspondence to the City Council, on matters listed on the agenda please email PublicComment@losaltosca.gov

From: Jeanine Valadez
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #12 6/14/2022
Date: Monday, June 13, 2022 12:01:45 PM
Attachments: 2022_04_22 City of Los Altos Policy Military Equipment DRAFT redline V.1.pdf

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City Council, City Staff, Los Altos PD,

I cannot support Policy 709 as written. It is missing key elements of AB481 (most notably the requirement for accountability and consequences) and the vocabulary used doesn't properly constrain authorized uses of ME in our city.
I am available to discuss the rationale behind each and every edit or suggestion.
Please see attached redline,

Jeanine Valadez
Disclosure: I am a PARC commissioner but am writing this as a member of the public.

Military Equipment

709.1 PURPOSE AND SCOPE

The purpose of this policy is to provide guidelines for the approval, acquisition, and reporting requirements of military equipment (Government Code § 7070; Government Code § 7071; Government Code § 7072).

709.1.1 DEFINITIONS

Definitions related to this policy include (Government Code § 7070):

Governing body – The elected or appointed body that oversees the Department (for Los Altos, this is the City Council).

Military equipment – Includes but is not limited to the following:

- Unmanned, remotely piloted, powered aerial or ground vehicles.
- Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers.
- High mobility multipurpose wheeled vehicles (HMMWV), two-and-one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached.
- Tracked armored vehicles that provide ballistic protection to their occupants and utilize a tracked system instead of wheels for forward motion.
- Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.
- Weaponized aircraft, vessels, or vehicles of any kind.
- Battering rams, slugs, and breaching apparatuses that are explosive in nature. This does not include items designed to remove a lock, or a handheld, one-person ram.
- Firearms and ammunition of .50 caliber or greater, excluding standard-issue shotguns and standard-issue shotgun ammunition.
- Specialized firearms and ammunition of less than .50 caliber, including firearms and accessories identified as assault weapons in Penal Code § 30510 and Penal Code § 30515, with the exception of standard-issue firearms and ammunition of less than .50 caliber.
- Any firearm or firearm accessory that is designed to launch explosive projectiles.
- Noise-flash diversionary devices and explosive breaching tools.
- Munitions containing tear gas or OC (Oleoresin capsicum), excluding standard, service-issued handheld pepper spray.
- TASER® Shockwave, microwave weapons, water cannons, and long-range acoustic devices (LRADs).
- Kinetic energy weapons and munitions, including lethal and less-lethal implementations.
- Any other equipment as determined by a governing body or a state agency to require additional oversight.

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709.2 POLICY

It is the policy of the Los Altos Police Department that members of this department comply with the provisions of Government Code § 7071 with respect to military equipment.

709.3 MILITARY EQUIPMENT COORDINATOR

The Chief of Police should designate a member of this department to act as the military equipment coordinator. The responsibilities of the military equipment coordinator include but are not limited to:

(a) Acting as liaison to the governing body for matters related to the requirements of this policy.

(b) Identifying department equipment that qualifies as military equipment in the current possession of the Department, or the equipment the Department intends to acquire that requires approval by the governing body.

(c) Conducting an inventory of all military equipment at least annually.

(d) Collaborating with any allied agency that may use military equipment within the jurisdiction of Los Altos Police Department (Government Code § 7071).

(e) Preparing for, scheduling, and coordinating the annual community engagement meeting to include:

1. Publicizing the details of the meeting.
2. Preparing for public questions regarding the department's funding, acquisition, and use of equipment.

(f) Preparing the annual military equipment report for submission to the Chief of Police and ensuring that the report is made available on the department website (Government Code § 7072).

(g) Establishing the procedure for a person to register a complaint or concern, or how that person may submit any questions about the use of a type of military equipment, including, but not limited to results of past tests conducted to verify efficacy of military equipment owned by Department, and how the Department will respond in a timely manner.

709.4 MILITARY EQUIPMENT INVENTORY

The following constitutes a list and description of qualifying equipment for the Department:

1. **40 MM Launchers and Rounds:** 40mm Launchers are utilized by department personnel as a less lethal tool to launch impact rounds.

   (a) Description, quantity, capabilities, and purchase cost

      i. PENN ARMS GL-140-C, 40MM SINGLE SHOT LAUNCHER, cost: $1,000, quantity: 3. The 40mm Single Launcher is a tactical single shot launcher that features a collapsible stock. It will fire standard 40mm less lethal ammunition, up to 6.0 inches in cartridge length. 40mm launchers are capable of firing a variety of munitions with a maximum effective range of one hundred twenty (120) feet.

      ii. SAGE CONTROL ORDINANCES INC K041 STANDARD ENERGY

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Military Equipment

IMPACT BATON PROJECTILE, cost: $21.00, quantity: 14. A less

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lethal 40mm impact baton projectile fired from a single 40mm grenade launcher with a rifled barrel at 51-72 MPS (meters per second). The projectile provides accurate and effective performance when fired from the recommended firing distances of not less than 10 feet and no greater than 75 feet. [Note: many agencies now use K08 SST (Super Soft Tip) projectiles instead of this version]

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use: Situations for use of the less lethal weapon systems may include, but are not limited to the following; however, other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems:

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

(d) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(e) Lifespan:

i. Penn Arms GL-140-C- No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear

ii. K041 Standard Energy Impact Batons-5 years

(f) Fiscal Impact: Annual maintenance is approximately $100 for each launcher.

(g) Legal and Procedural Rules: Use of the 40mm launcher and 40mm baton rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the 40mm only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

2. **Less Lethal Shotgun and Rounds**: Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round.

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 LESS LETHAL SHOTGUN, cost: $950, quantity: 11. The Remington 870 Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round up to a distance of 75 feet. The

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range of the weapon system helps to maintain space between officers and a suspect reducing the immediacy of the threat which is a principle of

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deescalation. The less lethal 12- gauge shotgun is distinguishable by an orange butt stock and fore grip.

ii. 12-GAUGE SUPER-SOCK BEANBAG ROUND 2581, cost: $6, quantity: 90. A less lethal 2.4-inch 12-gauge shotgun round firing a ballistic fiber bag filled with 40 grams of lead shot at a velocity of 270-290 feet per second (FPS). CTS (Combined Tactical Systems) Super-Sock rounds are discharged from a dedicated 12- gauge shotgun that is distinguishable by an orange butt stock and fore grip. This round provides accurate and effective performance when fired from the approved distance of not fewer than five (5) feet. The maximum effective range of this munition is up to 75 feet from the target. The Model 2581 Super-Sock is in its deployed state immediately upon exiting the barrel. It does not require a minimum range to "unfold" or "stabilize." The Super-Sock is an aerodynamic projectile. However, accuracy is relative to the shotgun, barrel length, environmental conditions, and the operator. The Super-Sock is very accurate. However, effectiveness depends on many variables, such as distance, clothing, stature, and the point where the projectile impacts.

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use - Situations for use of the less lethal weapon systems may include, but are not limited to the following; however, other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and , in general shall reflect necessary, reasonable, and proportional use of less-lethal weapon systems:

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

(d) Lifespan:

i. Remington 970 Less Lethal Shotgun-25 years

ii. Super Sock Round Model 2581: No listed expiration date

(e) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(f) Fiscal Impact: Annual maintenance is approximately $100 per shotgun.

(g) Legal and Procedural Rules: Use of the less lethal shotgun and Super Sock rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of

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the Los Altos Police Department to utilize the less lethal shotgun only for official

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law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

3. **5.56mm Semi-Automatic Rifles and Ammunition:** The Colt AR-15/M4 5.56 mm/.223 semiautomatic rifles are used for both patrol and the SWAT Team.

   (a) Description, quantity, capabilities, and purchase cost

      i. COLT AR/M4 RIFLES, cost: $1200, quantity: 27. These rifles, equipped and locked in each patrol car or police motorcycle, offer a higher degree of accuracy at a longer distance. The ammunition used in rifles are also more effective at penetrating body armor (as some suspects have worn during high-profile shooting events in the country). They are normally kept secured in patrol cars or in the Police station and are only deployed on specific incidents where officers believe guns or weapons are involved.[Question: This listing is vague. Do we actually include both AR15 (semi-auto) and M4 (burst and fully auto) rifles in our inventory? Or is the use of the descriptor "AR-15/M4" being used as a generic term and we actually only stock semi-auto rifles? It would be better to itemize what kinds of rifles we actually have because they have different capabilities, barrel lengths (and therefore different targeting-efficacy metrics and close-quarters suitability), and costs. Clarification is needed here.]

      ii. .223 CALIBER or 5.56MM RIFLE AMMUNITION, cost: $280 per case of 500 rounds, quantity: 10,800 rounds. This rifle ammunition used in conjunction with an AR-15 type rifle provides officers the ability to engage hostile suspects at distances generally greater than the effective distance of their handguns. Rifle ammunition fired from AR-15 rifles offer advantages over handguns, such as increased accuracy potential and the ability to defeat soft body armor but are not appropriate for every situation.

   (b) Purpose: To be used as precision weapon to address a threat with more precision and/or greater distances than a handgun, if present and feasible.

   (c) Authorized Use - Members may deploy the patrol rifle in any circumstance where the member can articulate a reasonable expectation that the rifle may be needed. Situations for use of ~~the less~~ this lethal weapon system~~s~~ may include, but are not limited to the following; however, other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and, in general, shall reflect necessary, reasonable, and proportional use of lethal weapon systems:

      i. Situations where the member reasonably anticipates an armed encounter.

      ii. When a member is faced with a situation that may require accurate and effective fire at long range.

      iii. Situations where a member reasonably expects the need to meet or exceed a suspect's firepower.

      iv. When a member reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage.

      v. When a member reasonably believes that a suspect may be wearing body armor.

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vi. When authorized or requested by a supervisor.

vii. When needed to euthanize an animal.

(d) Lifespan:

i. Colt AR/M4 Rifles: Approximately 15-20 years

ii. 223 Caliber or 5.56mm rifle ammunition: No expiration

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(e) Training: Officers must successfully complete a 24-hour patrol rifle course as well as regular Department firearms training and qualifications as required by law and policy. Firearm Instructors attend a 40-hour POST-~~approved~~ certified rifle instructor class, and SWAT personnel must attend an 80-hour basic SWAT Team course. (POST is the Peace Officer Standards and Training Council; SWAT is Special Weapons and Tactics.)

(f) Fiscal Impact: Annual maintenance is approximately $100 per rifle.

(g) Legal and Procedural Rules: Use of the patrol rifles and ammunition are subject to the requirements of Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

4. .**308 Caliber Remington 700 and Heckler & Koch HK-91 Sniper Rifles and Ammunition:** The sniper rifles are capable of firing a .308 caliber bullet. This rifle may only be used by a SWAT Officer trained and certified to be a sniper (LAPD currently has two such officers) and may be deployed to assist the SWAT Team in a critical incident or emergency.

(a) Description, quantity, capabilities, and purchase cost

i. .308 CALIBER REMINGTON 700 AND 700 LTR RIFLES, cost: $1,000, quantity: 2. Remington 700: No cost, surveyed, Remington 700LTR
$1,000.

ii. .308 CALIBER HECKLER & KOCH HK-91 RIFLE, cost: No cost, surveyed, ~~,~~ quantity: 1.

iii. .308 AMMUNITION, cost: $1.50 per round, quantity: ~~3,040~~ 3,040 rounds. These nickel-plated bonded soft-point 308/7.62 cartridges from Speer Gold-Dot are resistant to corrosion, capable of expansion from barrels as short as 10", and retain accuracy from a variety of barrels lengths.

(b) Purpose: This rifle may only be used by a SWAT Officer trained and certified to be a sniper and may be deployed to assist the SWAT Team in a critical incident or emergency. The main use of this lethal weapons system is for observation of an incident and to be able to accurately and immediately be able to stop a threat to life.

(c) Authorized Use: Examples of situations for deploying the sniper rifle may include, but are not limited to the following; however, other situations not listed here may also be deemed authorized use cases under applicable penal codes and case law, and, in general, shall reflect necessary, reasonable, and proportional use of lethal weapon systems:

i. where the Officer reasonably anticipates an armed encounter;

ii. when the Officer is faced with a situation that may require accurate and effective fire at a long distance;

iii. where an Officer reasonably expects the need to meet or exceed the

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firearms and ammunition that a suspect is reported or believed to possess;

iv. when an Officer reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage;

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v. when an Officer reasonably believes that a suspect may be wearing body armor.

(d) Lifespan:

i. .308 Caliber Remington 700/700LTR: Approximately 15 years

ii. .308 Caliber Heckler & Koch HK-91: Approximately 15 years

iii. .308 Ammunition: No expiration

(e) Training: In addition to patrol rifle and standard SWAT operator training, SWAT snipers must successfully complete a California POST-certified sniper course as well as regular SWAT sniper training and qualifications as required by law and policy.

(f) Fiscal Impact: Annual maintenance is approximately $100 per Remington rifle. The HK is not used.

(g) Legal and Procedural Rules: Use of the sniper rifles and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos, Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), Policy 312 (FIREARMS), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

5. **Benelli M3Super90 12 gauge shotgun and ammunition: This firearm is not currently used by the department and is stored in the armory.** The Benelli M3 is a dual-mode (hybrid pump-action and semi-automatic) shotgun The ammunition for the shotgun is 00 Buck and slug rounds.

(a) Description, quantity, capabilities, and purchase cost

i. BENELLI M3SUPER90 12 GAUGE SHOTGUN, cost $500, quantity: 1. The Benelli M3 is a combination Pump-Action and Semi-Automatic Shotgun. The shotgun can be chambered for 12 GA shells with a 20 inch barrel.

ii. 00 BUCK AMMUNITION, cost: $1.80 per round, quantity: 600 rounds. A typical 12-gauge, 2 ¾-inch 00 Buckshot shell holds 8 pellets that are 0.33" in diameter. A 3-inch shell most often contains 12 of these same sized pellets.

iii. SLUG AMMUNITION, cost: $1.40 per round, quantity: 100. The Foster-type shotgun slug features exterior rifled grooves which contact the shotgun's bore to give it spin; and, the slug's hollow-point design initiates expansion to augment stopping power.

(b) Purpose: This shotgun is not currently utilized by the department. The only shotguns used by the Department are the less lethal shotguns. The ammunition is purchased solely for recruits in the police academy, where shotgun instruction occurs.

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(c) Authorized Use: There is currently no authorized use for the shotgun in our policy.

(d) Lifespan:

i. Benelli M3Super90 12 gauge shotgun: Approximately 15 years

ii. OO Buck Ammunition: No expiration

iii. Slug ammunition: No expiration

(e) Training: Officers receive training in shotgun use in the police academy, and have to pass firearm qualifications. There is no further training with the Benelli shotgun or ammunition.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of all firearms fall under the following policies: Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize firearms only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

6. **Remington 870 MCS 12 Gauge Breaching shotgun and breaching rounds: This firearm/ammunition is not currently used by the department and is stored in the SWAT armory.**

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 MCS 12 GAUGE BREACHING SHOTGUN, cost: $1,400, quantity: 1. Extremely compact breaching model 12 gauge with a ten inch cylinder bore breaching barrel with parkerized finish, a Knoxx recoil reducing breacher pistol grip stock, and synthetic modular fore-end.

ii. 12 GAUGE BREACHING ROUNDS, cost: $5.00 per round, quantity: 25 rounds. The 12-Gauge TKO Breaching Round is a 12-Gauge shell loaded with a compressed zinc slug, utilizing smokeless powder as a propellant. The is a widely used method to breach door locks or hinges for entry during tactical operations.

(b) Purpose: The breaching shotgun is used to safely gain entry into a structure. When properly deployed, the TKO breaching round is capable of defeating door lock mechanisms, door knobs, hinges, dead bolts, safety chains, and pad locks on both wooden or hollow core doors. Upon impact with the target, the zinc slug disintegrates in to a fine powder eliminating fragmentation. The Explosive Breaching Program, conducted in conjunction with the Mountain View Police Department, was established to provide the joint SWAT Team the ability to quickly create an opening in a wall or window to quickly enter a building for an emergency rescue of hostages. It is reserved for rescue operations only.

(c) Authorized Use: This equipment would only be deployed during a SWAT incident, and its use would need specific authorization from the Incident Commander. The equipment may only be used by a "tactical breacher" on the SWAT team. We currently do not have any authorized users at the Department.

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(d) Lifespan:

i. Remington 870 MCS 12 Gauge Breaching shotgun: Approximately 15 years

ii. 12-Gauge TKO Breaching Round: Approximately 5 years

(e) Training: The training consists of an 80-hour course for a member of the SWAT Team specifically designated as the "breacher." At the conclusion of the course, the breacher must pass a test proctored by CAL/OSHA. The OSHA certification is valid for 5 years. Before the expiration of the certification, the breacher must retake and pass the test.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of the breaching shotgun and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

7. **Kaiser Precision Vulcan II Munitions Pole: Telescoping tool utilized by SWAT personnel to safely deliver approved noise/diversionary devices. [This product does not come up in any Google or manufacturer's searches. I think I found its patent, though). Is it obsolete? Lots of court cases and settlements in favor of complainants who suffered injuries as a result of burns and impact by flash-bang deployment using poles similar to this one.]**

(a) Description, quantity, capabilities, and purchase cost

i. KAISER PRECISION VULCAN II MUNITIONS POLE, cost: $2,000, quantity: 1. The –munitions pole is a multi-purpose breaching tool, constructed of lightweight aluminum square tubing used to deploy distraction devices and chemical munitions in order to gain entrance into a building, structure or even a vehicle.

(b) Purpose: The munitions pole is used to safely deploy diversionary devices, chemical munitions, or other objects (cell phones, cameras) during SWAT operations.

(c) Authorized Use: This equipment would be deployed during primarily during a SWAT incident, but could be utilized to gain entry into a residence during other high--risk operations on patrol.

(d) Lifespan: Approximately 10 years

(e) Training: Kaiser Precision provided an instructional video for individual and team training.

(f) Fiscal Impact: None, does not require annual maintenance

(g) Legal and Procedural Rules: Use of the munitions pole are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414

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(HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to

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utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

8. **CTS Flash-bang Training Kit:** The training flash-bangs are built and weigh exactly the same as it's equivalent live Flash-Bang, but have no flash charge.

   (a) Description, quantity, capabilities, and purchase cost

      i. CTS FLASH-BANG TRAINING KIT, cost: $964, Quantity 1 kit (comes with 70 reload Training Fuzes, 1 body), current fuze inventory is 25. The training bodies are painted with a bright blue coating, and can be used an unlimited number of times. The M201FB fuze for this system has 10 times the output of a normal M201 fuze and it is threaded with a left hand thread so it can not be accidentally used in any other munitions. The training devices produce an output of about 120db.

   (b) Purpose: Flash-bangs are used to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. The distraction gives Officers time to seize a moment and create an opportunity to take control of high-risk or dangerous situations.

   (c) Authorized Use: SWAT operators may utilize the training flash-bangs as a training tool to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. Los Altos Police Department does not have any live flash-bangs in the inventory. Our operators use live flash-bangs while on SWAT events or at training with Mountain View Police Department.

   (d) Lifespan: 5 years

   (e) Training: These are a training tool. SWAT operators must attend and pass an 80-hour SWAT training class. Flash-bang training is provided by an instructor who has completed an 8-hour noise flash diversionary device course.

   (f) Legal and Procedural Rules: Use of the **live** flash-bangs are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

9. **Specialty Impact Munition (SIM) weapons and ammunition:** Simunition® is the pioneer and world leader in providing military, law enforcement and approved range members with the most realistic and non-lethal force-on-force, short range, simulation training system.

   (a) Description, quantity, capabilities, and purchase cost

      i. SIMUNITION GLOCK 17T, cost: $500 each, quantity: 8. The GLOCK Training Pistols were developed with the purpose of enabling reality-based tactical operations training using color marking or plastic projectile

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ammunition. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

ii. SIM CONVERTED BERETTA 92, cost: $500 each, quantity: 4. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

iii. HK MP5 CONVERSION KITS, cost: $500 each, quantity 2. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

iv. SIMUNITION COLT AR-15 CARBINE RIFLE UPPERS, cost: $1,000 each, quantity: 3. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

v. FX MARKING CARTRIDGES, cost: $350 for 500 rounds, quantity: 3,500 rounds. The reduced-energy, non-lethal cartridges leave a detergent-based, water-soluble color-marking compound. The visible impacts allow accurate assessment of simulated lethality. They feature tactical accuracy up to 25 feet (7.6 meters).

(b) Purpose: Enabling reality-based, force-on-force tactical operations training using color marking or plastic projectile ammunition.

(c) Authorized Use: Simunition weapons and marking rounds are non-operational rounds and non-operational weapons systems. These munitions provide for realistic close quarters firearms training while allowing the shooter to visually assess shot placement and accuracy in force-on-force training scenarios. These items are used for training purposes for all sworn staff members.

(d) Lifespan:

i. Simunition Glock 17T: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

ii. Sim Converted Beretta: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

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iii. HK MP5 Conversion Kits: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iv. Simunition Colt AR-15 Rifle Uppers: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

v. FX Marking Cartridges: Shelf life five (5) years.

(e) Training: These are a training tool. Simunition Instructors attend an informative, three-day (24-hour) course designed to provide students with substantial hands-on experience with Simunition® FX® training ammunition technology, weapons conversion kits, and the Simunition® line of protective equipment. The course provides in-depth, hands-on instruction in scenario-based training program development and training methodology, and gives critical practical experience to students on the best use of Simunition® training products in a highly effective, realistic, extremely safe training program. Sworn staff members are given extensive firearms handling courses and weapons safety instruction to include the use of SIMs for training purposes.

(f) Legal and Procedural Rules: Use of the Simunition firearms and marking rounds are subject to the requirements of Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS) while training. It is the policy of the Los Altos Police Department to utilize Simunition equipment only for official law enforcement training purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

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709.5 APPROVAL

The Chief of Police or the authorized designee shall obtain approval from the governing body by way of an ordinance adopting the military equipment policy. As part of the approval process, the Chief of Police or the authorized designee shall ensure the proposed military equipment policy is submitted to the governing body and is available on the department website at least 30 days prior to any public hearing concerning the military equipment at issue (Government Code § 7071). The military equipment policy must be approved by the governing body ~~prior to~~before the Department engag~~es~~ing in any of the following (Government Code § 7071):

(a) Request~~s~~ing military equipment made available pursuant to 10 USC § 2576a.

(b) Seek~~s~~ing funds for military equipment, including but not limited to applying for a grant, soliciting or accepting private, local, state, or federal funds, in-kind donations, or other donations or transfers.

(c) Acquir~~es~~ing military equipment either permanently or temporarily, including by borrowing or leasing.

(d) Collaborat~~es~~ing with another law enforcement agency in the deployment or other use of military equipment within the jurisdiction of this department.

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(e) Us~~ing~~es any new or existing military equipment for a purpose, in a manner, or by a person not previously approved by the governing body.

(f) Solicit~~ing~~es or respond~~ing~~s to a proposal for, or enter~~ing~~es into an agreement with, any other person or entity to seek funds for, apply to receive, acquire, use, or collaborate in the use of military equipment.

(g) Acquir~~ing~~es military equipment through any means not provided above.

The governing body shall approve the military equipment use policy in accordance with the scope of assessment described in AB 481: Subsection 7071 (1), Sec 2, Para 2, subpara A-D. Should the governing body at any review cycle fail to approve the military equipment use policy within 180 days of the commencement of said review cycle, the use of military equipment shall cease by the Department until that time that the governing body approves a military equipment policy.

709.6 COORDINATION WITH OTHER JURISDICTIONS

Military equipment used by other law enforcement agencies that are providing mutual aid to this jurisdiction or otherwise engaged in law enforcement operations within this jurisdiction shall comply with their respective military equipment policies in rendering mutual aid.

709.7 ANNUAL REPORT

Upon approval of a military equipment policy, the Chief of Police or the authorized designee should submit a military equipment report to the governing body for each type of military equipment approved within one year of approval, and annually thereafter for as long as the military equipment is available for use (Government Code § 7072).

The Chief of Police or the authorized designee should also make each annual military equipment report publicly available on the department website for as long as the military equipment is available for use. The report shall include all information required by Government Code § 7072 for the preceding calendar year for each type of military equipment in department inventory.

709.8 COMMUNITY ENGAGEMENT

Within 30 days of submitting and publicly releasing the annual report, the Department shall hold at least one well-publicized and conveniently located community engagement meeting, at which the Department should discuss the report and respond to public questions regarding the funding, acquisition, or use of military equipment.

Pursuant to California Government Code 7070(d)(7), members of the public may register complaints or concerns or submit questions about the use of each specific type of listed equipment in this policy by any of the following means:

(a) Via email to: policefeedback@losaltosca.gov

(b) Via phone call to~~-~~: 650-947-2672

(c) Via mail sent to:

Los Altos Police Department

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Military Equipment

Attention Operations Captain

1 North San Antonio Rd

Los Altos CA 94022

[COMPLIANCE AND ACCOUNTABILITY: Need to add section that fulfills AB 481's requirement to detail "the mechanisms to ensure compliance with the military equipment use policy, including which independent persons or entities have oversight authority, and, if applicable, what legally enforceable sanctions are put in place for violations of the policy."

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PUBLIC CORRESPONDENCE

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To send correspondence to the City Council, on matters listed on the agenda please email PublicComment@losaltosca.gov

From: Debra Strichartz
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM 12 - JUNE 12 2022
Date: Monday, June 13, 2022 3:09:39 PM

To Mayor, Vice-Mayor, and CouncilmembersI do not support the approval of our draft Military Equipment Use policy as is. The policy as proposed does not safeguard the public's welfare, safety, civil rights, and civil liberties, so it should not be approved. The policy leaves too many loopholes for the usage of military equipment in any capacity. I want to see prohibited use cases for each piece of military equipment so that we can minimize injuries and fatalities in our community.Thank you for your consideration of this matter.Sincerely

Debra Strichartz

From: Annie Rogaski
To: Public Comment
Subject: Public Comment Agenda, Item 12, June 12, 2022
Date: Tuesday, June 14, 2022 1:50:28 PM

Dear Mayor, Vice-Mayor, and Councilmembers,

I do not support the approval of the current draft of the Military Equipment Use policy. It does not sufficiently safeguard the public's welfare, safety, civil rights, and civil liberties, so should not be approved. The policy leaves too many loopholes for the usage of military equipment in any capacity. I want to see prohibited use cases for each piece of military equipment so that we can minimize injuries and fatalities in our community and best protect public safety.

Thank you for your consideration of this matter.

Best,
Anne Rogaski
Los Altos Resident

From: Los Altos Racial Equity
To: Public Comment; City Council
Subject: Fwd: Military Equipment Use Policy
Date: Tuesday, June 14, 2022 2:23:14 PM

Dear Mayor, Vice-Mayor & City Council Members,

The LAPD has submitted its Military Equipment Use Policy for review and vote by City Council. As per CA Govt. Code 7071, City Council can only approve this policy if it meets all four of these requirements:

(A) The military equipment is necessary because there is no reasonable alternative that can achieve the same objective of officer and civilian safety.
(B) The proposed military equipment use policy will safeguard the public's welfare, safety, civil rights, and civil liberties.
(C) If purchasing the equipment, the equipment is reasonably cost effective compared to available alternatives that can achieve the same objective of officer and civilian safety.
(D) Prior military equipment use complied with the military equipment use policy that was in effect at the time, or if prior uses did not comply with the accompanying military equipment use policy, corrective action has been taken to remedy nonconforming uses and ensure future compliance.

LARE does not feel that this proposal meets requirement B. Below we outline the issues and our proposed changes to safeguard the safety and civil rights of Los Altans. We would be happy to chat about our proposal and go over any questions you may have.

Renee Rashid
On behalf of LARE.

GOVERNING BODY

Current:
709.1.1: Los Altos City Council should be explicitly defined as the governing body so there is no confusion.

Proposed Change:
709.1.1 - Governing body - **The Los Altos City Council which oversees the department**.

MILITARY EQUIPMENT
Current:
The definitions of military equipment used in this policy do not match the definitions in AB 481. We believe they should match.

Proposed Change:
The offending definitions along with the corrections to make it match AB 481 are below.

- Tracked armored vehicles that provide ballistic protection to their occupants **and utilize a tracked system instead of wheels for forward motion.**
- Battering rams, slugs, and breaching apparatuses that are explosive in nature. This does not include items **designed to remove a lock, or** a handheld, one-person ram.
- Specialized firearms and ammunition of less than .50 caliber, including firearms and accessories identified as assault weapons in Penal Code § 30510 and Penal Code § 30515, with the exception of standard-issue firearms **and ammunition of less than .50 caliber.**
- Munitions containing tear gas or OC (**Oleoresin capsicum**), excluding standard, service-issued handheld pepper spray.
- Kinetic energy weapons and munitions, **including lethal and less-lethal implementations.**

VIOLATIONS OF POLICY

Current:

709.2: There is no indication of who can investigate violations of this policy and repercussions for violations found. Los Altans should have a route for private right of action for violations on the usage of military equipment by the Police Department.

Proposed Change: 709.2 could be modified in the following way, or a new section - 709.9 - could be created for COMPLIANCE AND ACCOUNTABILITY, which is what 7070 (d)(6) requires. (We would prefer a new section be created, but sample wording/accountability is below)

709.2 - It is the policy of the Los Altos Police Department that members of this department comply with the provisions of Government Code § 7071 with respect to military equipment. **Any violations can be investigated by the Los Altos IIO and be brought to the City Council. The City Council may vote on sanctions for violations. If the Los Altos Police Department or its individual officers violate this policy, they shall be liable for actual damages resulting from military equipment used against individuals.**

AUTHORIZED USE OF EQUIPMENT

Current:

Each of the military equipment items listed in the PD inventory must have an authorized use. In fact, every one of our authorized use cases uses the language “may include, but not limited to”. This seemingly authorizes ALL use cases without limitation. However, the use of lethal and non-lethal weapons has limitations in the CA penal code, which is not evident here. We are still digging in to whether there are loopholes in state law that we feel should be addressed here through prohibited use cases to strengthen accountability, but at the very least, we should state more explicitly that we rely on state laws and penal code.

Proposed Change:

Each of authorized use cases should have verbiage like this that refer to our state code.

"Examples of situations for deploying the <equipment> may
include, but are not limited to the following; however, other situations not listed
here may also be deemed authorized or unauthorized use cases under applicable penal codes
and case law, and, in general, shall reflect necessary, reasonable, and
proportional use of <lethal or non/lethal> weapon systems"

Thank you for your consideration,

Renee Rashid
on behalf of Los Altos for Racial Equity

Assembly Bill (AB) 481: Military Equipment Funding, Acquisition and Use

Chief Angela Averiett

Captain Katie Krauss

Why AB 481

On September 30, 2021 – Gov. Newsom signed eight police reform bills, including AB 481

AB 481 does the following:

- Increases transparency, accountability, oversight for acquisition and use of equipment
- Provides safeguards to protect public's welfare, safety, civil rights and liberties
- Creates public forum for input and engagement

AB 481 Requirements

- Governing Body approval of a Policy and Ordinance for continued use of items purchased prior to January 1, 2022
- It also requires an annual report; LAPD's first annual report is planned for January 2023
- Annual Report to include:
  - How equipment is being used
  - Maintenance and use costs
  - Internal audits
  - Community feedback on use
- AB 481 requires approval for the acquisition of funds associated with purchase of new equipment
- Establish a concern or complaint process. LAPD has established processes for the public to submit commendations, questions, concerns and complaints online, over the phone, or in person to LAPD staff or the Independent Intake Official

Community Engagement Activities

- April 28, 2022 – Meeting notice on Los Altos Police Department website, City Manager Weekly Update and social media
  - Full text of AB 481
  - AB 481 defined list of military equipment currently in Los Altos Police Department possession
  - Los Altos Police Department summary of AB 481
  - Draft Lexipol Policy 709
- May 12, 2022 – Community Meeting to Discuss AB 481 and Draft Policy 709
- May-September—Reviewed public comments from Council meetings and met with community members to get additional feedback/input
- September 20, 2022--Present to City Council to gain approval and recommendations

Los Altos PD's Equipment Inventory

Equipment Category	Item(s)	Funding Source for Acquisition
7	Breaching Equipment (Breaching Shotgun)	Grant, Asset Forfeiture or General Fund
10	Specialized firearms and ammunition of less than .50 caliber (Rifles, ammunition)	Grant, Asset Forfeiture or General Fund
11	Any firearm or firearm accessory that is designed to launch explosive projectiles (Simunition firearms, ammunition)	Grant, Asset Forfeiture or General Fund
12	Flashbang grenades and explosive breaching tools (Training flashbang devices, munitions pole)	Grant, Asset Forfeiture or General Fund
14	Kinetic energy weapons and munitions (40mm less lethal platform, less lethal shotgun, less lethal rounds)	Grant, Asset Forfeiture or General Fund

Recommendation

- Introduce an Ordinance Approving a Military Equipment Funding, Acquisition and Use Policy Pursuant to Assembly Bill 481

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From: Los Altos Racial Equity
To: Angela Averiett; Kathryn Krauss; Jolie Houston; Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #11 - 9/20/22
Date: Tuesday, September 20, 2022 12:37:56 PM

To Mayor Enander, Vice-Mayor Meadows, Councilmembers, Attorney Jolie, Chief Averiett & Capt. Krauss

Los Altos for Racial Equity (LARE) has taken a look at the new draft of the Los Altos Military Equipment Use Policy (MEUP). We want to thank City Council for allowing additional time to work on this important document. We also want to thank and recognize Chief Averiett & the PD (especially Capt. Krauss) for spending many hours taking our feedback into account and

- Adding City Council as the governing body
- Correcting and expanding definitions
- Citing appropriate code and providing further explanations
- Adding the phrase “necessary, reasonable, and proportional use” for authorized use cases to further guide the usage of military equipment
- Adding a section on compliance

We feel that these additions will greatly improve transparency for this policy.

However, there is one significant deviation in our policy from what is required by AB 481, which states:

§7070(d)(6): The mechanisms to ensure compliance with the military equipment use policy, including which ***independent persons or entities*** have oversight authority, and if applicable, what legally enforceable sanctions are put in place for violations of the policy.

As we understand it, our draft policy in 709.8 gives oversight authority - meaning the authority to conduct an investigation into misuse/misconduct - to the Chief of Police, which clearly is not an independent person or entity. Without an interpretation from Counsel, it seems that our policy as drafted could be in danger of being out-of-compliance with the law. While we do not doubt Chief Averiett’s character or integrity, assigning oversight to the Police Chief leads to an obvious conflict-of-interest that undermines accountability and transparency.

We are instead pushing for independent oversight, which we do not currently have (the Independent Intake Official has no oversight role, merely intake). However, we want to ensure accountability, transparency, and compliance with state law, and we feel that the time is right to come up with a solution that can provide this important function. We did see the inclusion of “Formal complaints regarding alleged violations of this policy will be handled by an independent investigator” in 709.8. If this is truly the method in which investigations will be conducted, we applaud this inclusion, but then this statement needs to be followed with more detail on who this person or entity would be, how & when the investigation would be launched, conducted and concluded, and who would have ultimate authority on handing consequences. We look forward to further clarification.

Thank you for your thoughtful attention to this matter,

Renee Rashid, Toni Moos & Tanya Maluf
On behalf of Los Altos for Racial Equity

From: Jeanine Valadez
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #11 9/20/2022
Date: Tuesday, September 20, 2022 2:00:07 PM
Attachments: 2022_09_07 Military Equipment Use Policy 709 Los Altos PD bluelines JAV EDITS V1.pdf

Honorable City Council, City Manager, City Attorney, and Asst. City Clerk,

Please see attached for my public comment on the most recent draft of MEUP 709.

Jeanine Valadez
I am a PARC commissioner but am speaking as a member of the public.

Military Equipment

709.1 PURPOSE AND SCOPE

The purpose of this policy is to provide guidelines for the approval, acquisition, and reporting requirements of military equipment (Government Code § 7070; Government Code § 7071; Government Code § 7072). Assembly Bill 481 (AB 481), signed into law on September 30, 2021, requires law enforcement agencies to create a policy establishing guidelines and requirements for the funding, acquisition, and use of "military equipment" (Government Code § 7070, 7071, and 7072), including requirements to host informational meetings with the public, generate annual "military equipment" use reports, and seek annual approval from their respective governing bodies. The purpose of this policy is to make sure that safeguards exist, including transparency, governing body and independent oversight, and accountability measures, to ensure the funding, acquisition, and use of "military equipment" is consistent with the provisions set forth by the governing body and as outlined in AB 481. This policy will also provide the public with a transparent view of the "military equipment" utilized by the Los Altos Police Department, as well as the criteria by which the governing body will assess and approve the funding, acquisition, and use of "military equipment" in this Department.

[Ed. note: In this edition, you removed my suggestion to include, within the scope of this policy, the assessment criteria the governing body (City Council) will use to approve the policy. By including these criteria in this policy, you not only enable enrichment of section 709.5 ("Approval"), but you inform the public of said criteria so that they may form their own assessment of whether or not the policy protects the public welfare as they observe their City Council render approval. In this light, I request incorporation of the above words and seek an explanation as to why Staff opposes their inclusion.]

709.1.1 DEFINITIONS

Definitions related to this policy include (Government Code § 7070):

Governing body – The Los Altos City Council, who will annually review this policy and approve, by ordinance, ~~for the adoption of this ordinance and the approval of~~ the annual report. ~~elected or appointed body that oversees the~~ .

POST - Peace Officer Standards and Training

SWAT - Special Weapons and Tactics

Military equipment – Per AB 481, military equipment ~~m~~eans the following: ~~i Includes but is not limited to the following:~~

(1) Unmanned, remotely piloted, powered aerial or ground vehicles.

(2) Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers. However, police versions of standard consumer vehicles are specifically excluded from this subdivision.

(3) High mobility multipurpose wheeled vehicles (HMMWV), commonly referred to as Humvees, two and one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry

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apparatus attached. However, unarmored all-terrain vehicles (ATVs) and motorized dirt bikes are specifically excluded from this subdivision.

(4) Tracked armored vehicles that provide ballistic protection to their occupants and utilize a tracked system instead of wheels for forward motion.

(5) Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.

(6) Weaponized aircraft, vessels, or vehicles of any kind.

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(7) Battering rams, slugs, and breaching apparatuses that are explosive in nature. However, items designed to remove a lock, such as bolt cutters, or a handheld ram designed to be operated by one person, are specifically excluded from this subdivision.

(8) Firearms of.50 caliber or greater. However, standard issue shotguns are specifically excluded from this subdivision.

(9) Ammunition of.50 caliber or greater. However, standard issue shotgun ammunition is specifically excluded from this subdivision.

(10) Specialized firearms and ammunition of less than.50 caliber, including assault weapons as defined in Sections 30510 and 30515 of the Penal Code, with the exception of standard issue service weapons and ammunition of less than.50 caliber that are issued to officers, agents, or employees of a law enforcement agency or a state agency.

(11) Any firearm or firearm accessory that is designed to launch explosive projectiles.

(12) "Flashbang" grenades and explosive breaching tools, "tear gas," and "pepper balls," excluding standard, service-issued handheld pepper spray.

(13) Taser Shockwave, microwave weapons, water cannons, and the Long Range Acoustic Device (LRAD).

(14) The following projectile launch platforms and their associated munitions: 40mm projectile launchers, "bean bag," rubber bullet, and specialty impact munition (SIM) weapons.

(15) Any other equipment as determined by a governing body or a state agency to require additional oversight.

(16) Not withstanding paragraphs (1) through (15), "military equipment" does not include general equipment not designated as prohibited or controlled by the federal Defense Logistics Agency.

~~Unmanned, remotely piloted, powered aerial or ground vehicles.~~

- ~~Mine resistant ambush protected (MRAP) vehicles or armored personnel carriers.~~
- ~~High mobility multipurpose wheeled vehicles (HMMWV), two and one half ton trucks, five ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached.~~
- ~~Tracked armored vehicles that provide ballistic protection to their occupants.~~
- ~~Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.~~
- ~~Weaponized aircraft, vessels, or vehicles of any kind.~~
- ~~Battering rams, slugs, and breaching apparatuses that are explosive in nature. This does not include a handheld, one person ram.~~
- ~~Firearms and ammunition of .50 caliber or greater, excluding standard issue shotguns and standard issue shotgun ammunition.~~

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- ~~Specialized firearms and ammunition of less than – .50 caliber, including firearms and accessories identified as assault weapons in Penal Code § 30510 and Penal Code § 30515, with the exception of standard issue firearms.~~
- ~~Any firearm or firearm accessory that is designed to launch explosive projectiles.~~
- ~~Noise flash diversionary devices and explosive breaching tools.~~
- ~~Munitions containing tear gas or OC, excluding standard, service issued handheld pepper spray.~~
- ~~TASER® Shockwave, microwave weapons, water cannons, and long-range acoustic devices (LRADs).~~
- ~~Kinetic energy weapons and munitions.~~
- ~~Any other equipment as determined by a governing body or a state agency to require additional oversight.~~

709.2 POLICY

It is the policy of the Los Altos Police Department that members of the department comply with the provisions of Government Code § 7071 with respect to qualifying "military equipment". "Military equipment" shall be used by members of the Department who have completed applicable training, including training required by the Commission on Peace Officer Standards and Training (POST). See the Military Equipment Inventory List (section 709.4) for associated "military equipment" training requirements.

"Military equipment", which has been approved for use by the governing body, shall be used in accordance with all other applicable department policies and laws. These policies and laws include, but are not limited to:

- ~~•~~ Los Altos Police Department Policy 300 (Use of Force)
- Los Altos Police Department Policy 308 (Control Devices and Techniques) ~~It is the policy of the that members of this comply with the provisions of Government Code § 7071 with respect to military equipment.~~
- Los Altos Police Department Policy 312 (Firearms)
- Los Altos Police Department Policy 414 (Hostage and Barricade Incidents)
- California Assembly Bill No. 48 (Use of Kinetic Energy Projectiles and Chemical Agents-Assemblies, Protests, and Demonstrations)
- California Penal Code Section 13652 (Use of Kinetic Energy Projectiles and Chemical Agents)

This policy expressly prohibits the use of "military equipment" on individuals or groups solely based on actual or perceived characteristics, such as race, ethnicity, national origin, religion, sex, sexual orientation, gender identity or expression, economic status, age, cultural group, or disability.

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709.3 MILITARY EQUIPMENT COORDINATOR

The Chief of Police should designate a member of this department to act as the military equipment coordinator. The responsibilities of the military equipment coordinator include but are not limited to:

(a) Acting as liaison to the governing body for matters related to the requirements of this policy.

(b) Identifying department equipment that qualifies as military equipment in the current possession of the Department, or the equipment the Department intends to acquire that requires approval by the governing body.

(c) Conducting an inventory of all military equipment at least annually.

(d) Collaborating with any allied agency that may use military equipment within the jurisdiction of Los Altos Police Department (Government Code § 7071).

(e) Preparing for, scheduling, and coordinating the annual community engagement meeting to include:

1. Publicizing the details of the meeting.
2. Preparing for public questions regarding the department's funding, acquisition, and use of equipment.

(f) Preparing the annual military equipment report for submission to the Chief of Police and ensuring that the report is made available on the department website (Government Code § 7072).

(g) Establishing the procedure for a person to register a complaint or concern, or how that person may submit any questions about the use of a type of military equipment, and how the Department will respond in a timely manner.

709.4 MILITARY EQUIPMENT INVENTORY

The following constitutes a list and description of qualifying equipment for the Department:

[Ed. Note: why did you change the itemization of equipment items from numerical to alphabetical? This creates a confusing hierarchy where letters are directly subordinate to letters. For example, 709.4(a)(a) points to “Description, quantity…”. Instead, either revert to using numerical assignments for each item of equipment, as in the original 709.4.1(a), or retain the alpha, but change the subordinate insets to numbers, for example, 709.4(a)(1) points to “Description, quantity…”]

(a) **40 MM Launchers and Rounds:** 40mm Launchers are utilized by department personnel as a less lethal tool to launch impact rounds.

(a) Description, quantity, capabilities, and purchase cost

i. PENN ARMS GL-140-C, 40MM SINGLE SHOT LAUNCHER, cost: $1,000, quantity: 3. The 40mm Single Launcher is a tactical single shot launcher that features a collapsible stock. It will fire standard 40mm less lethal ammunition, up to 6.0 inches in cartridge length. 40mm launchers are capable of firing a variety of munitions with a maximum effective range of one hundred twenty (120) feet.

ii. SAGE CONTROL ORDINANCES INC K041 STANDARD ENERGY IMPACT BATON PROJECTILE, cost: $21.00, quantity: 14. A less lethal 40mm impact baton projectile fired from a single 40mm grenade launcher

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with a rifled barrel at 51-72 MPS (meters per second). The projectile provides accurate and effective performance when fired from the recommended firing distances of not less than 10 feet and no greater than 75 feet.

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(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use: Subject to subsection (g) below, s~~S~~ituations for use of the less lethal weapon systems may include, but are not limited to the following: ~~however, other situations not listed here may also be deemed authorized use cases under applicable penal codes ad case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems: :~~

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

v. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of less lethal weapon system.

(d) ~~-~~Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(e) Lifespan:

i. Penn Arms GL-140-C- No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear

ii. K041 Standard Energy Impact Batons-5 years

(f) Fiscal Impact: Annual maintenance is approximately $100 for each launcher.

(g) Legal and Procedural Rules: Use of the 40mm launcher and 40mm baton rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the 40mm only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(b) **Less Lethal Shotgun and Rounds**: Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round.

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 LESS LETHAL SHOTGUN, cost: $950, quantity: 11. The Remington 870 Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round up to a distance of 75 feet. The range of the weapon system helps to maintain space between officers

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and a suspect reducing the immediacy of the threat which is a principle of deescalation. The less lethal 12- gauge shotgun is distinguishable by an orange butt stock and fore grip.

ii. 12-GAUGE SUPER-SOCK BEANBAG ROUND 2581, cost: $6, quantity: 90. A less lethal 2.4-inch 12-gauge shotgun round firing a ballistic fiber bag filled with 40 grams of lead shot at a velocity of 270-290 feet per second (FPS). CTS (Combined Tactical Systems) Super-Sock rounds are discharged from a dedicated 12- gauge shotgun that is distinguishable by an orange butt stock and fore grip. This round provides accurate and effective performance when fired from the approved distance of not fewer than five (5) feet. The maximum effective range of this munition is up to 75 feet from the target. The Model 2581 Super-Sock is in its deployed state immediately upon exiting the barrel. It does not require a minimum range to "unfold" or "stabilize." The Super-Sock is an aerodynamic projectile. However, accuracy is relative to the shotgun, barrel length, environmental conditions, and the operator. The Super-Sock is very accurate. However, effectiveness depends on many variables, such as distance, clothing, stature, and the point where the projectile impacts.

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use - Subject to subsection (g) below, s~~S~~ituations for use of the less lethal weapon systems may include, but are not limited to the following: ~~:~~

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

v. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of less lethal weapon system.

(d) Lifespan:

i. Remington 970 Less Lethal Shotgun-25 years

ii. Super Sock Round Model 2581: No listed expiration date

(e) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(f) Fiscal Impact: Annual maintenance is approximately $100 per shotgun.

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(g) Legal and Procedural Rules: Use of the less lethal shotgun and Super Sock rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the less lethal shotgun only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(c) **5.56mm Semi-Automatic Rifles and Ammunition:** The Colt AR-15~~/M4~~ 5.56 mm/.223 semiautomatic rifles are used for both patrol and the SWAT Team.

(a) Description, quantity, capabilities, and purchase cost

i. COLT AR RIFLES ~~/M4 RIFLES~~, cost: $1200, quantity: 27. These rifles, equipped and locked in each patrol car or police motorcycle, offer a higher degree of accuracy at a longer distance. The ammunition used in rifles are also more effective at penetrating body armor (as some suspects have worn during high-profile shooting events in the country). They are normally kept secured in patrol cars or in the Police station and are only deployed on specific incidents where officers believe guns or weapons are involved.

ii. .223 CALIBER or 5.56MM RIFLE AMMUNITION, cost: $280 per case of 500 rounds, quantity: 10,800 rounds. This rifle ammunition used in conjunction with an AR-15 type rifle provides officers the ability to engage hostile suspects at distances generally greater than the effective distance of their handguns. Rifle ammunition fired from AR-15 rifles offer advantages over handguns, such as increased accuracy potential and the ability to defeat soft body armor but are not appropriate for every situation.

(b) Purpose: To be used as precision weapon to address a threat with more precision and/or greater distances than a handgun, if present and feasible.

(c) Authorized Use - Members may deploy the patrol rifle in any circumstance where the member can articulate a reasonable expectation that the rifle may be needed. Subject to subsection (g) below, ~~s~~ Situations for use of these ~~e less lethal~~ weapon systems may include, but are not limited to, the following: ~~:~~

i. Situations where the member reasonably anticipates an armed encounter.

ii. When a member is faced with a situation that may require accurate and effective fire at long range.

iii. Situations where a member reasonably expects the need to meet or exceed a suspect's firepower.

iv. When a member reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage.

v. When a member reasonably believes that a suspect may be wearing body armor.

vi. When authorized or requested by a supervisor.

vii. When needed to euthanize an animal at safe distance.

[Ed note: without the prepositional phrase, this use seems unnecessarily excessive.]

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viii. When an officer is training at an approved range or other approved facility

ix. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan:

i. Colt AR~~/M4~~ Rifles: Approximately 15-20 years

ii. 223 Caliber or 5.56mm rifle ammunition: No expiration

(e) Training: Officers must successfully complete a 24-hour patrol rifle course as well as regular Department firearms training and qualifications as required by law and policy. Firearm Instructors attend a 40-hour POST-approved rifle instructor class, and SWAT personnel must attend an 80-hour basic SWAT Team course.

(f) Fiscal Impact: Annual maintenance is approximately $100 per rifle.

(g) Legal and Procedural Rules: Use of the patrol rifles and ammunition are subject to the requirements of Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(d) **.308 Caliber Remington 700 and Heckler & Koch HK-91 Sniper Rifles and Ammunition:** The sniper rifles are capable of firing a.308 caliber bullet. This rifle may only be used by a SWAT Officer trained and certified to be a sniper (LAPD currently has two such officers) and may be deployed to assist the SWAT Team in a critical incident or emergency.

(a) Description, quantity, capabilities, and purchase cost

i. .308 CALIBER REMINGTON 700 AND 700 LTR RIFLE, cost: $1,000, quantity: 2. Remington 700: No cost, surveyed, Remington 700LTR $1,000.

ii. .308 CALIBER HECKLER & KOCH HK-91 RIFLE, cost: No cost, surveyed, , quantity: 1.

iii. .308 AMMUNITION, cost: $1.50 per round, quantity: 3, ~~.~~040 rounds. These nickel-plated bonded soft-point 308/7.62 cartridges from Speer Gold-Dot are resistant to corrosion, capable of expansion from barrels as short as 10", and retain accuracy from a variety of barrels lengths.

(b) Purpose: This rifle may only be used by a SWAT Officer trained and certified to be a sniper and may be deployed to assist the SWAT Team in a critical incident or emergency. The main use of this weapon system is for observation of an incident and to be able to accurately and immediately be able to stop a threat to life.

(c) Authorized Use: Subject to subsection (g) below, e~~E~~xamples of situations for deploying the sniper rifle may include, but are not limited to the following: ~~:~~

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i. where the Officer reasonably anticipates an armed encounter;

ii. when the Officer is faced with a situation that may require accurate and effective fire at a long distance;

iii. where an Officer reasonably expects the need to meet or exceed the firearms and ammunition that a suspect is reported or believed to possess;

iv. when an Officer reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage;

v. when an Officer reasonably believes that a suspect may be wearing body armor.

vi. When an officer is training at an approved range or other approved facility

vii. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan:

i. .308 Caliber Remington 700/700LTR: Approximately 15 years

ii. .308 Caliber Heckler & Koch HK-91: Approximately 15 years

iii. .308 Ammunition: No expiration

(e) Training: In addition to patrol rifle and standard SWAT operator training, SWAT snipers must successfully complete a California POST-certified sniper course as well as regular SWAT sniper training and qualifications as required by law and policy.

(f) Fiscal Impact: Annual maintenance is approximately $100 per Remington rifle. The HK is not used.

(g) Legal and Procedural Rules: Use of the sniper rifles and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos, Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), Policy 312 (FIREARMS), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(e) **Benelli M3Super90 12 gauge shotgun and ammunition: This firearm is not currently used by the department and is stored in the armory.** The Benelli M3 is a dual-mode (hybrid pump-action and semi-automatic) shotgun The ammunition for the shotgun is 00 Buck and slug rounds.

(a) Description, quantity, capabilities, and purchase cost

i. BENELLI M3SUPER90 12 GAUGE SHOTGUN, cost $500, quantity: 1. The Benelli M3 is a combination Pump-Action and Semi-Automatic Shotgun. The shotgun can be chambered for 12 GA shells with a 20 inch barrel.

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ii. 00 BUCK AMMUNITION, cost: $1.80 per round, quantity: 600 rounds. A typical 12-gauge, 2 ¾-inch 00 Buckshot shell holds 8 pellets that are 0.33" in diameter. A 3-inch shell most often contains 12 of these same sized pellets.

iii. SLUG AMMUNITION, cost: $1.40 per round, quantity: 100. The Foster-type shotgun slug features exterior rifled grooves which contact the shotgun's bore to give it spin; and, the slug's hollow-point design initiates expansion to augment stopping power.

(b) Purpose: This shotgun is not currently utilized by the department. The only shotguns used by the Department are the less lethal shotguns. The ammunition is purchased solely for recruits in the police academy, where shotgun instruction occurs.

(c) Authorized Use: There is currently no authorized use for the shotgun in our policy.

(d) Lifespan:

i. Benelli M3Super90 12 gauge shotgun: Approximately 15 years

ii. OO Buck Ammunition: No expiration

iii. Slug ammunition: No expiration

(e) Training: Officers receive training in shotgun use in the police academy, and have to pass firearm qualifications. There is no further training with the Benelli shotgun or ammunition.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of all firearms fall under the following policies: Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize firearms only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(f) **Remington 870 MCS 12 Gauge Breaching shotgun and breaching rounds: This firearm/ammunition is not currently used by the department and is stored in the SWAT armory.**

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 MCS 12 GAUGE BREACHING SHOTGUN, cost: $1,400, quantity: 1. Extremely compact breaching model 12 gauge with a ten inch cylinder bore breaching barrel with parkerized finish, a Knoxx recoil reducing breacher pistol grip stock, and synthetic modular fore-end.

ii. 12 GAUGE BREACHING ROUNDS, cost: $5.00 per round, quantity: 25 rounds. The 12-Gauge TKO Breaching Round is a 12-Gauge shell loaded with a compressed zinc slug, utilizing smokeless powder as a propellant. The is a widely used method to breach door locks or hinges for entry during tactical operations.

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(b) Purpose: The breaching shotgun is used to safely gain entry into a structure. When properly deployed, the TKO breaching round is capable of defeating door lock mechanisms, door knobs, hinges, dead bolts, safety chains, and pad locks on both wooden or hollow core doors. Upon impact with the target, the zinc slug disintegrates in~~–~~to a fine powder eliminating fragmentation. The Explosive Breaching Program, conducted in conjunction with the Mountain View Police Department, was established to provide the joint SWAT Team the ability to quickly create an opening in a wall or window to quickly enter a building for an emergency rescue of hostages. It is reserved for rescue operations only.

(c) Authorized Use: Subject to subsection (g) below, t~~T~~his equipment would only be deployed during a SWAT incident, and its use would need specific authorization from the Incident Commander. The equipment may only be used by a "tactical breacher" on the SWAT team. We currently do not have any authorized users at the Department.

(d) Lifespan:

i. Remington 870 MCS 12 Gauge Breaching shotgun: Approximately 15 years

ii. 12-Gauge TKO Breaching Round: Approximately 5 years

(e) Training: The training consists of an 80-hour course for a member of the SWAT Team specifically designated as the "breacher." At the conclusion of the course, the breacher must pass a test proctored by CAL/OSHA. The OSHA certification is valid for 5 years. Before the expiration of the certification, the breacher must retake and pass the test.

(f) Fiscal Impact: None, the weapon is not utilized.[Question: Even if the weapon is not utilized, doesn't the department have to ensure the weapon's efficacy for use through maintenance? If so, then there must eb a fiscal impact. If not, then why has this piece of equipment not been decommissioned and eliminated?]

(g) Legal and Procedural Rules: Use of the breaching shotgun and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(g) **Kaiser Precision Vulcan II Munitions Pole: Telescoping tool utilized by SWAT personnel to safely deliver approved noise/diversionary devices.**

(a) Description, quantity, capabilities, and purchase cost

i. KAISER PRECISION VULCAN II MUNITIONS POLE, cost: $2,000, quantity: 1. The munitions pole is a multi-purpose breaching tool, constructed of lightweight aluminum square tubing used to deploy distraction devices and chemical munitions in order to gain entrance into a building, structure or even a vehicle.

(b) Purpose: The munitions pole is used to safely deploy diversionary devices, chemical munitions, or other objects (cell phones, cameras) during SWAT

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operations.

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(c) Authorized Use: Subject to subsection (g) below, t~~T~~his equipment would be deployed during primarily during a SWAT incident, but could be utilized to gain entry into a residence during other high- ~~-~~risk operations on patrol.

~~(c)~~i. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan: Approximately 10 years

(e) Training: Kaiser Precision provided an instructional video for individual and team training.

(f) Fiscal Impact: None, does not require annual maintenance

(g) Legal and Procedural Rules: Use of the munitions pole are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(h) **CTS Flash-bang Training Kit:** The training flash-bangs are built and weigh exactly the same as it's equivalent live Flash-Bang, but have no flash charge.

(a) Description, quantity, capabilities, and purchase cost

i. CTS FLASH-BANG TRAINING KIT, cost: $964, Quantity 1 kit (comes with 70 reload Training Fuzes, 1 body), current fuze inventory is 25. The training bodies are painted with a bright blue coating, and can be used an unlimited number of times. The M201FB fuze for this system has 10 times the output of a normal M201 fuze and it is threaded with a left hand thread so it can not be accidentally used in any other munitions. The training devices produce an output of about 120db.

(b) Purpose: Flash-bangs are used to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. The distraction gives Officers time to seize a moment and create an opportunity to take control of high-risk or dangerous situations.

(c) Authorized Use: Subject to subsection (g) below, SWAT operators may utilize the training flash-bangs as a training tool to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. Los Altos Police Department does not have any live flash-bangs in the inventory. Our operators use live flash-bangs while on SWAT events or at training with Mountain View Police Department.

~~(c)~~i. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan: 5 years

(e) Training: These are a training tool. SWAT operators must attend and pass an 80-hour SWAT training class. Flash-bang training is provided by an instructor

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who has completed an 8-hour noise flash diversionary device course.

~~(e)~~(f) Fiscal Impact: MISSING SECTION, need to fill.

~~(f)~~(g) Legal and Procedural Rules: Use of the **live** flash-bangs are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS

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PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(i) **Specialty Impact Munition (SIM) weapons and ammunition:** Simunition® is the pioneer and world leader in providing military, law enforcement and approved range members with the most realistic and non-lethal force-on-force, short range, simulation training system.

(a) Description, quantity, capabilities, and purchase cost

i. SIMUNITION GLOCK 17T, cost: $500 each, quantity: 8. The GLOCK Training Pistols were developed with the purpose of enabling reality-based tactical operations training using color marking or plastic projectile ammunition. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

ii. SIM CONVERTED BERETTA 92, cost: $500 each, quantity: 4. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

iii. HK MP5 CONVERSION KITS, cost: $500 each, quantity 2. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

iv. SIMUNITION COLT AR-15 CARBINE RIFLE UPPERS, cost: $1,000 each, quantity: 3. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

v. FX MARKING CARTRIDGES, cost: $350 for 500 rounds, quantity: 3,500 rounds. The reduced-energy, non-lethal cartridges leave a detergent-based, water-soluble color-marking compound. The visible impacts allow accurate assessment of simulated lethality. They feature tactical accuracy up to 25 feet (7.6 meters).

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(b) Purpose: Enabling reality-based, force-on-force tactical operations training using color marking or plastic projectile ammunition.

(c) Authorized Use: Subject to subsection (g) below, s~~S~~imunition weapons and marking rounds are non-operational rounds and non-operational weapons systems. These munitions provide for realistic close quarters firearms training while allowing the shooter to visually assess shot placement and accuracy in force on force training scenarios. These items are used for training purposes for all sworn staff members.

~~(c)~~i. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan:

i. Simunition Glock 17T: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

ii. Sim Converted Beretta: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iii. HK MP5 Conversion Kits: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iv. Simunition Colt AR-15 Rifle Uppers: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

v. FX Marking Cartridges: Shelf life five (5) years.

(e) Training: These are a training tool. Simunition Instructors attend an informative, three-day (24-hour) course designed to provide students with substantial hands-on experience with Simunition® FX® training ammunition technology, weapons conversion kits, and the Simunition® line of protective equipment. The course provides in-depth, hands-on instruction in scenario-based training program development and training methodology, and gives critical practical experience to students on the best use of Simunition® training products in a highly effective, realistic, extremely safe training program. Sworn staff members are given extensive firearms handling courses and weapons safety instruction to include the use of SIMs for training purposes.

~~(e)~~(f) Fiscal Impact: section MISSING, need to fill out or state None.

~~(f)~~(g) Legal and Procedural Rules: Use of the Simunition firearms and marking rounds are subject to the requirements of Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS) while training. It is the policy of the Los Altos Police Department to utilize Simunition equipment only for official law enforcement training purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

709.5 APPROVAL

The Chief of Police or the authorized designee shall obtain approval from the governing body by

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way of an ordinance adopting the military equipment policy. As part of the approval process, the Chief of Police or the authorized designee shall ensure the proposed military equipment policy is submitted to the governing body and is available on the department website at least 30 days

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prior to any public hearing concerning the military equipment at issue (Government Code § 7071). The military equipment policy must be approved by the governing body before the Department engages in any of the following ~~prior to engaging in any of the following~~ (Government Code § 7071):

(a) Requests ~~ing~~ military equipment made available pursuant to 10 USC § 2576a.

(b) Seekis ~~ng~~ funds for military equipment, including but not limited to applying for a grant, soliciting or accepting private, local, state, or federal funds, in-kind donations, or other donations or transfers.

(c) Acquires ~~ing~~ military equipment either permanently or temporarily, including by borrowing or leasing.

(d) Collaborates ~~ing~~ with another law enforcement agency in the deployment or other use of military equipment within the jurisdiction of this department.

(e) Usies ~~ng~~ any new or existing military equipment for a purpose, in a manner, or by a person not previously approved by the governing body.

(f) Solicits ~~ing~~ or responds ~~ing~~ to a proposal for, or enters ~~ing~~ into an agreement with, any other person or entity to seek funds for, apply to receive, acquire, use, or collaborate in the use of military equipment.

(g) Acquiries ~~ng~~ military equipment through any means not provided above.

[Ed. Note: You did not include the assessment criteria for the governing body (see my note under 709.1). An alternative is to add a new section here called Policy Review and Approval (you would change all the number ordering below) and include the criteria there. I include these words here again for your consideration and, as stated before want to understand what legal barriers exist to including them.]

[SECTION TBD] The governing body shall only approve the military equipment use policy if all of the following are true (§7071 Subdiv (d) para (1) subpara (A)-(D)):
(a) Each military equipment is necessary for lack of a reasonable alternative.
(b) The military equipment use policy will safeguard the public's welfare, safety, civil rights, and civil liberties.
(c) The military equipment is reasonably cost effective.
(d) All current or prior non-confirming uses have been remedied to assure future compliance with policy
(e) All required components of the military equipment use policy are included in the policy presented for approval, including at least the following for each item of equipment (GC §7070 Subdiv (d) para (1)-(7)): a. Description
b. Purpose(s) and authorized use(s)
c. Fiscal impact, initial costs and maintenance costs
d. Legal and procedural rules that govern authorized use(s)
e. Training required
f. Mechanisms to ensure compliance, independent oversight, and legal consequences (sanctions) for violation of policy

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g. Methods by which public engagement is achieved (complaints, concerns, questions, suggestions)

709.6 COORDINATION WITH OTHER JURISDICTIONS

Military equipment used by other law enforcement agencies that are providing mutual aid to this jurisdiction or otherwise engaged in law enforcement operations within this jurisdiction shall comply with their respective military equipment policies in rendering mutual aid.

709.7 ANNUAL REPORT

Upon approval of a military equipment policy, the Chief of Police or the authorized designee ~~should~~ shall submit a military equipment report to the governing body for each type of military equipment approved within one year of approval, and annually thereafter for as long as the military equipment is available for use (Government Code § 7072).

The Chief of Police or the authorized designee ~~should~~ shall also make each annual military equipment report publicly available on the department website for as long as the military equipment is available for use. The report shall include all information required by Government Code § 7072 for the preceding calendar year for each type of military equipment in department inventory.

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709.8 POLICY COMPLIANCE AND SUBMITTING COMPLAINTS

The Chief of Police or the authorized designee will ensure that all Los Altos Police Department employees comply with this policy. Suspected violations of the provisions set forth in this policy, or in other laws or policies governing the use of "military equipment", shall be handled in accordance with Los Altos Police Department Policy 340 (Standards of Conduct). Additionally, violations of the provisions set forth in this policy, or in other laws or policies governing the use of "military equipment", will be reported to the governing body via the annual Military Equipment Report.

Any member of the community can submit a complaint regarding the use of "military equipment" to any Los Altos Police Department employee or the Independent Intake Official. Complaints can be submitted in any form (e.g., in person, online, telephone, email, etc.). Once a complaint is received, it will be handled in accordance with Los Altos Police Department Policy 340 (Standards of Conduct) and LAPD Policy 1020 (Personnel Complaints). Formal complaints regarding alleged violations of this policy will be handled by an independent investigator.

[Ed. Note: while I applaud the addition of an independent investigator, I remain incredulous that this is the first time this term has been shown in this policy, located at the end of two substantial paragraphs.. This statement insufficiently describes the scope and authority of this role, where they sit in the Department or outside it, to whom they are accountable, if they will render consequences, and how the public will be informed of their work. This, coupled with the fact the IIO has no role other than intake, I remain unsatisfied that independent oversight has been manifested in this policy.

Complaints may be made directly to the Los Altos Police Department in one of the following ways (for online options, please visit https://www.losaltosca.gov/police/page/how-are-we-doing-0):

In Person:

Los Altos Police Department
1 N. San Antonio Road, Los Altos, CA 94022

Online Submission:
Complaint PD WEBFORM

By Email:
Fill out the appropriate Civilian Complaint Submission form (online), save it to your computer and email as an attachment to **PoliceFeedback@losaltosca.gov**

By Phone:
(650) 947-2770

Complaints may be made directly to the Independent Intake Official (IIO) Stephanie Atigh in one of the following ways:

Online Submission:
Complaint IIO WEBFORM (online)

By Email:
Fill out the appropriate Civilian Complaint Submission form (located online), save it to your

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computer and email as an attachment to **stephatigh@sbcglobal.net**

By Phone:
(831) 915-4643

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709.9 COMMUNITY ENGAGEMENT

Within 30 days of submitting and publicly releasing the annual report, the Department shall hold at least one well-publicized and conveniently located community engagement meeting, at which the Department should discuss the report and respond to public questions regarding the funding, acquisition, or use of military equipment.

~~Pursuant to California Government Code 7070(d)(7), members of the public may register complaints or concerns or submit questions about the use of each specific type of listed equipment in this policy by any of the following means:~~

(a) ~~Via email to: policefeedback @losaltosca.gov~~

(b) ~~Via phone call to : 650-947-2672~~

(c) ~~Via mail sent to:~~

~~Los Altos Police Department~~

~~Attention Operations Captain~~

~~1 North San Antonio Rd~~

~~Los Altos CA 94022~~

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From: Jeanine Valadez
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #11 9/20/2022
Date: Tuesday, September 20, 2022 2:50:15 PM
Attachments: 2022_09_07 Military Equipment Use Policy 709 Los Altos PD bluelines JAV EDITS V1.pdf

Honorable City Council, City Manager, City Attorney, and Asst. City Clerk,

I want to personally thank Captain Krauss for considering and including most of my previous suggested edits to this Military Equipment Use Policy (MEUP)
Whether these edits were incorporated directly, or were incorporated in spirit using other words or paragraph structure, the effect was the same: excellent!
I also loved some of the edits Capt. Krauss and/or staff took on themselves to ameliorate many ambiguities and inconsistencies with AB481; for example, the Definitions section is top-notch now.
Overall, the policy has been improved by a very large extent. THANK YOU.

However, and I do not intend to sound ungrateful, concerns remain such that I still cannot endorse the draft as written.
The green-lined PDF that I submitted separately captures almost all of my concerns. This letter completes the inventory and I hope that Capt. Krauss will continue to work with me to resolve these issues:

1) Reasons I was given for not including some of my suggestions were cited as relating to liability or legality. Given that virtually every change I suggested came from the MEUPs of other LE agencies in the state, I would have thought they would pass risk and legal muster. I would like an itemized rational as to what legal/liability barriers exist to inclusion.

2) While not staunching the functionality of the MEUP, it is very disappointing and notable that Staff has steered clear of any recognition of the underlying historical reckoning embodied in AB 481. It's as though this omission is by intention. Concerns that acknowledging history somehow reflects poorly on our current Department members are nonsense. It is exactly the lack of this acknowledgment that engenders mistrust.

3) In a similar vein, the current draft continues to sidestep the use of the term "independent oversight," despite the reality that this concept is literally all over the text of the law and is very clearly an underpinning of the goals the law sets out to achieve. While we appreciate that the IIO has been invoked, that role has no oversight authority, as currently defined. And a brief mention of an independent investigator leaves more questions than it answers. My colleagues at LARE will expand this topic further to express what is needed.

4) I remember being very concerned about how our 2 sniper-trained officers could ever be effective in their job because everything I read and heard from LE personnel told me nothing about how they would be trained to be part of a cohesive SWAT team. Everything I had read about operational efficacy in SWAT had to do with a cohesive, seamless, properly scaled operational team. Two officers were, in my

mind, stranded, and that introduced great risk. Yet, at the small scale of our city, having a full SWAT team would be senseless. It was only after meeting with Capt. Krauss and asking her to answer this question, that I learned how integrated our SWAT officers are with the Mountain View PD SWAT team. Quickly, my fears and concerns were ameliorated. It seemed so simple to add a mention of this integration in the Training paragraph for Sniper weapons and munitions. In fact, under the Breaching programs paragraph, such a mention exists in paragraph 709.4(f)(b), albeit in the Purpose statement. And yet, this edit suggestion was removed for sniper weapons. I would like an explanation as to why its inclusion would in any way injure the viability of this policy.

5) There are some missing Fiscal Impact paragraphs for some ME items. They must be present for every item, even if no financial impact exists. However, I contend that, even if an item is not used, if it is in our armory, it MIGHT be used, and, therefore, there must be some fiscal impact in terms of testing and maintenance. If there is absolutely no possibility of use and the item will sit in idle storage, then, in my opinion, it becomes a possible risk due to lack of maintenance. It should be decommissioned and eliminated from the armory.

6) I failed to include in my submitted greenlines an edit concerning the 1033 program. I did not included it because I had not heard back from Capt. Krauss on my questions surrounding this program as it relates to our ME. Having just heard back from her, I can now itemize my request: In the spirit of transparency, many other agencies include the citation below in their MEUPs. Including this statement does two things: a) it stalls any claims that our city is getting equipment directly from the Military, and, b) it alerts the public to the fact that should our agency every wish to acquire ME from the Military, they will have to educate themselves on what that means and how it impacts public safety and welfare, including requiring that any such acquisitions be thoroughly documented for public review. The requested addition belongs in the Policy section:

"The Department has not obtained, nor does it utilize, any equipment procured from the United States Department of Defense through the Law Enforcement Support Program, authorized under the National Defense Authorization Act, also known as the 1208 (pre-1997) or 1033 (1997 and later) program."

I look forward to continuing discussion with staff and Council on this topic. The goal here is to get a rock-solid, best-of-class MEUP for our city.

Thanks,

Jeanine Valadez
Pardon typos. I am a PARC commissioner but am speaking as a member of the public.

Military Equipment

709.1 PURPOSE AND SCOPE

The purpose of this policy is to provide guidelines for the approval, acquisition, and reporting requirements of military equipment (Government Code § 7070; Government Code § 7071; Government Code § 7072). Assembly Bill 481 (AB 481), signed into law on September 30, 2021, requires law enforcement agencies to create a policy establishing guidelines and requirements for the funding, acquisition, and use of "military equipment" (Government Code § 7070, 7071, and 7072), including requirements to host informational meetings with the public, generate annual "military equipment" use reports, and seek annual approval from their respective governing bodies. The purpose of this policy is to make sure that safeguards exist, including transparency, governing body and independent oversight, and accountability measures, to ensure the funding, acquisition, and use of "military equipment" is consistent with the provisions set forth by the governing body and as outlined in AB 481. This policy will also provide the public with a transparent view of the "military equipment" utilized by the Los Altos Police Department, as well as the criteria by which the governing body will assess and approve the funding, acquisition, and use of "military equipment" in this Department.

[Ed. note: In this edition, you removed my suggestion to include, within the scope of this policy, the assessment criteria the governing body (City Council) will use to approve the policy. By including these criteria in this policy, you not only enable enrichment of section 709.5 ("Approval"), but you inform the public of said criteria so that they may form their own assessment of whether or not the policy protects the public welfare as they observe their City Council render approval. In this light, I request incorporation of the above words and seek an explanation as to why Staff opposes their inclusion.]

709.1.1 DEFINITIONS

Definitions related to this policy include (Government Code § 7070):

Governing body – The Los Altos City Council, who will annually review this policy and approve, by ordinance, ~~for the adoption of this ordinance and the approval of~~ the annual report. ~~elected or appointed body that oversees the~~ .

POST - Peace Officer Standards and Training

SWAT - Special Weapons and Tactics

Military equipment – Per AB 481, military equipment means the following: ~~i Includes but is not limited to the following:~~

(1) Unmanned, remotely piloted, powered aerial or ground vehicles.

(2) Mine-resistant ambush-protected (MRAP) vehicles or armored personnel carriers. However, police versions of standard consumer vehicles are specifically excluded from this subdivision.

(3) High mobility multipurpose wheeled vehicles (HMMWV), commonly referred to as Humvees, two and one-half-ton trucks, five-ton trucks, or wheeled vehicles that have a breaching or entry

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apparatus attached. However, unarmored all-terrain vehicles (ATVs) and motorized dirt bikes are specifically excluded from this subdivision.

(4) Tracked armored vehicles that provide ballistic protection to their occupants and utilize a tracked system instead of wheels for forward motion.

(5) Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.

(6) Weaponized aircraft, vessels, or vehicles of any kind.

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(7) Battering rams, slugs, and breaching apparatuses that are explosive in nature. However, items designed to remove a lock, such as bolt cutters, or a handheld ram designed to be operated by one person, are specifically excluded from this subdivision.

(8) Firearms of.50 caliber or greater. However, standard issue shotguns are specifically excluded from this subdivision.

(9) Ammunition of.50 caliber or greater. However, standard issue shotgun ammunition is specifically excluded from this subdivision.

(10) Specialized firearms and ammunition of less than.50 caliber, including assault weapons as defined in Sections 30510 and 30515 of the Penal Code, with the exception of standard issue service weapons and ammunition of less than.50 caliber that are issued to officers, agents, or employees of a law enforcement agency or a state agency.

(11) Any firearm or firearm accessory that is designed to launch explosive projectiles.

(12) "Flashbang" grenades and explosive breaching tools, "tear gas," and "pepper balls," excluding standard, service-issued handheld pepper spray.

(13) Taser Shockwave, microwave weapons, water cannons, and the Long Range Acoustic Device (LRAD).

(14) The following projectile launch platforms and their associated munitions: 40mm projectile launchers, "bean bag," rubber bullet, and specialty impact munition (SIM) weapons.

(15) Any other equipment as determined by a governing body or a state agency to require additional oversight.

(16) Not withstanding paragraphs (1) through (15), "military equipment" does not include general equipment not designated as prohibited or controlled by the federal Defense Logistics Agency.

~~Unmanned, remotely piloted, powered aerial or ground vehicles.~~

- ~~Mine resistant ambush protected (MRAP) vehicles or armored personnel carriers.~~
- ~~High mobility multipurpose wheeled vehicles (HMMWV), two and one half ton trucks, five ton trucks, or wheeled vehicles that have a breaching or entry apparatus attached.~~
- ~~Tracked armored vehicles that provide ballistic protection to their occupants.~~
- ~~Command and control vehicles that are either built or modified to facilitate the operational control and direction of public safety units.~~
- ~~Weaponized aircraft, vessels, or vehicles of any kind.~~
- ~~Battering rams, slugs, and breaching apparatuses that are explosive in nature. This does not include a handheld, one person ram.~~
- ~~Firearms and ammunition of .50 caliber or greater, excluding standard issue shotguns and standard issue shotgun ammunition.~~

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- ~~Specialized firearms and ammunition of less than – .50 caliber, including firearms and accessories identified as assault weapons in Penal Code § 30510 and Penal Code § 30515, with the exception of standard issue firearms.~~
- ~~Any firearm or firearm accessory that is designed to launch explosive projectiles.~~
- ~~Noise flash diversionary devices and explosive breaching tools.~~
- ~~Munitions containing tear gas or OC, excluding standard, service issued handheld pepper spray.~~
- ~~TASER® Shockwave, microwave weapons, water cannons, and long-range acoustic devices (LRADs).~~
- ~~Kinetic energy weapons and munitions.~~
- ~~Any other equipment as determined by a governing body or a state agency to require additional oversight.~~

709.2 POLICY

It is the policy of the Los Altos Police Department that members of the department comply with the provisions of Government Code § 7071 with respect to qualifying "military equipment". "Military equipment" shall be used by members of the Department who have completed applicable training, including training required by the Commission on Peace Officer Standards and Training (POST). See the Military Equipment Inventory List (section 709.4) for associated "military equipment" training requirements.

"Military equipment", which has been approved for use by the governing body, shall be used in accordance with all other applicable department policies and laws. These policies and laws include, but are not limited to:

- ~~•~~ Los Altos Police Department Policy 300 (Use of Force)
- Los Altos Police Department Policy 308 (Control Devices and Techniques) ~~It is the policy of the that members of this comply with the provisions of Government Code § 7071 with respect to military equipment.~~
- Los Altos Police Department Policy 312 (Firearms)
- Los Altos Police Department Policy 414 (Hostage and Barricade Incidents)
- California Assembly Bill No. 48 (Use of Kinetic Energy Projectiles and Chemical Agents-Assemblies, Protests, and Demonstrations)
- California Penal Code Section 13652 (Use of Kinetic Energy Projectiles and Chemical Agents)

This policy expressly prohibits the use of "military equipment" on individuals or groups solely based on actual or perceived characteristics, such as race, ethnicity, national origin, religion, sex, sexual orientation, gender identity or expression, economic status, age, cultural group, or disability.

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709.3 MILITARY EQUIPMENT COORDINATOR

The Chief of Police should designate a member of this department to act as the military equipment coordinator. The responsibilities of the military equipment coordinator include but are not limited to:

(a) Acting as liaison to the governing body for matters related to the requirements of this policy.

(b) Identifying department equipment that qualifies as military equipment in the current possession of the Department, or the equipment the Department intends to acquire that requires approval by the governing body.

(c) Conducting an inventory of all military equipment at least annually.

(d) Collaborating with any allied agency that may use military equipment within the jurisdiction of Los Altos Police Department (Government Code § 7071).

(e) Preparing for, scheduling, and coordinating the annual community engagement meeting to include:

1. Publicizing the details of the meeting.
2. Preparing for public questions regarding the department's funding, acquisition, and use of equipment.

(f) Preparing the annual military equipment report for submission to the Chief of Police and ensuring that the report is made available on the department website (Government Code § 7072).

(g) Establishing the procedure for a person to register a complaint or concern, or how that person may submit any questions about the use of a type of military equipment, and how the Department will respond in a timely manner.

709.4 MILITARY EQUIPMENT INVENTORY

The following constitutes a list and description of qualifying equipment for the Department:

[Ed. Note: why did you change the itemization of equipment items from numerical to alphabetical? This creates a confusing hierarchy where letters are directly subordinate to letters. For example, 709.4(a)(a) points to “Description, quantity…”. Instead, either revert to using numerical assignments for each item of equipment, as in the original 709.4.1(a), or retain the alpha, but change the subordinate insets to numbers, for example, 709.4(a)(1) points to “Description, quantity…”]

(a) **40 MM Launchers and Rounds:** 40mm Launchers are utilized by department personnel as a less lethal tool to launch impact rounds.

(a) Description, quantity, capabilities, and purchase cost

i. PENN ARMS GL-140-C, 40MM SINGLE SHOT LAUNCHER, cost: $1,000, quantity: 3. The 40mm Single Launcher is a tactical single shot launcher that features a collapsible stock. It will fire standard 40mm less lethal ammunition, up to 6.0 inches in cartridge length. 40mm launchers are capable of firing a variety of munitions with a maximum effective range of one hundred twenty (120) feet.

ii. SAGE CONTROL ORDINANCES INC K041 STANDARD ENERGY IMPACT BATON PROJECTILE, cost: $21.00, quantity: 14. A less lethal 40mm impact baton projectile fired from a single 40mm grenade launcher

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with a rifled barrel at 51-72 MPS (meters per second). The projectile provides accurate and effective performance when fired from the recommended firing distances of not less than 10 feet and no greater than 75 feet.

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(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use: Subject to subsection (g) below, s~~S~~ituations for use of the less lethal weapon systems may include, but are not limited to the following: ~~however, other situations not listed here may also be deemed authorized use cases under applicable penal codes ad case law, and, in general shall reflect necessary, reasonable, and proportional use of less lethal weapon systems: :~~

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

v. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of less lethal weapon system.

(d) ~~-~~Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(e) Lifespan:

i. Penn Arms GL-140-C- No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear

ii. K041 Standard Energy Impact Batons-5 years

(f) Fiscal Impact: Annual maintenance is approximately $100 for each launcher.

(g) Legal and Procedural Rules: Use of the 40mm launcher and 40mm baton rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the 40mm only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(b) **Less Lethal Shotgun and Rounds**: Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round.

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 LESS LETHAL SHOTGUN, cost: $950, quantity: 11. The Remington 870 Less Lethal Shotgun is used to deploy the less lethal 12-gauge Super-Sock Beanbag Round up to a distance of 75 feet. The range of the weapon system helps to maintain space between officers

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and a suspect reducing the immediacy of the threat which is a principle of deescalation. The less lethal 12- gauge shotgun is distinguishable by an orange butt stock and fore grip.

ii. 12-GAUGE SUPER-SOCK BEANBAG ROUND 2581, cost: $6, quantity: 90. A less lethal 2.4-inch 12-gauge shotgun round firing a ballistic fiber bag filled with 40 grams of lead shot at a velocity of 270-290 feet per second (FPS). CTS (Combined Tactical Systems) Super-Sock rounds are discharged from a dedicated 12- gauge shotgun that is distinguishable by an orange butt stock and fore grip. This round provides accurate and effective performance when fired from the approved distance of not fewer than five (5) feet. The maximum effective range of this munition is up to 75 feet from the target. The Model 2581 Super-Sock is in its deployed state immediately upon exiting the barrel. It does not require a minimum range to "unfold" or "stabilize." The Super-Sock is an aerodynamic projectile. However, accuracy is relative to the shotgun, barrel length, environmental conditions, and the operator. The Super-Sock is very accurate. However, effectiveness depends on many variables, such as distance, clothing, stature, and the point where the projectile impacts.

(b) Purpose: To limit the escalation of conflict where employment of lethal force is prohibited or undesirable.

(c) Authorized Use - Subject to subsection (g) below, s~~S~~ituations for use of the less lethal weapon systems may include, but are not limited to the following: ~~:~~

i. The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.

ii. The suspect has made credible threats to harm him/herself or others.

iii. The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.

iv. There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

v. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of less lethal weapon system.

(d) Lifespan:

i. Remington 970 Less Lethal Shotgun-25 years

ii. Super Sock Round Model 2581: No listed expiration date

(e) Training: All personnel who are authorized to carry a control device must be properly trained and certified to carry the specific control device and are retrained or re-certified as necessary. Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.

(f) Fiscal Impact: Annual maintenance is approximately $100 per shotgun.

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(g) Legal and Procedural Rules: Use of the less lethal shotgun and Super Sock rounds are subject to the requirements of Policy 300 (USE OF FORCE), 308 (CONTROL DEVICES AND TECHNIQUES), 308.9 (KINETIC ENERGY PROJECTILE GUIDELINES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize the less lethal shotgun only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(c) **5.56mm Semi-Automatic Rifles and Ammunition:** The Colt AR-15~~/M4~~ 5.56 mm/.223 semiautomatic rifles are used for both patrol and the SWAT Team.

(a) Description, quantity, capabilities, and purchase cost

i. COLT AR RIFLES ~~/M4 RIFLES~~, cost: $1200, quantity: 27. These rifles, equipped and locked in each patrol car or police motorcycle, offer a higher degree of accuracy at a longer distance. The ammunition used in rifles are also more effective at penetrating body armor (as some suspects have worn during high-profile shooting events in the country). They are normally kept secured in patrol cars or in the Police station and are only deployed on specific incidents where officers believe guns or weapons are involved.

ii. .223 CALIBER or 5.56MM RIFLE AMMUNITION, cost: $280 per case of 500 rounds, quantity: 10,800 rounds. This rifle ammunition used in conjunction with an AR-15 type rifle provides officers the ability to engage hostile suspects at distances generally greater than the effective distance of their handguns. Rifle ammunition fired from AR-15 rifles offer advantages over handguns, such as increased accuracy potential and the ability to defeat soft body armor but are not appropriate for every situation.

(b) Purpose: To be used as precision weapon to address a threat with more precision and/or greater distances than a handgun, if present and feasible.

(c) Authorized Use - Members may deploy the patrol rifle in any circumstance where the member can articulate a reasonable expectation that the rifle may be needed. Subject to subsection (g) below), s ~~S~~ituations for use of these ~~e less lethal~~ weapon systems may include, but are not limited to, the following: ~~:~~

i. Situations where the member reasonably anticipates an armed encounter.

ii. When a member is faced with a situation that may require accurate and effective fire at long range.

iii. Situations where a member reasonably expects the need to meet or exceed a suspect's firepower.

iv. When a member reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage.

v. When a member reasonably believes that a suspect may be wearing body armor.

vi. When authorized or requested by a supervisor.

vii. When needed to euthanize an animal at safe distance.

[Ed note: without the prepositional phrase, this use seems unnecessarily excessive.]

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viii. When an officer is training at an approved range or other approved facility

ix. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan:

i. Colt AR~~/M4~~ Rifles: Approximately 15-20 years

ii. 223 Caliber or 5.56mm rifle ammunition: No expiration

(e) Training: Officers must successfully complete a 24-hour patrol rifle course as well as regular Department firearms training and qualifications as required by law and policy. Firearm Instructors attend a 40-hour POST-approved rifle instructor class, and SWAT personnel must attend an 80-hour basic SWAT Team course.

(f) Fiscal Impact: Annual maintenance is approximately $100 per rifle.

(g) Legal and Procedural Rules: Use of the patrol rifles and ammunition are subject to the requirements of Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(d) **.308 Caliber Remington 700 and Heckler & Koch HK-91 Sniper Rifles and Ammunition:** The sniper rifles are capable of firing a.308 caliber bullet. This rifle may only be used by a SWAT Officer trained and certified to be a sniper (LAPD currently has two such officers) and may be deployed to assist the SWAT Team in a critical incident or emergency.

(a) Description, quantity, capabilities, and purchase cost

i. .308 CALIBER REMINGTON 700 AND 700 LTR RIFLE, cost: $1,000, quantity: 2. Remington 700: No cost, surveyed, Remington 700LTR $1,000.

ii. .308 CALIBER HECKLER & KOCH HK-91 RIFLE, cost: No cost, surveyed, , quantity: 1.

iii. .308 AMMUNITION, cost: $1.50 per round, quantity: 3, ~~.~~040 rounds. These nickel-plated bonded soft-point 308/7.62 cartridges from Speer Gold-Dot are resistant to corrosion, capable of expansion from barrels as short as 10", and retain accuracy from a variety of barrels lengths.

(b) Purpose: This rifle may only be used by a SWAT Officer trained and certified to be a sniper and may be deployed to assist the SWAT Team in a critical incident or emergency. The main use of this weapon system is for observation of an incident and to be able to accurately and immediately be able to stop a threat to life.

(c) Authorized Use: Subject to subsection (g) below, e~~E~~xamples of situations for deploying the sniper rifle may include, but are not limited to the following: ~~:~~

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i. where the Officer reasonably anticipates an armed encounter;

ii. when the Officer is faced with a situation that may require accurate and effective fire at a long distance;

iii. where an Officer reasonably expects the need to meet or exceed the firearms and ammunition that a suspect is reported or believed to possess;

iv. when an Officer reasonably believes that there may be a need to fire on a barricaded person or a person with a hostage;

v. when an Officer reasonably believes that a suspect may be wearing body armor.

vi. When an officer is training at an approved range or other approved facility

vii. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan:

i. .308 Caliber Remington 700/700LTR: Approximately 15 years

ii. .308 Caliber Heckler & Koch HK-91: Approximately 15 years

iii. .308 Ammunition: No expiration

(e) Training: In addition to patrol rifle and standard SWAT operator training, SWAT snipers must successfully complete a California POST-certified sniper course as well as regular SWAT sniper training and qualifications as required by law and policy.

(f) Fiscal Impact: Annual maintenance is approximately $100 per Remington rifle. The HK is not used.

(g) Legal and Procedural Rules: Use of the sniper rifles and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos, Policy 300 (USE OF FORCE), Policy 312.3.2 (PATROL RIFLES), Policy 312 (FIREARMS), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the Los Altos Police Department to utilize rifles only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(e) **Benelli M3Super90 12 gauge shotgun and ammunition: This firearm is not currently used by the department and is stored in the armory.** The Benelli M3 is a dual-mode (hybrid pump-action and semi-automatic) shotgun The ammunition for the shotgun is 00 Buck and slug rounds.

(a) Description, quantity, capabilities, and purchase cost

i. BENELLI M3SUPER90 12 GAUGE SHOTGUN, cost $500, quantity: 1. The Benelli M3 is a combination Pump-Action and Semi-Automatic Shotgun. The shotgun can be chambered for 12 GA shells with a 20 inch barrel.

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ii. 00 BUCK AMMUNITION, cost: $1.80 per round, quantity: 600 rounds. A typical 12-gauge, 2 ¾-inch 00 Buckshot shell holds 8 pellets that are 0.33" in diameter. A 3-inch shell most often contains 12 of these same sized pellets.

iii. SLUG AMMUNITION, cost: $1.40 per round, quantity: 100. The Foster-type shotgun slug features exterior rifled grooves which contact the shotgun's bore to give it spin; and, the slug's hollow-point design initiates expansion to augment stopping power.

(b) Purpose: This shotgun is not currently utilized by the department. The only shotguns used by the Department are the less lethal shotguns. The ammunition is purchased solely for recruits in the police academy, where shotgun instruction occurs.

(c) Authorized Use: There is currently no authorized use for the shotgun in our policy.

(d) Lifespan:

i. Benelli M3Super90 12 gauge shotgun: Approximately 15 years

ii. OO Buck Ammunition: No expiration

iii. Slug ammunition: No expiration

(e) Training: Officers receive training in shotgun use in the police academy, and have to pass firearm qualifications. There is no further training with the Benelli shotgun or ammunition.

(f) Fiscal Impact: None, the weapon is not utilized.

(g) Legal and Procedural Rules: Use of all firearms fall under the following policies: Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS). It is the policy of the Los Altos Police Department to utilize firearms only for official law enforcement purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

(f) **Remington 870 MCS 12 Gauge Breaching shotgun and breaching rounds: This firearm/ammunition is not currently used by the department and is stored in the SWAT armory.**

(a) Description, quantity, capabilities, and purchase cost

i. REMINGTON 870 MCS 12 GAUGE BREACHING SHOTGUN, cost: $1,400, quantity: 1. Extremely compact breaching model 12 gauge with a ten inch cylinder bore breaching barrel with parkerized finish, a Knoxx recoil reducing breacher pistol grip stock, and synthetic modular fore-end.

ii. 12 GAUGE BREACHING ROUNDS, cost: $5.00 per round, quantity: 25 rounds. The 12-Gauge TKO Breaching Round is a 12-Gauge shell loaded with a compressed zinc slug, utilizing smokeless powder as a propellant. The is a widely used method to breach door locks or hinges for entry during tactical operations.

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(b) Purpose: The breaching shotgun is used to safely gain entry into a structure. When properly deployed, the TKO breaching round is capable of defeating door lock mechanisms, door knobs, hinges, dead bolts, safety chains, and pad locks on both wooden or hollow core doors. Upon impact with the target, the zinc slug disintegrates in~~–~~to a fine powder eliminating fragmentation. The Explosive Breaching Program, conducted in conjunction with the Mountain View Police Department, was established to provide the joint SWAT Team the ability to quickly create an opening in a wall or window to quickly enter a building for an emergency rescue of hostages. It is reserved for rescue operations only.

(c) Authorized Use: Subject to subsection (g) below, t~~T~~his equipment would only be deployed during a SWAT incident, and its use would need specific authorization from the Incident Commander. The equipment may only be used by a "tactical breacher" on the SWAT team. We currently do not have any authorized users at the Department.

(d) Lifespan:

i. Remington 870 MCS 12 Gauge Breaching shotgun: Approximately 15 years

ii. 12-Gauge TKO Breaching Round: Approximately 5 years

(e) Training: The training consists of an 80-hour course for a member of the SWAT Team specifically designated as the "breacher." At the conclusion of the course, the breacher must pass a test proctored by CAL/OSHA. The OSHA certification is valid for 5 years. Before the expiration of the certification, the breacher must retake and pass the test.

(f) Fiscal Impact: None, the weapon is not utilized.[Question: Even if the weapon is not utilized, doesn't the department have to ensure the weapon's efficacy for use through maintenance? If so, then there must eb a fiscal impact. If not, then why has this piece of equipment not been decommissioned and eliminated?]

(g) Legal and Procedural Rules: Use of the breaching shotgun and ammunition are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(g) **Kaiser Precision Vulcan II Munitions Pole: Telescoping tool utilized by SWAT personnel to safely deliver approved noise/diversionary devices.**

(a) Description, quantity, capabilities, and purchase cost

i. KAISER PRECISION VULCAN II MUNITIONS POLE, cost: $2,000, quantity: 1. The munitions pole is a multi-purpose breaching tool, constructed of lightweight aluminum square tubing used to deploy distraction devices and chemical munitions in order to gain entrance into a building, structure or even a vehicle.

(b) Purpose: The munitions pole is used to safely deploy diversionary devices, chemical munitions, or other objects (cell phones, cameras) during SWAT

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(c) Authorized Use: Subject to subsection (g) below, t~~T~~his equipment would be deployed during primarily during a SWAT incident, but could be utilized to gain entry into a residence during other high- ~~-~~risk operations on patrol.

~~(c)~~i. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan: Approximately 10 years

(e) Training: Kaiser Precision provided an instructional video for individual and team training.

(f) Fiscal Impact: None, does not require annual maintenance

(g) Legal and Procedural Rules: Use of the munitions pole are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(h) **CTS Flash-bang Training Kit:** The training flash-bangs are built and weigh exactly the same as it's equivalent live Flash-Bang, but have no flash charge.

(a) Description, quantity, capabilities, and purchase cost

i. CTS FLASH-BANG TRAINING KIT, cost: $964, Quantity 1 kit (comes with 70 reload Training Fuzes, 1 body), current fuze inventory is 25. The training bodies are painted with a bright blue coating, and can be used an unlimited number of times. The M201FB fuze for this system has 10 times the output of a normal M201 fuze and it is threaded with a left hand thread so it can not be accidentally used in any other munitions. The training devices produce an output of about 120db.

(b) Purpose: Flash-bangs are used to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. The distraction gives Officers time to seize a moment and create an opportunity to take control of high-risk or dangerous situations.

(c) Authorized Use: Subject to subsection (g) below, SWAT operators may utilize the training flash-bangs as a training tool to distract and temporarily immobilize dangerous suspects by overwhelming their senses of vision and hearing. Los Altos Police Department does not have any live flash-bangs in the inventory. Our operators use live flash-bangs while on SWAT events or at training with Mountain View Police Department.

~~(c)~~i. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan: 5 years

(e) Training: These are a training tool. SWAT operators must attend and pass an 80-hour SWAT training class. Flash-bang training is provided by an instructor

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who has completed an 8-hour noise flash diversionary device course.

~~(e)~~(f) Fiscal Impact: MISSING SECTION, need to fill.

~~(f)~~(g) Legal and Procedural Rules: Use of the **live** flash-bangs are subject to the requirements of the SWAT Standard Operating Procedures for Mountain View/Los Altos. Use is also under Policy 317 (HIGH RISK OPERATIONS

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PROTOCOL), Policy 322 (SEARCH AND SEIZURE), and Policy 414 (HOSTAGE AND BARRICADE INCIDENTS). It is the policy of the LAPD to utilize diversion devices only for official law enforcement purposes and pursuant to State and Federal law regarding the use of force.

(i) **Specialty Impact Munition (SIM) weapons and ammunition:** Simunition® is the pioneer and world leader in providing military, law enforcement and approved range members with the most realistic and non-lethal force-on-force, short range, simulation training system.

(a) Description, quantity, capabilities, and purchase cost

i. SIMUNITION GLOCK 17T, cost: $500 each, quantity: 8. The GLOCK Training Pistols were developed with the purpose of enabling reality-based tactical operations training using color marking or plastic projectile ammunition. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

ii. SIM CONVERTED BERETTA 92, cost: $500 each, quantity: 4. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized in a pistol caliber barrel training platform (9mm), SIMs have an effective range of 25 feet.

iii. HK MP5 CONVERSION KITS, cost: $500 each, quantity 2. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

iv. SIMUNITION COLT AR-15 CARBINE RIFLE UPPERS, cost: $1,000 each, quantity: 3. The Simunition® conversion kit, conversion bolt, bolt carrier assembly and safety-ring insert allow the FX® Marking Cartridges and the SecuriBlank® to be fired safely from the user's own service weapon. These easy-to-install kits help preclude the inadvertent chambering of live ammunition and ensure the proper operation and cycling of the weapons. When utilized with a training munition bolt carrier group in a 5.56mm rifle platform, SIMs have an effective range of approximately 27 yards.

v. FX MARKING CARTRIDGES, cost: $350 for 500 rounds, quantity: 3,500 rounds. The reduced-energy, non-lethal cartridges leave a detergent-based, water-soluble color-marking compound. The visible impacts allow accurate assessment of simulated lethality. They feature tactical accuracy up to 25 feet (7.6 meters).

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(b) Purpose: Enabling reality-based, force-on-force tactical operations training using color marking or plastic projectile ammunition.

(c) Authorized Use: Subject to subsection (g) below, s~~S~~imunition weapons and marking rounds are non-operational rounds and non-operational weapons systems. These munitions provide for realistic close quarters firearms training while allowing the shooter to visually assess shot placement and accuracy in force on force training scenarios. These items are used for training purposes for all sworn staff members.

~~(c)~~i. Other situations not listed here may also be deemed authorized use cases under applicable penal code and case law, and shall reflect necessary, reasonable, and proportional use of this weapon system.

(d) Lifespan:

i. Simunition Glock 17T: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

ii. Sim Converted Beretta: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iii. HK MP5 Conversion Kits: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

iv. Simunition Colt AR-15 Rifle Uppers: – 24-month limited warranty. No lifespan indicated by manufacturer. Lifespan varies on operational usage and wear.

v. FX Marking Cartridges: Shelf life five (5) years.

(e) Training: These are a training tool. Simunition Instructors attend an informative, three-day (24-hour) course designed to provide students with substantial hands-on experience with Simunition® FX® training ammunition technology, weapons conversion kits, and the Simunition® line of protective equipment. The course provides in-depth, hands-on instruction in scenario-based training program development and training methodology, and gives critical practical experience to students on the best use of Simunition® training products in a highly effective, realistic, extremely safe training program. Sworn staff members are given extensive firearms handling courses and weapons safety instruction to include the use of SIMs for training purposes.

~~(e)~~(f) Fiscal Impact: section MISSING, need to fill out or state None.

~~(f)~~(g) Legal and Procedural Rules: Use of the Simunition firearms and marking rounds are subject to the requirements of Policy 300 (USE OF FORCE) and Policy 312 (FIREARMS) while training. It is the policy of the Los Altos Police Department to utilize Simunition equipment only for official law enforcement training purposes, in accordance with all requirements under State and Federal law, including those regarding the use of force.

709.5 APPROVAL

The Chief of Police or the authorized designee shall obtain approval from the governing body by

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way of an ordinance adopting the military equipment policy. As part of the approval process, the Chief of Police or the authorized designee shall ensure the proposed military equipment policy is submitted to the governing body and is available on the department website at least 30 days

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prior to any public hearing concerning the military equipment at issue (Government Code § 7071). The military equipment policy must be approved by the governing body before the Department engages in any of the following ~~prior to engaging in any of the following~~ (Government Code § 7071):

(a) Request~~s~~ ~~ing~~ military equipment made available pursuant to 10 USC § 2576a.

(b) Seeki~~s~~ ~~ng~~ funds for military equipment, including but not limited to applying for a grant, soliciting or accepting private, local, state, or federal funds, in-kind donations, or other donations or transfers.

(c) Acquir~~es~~ ~~ing~~ military equipment either permanently or temporarily, including by borrowing or leasing.

(d) Collaborat~~es~~ ~~ing~~ with another law enforcement agency in the deployment or other use of military equipment within the jurisdiction of this department.

(e) Usi~~es~~ ~~ng~~ any new or existing military equipment for a purpose, in a manner, or by a person not previously approved by the governing body.

(f) Solicit~~s~~ ~~ing~~ or respond~~s~~ ~~ing~~ to a proposal for, or enter~~s~~ ~~ing~~ into an agreement with, any other person or entity to seek funds for, apply to receive, acquire, use, or collaborate in the use of military equipment.

(g) Acquiri~~es~~ ~~ng~~ military equipment through any means not provided above.

[Ed. Note: You did not include the assessment criteria for the governing body (see my note under 709.1). An alternative is to add a new section here called Policy Review and Approval (you would change all the number ordering below) and include the criteria there. I include these words here again for your consideration and, as stated before want to understand what legal barriers exist to including them.]

[SECTION TBD] The governing body shall only approve the military equipment use policy if all of the following are true (§7071 Subdiv (d) para (1) subpara (A)-(D)):
(a) Each military equipment is necessary for lack of a reasonable alternative.
(b) The military equipment use policy will safeguard the public's welfare, safety, civil rights, and civil liberties.
(c) The military equipment is reasonably cost effective.
(d) All current or prior non-confirming uses have been remedied to assure future compliance with policy
(e) All required components of the military equipment use policy are included in the policy presented for approval, including at least the following for each item of equipment (GC §7070 Subdiv (d) para (1)-(7)): a. Description
b. Purpose(s) and authorized use(s)
c. Fiscal impact, initial costs and maintenance costs
d. Legal and procedural rules that govern authorized use(s)
e. Training required
f. Mechanisms to ensure compliance, independent oversight, and legal consequences (sanctions) for violation of policy

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g. Methods by which public engagement is achieved (complaints, concerns, questions, suggestions)

709.6 COORDINATION WITH OTHER JURISDICTIONS

Military equipment used by other law enforcement agencies that are providing mutual aid to this jurisdiction or otherwise engaged in law enforcement operations within this jurisdiction shall comply with their respective military equipment policies in rendering mutual aid.

709.7 ANNUAL REPORT

Upon approval of a military equipment policy, the Chief of Police or the authorized designee ~~should~~ shall submit a military equipment report to the governing body for each type of military equipment approved within one year of approval, and annually thereafter for as long as the military equipment is available for use (Government Code § 7072).

The Chief of Police or the authorized designee ~~should~~ shall also make each annual military equipment report publicly available on the department website for as long as the military equipment is available for use. The report shall include all information required by Government Code § 7072 for the preceding calendar year for each type of military equipment in department inventory.

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709.8 POLICY COMPLIANCE AND SUBMITTING COMPLAINTS

The Chief of Police or the authorized designee will ensure that all Los Altos Police Department employees comply with this policy. Suspected violations of the provisions set forth in this policy, or in other laws or policies governing the use of "military equipment", shall be handled in accordance with Los Altos Police Department Policy 340 (Standards of Conduct). Additionally, violations of the provisions set forth in this policy, or in other laws or policies governing the use of "military equipment", will be reported to the governing body via the annual Military Equipment Report.

Any member of the community can submit a complaint regarding the use of "military equipment" to any Los Altos Police Department employee or the Independent Intake Official. Complaints can be submitted in any form (e.g., in person, online, telephone, email, etc.). Once a complaint is received, it will be handled in accordance with Los Altos Police Department Policy 340 (Standards of Conduct) and LAPD Policy 1020 (Personnel Complaints). Formal complaints regarding alleged violations of this policy will be handled by an independent investigator.

[Ed. Note: while I applaud the addition of an independent investigator, I remain incredulous that this is the first time this term has been shown in this policy, located at the end of two substantial paragraphs.. This statement insufficiently describes the scope and authority of this role, where they sit in the Department or outside it, to whom they are accountable, if they will render consequences, and how the public will be informed of their work. This, coupled with the fact the IIO has no role other than intake, I remain unsatisfied that independent oversight has been manifested in this policy.

Complaints may be made directly to the Los Altos Police Department in one of the following ways (for online options, please visit https://www.losaltosca.gov/police/page/how-are-we-doing-0):

In Person:

Los Altos Police Department
1 N. San Antonio Road, Los Altos, CA 94022

Online Submission:
Complaint PD WEBFORM

By Email:
Fill out the appropriate Civilian Complaint Submission form (online), save it to your computer and email as an attachment to **PoliceFeedback@losaltosca.gov**

By Phone:
(650) 947-2770

Complaints may be made directly to the Independent Intake Official (IIO) Stephanie Atigh in one of the following ways:

Online Submission:
Complaint IIO WEBFORM (online)

By Email:
Fill out the appropriate Civilian Complaint Submission form (located online), save it to your

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computer and email as an attachment to [redacted]

By Phone:

[redacted]

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709.9 COMMUNITY ENGAGEMENT

Within 30 days of submitting and publicly releasing the annual report, the Department shall hold at least one well-publicized and conveniently located community engagement meeting, at which the Department should discuss the report and respond to public questions regarding the funding, acquisition, or use of military equipment.

~~Pursuant to California Government Code 7070(d)(7), members of the public may register complaints or concerns or submit questions about the use of each specific type of listed equipment in this policy by any of the following means:~~

(a) ~~Via email to: policefeedback @losaltosca.gov~~

(b) ~~Via phone call to : 650-947-2672~~

(c) ~~Via mail sent to:~~

~~Los Altos Police Department~~

~~Attention Operations Captain~~

~~1 North San Antonio Rd~~

~~Los Altos CA 94022~~

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AGENDA REPORT SUMMARY

Meeting Date: September 6, 2022

Subject: Commission Appointments

Prepared by: Angel Rodriguez, City Clerk
Reviewed by: Jon Maginot, Assistant City Manager
Approved by: Gabriel Engeland, City Manager

Attachment(s):
None

Initiated by:
City Council

Previous Council Consideration: None
Fiscal Impact:
None

Environmental Review:
Not applicable

Policy Question(s) for Council Consideration:
Does the Council wish to appoint the applicants to serve on the following Commissions?

- Parks and Recreation Commission
- Design Review Commission
- Planning Commission
- Historical Commission
- Public Arts Commission

Summary:
Below is a summary of the number of seats to be filled, the terms, number of applications received for each Commission, an alphabetical listing of the applicants. Eligible incumbents seeking re-appointment are indicated with an asterisk (*) following the applicant's name. All, but one of the applicant's invited to the interview were interviewed by the City Council on August 30, 2022.

Reviewed by:

City Attorney

City Manager GE

Finance Director

JH N/A

Subject: Commission Appointments – Parks and Recreation Commission, Design Review Commission, Planning Commission, Historical Commission, Public Arts Commission

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PARKS AND RECREATION COMMISSION: 1 partial term expiring in March 2025

2 applications received
Mike Tkalcevic
Steven C Brocksen

DESIGN REVIEW COMMISSION: 2 full terms expiring September 2026

3 applications received
Chepe Mantica
Stuart Klein
Urvashi Nagrani

PLANNING COMMISSION: 3 full terms expiring in September 2026

4 applications received

Joe Beninato
Kate Disney
Mehruss Jon Ahi*
Theresa May Couture

HISTORICAL COMMISSION: 4 full terms expiring in September 2026

3 applications received
Jonathan Adams
Jonathan Baer
Liza Coe

PUBLIC ARTS COMMISSION: 1 partial term expiring September 2025

0 application received

Subject: Commission Appointments – Parks and Recreation Commission, Design Review Commission, Planning Commission, Historical Commission, Public Arts Commission

Staff Recommendation:

Appoint applicants to fill the vacancies on the Parks and Recreation Commission, Design Review Commission, Planning Commission, Historical Commission, Public Arts Commission.

Subject: Commission Appointments – Parks and Recreation Commission, Design Review Commission, Planning Commission, Historical Commission, Public Arts Commission

Purpose

To fill existing or upcoming, due to expiration of terms, Commission vacancies.

Background

The City Council appoints individuals to serve on the various City Commissions and one Committee.

Except for Senior and Youth Commissioners, members are appointed to four-year terms and may serve a total of two consecutive terms plus the fulfillment of an unexpired term should they be so appointed.

Discussion/Analysis

Currently there are eleven (11) vacancies total across five (5) Commissions resulting in the following Commission seats to be filled:

Parks and Recreation Commission: One partial term expiring in March 2025

Design Review Commission: Two terms expiring in September 2026

Planning Commission: Three terms expiring in September 2026

Historical Commission; Four terms expiring in September 2026

Public Arts Commission: One partial term expiring in September 2025

On August 30, 2022, the City Council interviewed all but one of the applicants.

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject: City of Los Altos Non-Profit and Civic Organization Contributions Policy

Prepared by: Anthony Carnesecca, Economic Development Administrator
Reviewed by: Jon Maginot, Assistant City Manager
Approved by: Gabriel Engeland, City Manager

Attachment(s):
1. Resolution 22-XX City of Los Altos Non-Profit and Civic Organization Contributions Policy
2. City of Los Altos Non-Profit and Civic Organization Contributions Application
3. City of Los Altos Non-Profit and Civic Organization Contributions Audit Report

Initiated by:
City Council

Previous Council Consideration:
None.

Fiscal Impact:
The following policy will cost a varying amount depending upon the particular request from each organization.

Environmental Review:
Not applicable

Policy Question(s) for Council Consideration:
- Does the City Council want to establish a formal policy for any contributions to non-profit and civic organizations benefitting the Los Altos community?

Summary:
- City Council has historically approved contributions individually due to a lack of policy.
- This policy will allow different avenues for City Council to allocate contributions to Los Altos non-profit and civic organizations.
- This policy will increase transparency for residents during the budget process.
  This policy ensure the City meets its non-discretionary obligations for contracts and participation in JPAs.

Reviewed By:

City Manager	City Attorney	Finance Director
GE	JH	SN

Subject: City of Los Altos Non-Profit and Civic Organization Contributions Policy

Staff Recommendation:
Adopt the City of Los Altos Non-Profit and Civic Organization Contributions Policy.

Purpose
Create a common policy outlining the process and requirements for non-profit and civic organization contributions from the City of Los Altos.

Background
The City of Los Altos has historically allocated funds to organizations. The City also allocates funds annually as legally required through contracts or participation in Joint Powers Authority (JPA) agreements.

The City Council directed staff to create a formal process for discretionary requests and contributions that could be implemented during the next regular budget cycle. The recommended policy will also make a distinction between the discretionary contributions to organizations, and the non-discretionary allocations, such as contract payments or participation in a JPA.

In the current budget year, the City has provided discretionary funds to:

- WomenSV ($20,000)
- The Los Altos Chamber of Commerce ($60,000)

The City provided non-discretionary funds, through contracts or JPA participation, as follows:

- The City of Los Altos has a signed contract with the Los Altos History Museum in the amount of $65,000 annually.
- The City of Los Altos has a Joint Powers Agreement with Town of Los Altos Hills, City of Mountain View, Los Altos School District, Mountain View School District, Mountain View-Los Altos Union High School District, and Whisman School District for Counseling & Mental Health Services (CHAC) in the amount of $49,000.

Discussion/Analysis
In an effort to increase transparency and budget certainty, the City Council directed staff to recommend a policy for contributions to non-profit and civic organizations. Additionally, this policy will create a distinction between discretionary and non-discretionary allocations.

City staff researched other cities' policies and created a policy that allows non-profit and civic organizations to request their contributions as part of the annual budget process. The most efficient use of time and resources is to consolidate this review so City Council will only need to complete one review of all non-profit and civic organization contribution requests annually. City staff will complete an initial review to verify that the organization has met all requirements for the program without any prior or outstanding issues with the City and will then incorporate initially-qualified

Subject: City of Los Altos Non-Profit and Civic Organization Contributions Policy

requests into the budget for a review by City Council through the budget adoption process. City Council will retain final authority to approve or deny these discretionary funding requests.

All requirements for applicants are outlined in the resolution and reiterated through the application form attached to this agenda report.

In addition to discretionary funding requests, the City also provides funding to organizations that are not discretionary. Funding that takes place as part of a contractual obligation or participation in a JPA will also be included in the budget process, but will not be listed as discretionary.

The City Council may opt to enter into contracts with organizations as opposed to reviewing and approving certain expenditures on an annual basis. Contracts would allow long-standing organizations to not request funding annually while still meeting annual reporting requirements to verify that the funds are spent properly.

Recommendation

The staff recommends adoption of the City of Los Altos Non-Profit and Civic Organization Contributions Policy.

RESOLUTION NO. 2022-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS DEFINING A NON-PROFIT AND CIVIC ORGANIZATION CONTRIBUTIONS POLICY

WHEREAS, the City of Los Altos has historically allocated funds to a number of non-profit and civic organizations every year in the budget ;and

WHEREAS, City Council expressed a desire to create a formal process ;and

WHEREAS, The purpose of this policy is to establish a process for non-profit and civic organizations to request funding contributions from the City Council ;and

WHEREAS, The policy is intended to allow the City Council to fully evaluate all funding requests at one time with budget appropriation.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Los Altos hereby adopts the following policy:

City of Los Altos requires all organizations interested in funding to provide the completed "City of Los Altos Non-Profit and Civic Organization Contribution Application" and all other required documents to City staff by January 1st of every year for consideration in the next budget cycle. These applications will be considered annually as part of the budget process.

1. Applicant Criteria
    a. The organization must be a non-profit or civic organization.
    b. The organization must provide a direct benefit to the Los Altos community.
    c. Current recipients may be given priority.

2. Application Availability and Deadline
    a. Applications for the next Fiscal Year (July-June) will be available on the City's website annually in October.
    b. Completed applications will be due annually on January 1st of every year.
    c. For example, organizations that are requesting a contribution for FY 23-24 must submit by January 1, 2023 in order to allow time for staff review and preparation of the appropriate budget documents.

3. Review and Approval Process
    a. Applications will be reviewed by City staff.
    b. Funding applications and details will be included annually in the budget development or mid-cycle budget review process.
    c. The City Manager will make recommendations on funding to the City Council based on established Council priorities and funding constraints.

d. The City Council shall award and include final funding within the budget.
e. Once approved, the City and the organization will enter into a contract, where the organization must meet all requirements outlined in the contract.

4. Reporting Requirements
    a. An annual report must be submitted by July 30 for the prior fiscal year from the organization.
    b. The report shall include a record of the use of City funds and information that provides details on the organization's impact to the community.
    c. City Council or staff may impose additional reporting requirements as necessary.
    d. If an organization does not submit their annual report, funding will be withdrawn for the next fiscal year.

5. Contribution Length
    a. The organization may either apply for a one-year or multi-year contract, which requires that the organization only apply when their contract runs out.
    b. Organizations that select longer than one year will still be required to submit their annual report on the prior fiscal year's the use of City funds annually.

I HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a meeting thereof on the ___ day of ____, 2022 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Anita Enander, MAYOR

Attest:

_____
Angel Rodriguez, INTERIM CITY CLERK

City of Los Altos
Non-Profit and Civic Organization Contributions Application

Organization Information

Name: _____

Address: _____

Website: _____

Non-profit? Y/N

Civic organization? Y/N

Benefit Los Altos community? Y/N

Description of organizational activities: _____
_____
_____

Description of organizational impact on Los Altos community: _____
_____
_____

Contact Information

Contact name: _____

Contact role: _____

Email: _____

Phone: _____

Contribution Information

Annual contribution amount requested: _____

Length of contribution request? _____

Total contribution amount requested: _____

Repeat request from a previous budget cycle? Y / N

Use of funds:

Expense	Amount	Intended Use	Contribution to City

Total			

Agreement

As the official representative for the above organization, I agree to comply with all requirements listed or otherwise enforced through the City of Los Altos Non-Profit and Civic Organization Contribution Policy. The City reserves the right to revoke this application at any time for any purpose. The organization shall provide all documents and organizational information as required by the City of Los Altos necessary to comply with Non-Profit and Civic Organization Contribution Policy application. The official representative certifies that the above information is true and accurate to the best of my knowledge.

Signature:_____ Date:_____

City of Los Altos
Non-Profit and Civic Organization Contributions Audit Report

Organization Information

Name: _____

Contact Information

Contact name: _____

Contact role: _____

Email: _____

Phone: _____

Contribution Information

Annual contribution amount received: _____

Use of funds:

Expense	Amount	Intended Use	Contribution to City
Total			

Does the use of funds information match the same information on your application? Y/N

If not, explain: _____
_____
_____

Agreement

As the official representative for the above organization, I agree to comply with all requirements listed or otherwise enforced through the City of Los Altos Non-Profit and Civic Organization Contribution Policy. The City reserves the right to revoke this application at any time for any purpose. The organization shall provide all documents and organizational information as required by the City of Los Altos necessary to comply with Non-Profit and Civic Organization Contribution Policy application. The official representative certifies that the above information is true and accurate to the best of my knowledge.

Signature:_____ Date:_____

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject Consider approval of the updated License Agreement with SFPUC for Hetch Hetchy Trail in Los Altos; find that the approval of the agreement is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15301 (Existing Facilities).

Prepared by: Manny A. Hernandez, Parks and Recreation Director
Approved by: Gabriel Engeland, City Manager

Attachment(s):
1. Updated License Agreement between San Francisco Public Utilities Commission and the City of Los Altos.
2. Hetch Hetchy Regional Water System Amendment to the Right of Way Integrated Vegetation Management Policy.
3. Land Use Permit Dated February 4, 1987 (P3137B)

Initiated by:
Staff

Previous Council Consideration:
None

Fiscal Impact:
None

Environmental Review:
The approval of the updated license agreement is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15301 (Existing Facilities) in that the only work required under the agreement is limited to the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use, and none of the circumstances identified in CEQA Guidelines Section 15300.2 applies.

Reviewed By:

City Manager	City Attorney	Finance Director
GE	JH	JF

Subject: Updated License Agreement with SFPUC for Hetch Hetchy Trail in Los Altos

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Policy Question(s) for Council Consideration:

- Does City Council desire to maintain usage of the easement on the SFPUC property as a public recreation trail?
    - If so, does City Council wish to amend the license agreement with the SFPUC under the proposed terms?

Summary:

- Keeping the SFPUC parcels open as a bicycle and pedestrian trail is important to the public
- There will be a noticeable impact when the vegetation along the trail is brought up to current vegetation management policy as mandated by SFPUC
- Protection and maintenance of the SFPUC infrastructure is vital
- Staff will work with SFPUC to maintain as much current vegetation as possible under the updated license agreement and vegetation management policy

Staff Recommendation:

Staff recommends the City Council authorize the City Manager to execute the updated license agreement with the San Francisco Public Utilities Commission for the continued use of the Hetch Hetchy Trail as a publicly accessible recreation trail that connects with Palo Alto across the Adobe Creek pedestrian bridge.

Direct staff to work with SFPUC to maintain as much current vegetation as possible while complying with the updated license agreement and vegetation management policy.

Purpose

Provide continued public bicycle and pedestrian access along the Hetch Hetchy Trail that connects with Palo Alto at the Adobe Creek pedestrian bridge and begin maintenance of three additional parcels located on the east side of Los Altos Avenue which are currently maintained by SFPUC.

Background

The San Francisco Public Utilities Commission ("SFPUC") is responsible for the delivery of potable water and the collection and treatment of wastewater for some 800,000 customers within the City of San Francisco; it is also responsible for the delivery of potable water to 26 other water retailers with a customer base of 1.8 million.

The City of Los Altos currently has a land use permit with the San Francisco Public Utilities Commission that allows the City to maintain SFPUC parcel numbers 236 and 237 (between Los Altos Ave. and the Adobe Creek pedestrian bridge) as a bike and pedestrian path that connects to Palo Alto along the Hetch Hetchy trail. As part of this land use permit the City is expected to maintain the landscaping along these parcels and are subject to approval by the SFPUC for any

modifications or improvements. There are three additional SFPUC parcels (numbers 233-A and portions of 232-A and 234-A) within City of Los Altos property that are not included in the current Land Use Permit, but would be incorporated into the permit if the recommended license agreement is approved by the City Council.

SFPUC will complete the maintenance of the parcels by removing vegetation that is not in conformance with their vegetation management policy regardless of whether or not the City agrees to an updated license agreement.

Discussion/Analysis

The San Francisco Public Utilities Commission is mandating updates to the current land use permit with the City of Los Altos that would allow for the continued public use of the Hetch Hetchy trail as a bike and pedestrian trail that connects to Palo Alto across Adobe Creek. The required updates will be part of a License Agreement between the SFPUC and the City of Los Altos.

As part of the license agreement, the City of Los Altos will be expected to maintain all or a portion of three additional parcels of land between Los Altos Avenue and Mercedes Avenue, as well as maintain both parcels included in the current Land Use agreement, in accordance with the SFPUC amended Right of Way Integrated Vegetation Management Policy. The initial work to bring the vegetation up to the SFPUC amended policy will be done by the SFPUC before handing over maintenance duties to the City.

According to the SFPUC Vegetation Management Policy, it is established to manage vegetation on the transmission, distribution and collection systems within the SFPUC Right of Way so that it does not pose a threat or hazard to the system's integrity and infrastructure or impede utility maintenance and operations. The existence of large woody vegetation and water transmission lines within the right of way are not considered compatible. Roots can impact transmission pipelines by causing corrosion. The existence of trees and other vegetation directly adjacent to pipelines makes emergency and annual maintenance very difficult, hazardous, and expensive, and increases concerns for public safety. The risk of fire within the ROW is always a concern and the reduction of fire ladder fuels within these corridors is another reason to modify the vegetation mosaic. One of the other objectives of this policy is to reduce and eliminate as much as practicable the use of herbicides on vegetation within the right of way and to implement integrated pest management.

The following is a guideline for the size at maturity of plants (small trees, shrubs, and groundcover) that may be permitted to be used as landscape materials. Note: All distance measurements are for mature trees and plants measured from the edge of the drip-line to the edge of the pipeline.

- Plants that may be permitted to be planted directly above existing and future pipelines: shallow rooted plants such as ground cover, grasses, flowers, and very low growing plants that grow to a maximum of one foot in height at maturity.
- Plants that may be permitted to be planted 15–25 feet from the edge of existing and future pipelines: shrubs and plants that grow to a maximum of five feet in height at maturity.
- Plants that may be permitted to be planted 25 feet or more from the edge of existing and future pipelines: small trees or shrubs that grow to a maximum of twenty feet in height and fifteen feet in canopy width.

Trees and plants that exceed the maximum height and size limit (described above) may be permitted within a leased or licensed area provided they are in containers and are above ground. Container load and placement location(s) are subject to review and approval by the SFPUC. Low water use plant species are encouraged and invasive plant species are not allowed. All appurtenances, vaults, and facility infrastructure must remain visible and accessible at all times.

City of Los Altos staff has evaluated the maintenance plan for the current and added parcels to this license agreement and it is not expected to add significant cost or labor hours to the Park Maintenance Division of the Parks and Recreation Department. Under the SFPUC amended Vegetation Management Policy, staff has concluded that maintenance can be accomplished within the current operating budget and maintenance crew staffing levels. There is no expected fiscal impact.

It is anticipated that a significant amount of existing vegetation on the trail will be removed by the SFPUC in order to bring it into compliance with the amended Right of Way Integrated Vegetation Management Policy. City staff has reached out to the residents and trail users in that area to assist in answering questions and relay concerns to the SFPUC. Staff is also working with the SFPUC to prepare the area and surrounding residents for the initial vegetation removal.

Recommendation

The staff recommends the City Council authorize the City Manager to execute the Revocable License Agreement with the San Francisco Public Utilities Commission.

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
REVOCABLE LICENSE

(Replacing and Superseding Four (4) SFPUC Real Estate Agreements identified in Section 2 of this License)
(License #P4550)

THIS REVOCABLE LICENSE (this "**License**") dated for reference purposes only as of _____, 2022 (**"Effective Date"**), is made by and between the CITY AND COUNTY OF SAN FRANCISCO, a municipal corporation ("**City**"), acting by and through its Public Utilities Commission ("**SFPUC**"), and CITY OF LOS ALTOS, a California municipal corporation ("**Licensee**"). City and Licensee are sometimes collectively referred to in this License as the "**Parties**" or singularly as a "**Party**." This License is entered into with reference to the following facts and understandings of the Parties.

RECITALS

A. City owns certain real property under the SFPUC's jurisdiction in the City of Los Altos commonly referred to as the Bay Division Pipeline No. 3 and 4 right of way ("**Right of Way**").

B. Pursuant to that certain Revocable Permit entered into by and between City and Licensee, dated April 4, 1961 ("**GEN-0215**"), City granted Licensee permission to use a portion of the Right of Way designated as SFPUC Parcel No. 236 for a street extension and a six-foot (6') sewer line, as shown on drawings prepared by George S. Nolte, Consulting Civil Engineer's, Inc., Sheet 1 of Job No. 246-60 entitled "Improvement Plan Tract No. 2930 Preliminary Los Altos, California" and dated March of 1961, and attached hereto as **Exhibit B-1**.

C. Pursuant to that certain Revocable Permit entered into by and between the City and Licensee, dated May 21, 1963 ("**GEN-0687**"), City granted Licensee permission to use a portion of the Right of Way designated as SFPUC Parcel Nos. 232A, 233B and 234A for Licensee's use as a cul-de-sac, storm drain and a ten-foot (10') fire department access roadway, as depicted in the attached San Francisco Water Department Drawing B-2518, attached hereto as **Exhibit B-2**.

D. Pursuant to that certain Land Use Permit entered into by and between City and Licensee, dated May 9, 1972 ("**GEN -1339**"), City granted Licensee permission to use a portion of the Right of Way, designated as SFPUC Parcels Nos. 234A and 236 for the purpose of street widening and landscaping, as reflected in the drawing attached hereto as **Exhibit B-3**. GEN-0215 together with GEN-0687 and GEN-1339 are collectively referred to as the "**Engineering Permits**".

E. Pursuant to that certain Land Use Permit entered into by and between the City and Licensee, dated June 12, 1974 ("**Permit No. 3137**"), City granted Licensee permission to use a portion of the Right of Way, designated as SFPUC Parcel Nos. 234-A, 236, and 237 for the construction of landscaping and a bicycle path, including a pedestrian bridge, in accordance with the drawing entitled "Preliminary Landscape Plan," dated July 11, 1973 (revised March 21, 1974)

prepared by Royston, Hanamoto, Beck & Abey, Landscape Architects ("**Landscaping Plans**"), and that set of Plans prepared by George Nolte and Associates, drawing Numbers 6070-73, sheets, 2,3,4 and 5, dated May 1974 and attached hereto as **Exhibit B-4** ("**Bridge Plans**"). The pedestrian bridge shall hereinafter be referred to as the "**Bridge**".

F. Pursuant to that certain Land Use Permit entered into by and between the City and Licensee, dated February 4, 1987, and effective retroactively as of December 1, 1985 (**"Permit No. 3137B**"), which superseded and revoked Permit No. 3137, City granted Licensee permission to use portions of the Right of Way, being the entirety of SFPUC Parcel No. 233-A, and portions of SFPUC Parcel Nos. 232-A, 234-A, 236 and 237, as depicted on San Francisco Water Department drawing C-1061-1, attached hereto as **Exhibit B-5** for a bicycle path, including the Bridge, and landscaping purposes in accordance with the Landscaping Plans, the Bridge Plans attached hereto as **Exhibit B-4**, and the drawings from the Licensee, dated November 19, 1985, showing added permit area for Licensee, attached hereto as **Exhibit B-6**.

G. Permit No. P3137B was amended by that certain letter from City to Licensee, dated April 22, 2005 ("**Letter Amendment**"), wherein City, in response to Licensee's request set forth in that certain letter from Licensee to City dated March 22, 2005 ("**Amendment Request**"), agreed to remove the entirety of Parcel 233-A and portions of Parcels 232-A and 234-A from the permit area governed by Permit No. 3137B, thereby leaving Parcels 236 and 237 as areas permitted for Licensee's use.

H. City and Permittee now desire to enter into this License to, among other things: (a) add back to the areas permitted for Licensee's use portions of the Right of Way, designated as the entirety of SFPUC Parcel Nos. 233-A and 233-B, and portions of SFPUC Parcel Nos. 232-A and 234-A, that were removed under the Letter Amendment; and (b) revoke, supersede and replace the Engineering Permits and Permit No. 3137B with the terms contained in this License.

AGREEMENT

NOW, THEREFORE, for and in consideration of the foregoing Recitals, which are incorporated into this License by this reference, the mutual covenants and obligations of the Parties contained in this License, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agrees as follows.

BASIC LICENSE INFORMATION

The following is a summary of basic license information ("**Basic License Information**"). Each item below shall be deemed to incorporate all of the terms set forth in this License pertaining to such item. In the event of any conflict between the information in this Section and any more specific provision of this License, the more specific provision shall control.

City:	CITY AND COUNTY OF SAN FRANCISCO, acting by and through its Public Utilities Commission
Licensee:	CITY OF LOS ALTOS, a California municipal corporation

Combined License Area (**Section 1 and Section 5(b)):**	The Combined License Area shall consist of the Pathway Area and the Maintenance Area.
Pathway Area:	Approximately 80,000 square feet, consisting of SFPUC Parcel Nos. 236 and 237 in Los Altos, California, as more particularly described in the legal description attached as **Exhibit A** and as shown in the attached **Exhibit B**, together with any appurtenances.
Maintenance Area (Section 5(b)):	Approximately 50,000 square feet, consisting of portions of SFPUC Parcel Nos. 232-A and 234-A and the entirety of SFPUC Parcel Nos. 233-A and 233-B in Los Altos, California, as shown in the attached **Exhibit C**.
Term (**Section 2**):	Month-to-month commencing on the Commencement Date. Actual Commencement Date: _____
Pathway Area Permitted Acts (**Section 6(a)**):	The "**Permitted Acts**" within the Pathway Area include the following: **(i)** Maintaining in compliance with all applicable Laws and Disability and Safety Regulations (as defined in **Section 11**) four (4) disabled-access curb ramps ("**ADA Ramps**") in the locations shown on the engineering drawings attached as **Exhibit E**; **(ii)** operating, maintaining, and repairing an existing concrete-paved recreational pathway on the Pathway Area, as shown on **Exhibit B**; **(iii)** maintaining vegetation consisting of low-growing shrubs, grass and other plants in accordance with the SFPUC Vegetation Management Policy (**Exhibit F**); **(iv)** removing all non-compliant vegetation ("**Vegetative Encroachments**") that do not comport with the SFPUC Vegetation Management Policy (**Exhibit F**) and one (1) light pole, in strict accordance with **Section 3** ("**Encroachment Removal"**); **(v)** maintaining the Bridge; **(vi)** installing and maintaining signage on the Pathway Area in accordance with **Section 5(a)**;

	(vii) the use, maintenance, and repair of the street crossing at Estrellita Way, as shown on **Exhibit B-1**; **(viii)** the use, operation, maintenance, and repair of one (1) six- inch (6") sewer line at Estrellita Way, as shown on **Exhibit B-1**; **(ix)** the use, maintenance, and repair of the street widening at Los Altos Avenue that extends into the Combined License Area, as shown on **Exhibit B-3**; and **(x)** the use, maintenance, and repair of the street crossing and storm drain at Via Del Pozo, as shown on **Exhibit B-2**. The improvements to be installed or maintained by Licensee listed as items (i) and (ii) and (v) through (x) above are collectively referred to as the "**Permitted Improvements**".
Maintenance Area Permitted Acts (**Section 5(b)**):	The "**Permitted Acts**" within the Maintenance Area include the maintenance of the surface of the parcels owned by City and identified on the attached **Exhibit C** (the "**Maintenance Area**"): **(i)** the mowing of grass, removal of weeds, and trimming or removal of trees when necessary in accordance with the SFPUC Vegetation Management Policy or at the discretion of the SFPUC Right of Way Manager and, in any event, at least twice each calendar year, and **(ii)** the regular (at least once every calendar month) removal of trash, debris, and graffiti as reasonably required or necessary to keep the Maintenance Area in a safe, sanitary, and sightly condition and to prevent the existence of a nuisance on the Maintenance Area.
Licensee's Share of Property Taxes:	See **Section 32** [Taxes, Assessments, Licenses, License Fees, and Liens].
Notices:	See **Section 33** [Notices].
Key Contact for City:	SFPUC Real Estate Director
Telephone No. and Email:	(415) 487-5210 RES@sfwater.org

Day-to-Day Contact for City:	Emily Read, SFPUC Right of Way Manager
Telephone No. and Email:	(650) 652-3204 Eread@sfwater.org
Key Contact for Licensee:	_____
Telephone No. and Email:	(___) ___-____ _____
Alternate Contact for Licensee:	_____
Telephone No. and Email:	(___) ___-____ _____

City and Licensee agree as follows:

1. License; Supersession and Revocation.

(a) License. City confers to Licensee a revocable, personal, non-exclusive, and non-possessory privilege to enter upon and use that certain real property owned by City situated in the County of Santa Clara, State of California, as more particularly described in the attached **Exhibit A** and more particularly depicted on **Exhibit B** and **Exhibit C** (together, the "**Combined License Area**"), for the limited purpose and subject to the terms, conditions, and restrictions set forth below. This License gives Licensee a license only and notwithstanding anything to the contrary in this License, it does not constitute a grant by City of any ownership, leasehold, easement, or other property interest or estate whatsoever in any portion of the Combined License Area. Nothing in this License shall be construed as granting or creating any franchise rights pursuant to any federal, state, or local laws.

THE PRIVILEGE GIVEN TO LICENSEE UNDER THIS LICENSE IS EFFECTIVE ONLY INSOFAR AS THE RIGHTS OF CITY IN THE COMBINED LICENSE AREA ARE CONCERNED, AND LICENSEE SHALL OBTAIN ANY FURTHER PERMISSION NECESSARY BECAUSE OF ANY OTHER EXISTING RIGHTS AFFECTING THE COMBINED LICENSE AREA. WITHOUT LIMITING THE FOREGOING, THIS LICENSE IS BEING ISSUED SUBJECT AND SUBORDINATE TO ALL OF THE TERMS AND CONDITIONS OF THAT CERTAIN DEED (A) DATED AUGUST 4, 1949, AND RECORDED IN BOOK 1921, AT PAGE 268, OF OFFICIAL RECORDS OF SANTA CLARA COUNTY, AND (B) DATED JANUARY 3, 1950 AND RECORDED SEPTEMBER 5, 1950 IN BOOK 2047, AT PAGE 466 OF OFFICIAL RECORDS OF SANTA CLARA COUNTY, AND (C) DATED SEPTEMBER 21, 1950, AND RECORDED NOVEMBER 20, 1950 IN BOOK 2099, AT PAGE 9, OF OFFICIAL RECORDS OF SANTA CLARA COUNTY, AND (D) DATED MAY 16, 1950, AND RECORDED IN BOOK 1994 AT PAGE 182 OF THE OFFICIAL RECORDS OF SANTA CLARA COUNTY, AND (E) DATED MARCH 1, 1950, AND RECORDED MARCH 2, 1950 IN

BOOK 1937 AT PAGE 565 IN THE OFFICIAL RECORDS OF SANTA CLARA COUNTY, PURSUANT TO WHICH CITY ACQUIRED ITS INTEREST IN THE COMBINED LICENSE AREA, COPIES OF WHICH ARE ATTACHED TO THIS LICENSE AS **EXHIBIT D (**THE "**DEEDS**"), AND ALL OTHER EXISTING AND FUTURE DOCUMENTS AND INSTRUMENTS OF RECORD AFFECTING THE COMBINED LICENSE AREA (COLLECTIVELY, WITH THE DEEDS, THE "**RECORDED DOCUMENTS**"). LICENSEE MUST SECURE ALL ADDITIONAL NECESSARY APPROVALS, PERMITS, LICENSES, AND CONSENTS, AND DELIVER ALL NECESSARY NOTICES, BEFORE COMMENCING WORK IN THE COMBINED LICENSE AREA, INCLUDING ANY APPROVALS, PERMITS, LICENSES, CONSENTS, OR NOTICES REQUIRED FROM OR TO THE GRANTORS UNDER THE RECORDED DOCUMENTS. FOR CITY'S BENEFIT, LICENSEE COVENANTS AND AGREES THAT LICENSEE SHALL FULLY COMPLY WITH THE TERMS AND CONDITIONS OF THE RECORDED DOCUMENTS AND ANY OTHER RULES AND REGULATIONS PROMULGATED BY CITY AS THEY APPLY TO ANY WORK TO BE PERFORMED OR FACILITIES TO BE INSTALLED BY LICENSEE ON THE COMBINED LICENSE AREA PURSUANT TO THIS LICENSE, AND CITY SHALL HAVE NO RESPONSIBILITY OR LIABILITY OF ANY KIND WITH RESPECT THERETO. LICENSEE ACKNOWLEDGES AND AGREES THAT NEITHER CITY NOR ANY OF ITS DEPARTMENTS, COMMISSIONS, OFFICERS, DIRECTORS, AND EMPLOYEES, AND ALL PERSONS ACTING BY, THROUGH, OR UNDER EACH OF THEM HAVE MADE, AND CITY DISCLAIMS, ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE PRESENT OR FUTURE SUITABILITY OF THE COMBINED LICENSE AREA FOR LICENSEE'S INTENDED WORK OR FACILITIES, THE IMPACT OF ANY TERM OR CONDITION OF THE RECORDED DOCUMENTS ON LICENSEE'S RIGHTS UNDER THIS LICENSE, OR THE ABILITY TO OBTAIN OR DELIVER, OR THE PROCEDURE FOR OBTAINING OR DELIVERING, ANY NECESSARY APPROVALS, LICENSES, PERMITS, CONSENTS OR NOTICES FROM OR TO THE GRANTOR UNDER THE RECORDED DOCUMENTS OR ANY OTHER PARTY WITH RESPECT TO ANY MATTERS CONTAINED IN THIS LICENSE.

(b) Supersession and Revocation. Effective as of the Commencement Date (defined in **Section 2** [Term of License] below), this License shall immediately supersede, replace, and revoke the following permits and agreements previously issued to Licensee by City, and each of such instruments shall be deemed to have terminated as of the Commencement Date and have no further force or effect thereafter; provided, however, that any provisions expressly stated to survive under any such permit shall continue; provided, further that such termination shall not nullify or release Licensee of any obligations accruing under any such instrument with respect to periods prior to the Commencement Date:

(i) the Engineering Permits; and

(ii) Permit P3137B.

2. Term of License; Suspension During Emergency or SFPUC Project; Early Termination.

(a) Term. The privilege conferred to Licensee pursuant to this License shall commence on the Actual Commencement Date, as shown in the Basic License Information and shall immediately expire upon written notice from City revoking this License. The Actual

Commencement Date is the date on which this License is executed and delivered by City following the SFPUC authorization and approval and the receipt of all fees and insurance certificates required to be provided by this License ("**Commencement Date**"). City may revoke this License at any time for Good Cause (as defined in **Section 2(c)**) without penalty, liability or expense of any kind to City, including, any obligation to reimburse Licensee for any improvements installed by Licensee; provided, however that in the event City revokes this License for any reason other than for Good Cause, City will, at the request of Licensee, reimburse Licensee for the cost of any improvements that have been installed by Licensee on the Pathway Area after the Commencement Date with the City's prior written consent, less straight line depreciation for such improvements, assuming a ten (10) year useful life. Notwithstanding the foregoing, City and Licensee herby acknowledge and agree that City will not and shall have no obligation to reimburse Licensee for any improvements that have been installed: (1) by Licensee without Licensee's prior written consent; (2) by another party; or (3) by Licensee below the surface of the City's parcels or within any public right of way on the City's parcels. Upon termination of this License, Licensee will immediately surrender the Combined License Area in the condition required by this License.

(b) Suspension during Emergency or SFPUC Project. In the event that an emergency requires City repairs or construction on or about the License Area ("**Emergency Work**") or City determines to undertake a capital improvement, upgrade, replacement, or repair project ("**SFPUC Project**") within the License Area, City, at its sole option in lieu of revocation of this License, may declare that the Parties' respective rights and obligations pursuant to this License with respect to all or any portion of the License Area will be suspended during the course of any such Emergency Work or SFPUC Project, as the case may be. Accordingly, upon no less than sixty (60) days' prior written notice from City to Licensee, except in the case of an emergency, where City may suspend this License by giving such notice as reasonably practicable under the circumstances, this License will be suspended for the duration of the SFPUC Project or Emergency Work with respect to the License Area, or the portion of the License Area designated by City, until City notifies Licensee that such SFPUC Project or Emergency Work is complete. Upon any receipt of any such City suspension notice, Licensee shall surrender all or the portion of the License Area subject to suspension when and as required by City and promptly coordinate with City to accomplish the removal of any of Licensee's personal property from the License Area subject to such suspension in accordance with Section 14 [Removal or Alteration of facilities or Improvements]. At its discretion, City may fence the portion of the License Area required for the SFPUC Project or Emergency Work. Upon completion of the SFPUC Project or Emergency Work, City will remove any such fencing and restore the surface of the License Area level with adjacent ground, with grass or gravel at the surface, and not to its previous condition, and this License will apply again to the entire License Area. City's rights under this Section are in addition to and cumulative with those described in Section 6(b) [Subject to City Uses] below.

(c) Early Termination. If Licensee fails to comply with the terms and conditions of this License and such failure is not cured by Licensee within five (5) business days of City's notice to Licensee specifying such failure, or in the case of a non-compliance that cannot be cured within five (5) business days, Licensee both fails to cure such non-compliance within such five (5)- day period and fails to diligently pursue such cure to completion on or before the date that is thirty (30) days after the City's initial notice of Licensee's failure to comply, such non-compliance shall constitute "**Good Cause**" for City to revoke this License, and this License shall terminate thirty (30) days after City's notice of termination to Licensee, and if City directs Licensee (at City's sole discretion) to remove all equipment and installations from the License Area, then Licensee shall

forthwith remove such equipment and installations at Licensee's cost and shall restore the License Area to its former condition as of the Effective Date of this License.

3. Encroachment Removal. Licensee's compliance with this Section is partial consideration for City's issuance of this License.

(a) Initial Removal of Vegetative Encroachments; Communications.

(i) Within two hundred seventy (270) days of the Commencement Date ("**Initial Removal Period**"), Licensee shall remove, at its sole cost, Vegetative Encroachments as follows: **(A)** on the northern portion of the Pathway Area, Licensee shall remove all Vegetative Encroachments from the ground and airspace within fifteen feet (15') from the edge of SFPUC Bay Division Pipeline No. 3 and **(B)** on the southern portion of the Pathway Area, Licensee shall remove all Vegetative Encroachments from the ground and airspace within fifteen feet (15') from the edge of the SFPUC Bay Division Pipeline No. 4 ("**Initial Removal**"). Within the first thirty (30) days of the Initial Removal Period, City and Licensee will meet to review the trees on the License Area and designate any trees that do not constitute Vegetative Encroachments to ensure these trees are not removed from the License Area; provided, however, that City reserves the right to make the final determination regarding which trees pose unacceptable risks to the SFPUC facilities and must be removed.

(ii) In accordance with Section 3(g) below, Licensee is responsible for all communications with third parties, including members of the public, regarding the removal of the Vegetative Encroachments, including, without limitation, any pruning and tree removal.

(iii) Licensee shall remove other Vegetative Encroachments to conform to the requirements of **Section 3 (h)**.

(b) Phase Two Removal of Vegetative Encroachments. Within three hundred sixty-five (365) days of the Commencement Date ("**Phase Two Removal Period**"), Licensee shall remove, at its sole cost, Vegetative Encroachments on the southern portion of the Pathway Area from the ground and airspace within twenty feet (20') from the edge of the SFPUC Day Division Pipeline No. 4. In accordance with Section 3(g) below, Licensee is responsible for all communications with third parties, including members of the public, regarding the removal of the Vegetative Encroachments, including, without limitation, any pruning and tree removal.

(c) Continuing Vegetative Encroachments Removal Obligations. Following the Phase Two Removal Period, Licensee shall remove Vegetative Encroachments every other year, or annually at the SFPUC Right of Way Manager's direction, as follows: **(i)** on the northern portion of the Combined License Area, as depicted on **Exhibit B**, Licensee shall remove all Vegetative Encroachments from the ground and airspace within fifteen feet (15') from the edge of SFPUC Bay Division Pipeline No. 3 and **(ii)** on the southern portion of the Combined License Area, as depicted on **Exhibit B**, Licensee shall remove all Vegetative Encroachments from the ground and airspace within twenty feet (20') from the edge of the

SFPUC Bay Division Pipeline No. 4. Licensee shall keep the Combined License Area clear of regrowth of foliage as is necessary to retain vertical clearance above SFPUC facilities. Licensee shall remove all young seedlings, regrowth, and shrubs as the SFPUC's Right of Way directs as necessary to prevent future Vegetative Encroachments.

(d) **Annual Meetings**. Licensee shall meet with the SFPUC Right of Way Manager annually, promptly upon the SFPUC's request, to inspect the Combined License Area and expeditiously resolve any issues regarding Licensee's compliance with this Section.

(e) **Light Pole Removal**. Licensee shall remove the light pole located at the west side of Estrellita Way within the Pathway Area within sixty (60) days of the Commencement Date.

(f) **Other Encroachment Removal**. Licensee shall cause all Encroachments (as defined below) to be removed in accordance with the SFPUC's Encroachment Policy (attached as **Exhibit G**). This obligation applies to Encroachments discovered by, or reported to, Licensee and City. Licensee shall enforce Laws (as defined below) related to Encroachments within the Combined License Area. "**Encroachments**" are improvements (as defined in Section 8 [Restrictions on Use]) or vegetation within the Combined License Area not approved by City.

(g) **Communications**. During the term of this License, Licensee shall inform property owners adjoining the Combined License Area, and respond to third party inquiries, if any, of Licensee's efforts to remove the Vegetative Encroachments and/or Encroachments from the Combined License Area. The SFPUC will inform Licensee by written notice of any known third-party violations of the SFPUC's Encroachment Policy, Vegetation Management Policy, or related guidelines (and risks resulting from such violations) occurring in and on the Combined License Area. Licensee to sign reasonable requests from City for Licensee to co-sign SFPUC correspondence to applicable third parties regarding any such violations.

(h) **Vegetative Encroachment Removal Standards**. Licensee shall retain, at its cost, an International Society of Arboriculture Certified Arborist to oversee removal of Vegetative Encroachments. Licensee shall conduct all Vegetative Encroachment removal in accordance with applicable Laws (as defined below), including restrictions regarding nesting birds. Consistent with the Migratory Birds Treaty Act, 16 U.S.C. §§ 703–712, trees will be removed and, or pruned outside of nesting bird season which extends from February 15th through August 15th; or, if removal and or trimming is proposed during the nesting season, Licensee will, at its cost, retain a biologist to inspect the trees in advance of work and, if active nests are present, work will be delayed until nestlings have fledged.

4. **Permitted Encroachments**. City will allow Licensee to maintain the following existing encroachments (together, "**Permitted Encroachments**") installed by Licensee within the Pathway Area in their current locations on the Pathway Area:

(a) three (3) wooden trail signs;

(b) five (5) wooden benches;

(c) three (3) garbage cans;

(d) two (2) bicycle safety signs;

(e) one (1) water fountain;

(f) one (1) backflow preventor; and

(g) one (1) concrete bench.

Licensee acknowledges that City may require Licensee to remove any or all Permitted Encroachments at the SFPUC's sole and absolute discretion. If City requires the removal of any or all Permitted Encroachments from the Pathway Area, Licensee shall remove any or all such Permitted Encroachments within thirty (30) days of City's notice to remove, except in an emergency when Licensee shall remove all such Permitted Encroachments as soon as possible. At its sole discretion, City may elect to remove any or all of the Permitted Encroachments itself, at Licensee's sole cost, by notifying Licensee of such fact, in which event Licensee shall pay City the cost of such removal within thirty (30) days after receipt of City's invoice. Licensee may use the Permitted Encroachments until they reach the end of their useful lives, as determined by City in its sole discretion, at which point, the SFPUC may require removal or relocation to a location approved by the City.

5. Consideration.

(a) Educational Signage. As partial consideration for City entering into this License, Licensee shall install and maintain, at its sole cost, at least one (1) educational sign on the Pathway Area in accordance with this Section. Licensee shall work with SFPUC staff to install one (1) sign within the Pathway Area within one-hundred eighty (180) days of the Commencement Date at a location to be approved by the SFPUC Land Engineering Division and the SFPUC Right of Way Manager. The size and content of any such sign shall be subject to the SFPUC's approval, in its sole discretion.

(b) Maintenance Area Obligations. As additional partial consideration for City entering into this License, Licensee will maintain the surface of the parcels comprising the Maintenance Area, located adjacent to the Pathway Area. As used in this **Section 5(b),** the terms "maintain," "maintenance," and "maintenance obligations," mean that, with respect to the Maintenance Area, Licensee shall be solely responsible to **(i)** mow grass, remove weeds, and trim or remove trees when necessary in accordance with the SFPUC Vegetation Management Policy or at the discretion of the SFPUC Right of Way Manager and, in any event, at least twice each calendar year, and **(ii)** regularly (at least once every calendar month) remove trash, debris, and graffiti as reasonably required or necessary to keep the Maintenance Area in a safe, sanitary, and sightly condition and to prevent the existence of a nuisance on the Maintenance Area.

In the course of maintaining the Maintenance Area, Licensee shall not do anything in, on, under, or about the Maintenance Area that could cause damage to or interference with any pipelines or other property located in, on, under, or about the Maintenance Area. Licensee shall use, and shall cause its employees, contractors, and agents to use, due care at all times to avoid any damage or harm to City's water pipelines or other property and natural attributes of the

Maintenance Area and to minimize slope erosion. Licensee shall not perform any excavation work without City's prior written approval, which City may withhold at its sole discretion. Under no circumstances shall Licensee damage, harm, or remove any rare, threatened, or endangered species that are present on or about the Maintenance Area.

Licensee's obligations to maintain the Maintenance Area shall continue until the earlier of the following dates: (1) the date Licensee receives City's notice terminating all of Licensee's then remaining maintenance obligations pursuant to this Section 5 (b) or (2) the date that this License is terminated. Licensee shall notify City in writing not less than five (5) days before performing any maintenance work on the Maintenance Area, except in the case of an emergency wherein Licensee shall notify City telephonically and in writing as soon as reasonably possible. For the purposes of the foregoing notice obligation, "maintenance work" shall not be deemed to include the mowing, or the weed, trash, debris, and graffiti removal regularly performed by Licensee pursuant to this Section. Notwithstanding the foregoing, at all times, City shall retain all of its property rights with respect to the Maintenance Area, including, without limitation, the right at all relevant times to enter upon, or over the Maintenance Area. If, at any time prior to the termination of Licensee's maintenance obligations pursuant to this **Section 5**(b), City notifies Licensee of deficiencies or failures in Licensee's performance of such obligations, Licensee shall promptly remedy or cure such deficiencies or failures.

6. Use of Combined License Area.

(a) Permitted Acts. Licensee may enter and use the Combined License Area for the sole purpose of performing the Permitted Acts (as defined in the Basic License Information) and in strict accordance with **Section 7(a)** [Approval of Plans and Specifications] below, and for no other purpose whatsoever. Except as specifically permitted by this License or otherwise approved by City pursuant to the terms of this License, Licensee shall not permit, construct, maintain, or allow any other improvements, structures, or paved areas on, across, within, over, or under the Combined License Area other than the Permitted Improvements and the Permitted Encroachments allowed on the Pathway Area.

(b) Subject to City Uses. Licensee is aware that the Combined License Area constitutes a portion of City's regional water pipeline delivery system. Notwithstanding anything to the contrary in this License, any and all of Licensee's activities pursuant to this License shall be subject and subordinate at all times to City's existing and future use of the Combined License Area for municipal and other purposes. City shall in no way be liable for any damage or destruction to Licensee's property and/or improvements resulting from the condition of the Combined License Area or the SFPUC facilities, from any pipeline break or from any pipeline repair or maintenance activities. At City's request, Licensee shall immediately remove any of Licensee's property or improvements from the Combined License Area to allow City access to the SFPUC facilities. If City deems it necessary, at City's sole discretion, City may remove any such property or improvements and City shall not be responsible for restoring or returning the same to its prior condition.

7. Installation and Maintenance of Facilities. Licensee may perform the Permitted Acts described in **Section 6(a)** [Permitted Acts] above and shall install certain facilities on the Pathway Area consisting of the signage required under **Section 5 (a)** [Educational Signage]. Licensee shall also maintain the ADA Ramps authorized by City under the consent letter issued by City prior to the Commencement Date (the "**Consent Letter**"). The ADA Ramps and signage to be installed

on the Pathway Area shall hereinafter collectively be referred to as the "**Facilities**") and shall be installed only upon satisfaction of the following conditions, which are for City's sole benefit:

(a) Approval of Plans and Specifications. Licensee shall install and maintain the permitted Facilities in accordance with plans and specifications (including drawings) approved in advance and in writing by the SFPUC and attached as **Exhibit E** ("**Approved Plans**"). The Approved Plans may be revised or amended only with the SFPUC's prior written approval after the SFPUC's Bureau of Environmental Management has determined that no further environmental review is required by CEQA as a result of any such revision or amendment.

(b) Energy Service and Related Facilities. If Licensee seeks electrical service for use in the Combined License Area, or for any licensed Facilities, Licensee shall contact the Interconnection Services Department in the Power Enterprise of the SFPUC to arrange for service. Licensee shall purchase all electricity necessary for its operations at the Combined License Area from the SFPUC, at the SFPUC's standard rates charged to third parties, unless the SFPUC determines, in its sole judgment, that it is not feasible to provide such service to the Combined License Area. The SFPUC is the provider of electric services to City property, and the SFPUC's Interconnection Services Department coordinates with Pacific Gas and Electric Company and others to implement this Section. Except as provided above with respect to any electricity services provided by the SFPUC, Licensee shall make arrangements and pay for all utilities and services furnished to the Combined License Area, including gas, electricity, water, sewage, telephone, and trash collection services, and for all deposits, connection, and installation charges.

Except as otherwise provided in this License, the SFPUC has no responsibility or liability of any kind with respect to any utilities that may be on or about the Combined License Area. Licensee has the sole responsibility to locate any utility facilities within the Combined License Area and protect them from damage resulting from Licensee's use of the Combined License Area.

(c) Permits, Licenses, and Approvals. Before beginning any permitted improvement or alteration work in the Combined License Area, Licensee shall obtain any and all permits, licenses, and approvals (collectively, "**Approvals**") of all regulatory agencies and other third parties that are required for Licensee to commence, complete, and maintain the permitted work. Promptly upon receipt of such Approvals, Licensee shall deliver copies of them to the SFPUC. No approval by the SFPUC for purposes of Licensee's work under this License shall be deemed to constitute the approval of any federal, state, or local regulatory authority with jurisdiction, and nothing in this License shall limit Licensee's obligation to obtain all such regulatory Approvals, at Licensee's sole cost.

(d) Limits of City's or SFPUC's Consent. City's or the SFPUC's consent to or approval of any improvements, equipment, or fixtures shall not relieve Licensee or its engineers, architects, or contractors from any liability for negligence, errors, or omissions associated with the design and construction of any such improvements, equipment, or fixtures. In no event shall the SFPUC's approval of plans or specifications be deemed to constitute a representation or warranty by City concerning the suitability of the improvements, equipment, or fixtures for Licensee's purposes or that the work called for in the plans and specifications complies with applicable building codes or other applicable Laws (defined in **Section 11** [Compliance with Laws] below), or industry standards, nor shall such approval release Licensee from its obligation to supply plans and specifications that conform to applicable building codes, other applicable Laws, and industry standards.

(e) Exercise of Due Care. Licensee shall use, and shall cause its Agents (defined in **Section 21** [Indemnity] below) to use, due care at all times to avoid any damage or harm to City's water pipelines, facilities, or other property and to native vegetation and natural attributes of the Combined License Area and to minimize slope erosion. Licensee shall not disturb the surface of the Combined License Area or perform any excavation work without City's prior written approval, which City may withhold at its sole discretion. City may condition and/or oversee any permitted excavation work. At its own expense, Licensee shall mark the location of City's water pipelines or other facilities within the Combined License Area and shall not use any pick, plow, or other sharp tool to remove the two feet of soil around the pipelines or other facilities, provided that Licensee may use hand shovels or pneumatic shovels in compliance with all other terms and conditions of this License. Licensee shall immediately inform City of any actual or potential damage to the coating of the pipeline, and any such damage shall be promptly repaired by Licensee, at its own expense, to City's satisfaction prior to backfilling; provided, at its sole discretion, City may elect to make any necessary repairs itself, at Licensee's sole cost, by notifying Licensee of such fact. Upon completion of the repairs, City shall send to Licensee a bill therefor, which Licensee shall pay within thirty (30) days following receipt. Under no circumstances shall Licensee damage, harm, or take any rare, threatened, or endangered species present on or about the Combined License Area.

(f) Cooperation with Public Utilities Commission. Licensee and its Agents shall work closely with City personnel to minimize any potential disturbance (even if temporary) of the natural features of the Combined License Area and to avoid disruption (even if temporary) of City facilities, in, under, on, or about the Combined License Area and City uses of such facilities.

(g) Heavy Equipment. Licensee shall not use any heavy construction equipment over or about City's pipelines, except as otherwise expressly allowed in **Section 8(i)** [Heavy Equipment and Vehicles] below.

(h) Work Schedule. Licensee must begin installation work, if at all, within ninety (90) days after the commencement of the term of this License. At least ten (10) business days prior to the commencement of any improvement or alteration work on the Combined License Area, Licensee shall notify City's Construction Inspector ("**Construction Inspector**"), at (650) 871-3015, of the date such work shall commence and the intended construction schedule. Notification must also be given to Underground Service Alert at least two (2) days prior to start of work. Notwithstanding the approval of such schedule by the SFPUC, the Construction Inspector shall have the right to require Licensee to adjust such schedule from time to time. All work must be performed during regular working hours (Monday through Friday) between 8:00 a.m. and 4:30 p.m., exclusive of City holidays. Any work performed during any other time or day must be preapproved by the SFPUC at least ten (10) business days prior to commencing such work. In connection with such approval, City may charge Licensee additional inspection fees payable prior to the SFPUC's approval of the request. Notwithstanding the work hours set forth above, Licensee shall comply with any applicable local ordinance that imposes later start times and/or earlier cessation times for construction activities. Licensee shall complete all work and restoration no later than (365) days after the commencement of the term of this License.

(i) Restoration of License Area. Immediately following completion of any work permitted under this License, Licensee shall remove all debris and any excess dirt and shall restore the Combined License Area to its condition immediately prior to such work, to City's satisfaction. Licensee shall restore any damage caused to existing roads and restore excavated areas with new

vegetation (including irrigation and maintenance until established) and erosion control netting, all as requested by City, and shall comply with all applicable regulations of the regulatory agency with jurisdiction.

(j) Pipeline Depth/Installation of Above-Ground Markers. Before commencing any excavation work in the Combined License Area, Licensee shall measure the depth of City's pipelines, if any, located in the Combined License Area by potholing and forward such information to City. Any potholing authorized by this License shall be subject to the requirements of **Section 7(p)** [Potholing] below. Upon completion of work, Licensee shall promptly notify City in writing of the depth of City's pipeline and related facilities in the Combined License Area. Licensee shall install above-ground markers identifying the location of any underground facilities installed pursuant to this License. The location, type, and installation of markers and identifying information on the markers shall be subject to the SFPUC's prior written approval.

(k) As-Built Drawings/Reports. Promptly upon completion of the installation of the Facilities, Licensee shall furnish the SFPUC with two (2) complete copies of final as-built drawings for the Facilities, which drawings shall include sufficient detail so as to allow City to precisely locate the Facilities. If Licensee or any of its Agents or consultants prepares any environmental, seismic, geophysical, or other written report relating to the Combined License Area and/or any work performed on the Combined License Area, Licensee shall furnish to City a complete copy of such report, including any schedules, exhibits, and maps, promptly upon completion of the same.

(l) Responsibility for Maintenance of Facilities. Licensee shall be solely responsible for repairing and maintaining all Facilities placed in or on the Combined License Area pursuant to this License or the Consent Letter in good and safe condition, and City shall have no duty whatsoever for any repair or maintenance of the Combined License Area or any such Facilities. Licensee shall notify City in writing not less than five (5) days before performing any repair or maintenance work in the Combined License Area, except in the case of an emergency when Licensee shall notify City telephonically and in writing as soon as reasonably possible.

(m) Revocability. The installation of the Facilities to the Combined License Area, regardless of cost, shall not in any way whatsoever limit City's right to revoke this License pursuant to its terms or any of City's other rights under this License.

(n) Contractors. Licensee shall not accept and release its contractor for work authorized or required by this License before securing the SFPUC's written approval.

(o) Cathodic and Other Protection. City may adopt from time to time such rules and regulations with regard to Licensee's Facilities and operations under this License as City may determine are necessary or appropriate, at City's sole discretion, to safeguard against corrosion of, or other damage to, City's pipelines and related facilities. Licensee shall immediately comply with all such rules and regulations upon receipt of a copy of such rules and regulations.

(p) Potholing. Any potholing authorized by this License shall be subject to the direction of City's Construction Inspector. Potholing using the soft dig method (vacuum soil extraction system) is preferred. If Licensee wishes to use any other mechanical method such as digging with a backhoe, License must submit a written request to the SFPUC at least five (5) business days prior to commencing such work and obtain the SFPUC's prior written consent.

Notwithstanding the foregoing, the last two feet (2') above the top of the pipe must be dug manually, without the use of any machines.

8. **Restrictions on Use**. The following uses (by way of example only) of the Combined License Area by Licensee, or any other person claiming by or through Licensee, are inconsistent with the limited purpose of this License and are strictly prohibited as provided below:

(a) **Improvements**. Except as otherwise expressly provided in this License, Licensee shall not construct or place any temporary or permanent structures or improvements in, on, under, or about the Combined License Area, nor shall Licensee make any alterations or additions to any existing structures or improvements on the Combined License Area, unless Licensee first obtains the SFPUC's prior written consent, which the SFPUC may give or withhold at its sole and absolute discretion. For purposes of this License, the term "**improvements**" includes asphalt, concrete, and cementitious driveways, sidewalks, and parking areas, shacks, storage facilities, and fences.

(b) **Trees and Other Plantings**. Licensee shall not plant any trees or other vegetation in or on the Combined License Area, except as otherwise expressly provided in this License and except in accordance with detailed plans consistent with the SFPUC's Vegetation Management Policy (attached as **Exhibit F**), which may be amended from time to time and as approved by the SFPUC in writing in advance.

(c) **Dumping**. Licensee shall not cause or permit the dumping or other disposal in, on, under, or about the Combined License Area of landfill, refuse, Hazardous Material (defined in **subsection (d)** [Hazardous Material] below), or any other materials, including materials that are unsightly or could pose a hazard to the human health or safety, native vegetation or wildlife, or the environment.

(d) **Hazardous Material**. Licensee shall not cause, nor shall Licensee allow any of its Agents or Invitees (defined in **Section 21** [Indemnity] below) to cause, any Hazardous Material to be brought upon, kept, used, stored, generated, released, or disposed of in, on, under, or about the Combined License Area, or transported to, from, or over the Combined License Area. Licensee shall immediately notify City when Licensee learns of, or has reason to believe that, a release of Hazardous Material has occurred in, on, under, or about any part of the Combined License Area. Licensee shall further comply with all applicable Laws requiring notice of such releases or threatened releases to governmental agencies, and shall take all action necessary or desirable to mitigate the release or minimize the spread of contamination. If Licensee or its Agents or Invitees cause a release of Hazardous Material, Licensee shall promptly return the Combined License Area to the condition immediately prior to the release, without cost to City, in accordance with all Laws, and using the highest and best technology available. In connection with such remedial action, Licensee shall afford City a full opportunity to participate in any discussion or negotiations with governmental agencies and environmental consultants regarding any settlement agreement, cleanup or abatement agreement, consent decree, or other compromise proceeding involving Hazardous Material, and any other abatement or cleanup plan, strategy, and procedure. For purposes of this License, "**Hazardous Material**" means material that, because of its quantity, concentration, or physical or chemical characteristics, is at any time now or hereafter deemed by any federal, state, or local governmental authority to pose a present or potential hazard to public health, welfare, or the environment. Hazardous Material includes the following: any material or substance defined as a "hazardous substance, pollutant or contaminant" pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended,

42 U.S.C. Sections 9601 et seq., or pursuant to Section 25316 of the California Health & Safety Code or any other federal, state, or local Law; a "hazardous waste" listed pursuant to Section 25140 of the California Health & Safety Code; any asbestos and asbestos containing materials whether or not such materials are part of the Combined License Area or are naturally occurring substances in the Combined License Area; and any petroleum, including crude oil or any crude-oil fraction, natural gas, or natural gas liquids, provided, the foregoing shall not prohibit Licensee from traversing to, from, and across the Combined License Area in standard motor vehicles that do not exceed the weight limitations set forth below. The term "**release**" or "**threatened release**" when used with respect to Hazardous Material shall include any actual or imminent spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing in, on, under, or about the Combined License Area. Notwithstanding any contrary provision contained in this License, Licensee will not be responsible for any release of Hazardous Materials to the extent caused by any act or omission of the City.

(e) Nuisances. Licensee shall not conduct any activities in, on, under, or about the Combined License Area that constitute waste, nuisance, or unreasonable annoyance (including emission of objectionable odors, noises, or lights) to City, to the owners or occupants of neighboring property, or to the public, or that constitute waste or nuisance per se.

(f) Damage. Licensee shall not do anything in, on, under, or about the Combined License Area that could cause damage to or interference with any pipelines, facilities, or other property located in, on, under, or about the Combined License Area. Licensee will compensate City for any and all damage caused to the Combined License Area and City facilities resulting from the activities of Licensee and its Agents and Invitees, including damage resulting from defective work.

(g) Use of Adjoining Land. Licensee acknowledges that the privilege given under this License shall be limited strictly to the Combined License Area. Licensee shall not traverse over or otherwise use any adjoining lands of City.

(h) Ponding; Water Courses. Licensee shall not cause any ponding on the Combined License Area or any flooding on adjacent land. Licensee shall not engage in any activity that causes any change, disturbance, fill, alteration, or impairment to the bed, bank, or channel of any natural water course, wetland, or other body of water on, in, under, or about the Combined License Area, nor shall Licensee engage in any activity that could pollute or degrade any surface or subsurface waters or result in the diminution or drainage of such waters.

(i) Heavy Equipment and Vehicles. To prevent damage to City's underground pipelines, Licensee's use of vehicles and equipment within twenty feet (20') of each side of the centerline of any City pipeline (measured on the surface) shall be subject to the following restrictions:

(i) The depth of soil cover over the tops of City's pipelines must be at least three feet (3') for steel cylinder pipe and four feet (4') for reinforced pre-stressed concrete cylinder pipe to accommodate the loading defined in **subsection (ii)** below. If any equipment with axle loading exceeds the loads stated in **subsection (ii)** below or if the depth of soil cover is less than stated above, Licensee shall submit to the SFPUC for review and approval, at the SFPUC's sole discretion, engineering calculations prepared by a licensed Professional Engineer licensed in California showing that City's pipelines will not be adversely affected by Licensee's proposed

activities. If City's pipelines may be adversely affected, Licensee shall submit remedial measures for City's approval to ensure that no adverse effect will occur.

(ii) The effects of vehicle and equipment loads to the pipeline must not exceed the effects of the "AASHTO Standard H-10 Loading." H-10 loading is defined as loading caused by a two-axle truck with a gross weight of ten tons (20,000 lbs.), axles fourteen feet (14') apart, and rear axle carrying eight tons (16,000 lbs.). Licensee shall be responsible for providing the SFPUC adequate evidence that its equipment and vehicles meet the foregoing requirements.

(iii) Licensee shall not use vibrating compaction equipment without the SFPUC's prior written approval, which approval may be given or withheld at the SFPUC's sole discretion.

(iv) If the depth of the soil cover over the pipeline (determined by potholing or other proof procedure) is less than the minimum stated in **subsection (i)** above, unless an alternate method is approved by the SFPUC in writing, all excavation and grading over the pipeline shall be performed manually. For any machinery or equipment excavation and grading over and/or within twenty feet (20') of each side of the centerline of the pipeline (measured on the surface), Licensee shall submit a written proposal together with all supporting calculations and data to the SFPUC for review and approval. In any case, the two feet (2') of soil around the pipeline shall be removed manually or by other methods approved by the SFPUC with due care as provided in **Section 7(e)** [Exercise of Due Care] above.

9. **License Fee(s)**. Without limiting its right to revoke this License or any of its other rights under this License, at any time, upon not less than thirty (30) days' written notice to Licensee, City may charge a use fee for the privileges granted by this License if City establishes a general policy for charging fees for the use(s) permitted by this License, and City may increase such fee from time to time in accordance with such policy**.**

10. **Required Insurance Coverages**. Licensee's compliance with the provisions of this Section 10 shall in no way relieve or decrease Licensee's indemnification or other obligations under this License. Licensee must maintain in force for the use of the Combined License Area, during the full term of this License, insurance in the amounts and coverages listed below. In addition, Licensee shall cause each Agent (defined in Section 21 [Indemnity] below) performing work on the Combined License Area to procure and keep in effect during the course of such work appropriate amounts of insurance and add City as additional insureds for those respective policies.

(a) Commercial General Liability Insurance with limits not less than $3,000,000 each occurrence for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Independent Contractors, Explosion, Collapse, and Underground (XCU), Broad Form Property Damage and Products, and Completed Operations.

(b) Commercial Automobile Liability Insurance with limits not less than $1,000,000 each occurrence, "Combined Single Limit" for Bodily Injury and Property Damage, including Owned, Non-Owned, and Hired auto coverage, as applicable.

(c) Workers' Compensation, in statutory amounts, with Employers' Liability Limits not less than $1,000,000 each accident, injury, or illness.

(d) Additional Insured Endorsements.

(i) The Commercial General Liability policy must be endorsed to name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

(ii) The Commercial Automobile Liability Insurance policy must be endorsed to name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

(e) Waiver of Subrogation Endorsements. The Workers' Compensation policy(ies) and all Liability Policies referenced above shall be endorsed with a waiver of subrogation in favor of City for all work performed by Licensee or its Agents.

(f) Primary Insurance Endorsements.

(i) The Commercial General Liability policy shall provide that such policies are primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this License, and that the insurance applies separately to each insured against whom claim is made or suit is brought.

(ii) The Commercial Automobile Liability Insurance policy shall provide that such policies are primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this License, and that the insurance applies separately to each insured against whom claim is made or suit is brought.

(iii) Such policies shall also provide for severability of interests and that an act or omission of one of the named insureds which would void or otherwise reduce coverage shall not reduce or void the coverage as to any insured, and shall afford coverage for all claims based on acts, omissions, injury, or damage that occurred or arose (or the onset of which occurred or arose) in whole or in part during the policy period.

(g) Other Insurance Requirements.

(i) Thirty (30) days' advance written notice shall be provided to City of cancellation, intended non-renewal, or reduction in coverages, except for non-payment for which no less than ten (10) days' notice shall be provided to City. Notices shall be sent to the City address set forth in Section 31 [Notices].

(ii) Should any of the required insurance be provided under a claims-made form, Licensee shall maintain such coverage continuously throughout the term of this License and, without lapse, for a period of three years beyond the expiration of this License, to the effect that, should occurrences during the License term give rise to claims made after expiration of the License, such claims shall be covered by such claims-made policies.

(iii) Should any of the required insurance be provided under a form of coverage that includes a general annual aggregate limit or provides that claims investigation or legal defense costs be included in such general annual aggregate limit, such general annual aggregate limit shall be double the occurrence or claims limits specified above.

(iv) Should any required insurance lapse during the term of this License, requests for payments originating after such lapse shall not be processed until City receives satisfactory evidence of reinstated coverage as required by this License, effective as of the lapse date. If insurance is not reinstated, City may, at its sole option, terminate this License effective on the date of such lapse of insurance.

(v) Prior to the Commencement Date of this License, Licensee shall furnish to City certificates of insurance and additional insured policy endorsements with insurers with ratings comparable to A-, VIII or higher, that are authorized to do business in the State of California, and that are satisfactory to City, in form evidencing all coverages set forth above. Licensee and its contractors shall submit or cause their respective insurance brokers to submit requested information through the Exigis insurance verification program designated by City or any successor program used by City for verification of Licensee and contractor insurance coverage. Approval of the insurance by City shall not relieve or decrease Licensee's liability hereunder. If Licensee shall fail to procure such insurance, or to deliver such policies or certificates, at its option, City may procure the same for the account of Licensee, and Licensee shall reimburse City for any costs so paid by City within five (5) business days after delivery to Licensee of bills therefor.

(vi) If Licensee will use any subcontractor(s) to perform the Permitted Acts, Licensee shall require the subcontractor(s) to provide all necessary insurance and to name the City and County of San Francisco, its officers, agents and employees, and the Licensee as additional insureds.

(vii) Upon City's request, Licensee and City shall periodically review the limits and types of insurance carried pursuant to this Section. If the general commercial practice in the City and County of San Francisco is to carry liability insurance in an amount or coverage materially greater than the amount or coverage then being carried by Licensee for risks comparable to those associated with the Combined License Area, then, at its sole discretion, City may require Licensee to increase the amounts or coverage carried by Licensee hereunder to conform to such general commercial practice.

(h) Self-Insurance.

Licensee shall have the right to self-insure with respect to any of the insurance requirements required under this License, to the extent permitted by applicable law. If Licensee elects to self-insure with respect to any of the insurance requirements required under this License, before the Commencement Date and upon written request by the SFPUC, within thirty (30) days of the commencement of each year thereafter, Licensee shall submit to the SFPUC a certificate of self-insurance signed by a duly authorized representative of Licensee, such certificate evidencing that Licensee's self-insurance program is adequately funded, in full force and effect and in compliance with and subject to all the terms, agreements, covenants, conditions and provisions of this License. If Licensee elects to self-insure, Licensee shall give City prompt written notice of any significant change in or the depletion of its self-insurance fund. Notwithstanding the foregoing, Licensee is also responsible for causing any contractors, subcontractors, and/or Agents to maintain commercially reasonable insurance coverages and coverage limits as required under this License.

Any deductibles or self-insured retentions must be declared. All deductibles and self-insured retentions shall be paid by Licensee.

With respect to any claim, loss, or liability that would have been covered by the insurance policies (including the status as an "additional insured" thereunder of City, the SFPUC, and their respective Agents and Employees) required by this License to be maintained by Licensee but within the self-insured retention or deductible amount, Licensee shall cover such claim, loss, or liability on the same basis as the insurance arrangements or deductibles on such insurance policies, including such insurance carrier responsibility to protect City, the SFPUC, and their respective Agents and Employees as an "additional insured."

11. Compliance with Laws.

(a) At its expense, Licensee shall conduct and cause to be conducted all activities on the Combined License Area permitted by this License in a safe and reasonable manner and in compliance with all laws, statutes, ordinances, rules, regulations, policies, orders, edicts, and the like (including, without limitation, the Americans with Disabilities Act ("**ADA**") codified at Title 42 U. S.C. 12-101 and the regulations issued thereunder, and any other applicable disability access ordinances, laws and regulations, fire safety laws, ordinances or regulations collectively the "**Disability and Safety Regulations**") (collectively, "**Laws**") of any governmental or other regulatory entity with jurisdiction and all covenants, restrictions, and provisions of record, whether presently in effect or subsequently adopted and whether or not in the contemplation of the parties.

(b) Licensee shall be responsible for causing all improvements and alterations installed by or on behalf of Licensee (including, without limitation, the Facilities and those improvements and alterations that predate this License) to be installed and maintained, in compliance with all Disability and Safety Regulations, and Licensee shall indemnify, defend, and hold City harmless from and against any and all claims or causes of action asserting (i) that any improvements or alterations installed by or on behalf of Licensee, regardless of whether such improvements or alternations predate this License, have caused the Combined License Area to be in violation of any Disability and Safety Regulations, or (ii) a cause of action or claim of violation of any applicable Disability and Safety Regulations resulting from or relating to any improvements or alterations undertaken by Licensee or on behalf of Licensee. Licensee's obligations under this Section shall survive any revocation of this License.

(c) In the event Licensee receives a notice from any governmental agency or is otherwise made aware that any improvement or alteration on the Combined License Area, including, without limitation, the Bridge and the ADA Ramps, is in violation of any Disability and Safety Regulations, Licensee shall immediately inform City and provide City a copy of such notice or documents informing Licensee of such violation. Licensee shall, at is sole cost and expense, and without cost to City, address any such violations in accordance with such notice and shall keep the City abreast of such negotiations and obtain the City's consent prior to performing any necessary repairs.

(d) At its sole expense, Licensee shall procure and maintain in force at all times during its use of the Combined License Area any and all business and other licenses or approvals necessary to conduct the activities allowed by this License.

(e) City is entering into this License in its capacity as a property owner with a proprietary interest in the Combined License Area and not as a regulatory agency with police powers. No approval by City for purposes of this License shall be deemed to constitute approval of any federal, state, City, or other local regulatory authority with jurisdiction, and nothing in this

License shall limit Licensee's obligation to obtain all such regulatory approvals at Licensee's sole cost, or limit in any way City's exercise of its police powers.

12. Covenant to Maintain License Area. Throughout the term of this License, at its sole cost, Licensee shall maintain the Combined License Area, including, without limitation, the Bridge and other Permitted Improvements, at all times in a good, clean, safe, secure, sanitary, and sightly condition, so far as the Combined License Area may be affected by Licensee's activities under this License.

13. Monuments.

(a) By its execution and delivery of this License, Licensee acknowledges that the monuments shown on the attached **Exhibit B**, if any, are in place and in good condition. During the installation of any permitted Facilities or alterations of, the Combined License Area pursuant to this License and at all times during Licensee's use of the Combined License Area, Licensee shall protect and safeguard City's monuments. Licensee shall promptly notify City if Licensee becomes aware of any change in the condition of City's monuments, regardless of the cause of such change.

(b) If Licensee damages a monument necessitating resurvey, repair, or replacement, as determined by City at its sole discretion, Licensee shall survey, file a land surveyor's map in the Official Records of the County of Santa Clara, and install a replacement monument within thirty (30) days of completion of work authorized under this License, all at Licensee's expense and to City's satisfaction. A recorded surveyor's map shall be furnished by Licensee to the SFPUC for its records.

(c) During the term of this License, City may replace missing monuments or install new monuments. When City replaces missing monuments or installs new monuments, City shall give Licensee written notice of such replacement or installation. Upon deposit of such notice in the U.S. mail by City, postage prepaid, Licensee shall assume the protection and replacement responsibilities set forth in this License.

(d) Notwithstanding any contrary provision contained in this License, Licensee will not be responsible for any damage, destruction or displacement of monuments caused by City's own acts or omissions.

14. Removal or Alteration of Facilities or Improvements. Without limiting City's rights under this License, at City's written request, Licensee shall promptly alter or remove, at its sole expense, any and all Facilities, improvements, plantings, or other property installed or placed in, on, under, or about the Combined License Area by or on behalf of Licensee (including any improvements, plantings, or other property that predate this License), as may be necessary to avoid any actual or potential interference with the installation, construction, maintenance, operation, repair, replacement, or removal of any of City's pipelines, power lines, facilities, or other structures now or later constructed or with any other operations or land uses by City. In the request, City may specify reasonable time limits for completion of the work. If, after such written notice, Licensee fails to complete the requested work within the prescribed time limits, City may perform the requested work and charge Licensee all costs and expenses so incurred by City. Such amount shall be due and payable upon City's demand. In the event of an emergency, at City's sole option, at Licensee's sole expense, and without notice, City may, alter, remove, or protect any and all

facilities, improvements, plantings, or other property installed or placed in, on, under, or about the Combined License Area by Licensee. Upon City's written or oral notice that an emergency exists, the owner of such utility facilities shall take immediate action at its sole expense to protect, remove, or relocate such facilities as required by City to meet the emergency.

15. Interruption or Disruption of License Area. Without limiting City's rights under this License or any applicable Laws, if Licensee's use of the Combined License Area is interrupted or disrupted for any reason in connection with any SFPUC request for removal or alteration of Licensee's Facilities located on the Combined License Area pursuant to **Section 14** [Removal or Alteration of Facilities] above, at its sole cost, Licensee shall be responsible for: **(a)** any and all costs of alteration, removal, and/or restoration of Licensee's Facilities or other improvements or alterations to a condition similar to that which existed prior to such interruption, disruption, alteration, or removal, and **(b)** the implementation or satisfaction of any mitigation measures or obligations that may arise under any applicable Laws, including the California Environmental Quality Act ("**CEQA**"), related to any interruption or disruption of Licensee's use of the Combined License Area. City shall not be responsible for mitigation of any potential recreational use impacts or other impacts associated with any interruption or disruption of use of the Combined License Area, or any related costs. If Licensee fails to promptly perform its obligations under this Section, at its sole option, City may elect to terminate this License immediately by written notice, or to exercise any and all other rights or remedies available to City under this License or at law, including the rights set forth in **Section 19** [City's Right to Cure Defaults by Licensee] of this License.

City would not be willing to give this License in the absence of Licensee's assurances under this **Section 15**, and Licensee expressly assumes any and all liability or obligations that may arise under this **Section 15**.

16. Signs. In addition to Licensee's obligations under **Section 5(a)** [Educational Signs] above, City, at its sole discretion, may require Licensee to install signs with language required by the SFPUC. Except **(a)** as expressly authorized under this **Section 16, (b)** as expressly authorized under Section 4 [Permitted Encroachments] or **(c)** for any pipeline markers required by City or any regulatory agency with jurisdiction, Licensee shall not place, erect, or maintain any sign, advertisement, banner, or similar object in, on, or about the Combined License Area without City's prior written consent, which City may give or withhold at its sole discretion; provided, however, that, without City's prior written consent, if necessary for Licensee's construction use, Licensee may place in the Combined License Area a temporary sign of less than thirty (30) days' duration that does not penetrate the ground surface.

17. Surrender. Upon the expiration of this License or within ten (10) days after any sooner revocation or other termination of this License, Licensee shall surrender the Combined License Area in the same condition as received, and broom clean, free from hazards, and clear of all debris. At such time, Licensee shall remove all of its property from the Combined License Area and all signs other than the Educational Signs and, upon City's request, the Facilities and any other structures, improvements, or alterations placed on the Combined License Area during the term of this License, and shall repair, at its cost, any damage to the Combined License Area caused by such removal. Licensee's obligations under this Section shall survive any termination of this License.

18. **Repair of Damage**. If any portion of the Combined License Area or any City property located on or about the Combined License Area is damaged or threatened by any of the activities conducted by Licensee or anyone acting by or through Licensee, at its sole cost, Licensee shall immediately notify City of such damage or threat by **(a)** telephoning the SFPUC's dispatch operator as specified in **Section 33(b)** [Emergency Contacts] below, and **(b)** providing written notice in accordance with **Section 33(a)** [Notices] below. City may, but shall not be obligated to, remedy such damage or threat at Licensee's sole cost, or City may elect to witness Licensee's repair work. If City elects not to remedy such damage or threat, Licensee shall repair any and all such damage and restore the Combined License Area or property to its previous condition subject to City's inspection, review, and approval. City has no responsibility or liability of any kind with respect to any utilities that may be on, in, or under the Combined License Area. Licensee is solely responsible for the location of any such utilities and other existing facilities and their protection from damage. Licensee shall be solely responsible to arrange and pay directly for any utilities or services necessary for its activities pursuant to this License; provided, Licensee shall obtain City's prior written approval to the provision of such services or utilities in, on, under, or through the Combined License Area.

19. **City's Right to Cure Defaults by Licensee**. If Licensee fails to perform any of its obligations under this License to restore the Combined License Area, remove or alter any of Licensee's Facilities, or improvements or alterations, or repair damage, or if Licensee defaults in the performance of any of its other obligations under this License, then, at its sole option, City may remedy such failure for Licensee's account and at Licensee's expense by providing Licensee with three (3) days' prior written or oral notice of City's intention to cure such default (except that no such prior notice shall be required in the event of an emergency as determined by City). Such action by City shall not be construed as a waiver of any of City's rights or remedies under this License, and nothing in this License shall imply any duty of City to do any act that Licensee is obligated to perform. Licensee shall pay to City upon demand, all costs, damages, expenses, or liabilities incurred by City, including reasonable attorneys', experts', and consultants' fees, in remedying or attempting to remedy such default. Licensee's obligations under this Section shall survive the termination of this License.

20. **No Costs to City**. Licensee shall bear all costs or expenses of any kind or nature in connection with its use of the Combined License Area, and shall keep the Combined License Area free and clear of any liens or claims of lien arising out of or in any way connected with its use of the Combined License Area.

21. **Indemnity**. Licensee shall indemnify, defend, reimburse, and hold harmless City, its officers, agents, employees, and contractors, and each of them, from and against any and all demands, claims, legal or administrative proceedings, losses, costs, penalties, fines, liens, judgments, damages, and liabilities of any kind ("**Claims**"), arising in any manner out of **(a)** any injury to or death of any person or damage to or destruction of any property occurring in, on, or about any part of the Combined License Area, whether such injury, death, damage, or destruction is caused by the person or property of Licensee, its officers, directors, members, employees, agents, consultants, contractors, or subcontractors (collectively, "**Agents**"), its invitees, guests, or business visitors (collectively, "**Invitees**"), or third persons, relating to any use or activity under this License, **(b)** any failure by Licensee to faithfully observe or perform any of the terms, covenants, or conditions of this License, **(c)** the use of the Combined License Area, including, without limitation, the Bridge, the other Permitted Improvements and any other improvements

installed by or on behalf of Licensee that predate this License, or any activities conducted on the Combined License Area by Licensee, its Agents, or Invitees, **(d)** any release or discharge, or threatened release or discharge, of any Hazardous Material caused or allowed by Licensee, its Agents, or Invitees, on, in, under, or about the Combined License Area, any improvements or into the environment, or **(e)** any failure by Licensee to faithfully observe or perform any terms, covenants, or conditions of the Recorded Documents to the extent that such terms, covenants, or conditions relate to or are triggered by the work to be performed or Facilities or other improvements or alterations installed pursuant to this License; except solely to the extent of Claims resulting directly from the willful misconduct of City or City's authorized representatives. In addition to Licensee's obligation to indemnify City, Licensee has an immediate and independent obligation to defend City from any claim that actually or potentially falls within this indemnity provision even if such allegation is or may be groundless, fraudulent, or false, which obligation arises at the time such claim is tendered to Licensee by City and continues at all times thereafter. The foregoing indemnity shall include reasonable attorneys', experts', and consultants' fees and costs, investigation and remediation costs, and all other reasonable costs and expenses incurred by the indemnified parties, including damages for decrease in the value of the Combined License Area and claims for damages or decreases in the value of adjoining property. Licensee's obligations under this Section shall survive the expiration or other termination of this License.

22. <u>Waiver of Claims</u>.

(a) Neither City nor any of its commissions, departments, boards, officers, agents, or employees shall be liable for any damage to the property of Licensee, its officers, agents, employees, contractors, or subcontractors, or their employees, or for any bodily injury or death to such persons, resulting or arising from the condition of the Combined License Area or its use by Licensee, or Licensee's Agents or Invitees.

(b) Because this License is freely revocable by City, Licensee expressly assumes the risk of making any expenditure in connection with this License, even if such expenditures are substantial. Without limiting any indemnification obligations of Licensee or other waivers contained in this License and as a material part of the consideration for this License, Licensee fully RELEASES, WAIVES, AND DISCHARGES forever any and all claims, demands, rights, and causes of action against, and covenants not to sue, City, its departments, commissions, officers, directors, and employees, and all persons acting by, through, or under each of them, under any present or future Laws, including any claim for inverse condemnation or the payment of just compensation under law or equity, if City exercises its right to revoke or terminate this License.

(c) Licensee acknowledges that it will not be a displaced person at the time this License is terminated or revoked or expires by its own terms, and Licensee fully RELEASES, WAIVES, AND DISCHARGES forever any and all claims, demands, rights, and causes of action against, and covenants not to sue, City, its departments, commissions, officers, directors, and employees, and all persons acting by, through, or under each of them, under any present or future Laws, including any and all claims for relocation benefits or assistance from City under federal and state relocation assistance laws.

(d) The fees payable pursuant to this License do not take into account any potential City liability for any consequential or incidental damages including lost profits and arising out of disruption to or any Facilities or other improvements or alterations installed pursuant to this License; or Licensee's uses of the Combined License Area permitted by this License. City would

not be willing to grant this License in the absence of a waiver of liability for consequential or incidental damages resulting from the acts or omissions of City or its departments, commissions, officers, directors, and employees, and by all persons acting by, through, or under each of them, and Licensee expressly assumes the risk with respect thereto. Accordingly, without limiting any indemnification obligations of Licensee or other waivers contained in this License and as a material part of the consideration for this License, Licensee fully RELEASES, WAIVES, AND DISCHARGES forever any and all claims, demands, rights, and causes of action against City for consequential and incidental damages (including lost profits) and covenants not to sue for such damages City, its departments, commissions, officers, directors, and employees, and all persons acting by, through, or under each of them, arising out of this License or the uses authorized under this License, including any interference with uses conducted by Licensee pursuant to this License, regardless of the cause, and whether or not due to the negligence of City or its departments, commissions, officers, directors, and employees, and all persons acting by, through, or under each of them, except for the gross negligence and willful misconduct of City or its departments, commissions, officers, directors, and employees, and all persons acting by, through, or under each of them.

(e) As part of Licensee's agreement to accept the Combined License Area in its "As Is" condition as provided below, and without limiting such agreement, Licensee, on behalf of itself and its successors and assigns, waives its right to recover from, and forever releases and discharges, City and its officers, agents, and employees, and their respective heirs, successors, administrators, personal representatives, and assigns, from any and all Claims, whether direct or indirect, known or unknown, foreseen and/or unforeseen, that may arise on account of or in any way be connected with the physical or environmental condition of the Combined License Area and any related improvements or any applicable Laws or the suitability of the Combined License Area for Licensee's intended use.

(f) In connection with the foregoing releases, Licensee acknowledges that it is familiar with Section 1542 of the California Civil Code, which reads:

> A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release and that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.

Licensee acknowledges that the releases contained in this License include all known and unknown, disclosed and undisclosed, and anticipated and unanticipated claims. Licensee realizes and acknowledges that it has agreed upon this License in light of this realization and, being fully aware of this situation, it nevertheless intends to waive the benefit of California Civil Code Section 1542, or any statute or other similar law now or later in effect. The releases contained in this License shall survive any termination of this License.

23. <u>As Is Condition of License Area; Disability Access; Disclaimer of Representations</u>. Licensee accepts the Combined License Area in its "AS IS" condition, without representation or warranty of any kind by City, its departments, commissions, officers, directors, and employees, and all persons acting by, through, or under each of them, and subject to all applicable Laws governing the use of the Combined License Area. Without limiting the foregoing, this License is made subject to any and all existing and future covenants, conditions, restrictions, easements, encumbrances, and other title matters affecting the Combined License Area, whether foreseen or

unforeseen, and whether such matters are of record or would be disclosed by an accurate inspection or survey.

City discloses (i) City has not been issued a disability access inspection certificate as described in California Civil Code Section 55.53(e), (ii) pursuant to California Civil Code Section 1938, that Landlord has not ordered, performed, or caused to be performed, a Certified Access Specialist ("**CASp**") inspection of the Combined License Area (sometimes referred to as "premises" or "subject premises" for the herein disclosures), and (iii) City makes the following statutory disclosure per California Civil Code Section 1938 (required "**CASp Disclosure**"):

"A Certified Access Specialist ("**CASp**") can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises."

24. **No Assignment**. This License is personal to Licensee and shall not be assigned, conveyed, or otherwise transferred by Licensee under any circumstances. Any attempt to assign, convey, or otherwise transfer this License shall be null and void and cause the immediate termination and revocation of this License.

25. **Cessation of Use**. Licensee will not terminate its activities on the Combined License Area pursuant to this License without prior written notice to City.

26. **No Joint Ventures or Partnership; No Authorization**. This License does not create a partnership or joint venture between City and Licensee as to any activity conducted by Licensee on, in, or relating to the Combined License Area. Licensee is not a state actor with respect to any activity conducted by Licensee on, in, under or around the Combined License Area. City's provision of this License does not constitute City's authorization or approval of any activity conducted by Licensee on, in, around, or relating to the Combined License Area.

27. **MacBride Principles - Northern Ireland**. The provisions of San Francisco Administrative Code Section 12F are incorporated into and made a part of this License by this reference. By signing this License, Licensee confirms that Licensee has read and understood that City urges companies doing business in Northern Ireland to resolve employment inequities and to abide by the MacBride Principles, and urges San Francisco companies to do business with corporations that abide by the MacBride Principles.

28. **Non-Discrimination in City Contracts and Benefits Ordinance**.

(a) **Covenant Not to Discriminate.** In the performance of this License, Licensee shall not discriminate against any employee of, any City employee working with Licensee, or applicant for employment with, Licensee, or against any person seeking accommodations, advantages, facilities, privileges, services, or membership in all business, social, or other establishments or organizations, on the basis of the fact or perception of a person's race, color, creed, religion, national origin,

ancestry, age, height, weight, sex, sexual orientation, gender identity, domestic partner status, marital status, disability or Acquired Immune Deficiency Syndrome or HIV status (AIDS/HIV status), or association with members of such protected classes, or in retaliation for opposition to discrimination against such classes.

(b) Other Subcontracts. Licensee shall include in all subcontracts relating to the Combined License Area a non-discrimination clause applicable to such subcontractor in substantially the form of **Section 28 (a)** [Covenant Not to Discriminate] above. In addition, Licensee shall incorporate by reference in all subcontracts the provisions of Sections 12B.2(a), 12B.2(c)-(k), and 12C.3 of the San Francisco Administrative Code and shall require all subcontractors to comply with such provisions. Licensee's failure to comply with the obligations in this subsection shall constitute a material breach of this License.

(c) Non-Discrimination in Benefits. Licensee does not as of the date of this License and will not during the term of this License, in any of its operations in San Francisco, on real property owned by City, or where the work is being performed for City or elsewhere within the United States, discriminate in the provision of bereavement leave, family medical leave, health benefits, membership or membership discounts, moving expenses, pension and retirement benefits, or travel benefits, as well as any benefits other than the benefits specified above, between employees with domestic partners and employees with spouses, and/or between the domestic partners and spouses of such employees, where the domestic partnership has been registered with a governmental entity pursuant to state or local law authorizing such registration, subject to the conditions set forth in Section 12B.2(b) of the San Francisco Administrative Code.

(d) Condition to License. As a condition to this License, Licensee shall execute the "Chapter 12B Declaration: Nondiscrimination in Contracts and Benefits" form (Form CMD-12B-101) with supporting documentation and secure the approval of the form by the San Francisco Contract Monitoring Division.

(e) Incorporation of Administrative Code Provisions by Reference. The provisions of Chapters 12B and 12C of the San Francisco Administrative Code relating to non-discrimination by parties contracting for the license of City property are incorporated in this Section by reference and made a part of this License as though fully set forth. Licensee shall comply fully with and be bound by all of the provisions that apply to this License under such Chapters of the San Francisco Administrative Code, including the remedies provided in such Chapters. Without limiting the foregoing, Licensee understands that pursuant to Section 12B.2(h) of the San Francisco Administrative Code, a penalty of $50 for each person for each calendar day during which such person was discriminated against in violation of the provisions of this License may be assessed against Licensee and/or deducted from any payments due Licensee.

29. Reserved.

30. Notification of Prohibition on Contributions. Licensee acknowledges that it is familiar with Section 1.126 of the San Francisco Campaign and Governmental Conduct Code, which prohibits any person who contracts with City for the selling or leasing of any land or building to or from City whenever such transaction would require the approval by a City elective officer, the board on which that City elective officer serves, or a board on which an appointee of that individual serves, from making any campaign contribution to **(a)** the City elective officer, **(b)** a candidate for the office held by such individual, or **(c)** a committee controlled by such individual or candidate,

at any time from the commencement of negotiations for the contract until the later of either the termination of negotiations for such contract or twelve months after the date the contract is approved. Licensee acknowledges that the foregoing restriction applies only if the contract or a combination or series of contracts approved by the same individual or board in a fiscal year have a total anticipated or actual value of $100,000 or more. Licensee further acknowledges that **(i)** the prohibition on contributions applies to each Licensee; each member of Licensee's board of directors, and Licensee's chief executive officer, chief financial officer, and chief operating officer; any person with an ownership interest of more than ten percent (10%) in Licensee; any subcontractor listed in the contract; and any committee that is sponsored or controlled by Licensee; and **(ii)** within thirty (30) days of the submission of a proposal for the contract, the City department seeking to enter into the contract must notify the Ethics Commission of the parties and any subcontractor to the contract. Additionally, Tenant certifies it has informed each of the persons described in the preceding sentence of the prohibitions contained in Section 1.126 by the time it submitted a proposal for the contract to the City, and has provided the names of the persons required to be informed to the City department seeking to enter into that contract within thirty (30) days of submitting its contract proposal to the City department receiving that submittal, and acknowledges the City department receiving that submittal was required to notify the Ethics Commission of those persons.

31. Tropical Hardwoods and Virgin Redwoods. City urges companies not to import, purchase, obtain, or use for any purpose, any tropical hardwood, tropical hardwood wood product, virgin redwood, or virgin redwood wood product, except as expressly permitted by the application of Sections 802(b) and 803(b) of the San Francisco Environment Code. Except as permitted by the application of Sections 802(b) and 803(b), Licensee shall not use or incorporate any tropical hardwood, tropical hardwood wood product, virgin redwood, or virgin redwood wood product in the performance of this License.

32. Taxes, Assessments, Licenses, License Fees, and Liens.

(a) Licensee recognizes and understands that this License may create a possessory interest subject to property taxation and that Licensee may be subject to the payment of property taxes levied on such interest. Licensee further recognizes and understands that any transfer or assignment permitted under this License and any exercise of any option to renew or extend this License may constitute a change in ownership for purposes of property taxation and therefore may result in a revaluation of any possessory interest created hereunder.

(b) Licensee shall pay taxes of any kind, including possessory interest taxes, that may be lawfully assessed on the interest created by this License and shall pay all other taxes, excises, licenses, permit charges, and assessments based on Licensee's usage of the Combined License Area that may be imposed upon Licensee by law, all of which shall be paid when the same become due and payable and before delinquency.

(c) Licensee shall not allow or suffer a lien for any such taxes or charges to be imposed upon the Combined License Area or upon any equipment or property located on the Combined License Area without promptly discharging the same, provided that Licensee may contest the validity of the same by paying under protest or posting adequate (at City's sole discretion) security during any such contest.

33. Notices.

(a) Any notice, consent, or approval required or permitted to be given under this License shall be in writing and shall be given by **(i)** hand delivery, against receipt, **(ii)** reliable next-business-day courier service that provides confirmation of delivery, or **(iii)** United States registered or certified mail, postage prepaid, return receipt required, and addressed as follows (or to such other address as either party may from time to time specify in writing to the other upon five (5) days' prior, written notice in the manner provided above):

City or the SFPUC: Real Estate Services Division
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 10th Floor
San Francisco, California 94102
Attn: Real Estate Director
Re: Los Altos Trail License
License P4550
Telephone No.: (415) 487-5210

with a copy to: Office of the City Attorney
City Hall, Room 234
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102
Attn: Real Estate & Finance Team
Re: Los Alto Trail License

Licensee: City of Los Altos
Los Altos City Hall
1 N. San Antonio Road
Los Altos, CA 94022
Attn: City Manager
Re: Los Altos Trail
License P4550
Telephone No.: (___) ___-____
E-mail: _____

A properly addressed notice transmitted by one of the foregoing methods shall be deemed received upon the confirmed date of delivery, attempted delivery, or rejected delivery, whichever occurs first. Any e-mail addresses, telephone numbers, or facsimile numbers provided by one party to the other shall be for convenience of communication only; neither party may give official or binding notice orally or by e-mail or facsimile. The effective time of a notice shall not be affected by the receipt, prior to receipt of the original, of an oral notice or an e-mail or telefacsimile copy of the notice.

(b) Emergency Contacts. Licensee shall immediately notify the SFPUC's Millbrae Dispatch facility by phone at (650) 872-5900 of any emergency or incident requiring emergency response.

(c) Day-to-Day Communications. Day-to-Day communications that are not intended as a notice or demand under this License may be communicated by email or telephone.

City's key contact for day-to-day communications is:

Attn: Emily Read, Right of Way Manager
Natural Resources and Land Management Division
San Francisco Public Utilities Commission
1657 Rollins Road
Burlingame, CA 94010
Telephone No.: (650) 652-3204
Email: ERead@sfwater.org

Los Altos' key contact for day-to-day communications is:

Attn:_____

Telephone No.:_____

Email:_____

34. Prohibition of Tobacco Sales and Advertising. No advertising or sale of cigarettes or tobacco products is allowed on the Combined License Area. This advertising prohibition includes the placement of the name of a company producing cigarettes or tobacco products or the name of any cigarette or tobacco product in any promotion of any event or product.

35. Prohibition of Alcoholic Beverage Advertising. No advertising of alcoholic beverages is allowed on the Combined License Area. For purposes of this Section, "alcoholic beverage" shall be defined as set forth in California Business and Professions Code Section 23004, and shall not include cleaning solutions, medical supplies, and other products and substances not intended for drinking. This advertising prohibition includes the placement of the name of a company producing alcoholic beverages or the name of any alcoholic beverage in any promotion of any event or product.

36. Restrictions on the Use of Pesticides. Chapter 3 of the San Francisco Environment Code ("Integrated Pest Management Program Ordinance or "**IPM Ordinance**") describes an integrated pest management ("**IPM**") policy to be implemented by all City departments. Licensee shall not use or apply or allow the use or application of any pesticides on the Combined License Area or contract with any person or entity to provide pest abatement or control services to the Combined License Area without first receiving City's written approval of an IPM plan that **(a)** lists, to the extent reasonably possible, the types and estimated quantities of pesticides that Licensee may need to apply to the Combined License Area during the term of this License, **(b)** describes the steps Licensee will take to meet the City's IPM Policy described in Section 300 of the IPM Ordinance and **(c)** identifies, by name, title, address, and telephone number, an individual to act as the Licensee's primary IPM contact person with the City. Licensee shall comply, and shall require all of Licensee's contractors to comply, with the IPM plan approved by the City and shall comply with the requirements of Sections 300(d), 302, 304, 305(f), 305(g), and 306 of the IPM Ordinance, as if Licensee were a City department. Among other matters, such provisions of the IPM

Ordinance: **(i)** provide for the use of pesticides only as a last resort, **(ii)** prohibit the use or application of pesticides on property owned by the City, except for pesticides granted an exemption under Section 303 of the IPM Ordinance (including pesticides included on the most current Reduced Risk Pesticide List compiled by City's Department of the Environment), **(iii)** impose certain notice requirements, and **(iv)** require Licensee to keep certain records and to report to City all pesticide use at the Combined License Area by Licensee's staff or contractors.

If Licensee or Licensee's contractor will apply pesticides to outdoor areas at the Combined License Area, Licensee must first obtain a written recommendation from a person holding a valid Agricultural Pest Control Advisor license issued by the California Department of Pesticide Regulation ("**CDPR**") and any such pesticide application shall be made only by or under the supervision of a person holding a valid, CDPR-issued Qualified Applicator certificate or Qualified Applicator license. City's current Reduced Risk Pesticide List and additional details about pest management on City property can be found at the San Francisco Department of the Environment website, http://sfenvironment.org/ipm.

37. Conflict of Interest. Licensee acknowledges that it is familiar with the provisions of Section 15.103 of City's Charter, Article III, Chapter 2 of City's Campaign and Governmental Conduct Code, and Sections 87100 et seq. and Sections 1090 et seq. of the California Government Code and certifies that it does not know of any facts that would constitute a violation of said provisions. If Licensee becomes aware of any such fact during the term of this License, Licensee shall immediately notify City.

38. Disclosure. City's Sunshine Ordinance (San Francisco Administrative Code Chapter 67) and the State Public Records Law (Gov't Code Sections 6250 et seq.), apply to this License and any and all records, information, and materials submitted to City in connection with this License. Accordingly, any and all such records, information, and materials may be subject to public disclosure in accordance with City's Sunshine Ordinance and the State Public Records Law. Licensee authorizes City to disclose any records, information, and materials submitted to City in connection with this License.

39. Food Service and Packaging Waste Reduction. Licensee shall comply fully with and be bound by all of the provisions of the Food Service and Packaging Waste Reduction Ordinance, as set forth in San Francisco Environment Code Chapter 16, including the remedies provided therein, and implementing guidelines and rules. The provisions of Chapter 16 are incorporated into this License by this reference and made a part of this License as though fully set forth. Capitalized terms used in this Section that are not otherwise defined in this License have the same meaning assigned to such terms in San Francisco Environment Code, Chapter 16. Accordingly, Licensee acknowledges that City contractors, lessees, and licensees may not use Disposable Food Service Ware that contains Polystyrene Foam in City Facilities while performing under a City contract, lease, or license, and shall instead use suitable Biodegradable/Compostable or Recyclable Disposable Food Service Ware. This provision is a material term of this License.

40. Severability. If any provision of this License, or its application to any person, entity, or circumstance, shall be held to be invalid or unenforceable by a court of competent jurisdiction, the remainder of this License, or the application of such provision to persons, entities, or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each other provision of this License shall be valid and be enforceable to the fullest extent permitted by law, except to the extent that enforcement of this License without the invalidated provision would

be unreasonable or inequitable under all the circumstances or would frustrate a fundamental purpose of this License.

41. Cooperative Drafting. This License has been drafted through a cooperative effort of both Parties, and both Parties have had an opportunity to have the License reviewed and revised by legal counsel. No party shall be considered the drafter of this License, and no presumption or rule that an ambiguity shall be construed against the party drafting the clause shall apply to the interpretation or enforcement of this License.

42. Reserved.

43. San Francisco Packaged Water Ordinance. Licensee shall comply with San Francisco Environment Code Chapter 24 ("**Chapter 24**"). Licensee shall not sell, provide or otherwise distribute Packaged Water, as defined in Chapter 24 (including bottled water), in the performance of this License or on City property unless Licensee obtains a waiver from the City's Department of the Environment. If Licensee violates this requirement, the City may exercise all remedies in this License and the Director of the City's Department of the Environment may impose administrative fines as set forth in Chapter 24.

44. General Provisions. **(a)** This License may be amended or modified only by a writing signed by City and Licensee. **(b)** No waiver by any party of any of the provisions of this License shall be effective unless in writing and signed by an officer or other authorized representative, and only to the extent expressly provided in such written waiver. No waiver shall be deemed a subsequent or continuing waiver of the same, or any other, provision of this License. **(c)** The exhibits referenced in and attached to this instrument are incorporated into this License. **(d)** This License contains the entire agreement between the Parties regarding the subject matter of this License, and all prior written or oral negotiations, discussions, understandings, and agreements are merged into this License. **(e)** The Section and other headings of this License are for convenience of reference only and shall be disregarded in the interpretation of this License. **(f)** Time is of the essence in all matters relating to this License. **(g)** This License shall be governed by California law and City's Charter. **(h)** If either party commences an action against the other or a dispute arises under this License, the prevailing party shall be entitled to recover from the other reasonable attorneys' fees and costs. For purposes of this License and the indemnifications set forth in this License, reasonable attorneys' fees of City shall be based on the fees regularly charged by private attorneys in San Francisco with comparable experience notwithstanding City's use of its own attorneys. **(i)** If Licensee consists of more than one person then the obligations of each person shall be joint and several. **(j)** Licensee may not record this License or any memorandum of this License. **(k)** Subject to the prohibition against assignments or other transfers by Licensee hereunder, this License shall be binding upon and inure to the benefit of the Parties and their respective heirs, representatives, successors, and assigns. **(l)** Any sale or conveyance of the property burdened by this License by City shall automatically revoke this License. **(m)** Notwithstanding anything to the contrary contained in this License, no officer or employee of City has authority to commit City to this License unless and until a resolution of the SFPUC shall have been duly adopted approving this License and authorizing the transaction contemplated by this License. Therefore, any of City's obligations or liabilities pursuant to or under this License are contingent upon enactment of such a resolution, and this License shall be null and void if, at its sole discretion, the SFPUC does not approve this License. **(n)** Each of the persons executing this License on Licensee's behalf do hereby represent and warrant that Licensee is a duly formed or organized (as applicable) and validly existing entity under the laws of California, that Licensee

is in good standing and qualified to do business in California (and covenants to maintain such status during the term of this License), that Licensee has full right and authority to enter into this License, and that each and all of the persons signing on behalf of Licensee are authorized to do so. Upon City's request, Licensee shall provide City with evidence reasonably satisfactory to City confirming the foregoing representations and warranties. **(o)** Except as expressly provided to the contrary, all approvals, consents, and determinations to be made by City under this License may be made at City's sole and absolute discretion. **(p)** Whenever this License requires City's or the SFPUC's consent or approval, the General Manager of the SFPUC, or his or her designee, shall be authorized to provide such consent or approval, except as otherwise provided by applicable Laws, including City's Charter, or by the SFPUC's Real Estate Guidelines. No consent, approval, election, or option shall be effective unless given, made, or exercised in writing. **(q)** This License may be executed in two or more counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument. **(r)** City and Licensee respectively agree to execute and deliver such further instruments and to take such further actions as City may reasonably request from time to time in order to carry out the provisions of this License. **(s)** Use of the word "including" or similar words will not be construed to limit any general term, statement, or other matter in this License, whether or not language of non-limitation, such as "without limitation" or similar words, are used.

NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS LICENSE, NO OFFICER OR EMPLOYEE OF CITY HAS AUTHORITY TO COMMIT CITY TO THIS LICENSE UNLESS AND UNTIL CITY'S PUBLIC UTILITIES COMMISSION SHALL HAVE DULY ADOPTED A RESOLUTION APPROVING THIS LICENSE AND AUTHORIZING THE TRANSACTIONS CONTEMPLATED IN THIS LICENSE. THEREFORE, ANY OBLIGATIONS OR LIABILITIES OF CITY UNDER THIS LICENSE ARE CONTINGENT UPON ADOPTION OF SUCH A RESOLUTION, AND THIS LICENSE SHALL BE NULL AND VOID IF CITY'S PUBLIC UTILITIES COMMISSION DO NOT APPROVE THIS LICENSE, AT THEIR RESPECTIVE SOLE DISCRETION. APPROVAL OF THIS LICENSE BY ANY DEPARTMENT, COMMISSION, OR AGENCY OF CITY SHALL NOT BE DEEMED TO IMPLY THAT SUCH RESOLUTION WILL BE ENACTED, NOR WILL ANY SUCH APPROVAL CREATE ANY BINDING OBLIGATIONS ON CITY.

[SIGNATURES ON FOLLOWING PAGE]

LICENSEE REPRESENTS AND WARRANTS TO CITY THAT IT HAS READ AND UNDERSTANDS THE CONTENTS OF THIS LICENSE, HAS HAD AN OPPORTUNITY TO REVIEW AND DISCUSS IT WITH COUNSEL OF ITS CHOOSING, AND AGREES TO COMPLY WITH AND BE BOUND BY ALL OF ITS PROVISIONS.

LICENSEE:

CITY OF LOS ALTOS,
a municipal corporation

By: _____

Name: _____

Its: _____

Date: _____

CITY:

CITY AND COUNTY OF SAN FRANCISCO,
a municipal corporation

By: _____
DENNIS J. HERRERA
General Manager
San Francisco Public Utilities Commission

Date: _____

APPROVED AS TO FORM:

DAVID CHIU
City Attorney

By: _____
Vincent L. Brown
Deputy City Attorney

Authorized by
San Francisco Public Utilities Commission

Resolution No. _____

Adopted: _____

EXHIBIT A

Description of Pathway Area

Approximately 80,000 square feet of all that certain real property located in the City of Los Altos, County of Santa Clara, California, described as follows:

The Pathway Area consists of the entirety of SFPUC Parcel Nos. 236 and 237, according to SFPUC records and as shown on the attached **Exhibit B** and made a part of this License.

EXHIBIT B

Depiction of Combined License Area

[see attached]

EXHIBIT B-1

Depiction of 1961 Revocable Permit Area for Street and Sewer Crossings

[see attached]

EXHIBIT B-2

Depiction of 1963 Revocable Permit Area for Street Crossing, Storm Drain and Fire Access Roadway

[see attached]

EXHIBIT B-3

Depiction of 1972 Revocable Permit Area for Street Widening and Landscaping

[see attached]

EXHIBIT B-4

Engineering Drawings for 1974 Adobe Creek Pedestrian and Bicycle Bridge

[see attached]

EXHIBIT B-5

Depiction of 1987 Revocable Permit Area for Bicycle Path and Landscaping

[see attached]

EXHIBIT B-6

Depiction of 1985 Drawing for Added Permit Area

[see attached]

EXHIBIT C

Depiction of Maintenance Area

[see attached]

EXHIBIT D

Deeds

[see attached]

EXHIBIT E

Approved Plans and Specifications

[see attached]

EXHIBIT F

SFPUC Vegetation Management Policy

[see attached]

EXHIBIT G

SFPUC Encroachment Policy

[see attached]

Hetch Hetchy
Regional Water System
Services of the San Francisco Public Utilities Commission

AMENDMENT TO THE

RIGHT OF WAY INTEGRATED VEGETATION MANAGEMENT POLICY

Approved January 13, 2015

by

SFPUC Resolution No. 15-0014

12.000 RIGHT OF WAY INTEGRATED VEGETATION MANAGEMENT POLICY

12.001 General

The San Francisco Public Utilities Commission ("SFPUC") is responsible for the delivery of potable water and the collection and treatment of wastewater for some 800,000 customers within the City of San Francisco; it is also responsible for the delivery of potable water to 26 other water retailers with a customer base of 1.8 million. **The following policy is established to manage vegetation on the transmission, distribution and collection systems within the SFPUC Right of Way ("ROW") so that it does not pose a threat or hazard to the system's integrity and infrastructure or impede utility maintenance and operations.**

The existence of large woody vegetation[1], hereinafter referred to as vegetation, and water transmission lines within the ROW are not compatible and, in fact, are mutually exclusive uses of the same space. Roots can impact transmission pipelines by causing corrosion. The existence of trees and other vegetation directly adjacent to pipelines makes emergency and annual maintenance very difficult, hazardous, and expensive, and increases concerns for public safety. The risk of fire within the ROW is always a concern and the reduction of fire ladder fuels within these corridors is another reason to modify the vegetation mosaic. In addition to managing vegetation in a timely manner to prevent any disruption in utility service, the SFPUC also manages vegetation on its ROW to comply with local fire ordinances enacted to protect public safety.

One of the other objectives of this policy is to reduce and eliminate as much as practicable the use of herbicides on vegetation within the ROW and to implement integrated pest management (IPM).

12.002 Woody Vegetation Management

1.0 Vegetation of any size or species will not be allowed to grow within certain critical portions of the ROW, pumping stations or other facilities as determined by a SFPUC qualified professional, and generally in accordance with the following guidelines.

1.1 Emergency Removal

SFPUC Management reserves the right to remove any vegetation without prior public notification that has been assessed by a SFPUC qualified professional as an immediate threat to transmission lines or other utility infrastructure, human life and property due to acts of God, insects, disease, or natural mortality.

1.2 Priority Removal

Vegetation that is within 15 feet of the edge of any pipe will be removed and the vegetative debris will be cut into short lengths and chipped whenever possible. Chips will be spread upon the site where the vegetation was removed. Material that cannot be chipped will be hauled away to a proper disposal site.

[1] Woody vegetation is defined as all brush, tree and ornamental shrub species planted in (or naturally occurring in) the native soil having a woody stem that at maturity exceeds 3 inches in diameter.

If vegetation along the ROW is grouped in contiguous stands[2], or populations, a systematic and staggered removal of that vegetation will be undertaken to replicate a natural appearance. Initial removal[3] will be vegetation immediately above or within 15 feet of the pipeline edges; secondary vegetation[4] within 15 to 25 feet from pipelines will then be removed.

1.3 Standard Removal

Vegetation that is more than 25 feet from the edge of a pipeline and up to the boundary of the ROW will be assessed by a SFPUC qualified professional for its age and condition, fire risk, and potential impact to the pipelines. Based on this assessment, the vegetation will be removed or retained.

1.4 Removal Standards

Each Operating Division will develop its own set of guidelines or follow established requirements in accordance with local needs.

2.0 All stems of vegetation will be cut flush with the ground and where deemed necessary or appropriate, roots will be removed. All trees identified for removal will be clearly marked with paint and/or a numbered aluminum tag.

3.0 Sprouting species of vegetation will be treated with herbicides where practicable, adhering to provisions of Chapter 3 of the San Francisco Environment Code.

4.0 Erosion control measures, where needed, will be completed before the work crew or contractors leave the work site or before October 15 of the calendar year.

5.0 Department personnel will remove in a timely manner any and all material that has been cut for maintenance purposes within any stream channel.

6.0 All vegetation removal work and consultation on vegetation retention will be reviewed and supervised by a SFPUC qualified professional. All vegetation removal work and/or treatment will be made on a case-by-case basis by a SFPUC qualified professional.

7.0 Notification process for areas of significant resource impact that are beyond regular and ongoing maintenance:

7.1 County/City Notification – The individual Operating Division will have sent to the affected county/city a map showing the sections of the ROW which will be worked, a written description of the work to be done, the appropriate removal time for the work crews, and a contact person for more information. This should be done approximately 10 days prior to start of work. Each Operating Division will develop its own set of guidelines in accordance with local need.

[2] A stand is defined as a community of trees possessing sufficient uniformity in composition, structure, age, arrangement, or condition to be distinguishable from adjacent forest communities to form a management unit.
[3] Initial removal is defined as the vegetation removed during the base year or first year of cutting.
[4] Secondary vegetation is defined as the vegetative growth during the second year following the base year for cutting.

7.2 Public Notification – The Operating Division will have notices posted at areas where the vegetation is to be removed with the same information as above also approximately 10 days prior to removal. Notices will also be sent to all property owners within 300 feet of the removal site. Posted notices will be 11- by 17-inches in size on colored paper and will be put up at each end of the project area and at crossover points through the ROW. Questions and complaints from the public will be handled through a designated contact person. Each Operating Division will develop its own set of guidelines in accordance with local needs.

12.003 Annual Grass and Weed Management

Annual grasses and weeds will be mowed, disked, sprayed or mulched along the ROW as appropriate to reduce vegetation and potential fire danger annually. This treatment should be completed before July 30 of each year. This date is targeted to allow the grasses, forbs and weeds to reach maturity and facilitate control for the season.

12.004 Segments of ROW that are covered by Agricultural deed rights

The only vegetation that may be planted within the ROW on those segments where an adjacent owner has Deeded Agricultural Rights will be: non-woody herbaceous plants such as grasses, flowers, bulbs, or vegetables.

12.005 Segments of ROW that are managed and maintained under a Lease or License

Special allowance may be made for these types of areas, as the vegetation will be maintained by the licensed user as per agreement with the City, and not allowed to grow unchecked. Only shallow rooted plants may be planted directly above the pipelines.

Within the above segments, the cost of vegetation maintenance and removal will be borne by the tenant or licensee exclusively. In a like fashion, when new vegetative encroachments are discovered they will be assessed by a SFPUC qualified professional on a case-by-case basis and either be permitted or proposed for removal.

The following is a guideline for the size at maturity of plants (small trees, shrubs, and groundcover) that may be permitted to be used as landscape materials. Note: All distance measurements are for mature trees and plants measured from the edge of the drip-line to the edge of the pipeline.

- Plants that may be permitted to be planted directly above existing and future pipelines: shallow rooted plants such as ground cover, grasses, flowers, and very low growing plants that grow to a maximum of one foot in height at maturity.
- Plants that may be permitted to be planted 15–25 feet from the edge of existing and future pipelines: shrubs and plants that grow to a maximum of five feet in height at maturity.
- Plants that may be permitted to be planted 25 feet or more from the edge of existing and future pipelines: small trees or shrubs that grow to a maximum of twenty feet in height and fifteen feet in canopy width.

Trees and plants that exceed the maximum height and size limit (described above) may be permitted within a leased or licensed area provided they are in containers and are above ground. Container load and placement location(s) are subject to review and approval by the SFPUC.

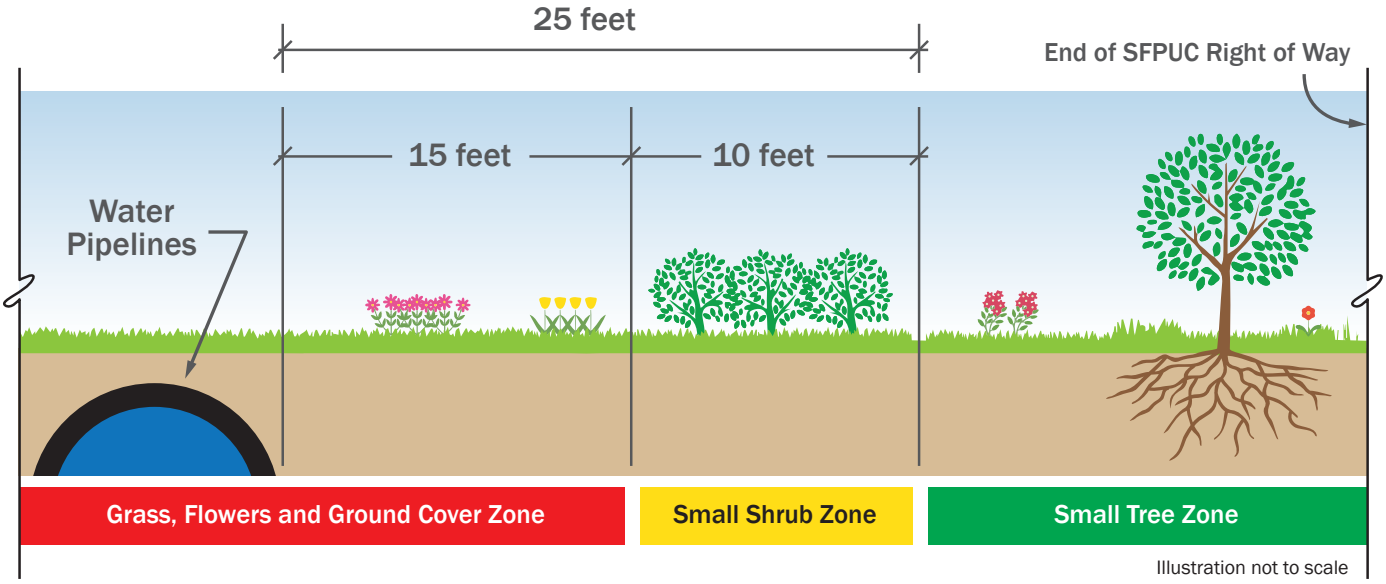
Low water use plant species are encouraged and invasive plant species are not allowed.

All appurtenances, vaults, and facility infrastructure must remain visible and accessible at all times. All determinations of species acceptability will be made by a SFPUC qualified professional.

The above policy is for general application and for internal administration purposes only and may not be relied upon by any third party for any reason whatsoever. The SFPUC reserves the right at its sole discretion, to establish stricter policies in any particular situation and to revise and update the above policy at any time.

San Francisco Public Utilities Commission (SFPUC)

Right Of Way (ROW) Landscape Vegetation Guidelines



The following vegetation types are permitted on the ROW within the appropriate zones.

Plantings that may be permitted directly above existing and future pipelines:

Ground cover, grasses, flowers, and very low growing plants that reach no more than one foot in height at maturity.

Plantings that may be permitted 15–25 feet from the edge of existing and future pipelines:

Shrubs and plants that grow no more than five feet tall in height at maturity.

Plantings that may be permitted 25 feet or more from the edge of existing and future pipelines:

Small trees or shrubs that grow to a maximum of twenty feet in height and fifteen feet in canopy width or less.

Agenda Item # 14.

SAN FRANCISCO WATER DEPARTMENT

LAND USE PERMIT

Pursuant to authority granted by the Public Utilities Commission, permission is hereby granted to

CITY OF LOS ALTOS
ONE NORTH SAN ANTONIO ROAD
LOS ALTOS, CALIFORNIA 94022

(hereinafter called "Permittee") to occupy and utilize the following described parcel or premises owned by the City and County of San Francisco (hereinafter called "City") an under jurisdiction of the Water Department:

The entirety of Parcel 233-A and portion of Parcels 232-A, 234-A, 236 and 237 of Bay Division Pipeline Nos. 3 and 4 right of way according to San Francisco Water Department records; said parcels as shown on San Francisco Water Department drawing C-1061-1 attached hereto and made a part hereof. Containing 2.53 acres more or less;

for the purpose of bicycle path and landscaping at the location referred to above.

This permit is granted subject to the following conditions:

1. Unless otherwise specifically provided herein this permit shall become effective when the Public Utilities Commission or its authorized representative and the Permittee have signed it. A copy shall be furnished to Permittee.
2. This permit does not constitute a lease, deed or grant of an easement, or of a fee interest by City. It is not transferable or assignable, and is revocable at any time at the option of the Public Utilities Commission.
3. The use authorized by this permit is limited solely to the purposes set forth herein, and, except as expressly herein provided, construction, excavation or installation of structures is not authorized.
4. Neither City nor any commission, board, officer, or employee thereof shall be held responsible or liable for damage to any property of the Permittee installed or located on the premises covered by this permit.
5. Permittee shall at all times keep City's lands in good and sightly condition, so far as the same may be affected by Permittee's operation hereunder.
6. In the event City institutes and prevails in any action for the enforcement of any of its rights hereunder, Permittee will pay to City such reasonable attorney's fees as may be determined by the Court, as part of the costs of such action.

7. Permittee shall, on receipt of notice to do so and within such reasonable time limits as may be fixed by said notice, alter or remove at his own expense any of his improvements, plantings, or other property to such extent as may be required to avoid interference with any of City's pipe, power lines, or other structures now or hereafter to be constructed, with the maintenance thereof, or with any other operations or land use by City. In the event Permittee fails to alter or remove any of his improvements, plantings, or other property within the time limit specified in said notice, said improvements, plantings, or other property may be removed by City, the reasonable expense of which shall be paid to City by Permittee.

8. In the event of any emergency City may, at its sole option and without notice, alter, remove or protect at Permittee's expense, any improvements, plantings, or other property, except utility facilities owned either by a private company or a public agency. On notice that an emergency exists, owners of utility facilities, at their own expense, must take immediate action to protect, remove or relocate such facilities as required to meet the emergency.

9. Permittee shall be responsible and liable for any and all damage to City's structures or property, due directly or indirectly to Permittee's occupation and use of City lands pursuant to this permit, and shall promptly pay any just claim therefor. Permittee shall assume the defense of and indemnify and save harmless the City and County of San Francisco, its Public Utilities Commission, officers, and employees from all claims, loss, liens, damage, injury and liability of every kind, nature and description, directly or indirectly arising from Permittee's occupation and use of City lands pursuant to this permit regardless of responsibility for negligence.

10. Any gardening or landscaping shall be limited to low growing shrubs, grass or plants. Planting of trees on pipeline or electric line rights-of-way is expressly not permitted.

11. To the extent that any special conditions set forth herein conflict with or are inconsistent with the printed conditions, the special conditions shall prevail.

12. In the event the purpose of this permit is to allow Permittee to install utility facilities underground across City's premises, the clear distance between the bottom of Permittee's installation and the top of City's existing and proposed future water lines shall not be less than six inches and Permittee's said installation shall be placed at an approximately constant grade for the entire crossing.

13. In the event the purpose of this permit is to allow Permittee to install utility facilities underground across City's premises, Permittee shall properly mark the alignment of the underground installation with witness posts.

14. All conditions of this permit are subject to periodic review.

15. This permit supersedes and revokes permit numbered 3137 commencing June 1974 and issued to City of Los Altos.

16. This permit is made subject to restrictions, conditions and to any and all easements and encumbrances of record.

17. Pursuant to Section 7 of this permit, City shall not be responsible for replacement of Permittee's improvements, plantings or other property.

    In the event maintenance is required on the existing pipelines or the installation of an additional line, then all costs of removing and replacing the Permittee's improvements shall be at no cost to the City.

18. Trees are expressly prohibited on Premises. Plants used for landscaping shall not exceed six (6) feet in height and shall be limited to varieties whose trunk at maturity does not exceed three (3) inches in diameter at a point six (6) inches above the ground surface.

19. Permittee's improvements and permitted area shall be in accordance with: (1) drawing entitled "Preliminary Landscape Plan" dated July 11, 1973, (revised March 21, 1974) prepared by Royston, Hanamoto, Beck & Abey, Landscape Architects; (2) set of Plans prepared by George Nolte and Associates, drawing numbers 6070-73, sheets 2, 3, 4 and 5 dated May 1974; and (3) drawing from City of Los Altos dated November 19, 1985, showing added permit area for City of Los Altos. Copies of said drawings, bearing signed approval of General Manager and Chief Engineer of San Francisco, hereinafter called "Manager", are on file with the Water Department.

    Permittee shall not perform any new earthwork, construction work or alteration work on Premises without prior written approval of Manager. Permittee shall notify the Manager of Suburban Operations of the San Francisco Water Department, Telephone (415) 697-4424, five (5) working days prior to the date of undertaking any work so approved.

20. Permittee shall exercise extreme care in the use of any tools and equipment in the course of any work permitted hereunder so as to not damage or injure City's pipelines or appurtenances. Permittee's use of vehicles and construction equipment within twenty (20) feet of City's pipelines shall be restricted as follows:

    a. Minimal cover over the pipelines shall be three (3) feet.

b. "Axle loading" of vehicles and construction equipment shall not exceed "AASHO Standard H-10 Loading". H-10 loading is defined as loading caused by a two axle truck with a gross weight of ten tons (20,000 lbs.), axles 14 feet apart, and rear axle carrying 8 tons (16,000 lbs.). It is Permittee's responsibility to provide substantiation that his equipment meets this requirement. Should this loading requirement prove to be inadequate protection for the pipelines, a more stringent limitation should be effective upon City's notice to Permittee.

c. The use of vibrating compaction equipment is prohibited.

21. Permit drawing attached and made a part of this permit shows the location of all City's pipeline right-of-way survey monuments. These monument points are noted in the drawings as "Existing" for monuments in place, and "Missing" for monuments not in place.

In accepting this permit, Permittee acknowledges that "existing" monuments are in good condition. During the term of this permit, Permittee shall assume full responsibility for protecting "existing" monuments from dislocation, damage and destruction.

Permittee agrees to reimburse City in the amount of $750.00 for each monument necessitating resurvey, repair and/or replacement.

During the term of this permit, the City may replace "missing" monuments, or install new monuments. When "missing" monuments are replaced, or new monuments installed, the Permittee will be given written notice and thereafter Permittee shall assume the same protection and reimbursement responsibilities as with "existing" monuments provided herebefore.

22. This permit shall commence retroactively from December 1, 1985 and shall be subject to annual review unless revoked sooner, pursuant to hereinabove Condition No. 2.

23. Permittee shall reimburse the City for fifty percent (50%) of all taxes and assessments levied on the subject permit area. Permittee recognizes and understands that this permit may create a possessory interest subject to property taxation and that the Permittee may be subject to the payment of property taxes levied on such interest.

24. Exhibit A entitled "Addendum to All City and County of San Francisco Contracts" is attached hereto and is hereby incorporated by reference.

25. Public Liability and Property Damage Insurance:

Permittee agrees to maintain in force during the existence of this permit, and at its cost and expense, comprehensive general liability insurance, including automobile and products liability insurance if required by the Public Utilities Commission. The policy or policies of said insurance shall name as insured, or as additional insureds, City, Public Utilities Commission and its members, and the officers, agents and employees of each. Said policy or policies shall insure said persons against loss or liability for damages for bodily injury, death or property damage occasioned by reason of the operations of Permittee in, on and about the property permitted to be occupied by or used with minimum liability limits as follows:

$1,000,000 Combined Single Limit for bodily injury or death of any one person; and
for bodily injury or death of two or more persons,
in any one occurrence; and
for damage to property resulting from any one occurrence.

A copy of said insurance policy or policies shall be furnished to the General Manager and Chief Engineer, San Francisco Water Department, hereinafter referred to as Manager, upon the execution of this permit and shall contain a provision that written notice of cancellation or of any material change thereof shall be delivered to Manager thirty (30) days in advance of the effective date thereof. In the event that others than the aforesaid persons are named in said policy or policies as insureds, or additional insureds, Permittee shall furnish Manager with a satisfactory severability of interests endorsement thereon. Approved forms of the last two aforesaid endorsements may be obtained from Manager.

Thereafter and during the term of this permit, Permittee shall furnish to Manager, from time to time, a duly executed certificate to the effect that the insurance coverage furnished to City is being maintained by Permittee. Such policies or certificates shall be issued by a company or companies approved in writing by City's Controller and as to form by City's City Attorney. Permittee shall increase the aforesaid limits upon the written demand of City provided that said increases are reasonable and justifiable by City.

Dated February 4, 1987

PERMITTEE

City of Los Altos

By _____

City Manager
Title

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION

General Manager of Public Utilities

By _____

JAMES D. COONEY
General Manager and Chief Engineer
San Francisco Water Department

Dated FEB 24 1987

EXHIBIT A

CHAPTER 12C OF THE SAN FRANCISCO ADMINISTRATIVE CODE

AMENDING THE SAN FRANCISCO ADMINISTRATIVE CODE BY ADDING CHAPTER 12C THERETO, PROHIBITING DISCRIMINATION IN REAL PROPERTY CONTRACTS ON THE GROUND OR BECAUSE OF RACE, COLOR, CREED, NATIONAL ORIGIN, ANCESTRY, AGE, SEX, SEXUAL ORIENTATION OR DISABILITY.

Be it ordained by the People of the City and County of San Francisco:

Section 1. Chapter 12C is added to the San Francisco Administrative Code to read as follows:

CHAPTER 12C

NONDISCRIMINATION IN PROPERTY CONTRACTS

SEC. 12C.1. All Property Contracts to Include Nondiscrimination Provisions.

All contracting agencies of the City and County of San Francisco, or any department thereof, acting for or on behalf of the City and County, shall include in all contracts, franchises, leases, concessions or other agreements involving the lease, rental, or other use of real property and improvements thereon of the City and County of San Francisco, for a period exceeding twenty-nine (29) days in any calendar year, whether by singular or cumulative instrument, a provision obligating the contractor, franchisee, lessee, concessionaire, or other party of said agreement not to discriminate on the ground or because of race, color, creed, national origin, ancestry, age, sex, sexual orientation or disability against any person seeking accommodations, advantages, facilities, privileges, services, or membership in all business, social, or other establishments or organizations, operating from or making use of said real property, and shall require such contractor, franchisee, lessee, or concessionaire to include a similar provision in all subcontracts, subleases, or other subordinate agreements for a period exceeding twenty-nine (29) days in any calendar year, whether by singular or cumulative instrument, let, awarded, negotiated or entered into thereunder.

SEC. 12C.2. Definitions.

As used in this chapter the term:

"Age" for the purpose of membership refers to and shall include any person who has attained the age of eighteen (18) years, except for bona fide senior citizen organizations.

"Contract" shall mean and include an agreement to operate from or make use of real property of the City and County of San Francisco in the operation of a business, social, or other establishment or organization.

"Contractor" means any person or persons, firm, partnership, corporation, or combination thereof, who enters into a contract to operate from or make use of real property of the City and County of San Francisco in the operation of a business, social, or other establishment or organization.

"Subcontract" shall mean and include an agreement or contract under or subordinate to a prime contract, franchise, lease, or concession to operate from or make use of real property of the City and County of San Francisco in the operation of a business, social or other establishment or organization.

"Concession" includes a grant of land or other property by or on behalf of the City and County of San Francisco to a person for the purpose or use specified in said grant.

"Concessionaire" shall mean and include a person who is the grantee or beneficiary of a concession as herein defined.

"Franchise" shall mean and include a right or privilege conferred by grant from the City and County of San Francisco, or any contracting agency thereof, and vested in and authorizing a person to conduct such business, social, or other activity as is specified in said grant.

"Franchisee" shall mean and include a person who is the grantee or beneficiary of a franchise as herein defined.

"Instrument" shall mean and include a contract, franchise, lease, concession or other agreement to operate from or make use of real property of the City and County of San Francisco in the operation of a business, social or other establishment or organization.

"Lease" shall mean and include a contract by which the City and County of San Francisco, or any contracting agency thereof, grants to a person the temporary possession and use of property, for reward, and the latter agrees to return the same to the former at a future time.

"Lessee" shall mean and include a person or tenant taking possession of real property under a lease as herein provided.

"Sublease" shall mean and include a lease by which a lessee or tenant transfers or lets to another person part or all of the leased real property for a portion of the term and under which said lessee or tenant retains some right or interest under the original lease.

"Real Property" shall mean and include land in which the City and County of San Francisco holds a legal interest and improvements to said real property.

"Sex" shall mean the character of being male or female.

"Sexual Orientation" shall mean the choice of human adult sexual partner according to gender.

"Disability" is a physical or mental impairment which does not make the person incapable of making use of the accommodations, advantages, facilities, privileges, services or membership in business, social or other establishments or organizations with a reasonable accommodation to his or her disability, and does not make the person incapable of making such use in a manner which would not endanger his or her health and safety or the health and safety of others.

"Tenant" shall mean the person or persons, firm, partnership, corporation or combination thereof who enter into a contract, franchise, lease, concession or other agreement involving the lease, rental or other use of real property and improvements thereon of the City and County of San Francisco.

SEC. 12C.3. Nondiscrimination Provisions of Property Contracts.

Every contract, franchise, lease, concession or other agreement entered into by any agency of the City and County of San Francisco, or any department thereof, involving the lease, rental, or other use of real property and improvements thereon of the City and County of San Francisco for a period exceeding twenty-nine (29) days in any calendar year, whether by singular or cumulative instrument, shall contain the provisions following, which shall be known as the nondiscrimination provisions of such property contract.

In the performance of this contract, the tenant agrees as follows:

(a) The tenant or subtenant will not discriminate against any person seeking accommodations, advantages, facilities, privileges, services, or membership in the business, social or other establishment or organization operated by the tenant or subtenant on the real property of the City and County of San Francisco, on the ground or because of race, color, creed, national origin, ancestry, age, sex, sexual orientation, or disability.

(b) Should the tenant or subtenant operate as a membership organization, the tenant will permit access to his membership records, rules, regulations and other pertinent data, by the awarding authority, or the San Francisco Human Rights Commission, for the purpose of investigating to ascertain compliance with the nondiscrimination provisions of this contract, and on request provide evidence that has or will comply with the nondiscrimination provisions of this contract.

(c) That tenant or subtenant shall be deemed to have breached the nondiscrimination provisions of this contract upon:

(1) A finding by the Director of the San Francisco Human Rights Commission or such other official who may be designated by the Human Rights Commission, that tenant has wilfully violated such nondiscrimination provisions.

(2) Upon such finding by the Director of the Human Rights Commission, or other official designated by the Human Rights Commission, the awarding authority shall notify tenant, or subtenant that unless he demonstrates to the satisfaction of the Director of the San Francisco Human Rights Commission or other official designated by the Human Rights Commission within such reasonable period as the Human Rights Commission shall determine, that the violation has been corrected, action will be taken as set forth in subparagraph (d).

(3) The Human Rights Commission shall, within ten days of the date of issuance of any finding by the Director of the Human Rights Commission or other official designated by the Commission in the enforcement of this chapter, mail to any person or persons affected by said finding, a copy of said finding, together with written notice of his right to appeal. Notice of appeal must be filed in writing with the Chairman of the Commission within 20 days of the date of mailing said copy and notice.

(4) For purposes of appeal proceedings under this section, a quorum shall consist of eight members of the Commission. The vote of the majority of the full Commission shall be necessary to affirm, reverse or modify such decisions, order or other action rendered hereunder. Should a member of the Human Rights Commission be designated under Section 12B.2 (c) (1) of this contract, that commissioner may not participate in an appeal under this section except as a witness.

(5) The presiding officer of the Commission shall have the power to administer oaths to witnesses in appeals before the Commission under this section. In the event that any person shall fail or refuse to appear as a witness in any such proceeding after being requested to do so, and if it shall appear to the Commission that his testimony, or books, records, documents or other things under his control are material and relevant as evidence in the matter under consideration by the Commission in the proceeding, the presiding officer of the Commission may subpoena such person, requiring his presence at the proceeding and requiring him to bring such books, records, documents or other things under his control.

(6) All appeals to the Human Rights Commission shall be open to public inspection. Upon reaching a decision in any appeal, the Commission shall give written notice thereof to the Director of the Human Rights Commission, or other official designated by the Human Rights Commission, and the appellant or appellants. The decision of the Commission shall be final unless within 15 days of the filing and service of written notice thereof appropriate legal proceedings are filed in a court of competent jurisdiction by any party to this contract.

(7) If any tenant or subtenant under contract to the City and County of San Francisco shall fail to appear at an appeal proceeding of the Commission after having been given written notice to appear, such failure to appea shall be grounds for cancellation of the contract or subcontract and such tenant or subtenant shall be deemed to have forfeited all rights, benefits and privileges thereunder.

(8) The Human Rights Commission of San Francisco shall promulgate rules and regulations for the implementation of the nondiscrimination provisions of this contract, and such rules and regulations shall, so far as practicable, be similar to those adopted in applicable federal executive orders.

(d) A breach of the nondiscrimination provisions in the performance of this contract shall be deemed by the City and County of San Francisco to be a material breach of contract and basis for determination by the officer, board or awarding authority responsible for the awarding or letting of such contract that the tenant or subtenant is an irresponsible tenant, lessee, franchisee or concessionaire as to all future contracts for the use of real property. Such person, firm or corporation shall not, for a period of two (2) years thereafter, or until he/she shall establish and carry out a program in conformity with the nondiscrimination provisions of this contract, be allowed to act as a tenant or subtenant under any contract involving the lease, rental or other use of real property and improvements thereon, of the City and County of San Francisco.

(e) Nothing contained in this contract shall be construed in any manner so as to prevent the City and County of San Francisco from pursuing any other remedies that may be available at law.

SEC. 12C.4. Human Rights Commission Empowered.

The San Francisco Human Rights Commission, its presiding officer and its director are hereby granted the power to do all acts and exercise all powers referred to in Section 12C.2 hereof.

SEC. 12C.5. Funding.

The Board of Supervisors shall appropriate such funds from the general fund of the City and County of San Francisco, subject to budgetary and fiscal provisions of the charter, as it may deem necessary for enforcement of this ordinance.

SEC. 12C.6. Severability.

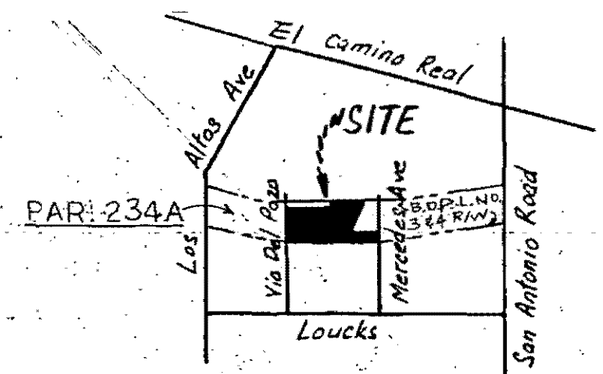
If any clause, sentence, paragraph or part of this title or the application thereof to any person or circumstances shall, for any reason, be adjudged by a court of competent jurisdiction to be invalid, such jurisdiction shall not affect, impair or invalidate the remainder of this chapter.

Final Passage-February 28, 1977
Approved by Mayor-March 11, 1977

Froid

Merced
Condominium

1071



VICINITY MAP

Property Line

20'

all existing bushes and shrubs not shown

Parking Lot

VIA DEL POZO

Existing

Existing landscaping

Proposed landscaping to match existing
1 Oleander & 6 Ligustrum Japonicum

Existing Fence

Pathway

Property Line/Fence

Cottonwood tree to be removed

APPROVED DRAWING FOR
SAN FRANCISCO WATER DEPT.
LAND USE

Thomas Chan 1/15/81
THOMAS CHAN DATE
SENIOR CIVIL ENGINEER

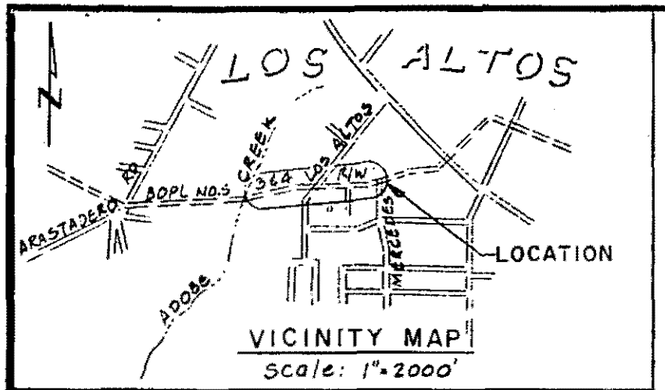
1061

1062

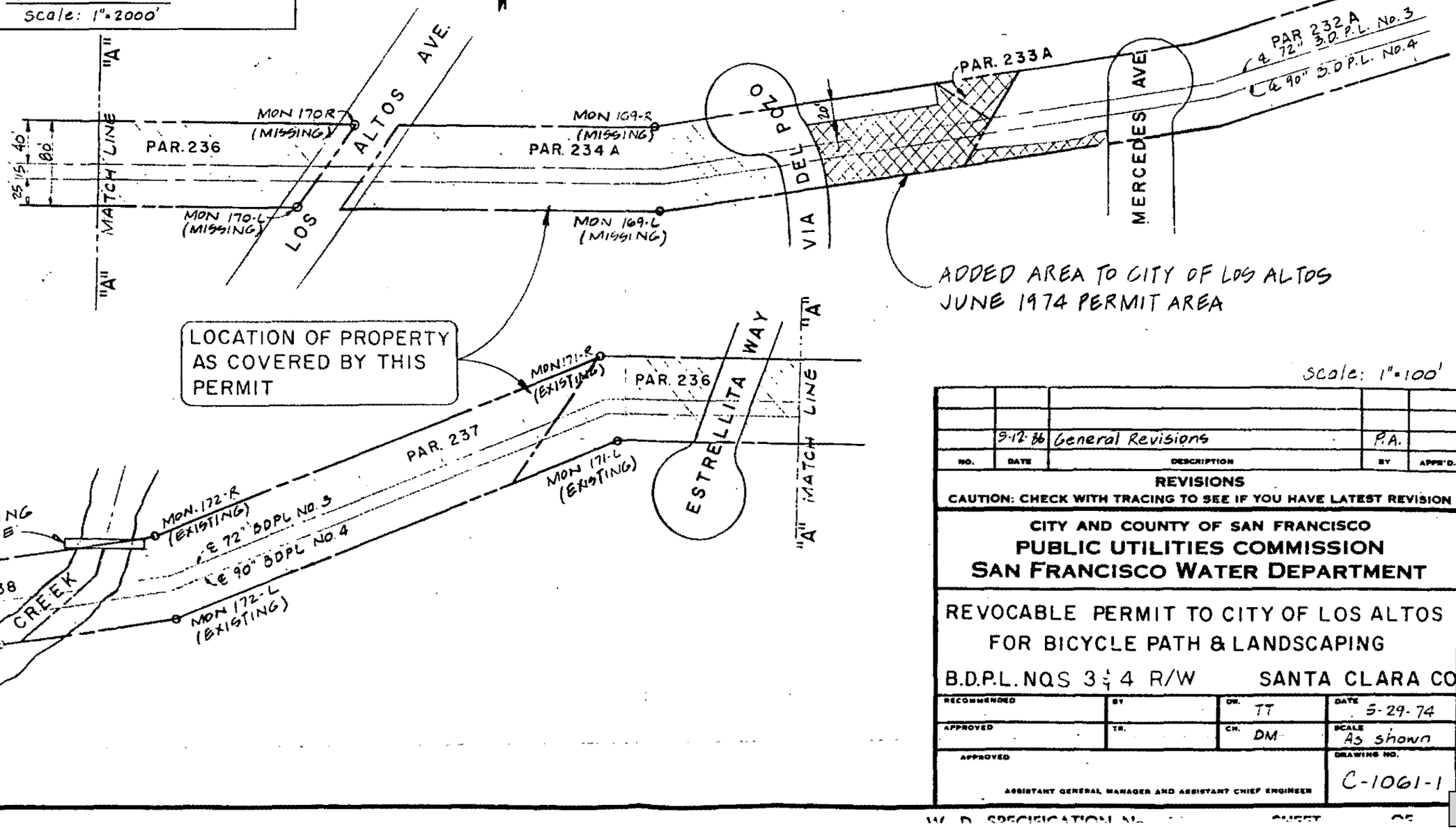
MERCEDES AVENUE

CITY OF LOS ALTOS SCALE: 1" : 20'

ADDED AREA OF CITY OF LOS ALTOS
JUNE, 1974 PERMIT
NOVEMBER 19, 1985



VICINITY MAP
Scale: 1"=2000'



Scale: 1"=100'

NO.	DATE	DESCRIPTION	BY	APPR'D.
	9-12-86	General Revisions	P.A.	

REVISIONS
CAUTION: CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
SAN FRANCISCO WATER DEPARTMENT

REVOCABLE PERMIT TO CITY OF LOS ALTOS
FOR BICYCLE PATH & LANDSCAPING

B.D.P.L. NOS 3 & 4 R/W SANTA CLARA CO

RECOMMENDED	BY	DR. TT	DATE 5-29-74
APPROVED	TR.	CH. DM	SCALE As shown
APPROVED ASSISTANT GENERAL MANAGER AND ASSISTANT CHIEF ENGINEER			DRAWING NO. C-1061-1

W. D. SPECIFICATION No. SHEET OF

Department of Public Works
Engineering Division
One North San Antonio Road
Los Altos, California 94022-3087
(650) 947-2780
Fax (650) 947-2732

RECEIVED
MAR 23 2005
REAL ESTATE SERVICES

March 22, 2005

Gary Dowd, Director of Real Estate
SAN FRANCISCO PUBLIC UTILITIES COMMISSION
Real Estate Services
1155 Market Street, 4th Floor
San Francisco, CA 94103

SUBJECT: HETCH HETCHY RIGHT OF WAY LAND USE PERMIT

Dear Mr. Dowd,

The City of Los Altos currently holds a Land Use Permit from the San Francisco Public Utilities Commission to occupy and utilize the entirety of Parcel 233-A and portions of Parcels 232-A, 234-A, 236 and 237 of Bay Division Pipeline Nos. 3 and 4 right of way for the purpose of a bicycle path and landscaping. A copy of the Use Permit is attached. A bicycle path exists on Parcels 236 and 237. Parcel 233-A and portions of Parcels 232-A, 234-A are currently undeveloped.

Los Altos requests that the Use Permit by modified to delete Parcel 233-A and portions of Parcels 232-A, 234-A from the Use Permit. The City has abandoned our proposed plan to construct a bicycle path in this area west of Los Altos Avenue. However, we wish to continue to maintain the existing bicycle path and landscaping east of Los Altos Avenue on Parcels 236 and 237. A drawing showing the area to be deleted from the Use Permit is attached.

Please advise on the process or procedure for modifying the Use Permit. Your assistance in this matter is greatly appreciated. If you have any questions, please feel free to contact me at (650) 947-2622.

Sincerely,

Jim Porter
Public Works Director

Attachments

Agenda Item # 14.

SFPUC

WATER
HETCH HETCHY WATER & POWER
CLEAN WATER

GAVIN NEWSOM
MAYOR

RICHARD SKLAR
PRESIDENT

ANN MOLLER CAEN
VICE PRESIDENT

E. DENNIS NORMANDY
ADAM WERBACH
RYAN L. BROOKS

SUSAN LEAL
GENERAL MANAGER

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

REAL ESTATE SERVICES
1155 Market St., 4th Floor, San Francisco, CA 94103 • Tel. (415) 487-5210 • Fax (415) 487-5200

April 22, 2005

Jim Porter, Public Works Director
The City of Los Altos
Department of Public Works
One North San Antonio Road
Los Altos, CA 94022-3087

SUBJECT: HETCH HETCHY RIGHT OF WAY LAND USE PERMIT

Dear Mr. Porter,

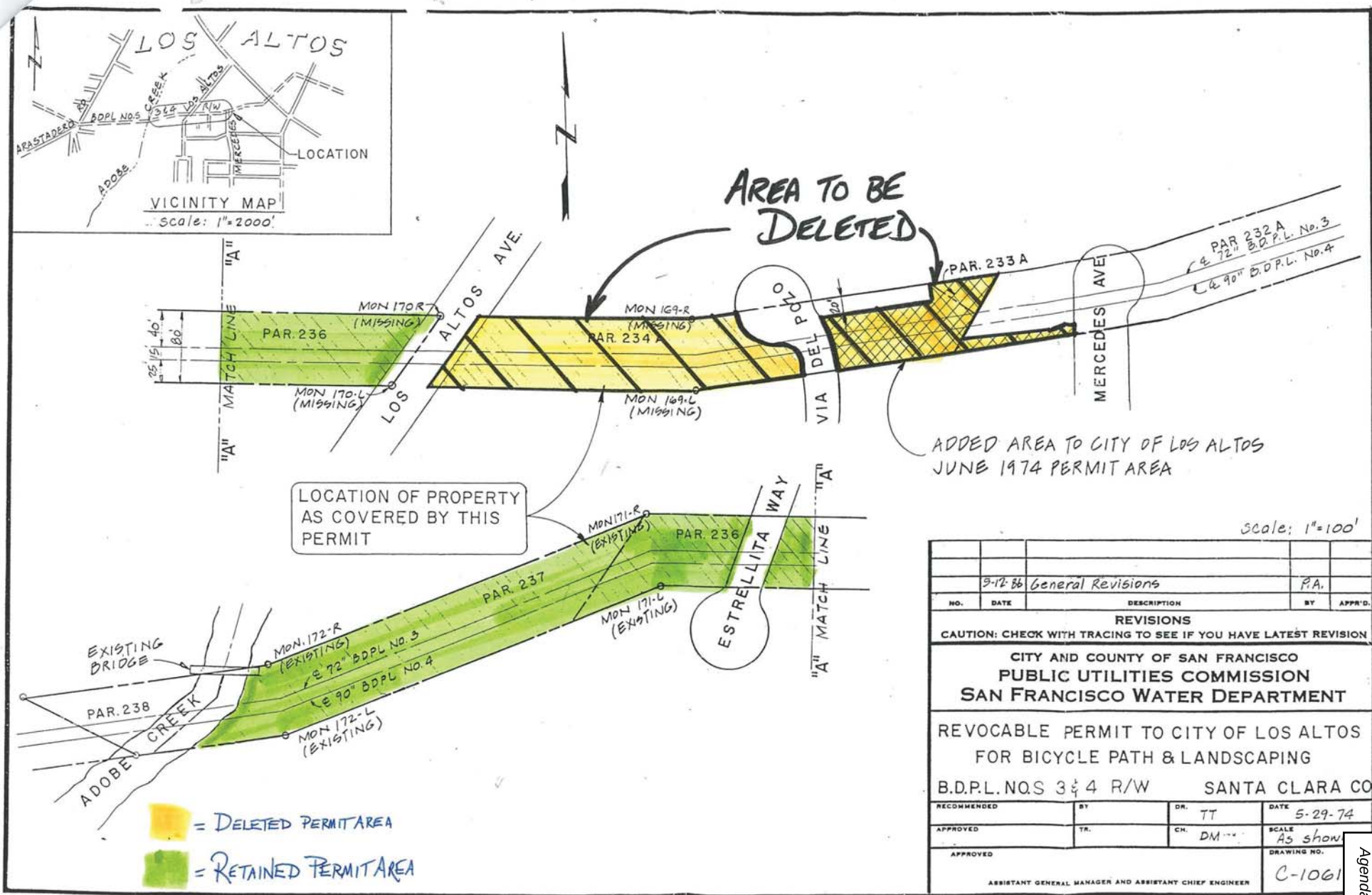
Per the request of the City of Los Altos to delete portions of the Land Use Permit P-3137A, the San Francisco Public Utilities Commission has agreed to the deletions for the entirety of Parcel 233-A and portions of Parcels 232-A and 234-A from the land use permit. The Land Use Permit will retain Parcels 236 and 237, including the maintenance of the bike path and landscaping on those parcels. The Land Use Permit has been renumbered P-3137B. A map showing the active parcels covered under this permit is attached.

If you have any questions regarding this matter, feel free to contact me at (415) 554-1522.

Sincerely,

Robert Reiter
Real Property Officer

Attachments



scale: 1"=100'

NO.	DATE	DESCRIPTION	BY	APPR'D.
	5-12-86	General Revisions	P.A.	

REVISIONS
CAUTION: CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
SAN FRANCISCO WATER DEPARTMENT

REVOCABLE PERMIT TO CITY OF LOS ALTOS
FOR BICYCLE PATH & LANDSCAPING
B.D.P.L. NOS 3 & 4 R/W SANTA CLARA CO

RECOMMENDED	BY	DR. TT	DATE 5-29-74
APPROVED	TR.	CH. DM	SCALE As shown
APPROVED ASSISTANT GENERAL MANAGER AND ASSISTANT CHIEF ENGINEER			DRAWING NO. C-1061

W. D. SPECIFICATION No. SHEET OF

From: Janice Bohman
To: Public Comment; City Council
Subject: PUBLIC COMMENT AGENDA ITEM #14 9/20/22
Date: Sunday, September 18, 2022 2:10:12 PM

Dear Council Members:
Please do not rubber stamp the SFPUC agreement. Those of us who use the path and also appreciate the established tree canopy of Los Altos would like to find a way to help SFPUC reduce the damage from their proposed actions.
Let us work together on this.
Thank you,
Janice Bohman
Dixon Way

From: Stanford Alumni
To: Public Comment
Subject: Hetch Hetchy Trail license agreement
Date: Sunday, September 18, 2022 10:35:51 PM
Attachments: Tom Evatt Park.png
John W. Christian Greenbelt.png
John Christian Greenbelt Sunnyvale .png
B9F8E1D4-2F6A-4E73-87B3-C82AE82CE6B4.png

To the honorable Los Altos City Council,

I am writing in regards to the updated license agreement with SFPUC for the Hetch Hetchy Trail (item 14 on the Agenda for the Tuesday, Sept. 20, 2022 meeting). As you know, interest in this item is quite high based on the large turnout at the meeting held about the Hetch Hetchy property in the community center (see photo).

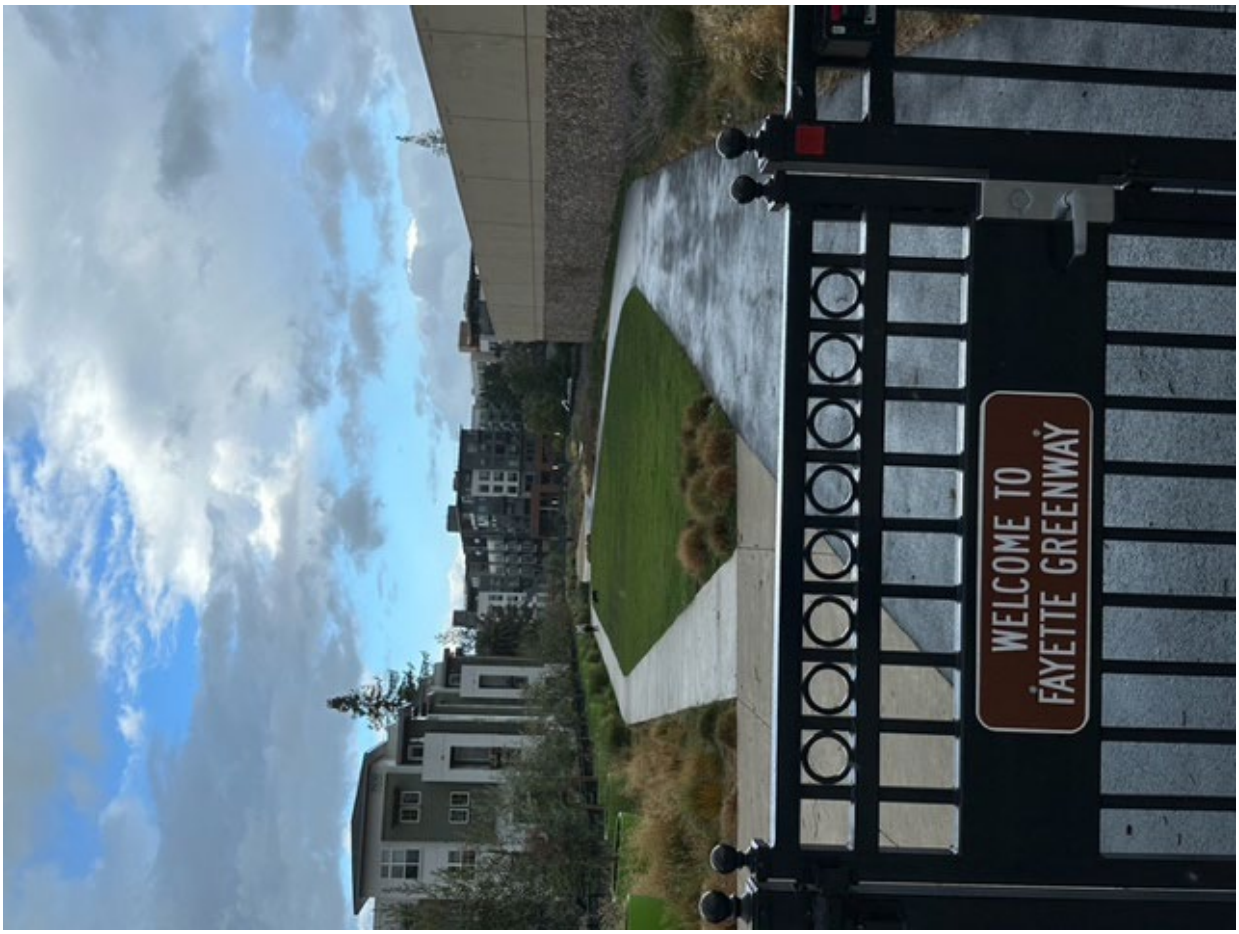
I would like to propose that as part of the negotiations, the city of Los Altos develop a plan and form a committee for improving the existing trail and make it into a better maintained greenbelt. This can be presented as part of the discussions with the Hetch Hetchy board. It could also be included in the agreement such that they cannot later change it.

If you follow the Hetch Hetchy pipeline through other cities, you will see many parks and greenbelts that are built over the pipeline including right across the street from Los Altos at 2640 W. El Camino Real in Mountain View. Other locations similar in shape to the Los Altos trail are the long multiple greenbelts called "John W. Christian Greenbelt" in Sunnyvale and the Tom Evatt Park in Milpitas. Photos of these three areas are attached below.

The concern that people have is the threat of cutting down the trees on the property. There are many tall older trees that are largely along the perimeter of the property. Some of these trees are old oak trees likely planted over 100 years ago when the Hetch Hetch Aqueduct was built in the years from 1914 to 1934. Many of these trees appear to be over 25 feet away from the underground pipeline and most of them are over 15 feet away, however the Hetch Hetchy property is wider than this at 80 feet wide. This means that per the Hetch Hetchy diagram, any tree that is over 20 feet high or has a canopy over 15 feet wide can be removed (see the green zone in the document attached).

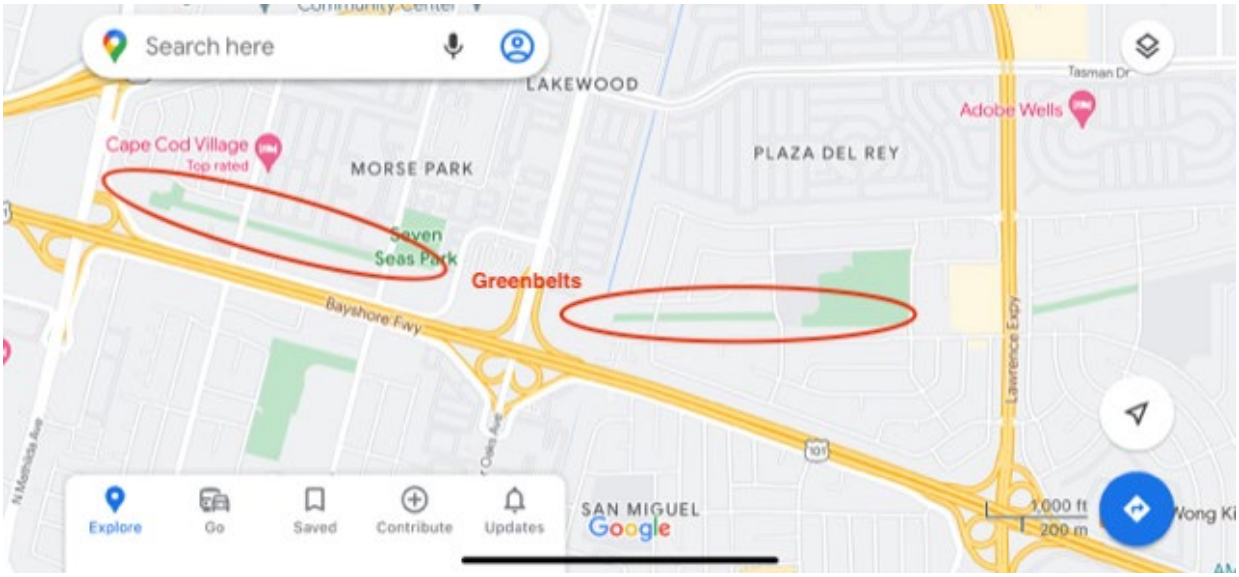
With best regards,
Donald Gardner, Ph.D.
180 Larsens Landing
Los Altos, CA

Fayette Greenway, 2640 W. El Camino Real, Mountain View



Tom Evatt Park, Milpitas

John W. Christian Greenbelt, Sunnyvale



Partial list of parks and greenbelts over the Hetch Hetchy pipeline

Fayette Greenway Park, Mountain View

Klein Park, Mountain View

Rengstorff Park, Mountain View

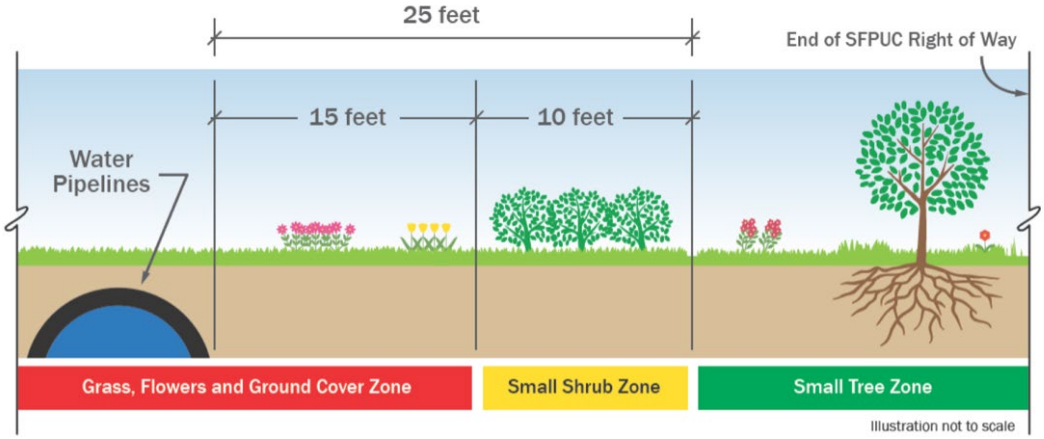
Rex Manor Park, Mountain View

Whisman Park, Mountain View
Sunnyvale Golf Course
John W. Christian Greenbelt, Sunnyvale
Seven Seas Park, Sunnyvale
Lakewood Park, Sunnyvale
Ulistac Natural Area, Santa Clara
Tom Evatt Park, Milpitas

Meeting held to discuss the Hetch Hetchy trail in Los Altos

San Francisco Public Utilities Commission (SFPUC)

Right Of Way (ROW) Landscape Vegetation Guidelines



The following vegetation types are permitted on the ROW within the appropriate zones.

Plantings that may be permitted directly above existing and future pipelines:

Ground cover, grasses, flowers, and very low growing plants that reach no more than one foot in height at maturity.

Plantings that may be permitted 15–25 feet from the edge of existing and future pipelines:

Shrubs and plants that grow no more than five feet tall in height at maturity.

Plantings that may be permitted 25 feet or more from the edge of existing and future pipelines:

Small trees or shrubs that grow to a maximum of twenty feet in height and fifteen feet in canopy width or less.

From: Chris Tucker
To: Public Comment
Subject: [Suspicious Impersonation] SFPUC agreement and trees on Hetch Hetchy trail.
Date: Monday, September 19, 2022 12:19:44 PM

Dear Members of the Los Altos City Council,

I am requesting that you do NOT sign the SFPUC agreement yet. I understand you are obligated to consider the agreement but we residents of Los Altos were only just recently made aware of the intentions of the SFPUC tree removal along the Hetch Hetchy path that lies within Los Altos.

We think signing the agreement now may result in trees being removed that are not actually impeding maintenance of the SFPUC pipe. We would like the city arborist, a representative from SFPUC and any other pertinent city officials and residents to walk the train together to mark the actual location of the pipe and so as to protect trees that are not a threat or actually lie on private property.

Please do not sign the SFPUC agreement until more information can be gathered.

respectfully,
Chris Tucker
280 Margarita Crt.
Los Altos

PUBLIC CORRESPONDENCE

The following is public correspondence received by the City Clerk's Office after the posting of the original agenda. Individual contact information has been redacted for privacy. This may *not* be a comprehensive collection of the public correspondence, but staff makes its best effort to include all correspondence received to date.

To send correspondence to the City Council, on matters listed on the agenda please email PublicComment@losaltosca.gov

From: Todd Basche
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #14 9/20/22
Date: Monday, September 19, 2022 2:41:44 PM

The new agreement is 47 pages long.
Please work WITH the community that elected you.
1. Postpone approving the agreement for one week.
2. Adequately publicize a meeting with the community to discuss the new proposal. We had over 100 people last week with nearly no notice.
3. Gabe should present a few Powerpoint slides highlighting the key elements of the new plan.
4. Agree to have a small group of specific residents walks the path with Gabe and SFPUC to mark trees etc.
(all abutters and some users of the Bike Path.)
5. Then, after that, you can sign and have changed the tone of the Council to one of actually getting the community input.

Todd
[redacted]

From: Todd Basche
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #14 9/20/22
Date: Monday, September 19, 2022 2:48:42 PM

The new agreement is 47 pages long.
Please work WITH the community that elected you.
1. Postpone approving the agreement for one week.
2. Adequately publicize a meeting with the community to discuss the new proposal. We had over 100 people last week with nearly no notice.
3. Gabe should present a few Powerpoint slides highlighting the key elements of the new plan.
4. Agree to have a small group of specific residents walks the path with Gabe and SFPUC to mark trees etc.
(all abutters and some users of the Bike Path.)
5. Then, after that, you can sign and have changed the tone of the Council to one of actually getting the community input.

Todd and Rahn Basche
1060 Estrellita Way Los Altos, ca. 94022
[redacted]

From: Holly Cohen
To: City Council; Public Comment
Cc: Anita Enander; Sally Meadows; Neysa Fligor; Lynette Lee Eng; Jonathan Weinberg; Holly Cohen
Subject: Please Do Not sign the agreement with SFPUC re: the Hetch Tetchy Bike Walking Path
Date: Monday, September 19, 2022 3:47:50 PM

Los Altos City Council,
At your Council meeting tomorrow evening, you will be asked to vote on an agreement with SFPUC regarding the Hetch Hetchy Bike Walking Path from Adobe Creek to Mercedes (item #14 on the agenda). **Please vote NO** tomorrow evening**.**

Community members need the opportunity to review the agreement, understand the implications and offer perspective. There has not been sufficient time for the community to weigh in – and with a NO vote tomorrow night, you will enable the community to have a voice in your decision-making process.

Thank you for your consideration,

Holly Cohen
1031 Via Del Pozo, Los Altos

From: James Oh
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #14 9/20/22
Date: Tuesday, September 20, 2022 12:12:02 AM

I would like to very much express my appreciation to Gabe Engeland for taking the time last Thursday to explain the license renewal situation with SFPUC and to field all the questions from the 104 people in attendance at the information session. As we saw at the information session, it was very clear that there was very passionate interest by the community to make sure the Hetch Hetchy path is kept as tree-friendly as possible.

And personally as an abutter to the path, there are two large oak trees that are right next to our property that sounds like they are at high risk from the SFPUC maintenance guidelines. It would be a tragedy if these beautiful trees were lost unnecessarily.

While we understand Gabe's strategy to try to get on good terms with the SFPUC for negotiating saving as many trees as possible, we believe this is a high risk strategy. We would like to involve the community in trying to figure out the best approach for negotiating with the SFPUC.

To this end, we would like to make the following recommendations for the approval tomorrow:

- DO NOT sign or approve the agreement with SFPUC on Sept 20th
- Ask the council members to form a committee with residents to review the SFPUC issue; let's include the community in this discussion.
- Give that combined committee time to meet with SFPUC and bring them to the table for a discussion.

We hope that we can cooperatively figure out the best strategy for resolving this situation with the SFPUC.

Thank you for all your help.

James Oh and Jooyeon Ann, 1081 Laureles Drive

From: Vincent Au
To: Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #14 9/20/22
Date: Tuesday, September 20, 2022 8:59:09 AM

Hi City of Los Altos,

We would like to express our concerns to allow SFPUC to cut down the large heritage trees on the Hetchy Hetchy path. This is a path that we enjoy and use daily and it would be a great loss to the city of Los Altos, if the natural beauty of the path was lost.

While we understand that SFPUC would like to cut the trees down for maintenance, I believe a compromise including discussions with members of the community should be completed and also looking into other ways of performing maintenance while saving as many of the trees as possible. Los Altos goes to large efforts to protect all heritage trees and I believe the same rules should apply in this case.

Thank you for your help.

Thanks,
-Vincent

From: Stanford Alumni
To: Public Comment
Subject: Hetch Hetchy Trail license agreement
Date: Tuesday, September 20, 2022 10:58:01 AM
Attachments: Alta Mesa Mem Park 698 Arastradero Rd, Palo Alto.png
255 S. Rengstorff Ave, Mountain View.png
2333 California St across from Klein Park, Mountain View.png
Stanford Hills Park, Stanford.png
Foothills Tennis & Swim Club, Palo Alto.png
166 Escuela Ave, Mountain View.png
Albert Augustine Memorial Park 394 Coelho St Milpitas.png
700 Tangelo Ct. Fremont.png

To the honorable Los Altos City Council,

I am writing in regards to the updated license agreement with SFPUC for the Hetch Hetchy Trail (item 14 on the Agenda for the Tuesday, Sept. 20, 2022 meeting).

I received an inquiry from a council member about locations of parks and areas that have trees that are within 25 feet of the Hetch Hetchy pipeline. In response to this request, attached are images of parks and open areas that appear to have tall trees that are within 25 feet the Hetch Hetchy pipeline. Nearby locations with 40+ feet tall trees include the Rex Manor Park in Mountain View and the Alta Mesa Memorial Park at 700 Arastradero Rd, Palo Alto. There are also many areas along Junipero Serra Blvd and in the area of the Stanford Dish at Stanford University that appear to have such trees close to the pipelines. In addition, there is a location near 700 Tangelo Ct. Fremont where the pipeline crosses a stream with trees similar to that at Adobe Creek.

It is also worth noting that it has been shown that trees help reduce the soil disturbance and protect the land from liquifying during an earthquake. Trees are actually beneficial to be in the vicinity of the waterline to help protect it during an earthquake. Perhaps not all of the implications of removing trees have been considered.

With best regards,
Donald Gardner, Ph.D.

Attached is a list and images from 10 locations of parks and areas.

Rex Manor Park @ 185 Farley St., Mountain View
Alta Mesa Memorial Park @ 700 Arastradero Rd, Palo Alto
Park next to 255 S. Rengstorff Ave, Mountain View
2333 California St across from Klein Park, Mountain View
Stanford Hills Park, Stanford
Parking area at Foothill Tennis & Swim Club, Palo Alto
166 Escuela Ave. Mountain View
Albert Augustine Memorial Park @ 394 Coelho St Milpitas
700 Tangelo Ct. Fremont
Along Junipero Serra Blvd and in the area of the Stanford Dish at Stanford University

Rex Manor Park @ 185 Farley St., Mountain View

Alta Mesa Memorial Park @ 700 Arastradero Rd, Palo Alto

Park next to 255 S. Rengstorff Ave, Mountain View

2333 California St across from Klein Park, Mountain View

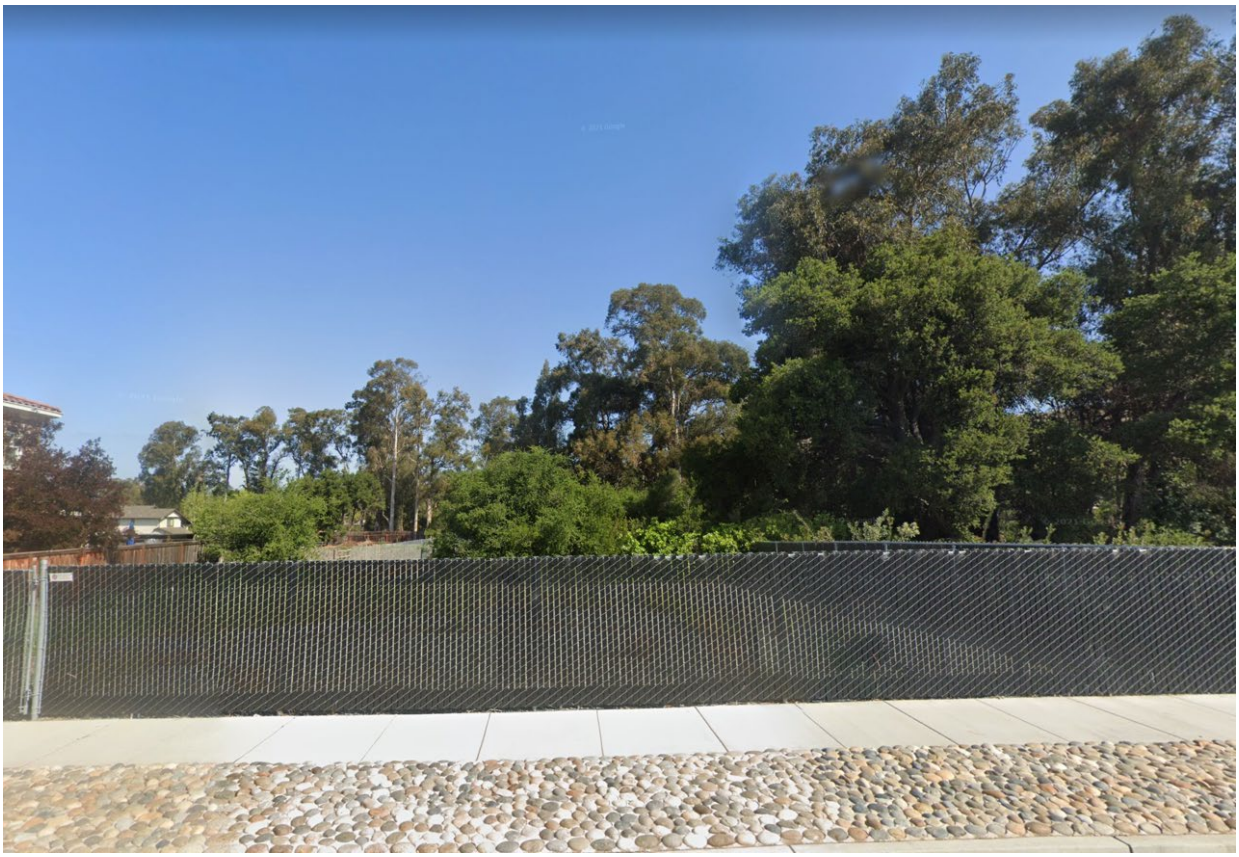
Stanford Hills Park, Stanford

Parking area at Foothill Tennis & Swim Club, Palo Alto

166 Escuela Ave. Mountain View

Albert Augustine Memorial Park @ 394 Coelho St Milpitas

700 Tangelo Ct. Fremont



From: Didier Moretti
To: Public Comment
Cc: Didier Moretti
Subject: SFPUC and the trail
Date: Tuesday, September 20, 2022 11:48:55 AM

Dear Members of the Los Altos City Council,

I am requesting that you do consider but NOT sign the SFPUC agreement yet. I understand you are obligated to consider the agreement but we residents of Los Altos were only just recently made aware of the intentions of the SFPUC tree removal along the Hetch Hetchy path that lies within Los Altos.

Our property is very near the trail and we use the trail often. Removing trees on the trail would result in complete lack of privacy in homes abutting the trail, or very near the trail like ours. It would also remove large areas of shade, with major adverse effects on current trees and vegetation in the adjoining areas and adjoining properties. It would result in a significant increase in noise from the sports fields and adjoining schools. Finally many of the trees are majestic oak trees that may be over 100 years old and should be protected to maintain the character of our Los Altos community.

We think signing the agreement now may result in trees being removed that are not actually impeding maintenance of the SFPUC pipe. We would like the city arborist, a representative from SFPUC and any other pertinent city officials and residents to walk the trail together to mark the actual location of the pipe and to work with the SFPUC to arrive at a reasonable solution that preserves the beautiful old trees along the trail.

Please do not sign the SFPUC agreement until more information can be gathered and reviewed, and a reasonable compromise struck with the SFPUC.

Respectfully,

Didier Moretti and Katrina Philip, 465 Mundell Way, Los Altos

Didier Moretti

From: Sanja Kelly
To: Public Comment
Subject: Agenda item 14
Date: Tuesday, September 20, 2022 2:22:45 PM

Esteemed Mayor and Members of the Los Altos City Council:

We are writing to you with a request that you **NOT sign the agreement with SFPUC that would cut down the trees along the Los Altos-Palo Alto Bike Path**. We were shocked to learn about this plan from a neighbor and are appalled that our own city government did not seek greater community input on an issue that would effectively wipe out one of the most beautiful green areas in our city.

The trees and greenery along the bike path provide much needed shade and relief during the hottest months. They contribute to the beauty of the area and allow for privacy for the adjacent property owners. For those who use the bike path for commuting, the trees make the ride more bearable in the heat, enabling us to cycle (instead of riding cars) lessening overall congestion and pollution.

Without the trees it would be a brown, dead, barren wasteland for 9 months of the year. It would adversely affect the enjoyment of those who regularly use the path and the property values of those who own lots near it. It would transform a picturesque pathway into an eye sore.

We understand that SFPUC might have legitimate needs for their property maintenance, but as part of any corporate-social responsibility commitment that most similar entities adhere to, **any action that might have negative consequences on a community needs to be (1) necessary, (2) proportionate, and (3) the least restrictive to achieve the intended legitimate goal.** We currently do not have any evidence that the tree removal is necessary (Have there been any assessments or studies for the path specifically?). Even if some trees are shown to have the impact, we ask you whether the action of cutting down *all trees* is proportionate.

We urge the council not to sign the agreement today. Instead, we hope that you would form an advisory committee in partnership with residents to search for a solution and draft an addendum to the agreement that would be acceptable to all. As the city council, your job is to represent the interests of our community and our community has told you loud and clear–including in the meeting last week attended by over 100 residents – that we do not want the agreement signed as it currently stands.

We typically do not care about local politics, but this will be our #1 issue in the local elections this fall. Many others feel the same.

Sincerely,

Sanja and Jason Kelly

From: Lisa Bernard
To: Public Comment
Subject: PUblic Comment Agenda Item #14 on 09/20/22
Date: Tuesday, September 20, 2022 3:34:36 PM

Please do not cut down the trees lining the pathway. Clear cutting is excessive and unnecessary. Green Los Altos has an initiative to plant new trees, which require more water than existing, older ones, and we are proposing to cut down establshed oak trees.

Nature is beautiful;. Part of the charm of Los ALtos is being able to meander along paths. If all the trees are cut down it will be ugly, unshaded, bad for the environment and extremely short-sighted on the town's behalf.

R Lisa Bernard, MD
Los Altos resident since 1994

From: Michael Ellerin
To: Public Comment
Subject: Agenda item #14 Hetch Hetchy Trail Land Use Permit
Date: Tuesday, September 20, 2022 4:47:55 PM

Please delay the signing of the Land Use Permit for just two weeks so the City can meet with each abutter and establish where the SFWD water pipes run alongside their property line and what trees are within 20’ of the southern pipe (90”) and within 15’ of the northern pipe (72”).

Since SFWD wants to meet with only a representative of the City, this preliminary resident-focused process will give the abutters and the community that supports them the most comfort that they were heard and respected in this eleventh hour of negotiations.

Icing on the PR cake would be the City knowing which trees it too wants to save and is willing to offer removal services at the City's expense if a tree remains inside the clear-cut zones of 15 and 20 feet but needs to be removed for water pipe repair.

Michael Ellerin
311 Lunada Drive
Los Altos

From: Mary Fossourier
To: Public Comment; PublicComment@losaltosca.govPublicComment@losaltosca.gov; Public Comment
Subject: PUBLIC COMMENT AGENDA ITEM #14 - MEETING DATE OF SEPT 20, 2022
Date: Tuesday, September 20, 2022 6:53:36 PM

Dear Mayor Anita Enander and City Council Members Sally Meadows, Neysa Fligor, Lynette Lee Eng and Jonathan Weinberg:

My family members are residents of Los Altos for more than 25 years. Although we are not directly on the SFPUC/HH path, we are nearby. And for all these years we have biked, jogged, walked, strolled all along the path. We love the path, we love Los Altos. We are so proud to be part of this community.

We already participated, live, in the meeting of Thurs Sept 15/22. It was earlier that week that we learned of the dastardly fate that awaits our Los Altos trees along that path. NOOOOOO! Please please please do not sign the the latest SFPUC agreement. It seems to us that doing so would be the "path of least resistance" for the City Council to take. And that is AFTER many years of procrastinating and temporizing on this issue. City Council has done nothing to prepare for this inevitability for year after year!

It is time for our City Council to DO its job! And that job is to work with the residents of Los Altos to prepare in the best possible manner for the future of our city. The City Council should work with other Mayors, including those of Palo Alto and Mountain View. You should work with the Mayor of San Francisco. You should understand the makeup of the SFPUC and those who work on the Hetch Hechy project. Work with all these groups instead of continuing to do nothing!

BOTTOM LINE: PLEASE DO NOT SIGN THE SFPUC AGREEMENT without the residents input.

Thank you!

from Mary et Jacques Fossourier,

25+ year residents of Los Altos.

1168 Laureles Drive, Los Altos, 94022.

[redacted]

AGENDA REPORT SUMMARY

Meeting Date: September 20, 2022

Subject 2021 Santa Clara County Multi-Jurisdictional Program for Public Information (PPI) Annual Report (FY22 - Year 1)

Prepared by: Steve Golden, Interim Planning Services Manager/Floodplain Administrator
Reviewed by: Nick Zornes, Development Services Director
Approved by: Gabriel Engeland, City Manager

Attachment(s):
1. Santa Clara County Multi-Jurisdictional Program for Public Information Annual Evaluation Report for FY22

Initiated by:
Development Services Division/Floodplain Administrator

Previous Council Consideration:
July 13, 2021 – Council Adoption of the 2021 Santa Clara County Multi-Jurisdiction Program for Public Information

Fiscal Impact:
None

Environmental Review:
Not applicable

Policy Question(s) for Council Consideration:
None

Summary:
- The Program for Public Information (PPI) is a program under the National Flood Insurance Program's Community Rating System (CRS) which contributes to the city's rating. The Federal Emergency Management Agency requires the elected body of each community to approve the PPI to receive credit for having a plan pursuant to the CRS guidelines and receive an annual report on PPI efforts and requires the community to share the annual report with their governing body.

Reviewed By:

City Manager	City Attorney	Finance Director
GE	JH	SN

Subject: 2021 Santa Clara County Multi-Jurisdictional Program for Public Information (PPI) Annual Report (FY22 - Year 1)

- Accept FY22 (Year 1) Annual Report for the 2021 Santa Clara County Multi-Jurisdictional Program for Public Information

Staff Recommendation:
Move to receive the 2021 Santa Clara County Multi-Jurisdictional Program for Public Information Annual Report (FY22-Year 1)

Purpose
Accept the 2021 Santa Clara County Multi-Jurisdictional Program for Public Information Annual Report (FY22-Year 1) so the City will continue to receive credit under the National Flood Insurance Program's Community Rating System program.

Background
The CRS is a voluntary program that allows communities to earn flood insurance premium discounts for residents and businesses by promoting flood risk reduction practices, floodplain management, and encourage buying flood insurance. These activities go above and beyond the normal enforcement of floodplain regulations and the community earn various points for different activities. There are CRS Class ratings that are assigned at 500-point increments, and each improvement in class rating nets an additional 5% discount for property owners paying flood insurance premiums. The PPI is a committee-based localized and coordinated approach to flood hazard community outreach efforts, which is primarily being organized and lead by the Santa Clara Valley Water District ("Valley Water"). The PPI is a major component of the public outreach effort that Los Altos earn points for having some of the activities implemented locally or at the County level. The total savings in flood premium discounts for Santa Clara County residents from the CRS program (11 participating agencies) is approximately $2.37 million per year[1]. The PPI was reviewed by the Federal Emergency Management Agency (FEMA) to make sure its provisions fully comply with their requirements prior to approval by any participating agency's governing body. FEMA informed the participating agencies that this is one of the first multi-jurisdictional PPI to be completed, and it involves the largest number of participating communities to date.

Every five years, CRS communities must update the PPI. The 2021 Santa Clara County Multi-Jurisdictional Program for Public Information represents the Five-Year Plan. The PPI was developed jointly, but it must be individually approved by each community's elected body for that community to receive CRS points for its implementation. Valley Water's Board approved the PPI on April 27, 2021. On July 13, 2021, the City Council adopted the PPI for the city of Los Altos.

[1] Last reviewed in 2021.

Subject: 2021 Santa Clara County Multi-Jurisdictional Program for Public Information (PPI) Annual Report (FY22 - Year 1)

Under the CRS requirements, each year, the CRS communities must reconvene to evaluate whether the flood risk reduction messages are still appropriate and adjust the PPI, as needed. Additionally, a report to FEMA must be submitted annually describing the PPI implementation, and the report is shared with each participating community governing body.

Discussion/Analysis

In October 2021, the city of Los Altos completed its mandated five-year audit administered by FEMA through the Insurance Services Office (ISO) which reviewed in detail all the local CRS recognized activities. Prior to the audit, the CRS activities contributed to the city's Class 8 rating, giving residents a 10% discount on insurance premiums. With the adoption of the 2021 Santa Clara County Multi-Jurisdictional Program for Public Information (PPI) and the incorporation of city recognized CRS activities, the city received additional points along with other activities to improve its rating to a Class 7 which will give residents a 15% discount on insurance premiums issued or renewed on or after April 1, 2023.

The FY22 Annual Report is the first annual report for the 2021 Santa Clara County Multi-Jurisdictional Program for Public Information (PPI) Annual Report (Attached). The report includes background information on how the PPI was developed by the participants, the preparation of the annual evaluation, the PPI accomplishments for FY22, and new initiatives. With regard to projects accomplished in FY22, Attachment 2 of the Annual Report lists all the projects proposed in the 2021 PPI (titled "Appendix A CRS Creditable Outreach and Flood Response Project by CRS Community"), with a column titled "Project Accomplishments" noting actions taken during the first year of the PPI (FY22). The most extensive outreach project was the Valley Water's Annual Flood Awareness Campaign, which the city of Los Altos gets CRS credit for since it targets our community. Specific city activities include: making brochures available in public buildings; including flood information and links to Valley Water Flood Awareness and FEMA information on the city's website; publishing two newspaper ads in the Town Crier titled "Assess Your Flood Risk and Flood Insurance Availability"; coordinating with Mission Trail to send out a Valley Water flood awareness bill insert (no cost to city); and participating in PPI coordination meetings. It should be noted and recognized that as described in the report the establishment of the five-year PPI was delayed and some outreach activities such as community events were canceled altogether as related to COVID-19 pandemic impacts and workforce augmentation.

Recommendation

Receive the 2021 Santa Clara County Multi-Jurisdictional Program for Public Information Annual Report (FY22-Year 1).

Santa Clara County Multi-Jurisdictional Program for Public Information 2021

Annual Evaluation Report for FY22

(Year 1: July 2021 to June 2022)

June 2022

Prepared by:

Santa Clara Valley Water District

and

County of Santa Clara CRS Participating Communities

I. INTRODUCTION

The Community Rating System (CRS) is a voluntary program of the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP). The CRS program allows communities to earn flood insurance premium discounts for their residents and businesses by implementing local mitigation, floodplain management, and outreach activities that exceed the minimum NFIP requirements to reduce the risk of flooding.

In Santa Clara County, 11 (eleven) communities have been active participants in the FEMA NFIP CRS for over 30 years.

The CRS participating communities are City of Cupertino, City of Gilroy, City of Los Altos, City of Milpitas, City of Morgan Hill, City of Mountain View, City of Palo Alto, City of San Jose, City of Santa Clara, City of Sunnyvale, and the Santa Clara Valley Water District (Valley Water).

CRS participating communities, along with their external non-governmental stakeholders, non-participating communities: *City of Saratoga, Town of Los Altos Hills, Town of Los Gatos, and County of Santa Clara* who opted to join the 2021 Program for Public Information (PPI), comprise the PPI Committee. The PPI Committee is listed in *Table 1. Members of the Santa Clara County Multi-Jurisdictional 2021 PPI Committee* of the 2021 PPI. (Attachment #1)

FEMA requires that each community participating in the PPI provide at least two representatives to the regional PPI Committee, with at least half of the representatives from outside the local government. Additionally, at least half of the representatives must attend all the meetings of the regional PPI Committee.

An important benefit of the PPI Committee's work is close collaboration between local public agency staff who work on flood protection throughout Santa Clara County. Together, PPI Committee members continue strengthening their individual CRS programs and ensuring communities can evaluate their flood programs against a nationally recognized benchmark.

The 2021 PPI Committee, along with the remaining non-participating communities (*City of Campbell and City of Monte Sereno),* and other interested parties, make up the Santa Clara County CRS Users Group.

The Santa Clara County CRS Users Group collaborates to ensure floodplain management activities provide enhanced public safety, reduced damage to property and public infrastructure, and avoidance of economic disruption and loss in Santa Clara County. Through the 5-year PPI development and the annual reporting process, members of the SC County CRS Users Group learn from one another about local floodplain management activities, including flood protection and land use issues. For both the Santa Clara County CRS Users Group and the PPI Committee, the PPI is one of the most impactful activities of the CRS Program.

Under the CRS program, flood insurance premium rates are discounted to reward CRS participating community actions that meet the three goals of the CRS: (1) reduce flood damage to insurable property; (2) strengthen and support the insurance aspects of the NFIP; and (3) encourage a comprehensive approach to floodplain management.

Flood insurance premiums for participating CRS communities are reduced in 5% increments for every 500 CRS points earned. As of April 30, 2022, the total savings for Santa Clara County residents from CRS discounts is approximately $2 million.

Valley Water is the lead flood risk reduction agency for Santa Clara County. Valley Water performs many flood preparedness outreach and stream stewardship/maintenance activities that earn CRS points for participating communities. Since Valley Water is not a land-use agency, the points Valley Water earns, as a fictitious community, provide a foundation upon which the CRS participating communities can build. FEMA approved this unique arrangement with Valley Water in 1998.

The *CRS Coordinator's Manual, 2013 Edition,* included the option to undertake a Program for Public Information (PPI) which is a method to customize flood risk and loss reduction outreach messages and increase CRS points. Each participant of the PPI Committee brings unique perspectives and suggestions that enhance the PPI. Each community must adopt the PPI through a formal vote by the community's governing body.

In 2013, Valley Water initiated and facilitated the effort to develop the first Multi-Jurisdictional PPI so that all Santa Clara County CRS participating communities could work together and benefit from this activity. Non-participating communities were also invited to participate in the development of the PPI. This work effort resulted in the 2015 Multi-Jurisdiction PPI (2015 PPI).

On April 14, 2015, Valley Water's Board adopted the 2015 PPI, which sunset in April 2020. Following Valley Water's lead, the other CRS participating communities' governing bodies adopted the 2015 PPI soon thereafter.

Under the CRS, the PPI must be updated every 5-years. Each subsequent year after adopting the PPI, the committee must submit an Annual Evaluation Report to FEMA describing the PPI implementation for the prior fiscal year. The PPI Committee must evaluate whether the flood risk reduction messages in the PPI are still relevant and adjust the PPI, if needed. The Annual Evaluation Report is shared with each participating community's governing body as an informational item.

As required, Annual Evaluation Reports for FY16 (Year 1) through FY19 (Year 4) for the 2015 PPI were prepared, sent to the governing body, and included in annual recertifications.

FY20 (Year 5), the PPI Committee was required to update the 2015 PPI. The Insurance Services Office (ISO), FEMA's CRS management contractor, exempted the committee from submitting an Annual Evaluation Report for FY20 (Year 5) as the committee focused on updating the 2015 PPI.

In February 2020, Valley Water hosted the start of the 5-year PPI process. Fifteen Santa Clara County communities worked together to update the 2015 PPI. These communities included the current eleven CRS participating communities as well as four non-participating communities that expressed interest in joining the CRS. Staff and external stakeholders from each community participated in developing the new PPI.

In March 2020, the Coronavirus (COVID-19) outbreak started. The California State Emergency Services Act, the Governor's Emergency Declaration related to the COVID-19 pandemic, the Governor's Executive Order N-29-20, and Order of the County of Santa Clara Public Health Officer dated March 16, 2020, went into effect.

The COVID-19 pandemic caused far-reaching, unprecedented changes. Businesses and organizations faced economic and operational uncertainty across every industry and sector. The workforce impacts during COVID-19 caused delays beyond control, including the PPI Committee's ability to continue its work of updating the 2015 PPI. Many communities shifted priorities to respond to the public health crisis; therefore, FEMA provided an extension of completing the update to the 2015 PPI to early 2021.

The PPI Committee reconvened in October 2020 to resume the PPI update. Several virtual meetings followed until the PPI Committee completed the 2021 PPI in April 2021. The 2021 PPI was adopted by participating communities, as indicated in *Table 1. Dates 2021 PPI Adopted*.

II. 2021 PPI DEVELOPMENT PROCESS

Valley Water, along with the CRS participating and non-participating communities, initiated the 2021 PPI process in February 2020. The Santa Clara County 2021 Multi-Jurisdictional Program for Public Information document was completed in April 2021 (*refer to Section I. Introduction for COVID-19 related delays).*

Virtual meetings were held between 2020 and 2021 to develop the 2021 PPI. In addition to FEMA's six priority topic messages, three additional messages below were identified as important for Santa Clara County. See *Table 3 in the 2021 PPI: CRS Priority Messages* for the complete list.

I. Encourage residents and workers to make a personal Family Emergency Plan.
II. Ask residents to download disaster apps; and
III. Urge drivers to slow down on wet roads and avoid driving through ponded water to reduce traffic accidents.

The PPI Committee worked between the meetings to draft the 2021 PPI and review the extensive list of outreach and flood response projects. (Attachment 2, *which is Appendix A of the 2021 PPI*)

Based on the PPI Committee's evaluation of the 2015 PPI, the consensus was that most of the 2015 PPI flood risk reduction messages were still relevant, so only minor edits were incorporated as needed. This became the basis for the 2021 PPI; therefore, no additional FEMA review was required, as the 2015 PPI already ensured its provisions were fully compliant with FEMA requirements.

The number of CRS points that the 2021 PPI activities will earn is determined by FEMA's CRS Specialist and Technical Reviewers in the Insurance Services Office (ISO). The PPI Committee estimates that of the possible 350 points, participating communities could earn up to 300+/- points per participating community for the PPI efforts.

Once Valley Water approved the 2021 PPI (5-Year Plan), the final document was provided to the PPI Committee to present to their government bodies for adoption and implementation. *Table 1. Dates of PPI Adoption* shows the 2021 PPI approval dates by agency (Community).

All 11 CRS participating communities have adopted the 2021 PPI as noted in *Table 1 Dates 2021 PPI Adopted* below. As non-participating communities are not in the CRS Program, they

are not required to adopt the PPI. At this time, all non-participating communities have chosen not to adopt the 2021 PPI.

Table 1. Dates 2021 PPI Adopted

Agency (Community)	Date Presented	Adoption*
Santa Clara Valley Water District	4/27/21	X
City of Cupertino	8/17/21	X
City of Gilroy	7/01/21	X
City of Los Altos	7/13/21	X
Town of Los Altos Hills *(non-CRS community)*	Not required*	Not required*
Town of Los Gatos *(non-CRS community)*	Not required*	Not required*
City of Milpitas	5/18/21	X
City of Morgan Hill	6/16/21	X
City of Mountain View	6/22/21	X
City of Palo Alto	6/14/21	X
City of San Jose	11/16/21	X
City of Santa Clara	7/06/21	X
County of Santa Clara *(non-CRS community)*	Not required*	Not required*
City of Saratoga *(non-CRS community)*	Not required*	Not required*
City of Sunnyvale	6/29/21	X
	Total Approved	**11**

**Non-CRS communities are encouraged to participate in PPI Committee activities and initiatives, but are not required to adopt the PPI, nor report out in the Annual Evaluation Reports.*

III. ANNUAL EVALUATION REPORTS

The 2021 PPI states that the PPI Committee will meet at least once yearly to evaluate the PPI and incorporate any needed revisions. This meeting is coordinated in conjunction with the ongoing CRS User's Group meetings, which occur at least twice a year.

The evaluation will cover:

- Reviewing projects that were completed.
- Evaluation of progress toward outcomes.
- Recommendations on projects that have not been completed.
- Recommendations for new projects not previously identified.
- Target Audience changes; and
- Impact of the program during a real flood event if one has occurred.

The Annual Evaluation Report is prepared by the PPI Committee for submission with each CRS community's annual CRS recertification package (or schedule 5-year cycle visits). The report is then shared with each CRS participating community's governing body as an informational item.

Section V. 2022 Santa Clara County CRS Users Group/PPI Committee Meetings – Monitoring and Evaluating the 2021 PPI of this report, summarizes the meetings held to develop the FY22 Annual Evaluation Report (Year 1 of the 2021 PPI).

Table 2 below shows how each community expects to share the FY22 Annual Evaluation Report with its governing body.

Table 2. How the 2021 PPI Annual Evaluation Report for FY22, Year 1 will be shared with Community's Governing Body

Community	Method for Sharing*
Santa Clara Valley Water District	Board Non-Agenda Item
City of Cupertino	Consent Item Council Agenda
City of Gilroy	Consent Calendar
City of Los Altos	Council Consent Calendar or Informational Staff Report
Town of Los Altos Hill *(non-CRS community)*	Not required
Town of Los Gatos *(non-CRS community)*	Not required
City of Milpitas	Memo to City Council
City of Morgan Hill	Council Consent Calendar
City of Mountain View	Council Weekly Update "Council Connection"
City of Palo Alto	Informational Staff Report
City of San Jose	Council Consent Calendar
City of Santa Clara	Council Consent Calendar
County of Santa Clara *(non-CRS community)*	Not required
City of Saratoga *(non-CRS community)*	Not required
City of Sunnyvale	City Manager's "Update Sunnyvale"

**Non-CRS communities are not required to share the 2021 PPI Annual Reports with their governing bodies.*

IV. 2021 PPI ACCOMPLISHMENTS FOR FY22

The PPI Committee identified three efforts needed from each CRS participating community for the 2021 PPI and to prepare and finalize subsequent Annual Evaluation Reports.

1. Governing bodies must adopt the 2021 PPI (*Table 1. Dates 2021 PPI Adopted*). The PPI Committee must prepare Annual Evaluation Reports and share the reports with its governing body as informational items.
2. For each fiscal year (*July 1 - June 30*) the communities must carry out and monitor the implementation of the outreach/flood response projects identified in *Attachment A CRS Creditable Outreach and Flood Response Projects by CRS Community of the 2021 PPI.* (Attachment 2)
3. The PPI Committee must review and consider the 'New Initiatives' identified in the 2021 PPI (*page 66*) for advancing flood risk reduction efforts.

Governing Bodies Approval: Including Valley Water, all 11 CRS participating communities' governing bodies adopted the 2021 PPI by the end of FY22. The approval dates are shown by agency (Community) in *Table 1. Dates of 2021 PPI Adopted* noted above.

Tracking System: The 2021 PPI is multi-jurisdictional and includes 15 agencies (*11 CRS participating communities and four non-participating communities*). Tracking implementation is quite complex compared to a single-agency PPI. As the informal lead, Valley Water continues to oversee the record-keeping to ensure consistency throughout the county. An electronic file-sharing system, Egnyte, is set up with folders for each community to file and share documents related to the 109 potential outreach/flood response projects identified in the 2021 PPI, and all CRS-related documentation. This also includes a comprehensive spreadsheet tracking which projects were accomplished in any given fiscal year, by the individual communities. This spreadsheet, along with the Annual Evaluation Report, will be submitted with annual CRS recertifications or a part of scheduled 5-year cycle visits.

Insurance Services Office (ISO) assigns credit for Valley Water outreach/flood response projects to all Santa Clara County CRS participating communities' ratings. Some communities also choose to carry out and report on their own outreach/flood response projects, in addition to those of Valley Water. These projects are shown on the composite spreadsheet and include input from each agency.

The PPI Committee discussed the benefits of using the Egnyte shared-filing system for tracking the 2021 PPI outreach/flood response projects and all CRS-related documentation. The PPI Committee also discussed the importance of ensuring each agency uploads their CRS documentation regularly. These benefits are:

- Information Share/Knowledge Transfer: CRS participating communities can view each other's program documentation. When a community improves its CRS rating, another community can access the documents submitted to determine how the CRS credited activities helped improve the score.
- Document Repository: A central location for CRS-related documentation, organized to mirror the CRS Coordinator's Manual (by community/activity/element) proves helpful when a community experiences staff turnover.
- Documentation Submittals: CRS documents are organized and easy to share with the CRS Specialists conducting cycle visits and/or annual recertification.

Summary of PPI Projects Accomplished in FY22

The complete list of outreach/flood response projects is included as Attachment 2 of this Report, listing all projects proposed in the 2021 PPI, with a "Project Accomplishments" column noting actions taken during the first year of the PPI, FY22.

Audiences	Projects Accomplished	
Community at Large (CAL)	81 potential projects, 63 accomplished	
Residents and Businesses in the Special Flood Hazard Area (SFHA)	18 potential projects, 16 accomplished	
Messengers to Other Target Audiences (Organizations & Businesses Serving the Community)	10 potential projects, 10 were accomplished	
	***Total Accomplished Projects**	89 of 109

* *Note: All projects carried out by CRS participating communities were accomplished in FY22.*

Variance in the number of potential projects versus accomplished projects is due to no updates received from non-participating communities, which is not required for this report.

These numbers go well beyond the minimum requirements of the CRS Program, and we anticipate all CRS participating communities will receive the maximum number of credits for our collective efforts in FY22.

It is important to note that most public events in 2020 through 2022 were heavily impacted or canceled due to shelter-in-place orders and the COVID-19 pandemic. Those events that were not canceled were often redesigned for virtual participation or smaller, socially distanced groups.

Valley Water's Outreach/Flood Response Projects

Annual Flood Awareness Campaign

Valley Water's FY22 Flood Awareness Campaign theme was "Flooding Can Happen During a Drought." It launched after the [1]Fourth National Climate Assessment was published; there could not have been a better time to have this conversation. The federal report assessed that intense extreme weather and climate-related events are becoming more frequent and will have catastrophic impacts on vulnerable communities, infrastructure, ecosystems, and our economy. Extreme storm events could result in more frequent and severe flooding in our region. Valley Water's message emphasized its commitment to reducing flood risks and protecting the community but acknowledging we cannot eliminate all risks. Thus, our communities must adapt and prepare; and it starts with being informed and aware of risks.

An educational paid advertising campaign supplemented Valley Water's community outreach effort. This year, its advertising campaign was supported by a series of formative research to understand target audiences, their awareness levels, and explore what educational messages and images most appealed to them.

The Flood Awareness Campaign lasted four months, from mid-November 2021 to February 2022. The paid advertisement campaign cost a total of $200,000.

Valley Water's FY22 Annual Flood Awareness Campaign shifted from general digital and public space advertising to a series of direct mailings to the 52,000 homes and businesses in Santa Clara County's FEMA SFHA.

Valley Water sent three separate targeted mailers to all homes and businesses in or near a high-risk flood area, as designated by the FEMA SHFA. The mailers were multilingual (English, Spanish, Chinese, and Vietnamese) and are posted on Valley Water's website.

1. Annual Floodplain Mailer
   54,790 mailed on December 13-14, 2021
   4,450 delivered to cities/county (*Public Works and Planning Departments*) between December 2021 – February 1, 2022
2. Multilingual Postcards with 9 CRS tips and links to flood preparedness webpages
   52,502 mailed on October 29, 2021
3. "You Live in a Flood Zone–Do You Know What to Do Before, During, and After a Flood?" Trifold.
   54,790 mailed on January 11, 2022

[1] US Global Change Resource Program (USGCRP) has a legal mandate to conduct a state-of-the-science synthesis of climate impacts and trends across U.S. regions and sectors every four years, known as the National Climate Assessment (NCA).

During FY22, Santa Clara County experienced a drought emergency. Valley Water's annual Floodplain Mailer reminded everyone that flooding can happen anytime it rains, and that climate change has made extreme weather the new normal. Drought conditions can harden the ground and increase run-off to streams and creeks during the first few days of heavy rain, increasing the risk of flooding. In addition, the flood mailer showcased Valley Water's ongoing flood protection projects in areas susceptible to flooding.

In FY22, the mailer featured QR codes, a magnet with important flood safety websites, a detachable emergency phone list, and photos of our most recent flood protection projects.

The direct mailing strategy was developed after the 2020-2021 post-Flood Awareness Campaign poll which indicated that only 29% of FEMA SFHA residents remembered receiving the annual Floodplain Mailer, while recollection of other broad advertising efforts hovered lower. The outreach shift from advertising to targeted mailings resulted in substantial savings while proving much more effective.

Valley Water also deployed a small-scale multilingual social media campaign, with the slogan "Flooding can happen during a drought," on social media and the web platforms including Facebook, Instagram, Google Ads, El Observador, Cali Today, and News for Chinese. The campaign launched in Winter FY22, starting with the season's first rains in December 2021 and continuing through January 2022. Digital ads targeted residents and commuters in or near the SFHA, using zip codes from published FEMA flood maps.

A key strategy for the paid campaign was incorporating all 2021 PPI messages in Valley Water ads. Staff crafted messages derived from Valley Water's annual Floodplain Mailer to residents in the SFHA. Additionally, the Valley Water Board of Directors shared posts on Nextdoor highlighting the "Flooding can happen during a drought" messaging and the nine CRS topics in Winter 2021. Valley Water posted a flood preparedness blog on its website in November 2021 and a digital copy of the Floodplain Mailer.

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Campaign Results

Facebook

Run Date	Language	CTR	Clicks	Impressions	CPC	CPM
1/14 – 2/24/22	English	0.24%	2,012	838,548	$1.49	$3.58
1/14 – 2/24/22	Spanish	0.31%	1,956	635,945	$1.28	$3.93
		0.27%	**3,968**	**1,474,493**	**$1.39**	**$3.73**

Instagram

Run Date	Language	CTR	Clicks	Impressions	CPC	CPM
1/14 – 2/24/22	English	0.07%	786	1,122,829	$7.00	$4.90
1/14 – 2/24/22	Spanish	0.08%	335	434,737	$8.96	$6.90
		0.07%	**1,121**	**1,557,566**	**$7.58**	**$5.46**

Google

Run Date	Language	CTR	Clicks	Impressions	CPC	CPM
1/14 – 2/24/22	English	0.05%	2,660	5,537,579	$3.01	$1.45
1/14 – 2/24/22	Spanish	0.09%	2,310	2,537,994	$1.74	$1.58
1/14 – 2/24/22	Chinese	0.07%	1,077	3,100,420	$3.23	$1.03
1/14 – 2/24/22	Vietnamese	0.03%	1,308	1,823,830	$1.43	$1.13
		0.06%	**7,355**	**12,999,823**	**$2.59**	**$1.36**

Nextdoor

Run Date	Language	CTR	Clicks	Impressions	CPC	CPM
1/14 – 2/25/22	English	0.16%	1,379	542,392	$14.98	$38.07
		0.16%	**1,379**	**542,392**	**$14.98**	**$38.07**

Valley Water also used its monthly newsletter, news blog, and social media profiles to enhance flood awareness efforts before and during forecasted storms starting as early as September. During the length of the campaign and leading up to anticipated storm events, Valley Water posted flash flood warnings, shared posts with critical messages about flood safety, and promoted the Flood Watch Tool throughout the winter.

Valley Water's flood protection resources page at ValleyWater.org/floodready serves as a hub of flood safety information with icons leading to a series of related web pages, including information on flood zone maps, signing up for emergency alerts, sandbags, reporting local flooding, and safety tips.

Of these subpages, the flood zone awareness page was the most accessed, which features a brief explanation for determining if a home is in a FEMA-designated flood zone. It also features an instructional YouTube tutorial for using FEMA's Map Service and a reminder that flooding can happen anytime it rains.

All communities were requested to add a link redirecting visitors to ValleyWater.org/floodready, floodsmart.gov, and ready.gov from their respective flood protection resource pages or homepage. All Santa Clara County communities received hard copies of Valley Water's Floodplain Mailer.

Valley Water shared a "Flood Follows Drought 2021-22 Flood Awareness Campaign Media Toolkit" with the CRS communities. The toolkit provided links to the multilingual floodplain mailer, social media graphics, messages for all nine flood awareness tips (PPI CRS message topics), and blog posts for all Santa Clara County communities to use.

The 2021-2022 post-Flood Awareness Campaign survey found:

- 59% recalled receiving mail with information about flood safety (29% in 2020-21).
- 76% are confident they have taken all necessary precautions to protect themselves from floods (64% in 2020-21).
- 61% rate the job Valley Water is doing at keeping them informed as excellent, good, or fair (32% in 2020-21).
- 10% increase in food zone awareness over last year (now at 50-60% awareness).
- 32% increase in recall of flood mailings vs. last year (now at 59% reach) with good recall amongst Spanish, Mandarin, and Vietnamese speakers.
- 58% of respondents clearly understood Valley Water's three main calls to action (find your risk, get flood insurance, develop a plan).
- 12% increase in respondents who believe they have taken all steps to be ready for a flood (now at 76%).
- 11% increase in respondents who have flood insurance (now at 51%).
- 100% of high-risk residents in mobile home parks are aware of our messaging.

The results above demonstrate an effective campaign that is less expensive than general advertising, yielding a savings of approximately $150,000 with more robust results. In the future, direct mailings to the FEMA SFHA seem to be an alternative outreach strategy for the flood awareness campaign rather than targeted advertising.

Valley Water discussed the new targeted mail approach with the PPI Committee and the Insurance Services Office (ISO). All agreed with this strategy.

Valley Water Education Outreach Program

Valley Water's Education Outreach includes flood awareness messaging in every program presented year-round. A dedicated flood-focused program is offered from October through April, depending on the rainfall situation on any given year.

Valley Water's role as a flood protection agency is highlighted in all presentations, so that participants in the Education Outreach Programs know that flood protection is one of Valley Water's core objectives in Santa Clara County.

The following are the Education Outreach efforts from October 2021 – March 2022.

Valley Water Flood Awareness Messaging

Flood awareness messaging is included in classroom presentations, STEAM (*Science, Technology,*

Engineering, Art, and Math) programs, libraries, camps, and Wonders of Water Wednesday, an after-school science program.

The following numbers represent the results of general flood protection messaging:

- 197 Presentations
- 4801 attendees
- 193 Educators

Flood-focused Programs

Education Outreach has two programs that focus on flood awareness and preparedness: "The Three Little Pigs and The Bad Weather Wolf" and "Watershed Maps".

The following numbers represent the results of Flood-focused Programs:

- 47 Presentations
- 986 attendees
- 54 Educators

Community Events

Due to the COVID-19 pandemic, countywide community events in FY22 were postponed.

CRS Participating Communities Outreach/Flood Response Projects

The PPI Committee identified the outreach/flood response projects for each community. The implementation of these projects is reflected in the FY 2022 'Project Accomplishments' column of Attachment 2.

V. 2022 SANTA CLARA COUNTY CRS USERS GROUP/PPI COMMITTEE MEETINGS – MONITORING AND EVALUATING THE 2021 PPI

Santa Clara County CRS Users Group/PPI Committee meetings were held on March 10, 2022, and May 19, 2022. Agenda and attendance sheets for each meeting are included. (Attachments 3-6)

Attendance was good at both meetings and quorum was met with staff from the eleven CRS participating communities. Staff from some non-participating communities, external stakeholders, and other interested parties were also in attendance.

As required by CRS, the objective for the March and May meetings was to monitor the implementation of the 2021 PPI and to determine if the desired outcomes were achieved, as well to discuss if any changes to the 2021 PPI were needed to complete this Annual Evaluation Report. The PPI Committee agreed that the 2021 PPI messaging and projects would remain the same for the duration of the 2021 PPI, which sunsets in 2026.

Santa Clara County 2021 Multi-Jurisdictional Program for Public Information
Annual Evaluation Report for FY22 (*Year 1: July 2021 to June 2022)*

At the March 10, 2022 meeting, a draft Project Accomplishment PPI Annual Evaluation Report for FY22 was shared with the communities to review.

The PPI Committee:

- Assessed whether the desired outcomes of the 2021 PPI were achieved in FY22, and what, if anything, should be changed.
- Discussed which communities have adopted the 2021 PPI and that conformed/enacted copy of their agenda items related to submitting the 2021 PPI to their respective governing bodies should be uploaded into Egnyte and a copy sent to Valley Water.
- Provided instruction on how communities will submit updates to Appendix A of the 2021 PPI to Valley Water for consolidating report.
- Communities were informed that all updates were due by the next CRS Users Group Meeting or sooner.

An ISO CRS Specialist shared best practices for Verification Cycle Visits. The specialist also reviewed updated/new/modified prerequisites for CRS Classes 6, 8, and 9, per the Addendum to the 2017 CRS Coordinator's Manual (Edition 2021) which went into effect January 1, 2021.

Lastly, to comply with *CRS Activity 350 - Flood Protection Information, Element c). Flood Protection Website,* from the CRS Coordinator's Manual, CRS participating communities were reminded to ensure to review their flood information landing page *monthly,* to verify all links are valid and *annually*, to ensure content is still relevant and current.

At the May 19, 2022 meeting, the PPI Committee discussed the 2021 PPI Annual Evaluation Report for FY22, reminding the group that the report will be due during scheduled 5-year cycle visits (f*or Cities of Gilroy and Morgan Hill)* or as part of communities' annual CRS recertification package which are due on August 1, 2022.

Valley Water Communications staff presented an overview of the 2021-2022 Flood Awareness Campaign, including the Floodplain Mailer that was mailed in December 2021 to all addresses in the FEMA Special Flood Hazard Area (SFHA), as well as to city/town/county managers, public works and planning directors, and the communities' CRS staff.

Additionally, Valley Water Communications staff also shared the FY22 post-campaign polling results with results. Valley and the PPI Committee determined that future flood awareness campaigns have an opportunity for expanded outreach to renters of both single-family homes and multi-family units, as well as providing localized historical flood information and outreach materials in public spaces.

Valley Water CRS staff shared information on the Department of Water Resources (DWR) statewide agency coordination calls scheduled to begin by July 2022. The DWR calls lead up to the 2022 California Flood Preparedness Week (CFPW) that is held annually each October (s*pecific dates for October 2022 to be announced*). We shared Valley Water's experience in participating on these calls, including the benefits of learning about CFPW, ways to participate, setting up lobby displays for the public, and how to access available resources for public events.

All communities were strongly encouraged to participate this year, including presenting a Resolution (*Valley Water's template available, upon request*) to their respective city councils to adopt CFPW, and to forward the information to their communication and emergency service teams.

We also discussed Valley Water's plan to provide all communities with 'emergency starter kits' and 'flood event kits' for their use as plans to recommence booth support at various city-hosted events, safety fairs, etc. These resources will ensure our messaging and information on how to 'Get Flood Ready' is uniformed throughout the county.

The consensus of the PPI Committee is that our 2021 PPI implementation is on target and that no changes are needed. Cities who have had the PPI approved by their elected officials reported receiving strong support.

This Annual Evaluation Report is the first report for the 2021 PPI to document our outreach project activities.

VI. FUTURE MESSAGING – Other New Initiatives

The PPI committee identified several new initiatives:

1. Continue and expand the standardized flood message prepared for each community to include flood messages in utility bills yearly, including PG&E.
2. Expand on partnerships with local chambers of commerce to disseminate and share flood preparedness information.
3. Expand on outreach to the Asian and Latino communities who live in flood-prone areas.
4. Expand on outreach to "hot spot" flood-prone areas by hosting on-site or virtual events.
5. Expand on reaching local homeowners associations (HOA)s and apartment associations (*i.e., Executive Council of Homeowners [ECHO]*).
6. Expand on reaching residents in marginal and low-income communities through partnering with organizations that reach these communities (*i.e., Second Harvest Food Bank and others*).
7. Communities could pursue FEMA Matching Funds Grants for severe Repetitive Loss Areas.
8. Review and expand other public information activities, such as Flood Protection Assistance (Activity 360) and Flood Insurance Promotion (Activity 370).
9. Develop a region-wide Flood Response Preparations (FRP) messaging plan.

The messages that the PPI Committee originally chose are still relevant to Santa Clara County. The committee will continue to increase its efforts to encourage people to prepare personal/family emergency plans and be flood-ready. This will be incorporated into the flood preparedness outreach that is done every fall. The PPI Committee will also continue coordinating efforts with the Valley Water's Education Outreach Program to promote flood preparedness in local schools.

The PPI Committee recommends continued use of social media for messaging. Mobile usage among individuals has increased exponentially over the years and online platforms are rapidly adjusting to mobile-friendly standards. This provides an excellent opportunity to modernize campaign ad efforts by utilizing social media and digital advertising to increase exposure and reach a greater number of residents in Santa Clara County. Furthermore, these modern advertising methods allow for specialized demographic targeting to allow reaching a narrow and defined audience, improving the ability to effectively reach vulnerable populations.

In support of our preparedness messaging, the PPI Committee will continue to promote the importance of having family emergency plans and emergency kits ready to go ***before*** an emergency/flood event occurs.

In October 2021, Valley Water partnered with Second Harvest Food Bank of Silicon Valley, to distribute 2,000 emergency preparedness starter kits of emergency supplies to underserved communities.

The PPI Committee will continue to promote the American Red Cross All-Hazard App which monitors alerts for severe weather, including floods, and the Floodsmart.gov and Ready.gov websites. The communities will distribute American Red Cross Emergency Contact Cards at events throughout the county.

VII. CONCLUSION

Overall, the CRS Users Group/PPI Committee successfully implemented the 2021 PPI in FY22. The 2021 PPI allowed participating communities to mutually decide which flood risk reduction messages are most appropriate and identified means by which messages are delivered. The objectives of participating in the 2021 PPI are to enhance the effectiveness of the flood risk messages to residents, reduce flood risks within the county, and earn valuable CRS credit points when identified projects are implemented by communities.

The CRS Users Group/PPI Committee will continue their work efforts through FY23.

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Attachments for submission to Valley Water Board, City Councils/Managers, and FEMA as part of 2022 Verification/Recertification Package, as required:

1. Members of the Santa Clara County Multi-Jurisdictional 2021 PPI Committee
2. Appendix A from 2021 SC County Multi-Jurisdictional PPI noting FY22 Project Accomplishments
3. March 10, 2022 Santa Clara County CRS Users Group Meeting Agenda
4. March 10, 2022 Santa Clara County CRS Users Group Meeting Attendance Sheet
5. May 19, 2022 Santa Clara County CRS Users Group Meeting Agenda
6. May 19, 2022 Santa Clara County CRS Users Group Meeting Attendance Sheet

Table 1. Members of the Santa Clara County Multi-Jurisdictional 2021 PPI Committee

Community	Local Government Representative and Alternates	External Stakeholders
County of Santa Clara	**Chris Freitas**, Sr. Civil Engineer **Neville R. Pereira**, PE, Development Services Manager, Department of Planning and Development, Floodplain Manager	**Marsha Hovey**, CADRE Board Chair
Cupertino	**Chad Mosley**, Assistant Public Works Director/City Engineer, Public Works Department, Floodplain Manager **Jennifer Chu**, Senior Civil Engineer Public Works Department	**Jim Oberhofer**, Emergency Coordinator Cupertino ARES/RACES
Gilroy	**Gary Heap**, City Engineer Public Works Department **Jorge Duran**, Senior Civil Engineer, Floodplain Manager Public Works Department	**Merna Leal**, City of Gilroy resident
Los Altos	**Steven Golden**, Senior Planner, Floodplain Manager **Andrea Trese**, Associate Civil Engineer	**Christopher Wilson**, Operations Manager, Los Altos Suburban District, California Water Company
Los Altos Hill	**Carl Cahill**, City Manager, Floodplain Manager **Nichol Bowersox**, Public Works Director/ City Engineer **Christine Hoffmann**, Assistant Engineer (DPW)	**Phil Witt**, General Manager Purissima Hills Water District
Los Gatos	**WooJae Kim**, P.E, Town Engineer Parks and Public Works, Floodplain Manager	**Annamaria Swardenski**, Swardenski Consulting
Milpitas	**Steven Erickson,** City Engineer/Engineering Director, Floodplain Manager **Kan Xu**, Principal Civil Engineer, Engineering Land Development Section **Brian Petrovic**, Associate Civil Engineer Engineering Land Development Section **Elizabeth Koo**, Administrative Analyst, Engineering Land Development Section	**Warren Wettenstein**, Chairman of the Economic Development & Trade Commission and President of the Milpitas Chamber
Morgan Hill	**Maria Angeles**, Senior Civil Engineer, Floodplain Manager, CFM **Charlie Ha**, Supervising Civil Engineer Engineering & Utilities Department	**Swanee Edwards**, City of Morgan Hill resident
Mountain View	**Renee Gunn**, Senior Civil Engineer, Public Works Department **Gabrielle Abdon**, Assistant Engineer, CFM	**Kevin Conant**, PG&E
Palo Alto	**Rajeev Hada**, Project Engineer, CFM Public Works Department, Engineering Services Division, Floodplain Manager	**Dan Melick**, CERT Volunteer City of Palo Alto resident
San José	**Arlene Lew**, Principal Engineering Technician **Vivian Tom**, Senior Transportation Specialist Department of Public Works Development Services Division	**Shari Carlet**, City of San José resident, certified Floodplain Manager
Santa Clara	**Evelyn Liang**, Senior Civil Engineer **Falguni Amin**, Principal Engineer Public Works – Engineering	**Kevin Moore**, Retired City Council member
Saratoga	**David Dorcich**, PE, QSP/D, Associate Civil Engineer, Community Development Department, Floodplain Manager	**Rebecca Gallardo**, Real Estate Agent for Intero, a Berkshire Hathaway Affiliate, servicing all areas of the Bay Area
Sunnyvale	**Tamara Davis**, Senior Management Analyst	**Jeff Holzman**, Director, Real Estate District Development Google **Agnes Veith**, City of Sunnyvale resident
Valley Water	**Trisha Howard**, Program Administrator **Paola Giles**, Public Information Representative III **Sherilyn Tran**, Office of Civic Engagement Unit Manager	**Nikki Rowe**, American Red Cross

Appendix A
CRS Creditable Outreach and Flood Response Projects by CRS Community
Santa Clara County Multi-Jurisdictional PPI 2021
FY 2022 (Year 1) Project Accomplishments by CRS Communities

Audience	[1] Message	Outcome	Project(s) Proposed to Support the Messages (XX denotes Community acronym, and Outreach Project #)	Assignment	[2] Schedule	[3] Stakeholder	FY 2022 Project Accomplishments INPUT HERE ONLY
Community At Large (CAL) – *Multilingual Communities* – *Groups with Special Evacuation Needs* – *New Residents, Visitors and Tourists*	Topic 1: Know your flood hazard Message 1A - Know your flood risk Message 1B - Contact your floodplain manager to find out if your property is in a floodplain Message 1C - Check if your home or business is in a Special Flood Hazard Area Topic 2: Insure your property for your flood hazard Message 2A - Get flood insurance ahead of time Message 2B – Insure your property Message 2C – There is a 30-day waiting period for the policy to take place Topic 3: Protect people from the flood hazard Message 3A - Put your 3-day emergency kit together Message 3B - Follow evacuation orders Message 3C – Learn the best route to high ground Topic 4: Protect your property from the flood hazard Message 4A - Protect your property from the flood hazard Message 4B - Prepare your home Message 4C - Sandbags can offer protection against a foot or less of floodwater Message 4E - Get sandbags before a flood Topic 5: Build responsibility Message 5A - Build responsibly in floodplains Message 5B - Comply with development requirements Message 5C - Check with your local floodplain manager before you build Topic 6: Protect natural floodplain functions Message 6A -Keep creeks clean and flowing Message 6B - Keep debris and trash out of our streams Message 6C - Don't pollute, dump, or drain anything in creeks	Educate our community on flood protection and preparedness measures	(VW OP #01) Multi-language Countywide Mailer (CWM) to every postal address in Santa Clara County (Topics 1-5 and 7, 8)	Valley Water Communications	Each late October or November	All Santa Clara County CRS Communities	Valley Water's annual August 2021 Countywide Mailer (CWM) was sent between August 24 - August 27, 2021, countywide to 735,282 addresses (*USPS: ECRWSS - Extended/Enhanced Carrier Route Walking Sequence Saturation Postal Customer*). The CWM includes flood protection and preparedness measures information, including FEMA map reading services, getting flood insurance, family emergency plans, downloading emergency preparedness app "Ready SCC," and where to get sandbags. Cupertino supports and promotes Valley Water's outreach projects. Gilroy: A utility bill insert was sent to every address in Gilroy in April 2022. Los Altos supports and promotes Valley Water's outreach efforts. Milpitas: A utility bill insert was sent to every address in Milpitas on 12/10/21. This was sent out in four languages (English, Spanish, Vietnamese and Chinese). Mountain View sent out Valley Water's Get Flood Ready flier as a utility billing insert to every City utility customer between 9/6/2021 and 10/25/2021. Palo Alto supports and promotes Valley Water's outreach project. The City of Santa Clara supports and promotes Valley Water's outreach efforts.

[1] **Message Topics**: **Outreach Projects (OP):** Topic 1 – Know your flood hazard; Topic 2 – Insure your property for your flood hazard; Topic 3 – Protect people from the flood hazard; Topic 4 – Protect your property from the hazard; Topic 5 – Build responsibly; Topic 6 – Protect natural floodplain functions; Topic 7 – Develop a Family Emergency Plan; Topic 8 – Download disaster Apps; Topic 9 – Understand shallow flooding risks – "Don't drive through standing water."
Flood Response Preparations (FRP): What to Do Before, During and After a Flood/Storm

[2] Each September, all deliverables need to be reported to Valley Water for tracking purposes.

[3] A **stakeholder** can be any agency, organization, or person (other than the community itself) that supports the message. Stakeholders can be: an insurance company that publishes a brochures on flood insurance, even if it is set out at City Hall; a local newspaper that publishes a flood or hurricane season supplement each year; FEMA, if, for example, a FEMA brochure is used as an informational material; schools that implement outreach activities; a local newspaper; a neighborhood or civic association that sponsors and hosts a presentation by a community employee; a utility company that includes pertinent articles in its monthly bills; or presentations made by state or FEMA staff at a Risk Map meeting.

Appendix A
CRS Creditable Outreach and Flood Response Projects by CRS Community
Santa Clara County Multi-Jurisdictional PPI 2021
FY 2022 (Year 1) Project Accomplishments by CRS Communities

Audience	[1] Message	Outcome	Project(s) Proposed to Support the Messages (XX denotes Community acronym, and Outreach Project #)	Assignment	[2] Schedule	[3] Stakeholder	FY 2022 Project Accomplishments INPUT HERE ONLY
	Topic 7: Develop a Family Emergency Plan Message 7A: Develop an emergency plan Topic 8: Download disaster Apps Message 8A - Download disaster emergency apps Topic 9: Understand shallow flooding risks – don't drive through standing water Message 9A - Understand shallow flooding risks - don't drive through standing water FEMA's message: "Turn Around Don't Drown®."		(VW OP #02) Distributes a soft copy of our Flood Safety Tips brochure for all SCC CRS communities' use (print hard copies to distribute at events and/or post of flood preparedness webpages) (Topics 1-9)	Valley Water Communications	Annually, November/ December	All Santa Clara County CRS Communities	Valley Water shared a "Flood Follows Drought 2021-22 Flood Awareness Campaign Media Toolkit" with the CRS communities in November 2021. The toolkit provided links to the multilingual floodplain mailer, social media graphics, messages for all nine flood awareness tips (PPI CRS message topics), and blog posts for all Santa Clara County communities to use. Cupertino distributes copies of Valley Water's Flood Safety Tips at various fairs/events (i.e., Earth Day Festival) and provides additional copies for the public on display at City Hall. Cupertino also has a direct link to Valley Water's annual mailer and Flood Ready webpage on the City's "Citizen Preparedness" webpage. Los Altos distributes brochures available at city hall, library, and community center. They are also distributed at community events (emergency training, wine stroll, etc.). Palo Alto promotes and distributes Valley Water's Flood Safety Tips at fairs and provides as an informational item on Utility Inserts sent every year. The City of Santa Clara has hard copy brochures available at city hall and central library. Planning to distribute at yearly art & wine festival as well.
			(CUP OP #03) Flood notice in the local newsletter, "The Cupertino Scene" (Topics 1-9)	City of Cupertino	Each October or November issue	N/A	Cupertino published the annual flood preparation article in the November 2021 issue of "The Cupertino Scene".
			(LA OP #04) Two (2) newspapers ads, in the Los Altos Town Crier (Topics 1-5)	City of Los Altos	Each fall	N/A	Los Altos published two newspaper ads titled "Assess Your Flood Risk and Flood Insurance Availability" on 10/20/21 and 10/27/21 in the Los Altos Town Crier.
			(LAH OP #05) The town's "Our Town" quarterly newsletter includes information on flood preparedness. The newsletter is mailed out town-wide and is also available online on the town's website (*Topics TBD during cycle visit*)	Town of Los Altos Hills	Each fall	N/A	Town of Los Altos Hills: No update available - non-CRS participating community.
			(LAH OP #06) The town distributes various flood preparedness and safety materials at events, including Valley Water's annual floodplain mailer and promotional item (e.g., emergency starter kits, Get Flood Ready Emergency Supply Checklist tote bags, etc.), FEMA flood insurance information, ReadySCC, and American Red Cross Flood apps, AlertSCC, sandbag guidelines, flood protection project-specific notices, FEMA NFIP materials, and preparedness activity/coloring books, etc.) to the public	Town of Los Altos Hills	Annually, spring and late summer	N/A	Town of Los Altos Hills: No update available - non-CRS participating community.
			(MIL OP #07) "Flood Public Advisory" brochure to community at large (Topics 1-6)	City of Milpitas	Each December or January	N/A	Milpitas: A utility bill insert was sent to every address in Milpitas on 12/10/21. This was sent out in four languages

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CRS Creditable Outreach and Flood Response Projects by CRS Community
Santa Clara County Multi-Jurisdictional PPI 2021
FY 2022 (Year 1) Project Accomplishments by CRS Communities

Audience	[1] Message	Outcome	Project(s) Proposed to Support the Messages (XX denotes Community acronym, and Outreach Project #)	Assignment	[2] Schedule	[3] Stakeholder	FY 2022 Project Accomplishments INPUT HERE ONLY
							(English, Vietnamese, Spanish, and Chinese).
			(MH OP #08) Sends a citywide "Flood Report" brochure (Topics 1-9)	City of Morgan Hill	Annually, close to or during the start of the rainy season	N/A	Morgan Hill mailed out citywide the "2021 Flood Report" brochure between 8/26/2021 and 9/2/2021.
			(MV OP #09) Sends "The View" citywide newsletter, Winter version, includes information on flood risk, flood safety, and the importance of buying flood insurance (Topics 1-9)	City of Mountain View	Fall newsletter edition	N/A	Mountain View published the Volume 2, 2021 edition of the View in September 2021 that featured information on flood awareness, flood insurance, and preparing for the winter storm.
			(MV OP #10) Mails a utility bill insert to all resident and businesses that contains information on flood risk, flood safety, and the importance of buying flood insurance (Topics 9)	City of Mountain View	Between July - September	N/A	Mountain View sent out Valley Water's Get Flood Ready flier as a utility billing insert to every City utility customer between 9/6/2021 and 10/25/2021.
			(PA OP #11) Sends the "Are You Ready for Winter Storms?' flier (aka utilities insert) to all residents and businesses in the City, along with their utility bills (Topics 1-9)	City of Palo Alto	Each Fall	N/A	Palo Alto sent "Are You Ready for Winter Storms?" fliers to all residents and businesses along with their utility bills in September 2021.
			(PA OP #12) Sends out utility announcement, "Anytime it can rain, it can flood. Don't get caught off-guard" (Topics 1, 2,3, 4, 5, 6, 7, & 9 – *will pursue adding other topic*)	City of Palo Alto	Each March/April	N/A	Palo Alto sent a utility announcement as an informational announcement on utility bills in March 2021.
			(PA OP #13) The city distributes various flood preparedness and safety documents, including FEMA NFIP materials for public/policyholders	City of Palo Alto	Year Round	N/A	Palo Alto distributes flood preparedness documents every year during the Earth Day event and Palo Alto's MSC Open House.
			(SC OP #14) Mails out a citywide newsletter for residents and businesses called "Inside Santa Clara" (Topics 1-9)	City of Santa Clara	Each fall	N/A	Santa Clara: Citywide newsletter was sent to residents and is available on the city website in November 2022.
		Educate our community on flood protection and preparedness measures Increase in 'hits' on Valley Water and communities Flood Protection Resources webpage *These website projects are credited under Activity 350 – Flood Protection Information, element c). Flood protection website (WEB),*	(VW OP #15) Flood Ready webpage: Flood & Safety, Flood Protection Resources, includes floodplain and countywide mailers https://www.valleywater.org/floodready	Valley Water	Year Round	All Santa Clara County CRS Communities	Valley Water's flood protection resources landing page includes the most current version of the annual floodplain and countywide mailers. Cupertino's Flood Section under the "Citizen Preparedness" webpage has a link that redirects to Valley Water's Flood Ready landing page. Gilroy's "Flood Management" and "Emergency Preparedness" web pages link to Valley Water's Flood ready landing page. Los Altos' "Floodplain Management Information" web page links to Valley Water's Flood Ready web page. Palo Alto's "Flood Information and Winter Storm Preparedness" webpage redirects to Valley Water's Flood Ready landing page.

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CRS Creditable Outreach and Flood Response Projects by CRS Community
Santa Clara County Multi-Jurisdictional PPI 2021
FY 2022 (Year 1) Project Accomplishments by CRS Communities

Audience	[1] Message	Outcome	Project(s) Proposed to Support the Messages (XX denotes Community acronym, and Outreach Project #)	Assignment	[2] Schedule	[3] Stakeholder	FY 2022 Project Accomplishments INPUT HERE ONLY
		not credited under Activity 330 ***Note**: To receive any WEB credit, the community's website must meet the following criteria:* *The community must check the website's links at least monthly, and fix those that are no longer accurate. At least annually, the community must review the content to ensure that it is still current and pertinent*	(ALL OP #16) All communities' website flood protection resources webpage includes language that contains the three additional PPI priority messages noted below: 7. Develop an emergency plan 8. Download disaster apps 9. Understand shallow flooding risks—don't drive through standing water	All Santa Clara County Communities	Year Round	N/A	Valley Water's flood protection resources landing page includes the top 6 CRS priority topic messages, as well as the 3 additional messages identified in the 2021 PPI (*page 45*). Cupertino's Flood Section under the "Citizen Preparedness" webpage includes the CRS 9 topics. Gilroy's "Emergency Preparedness" webpage includes the CRS 9 topics. Additionally, several posts on Email Express and social media were shared with this messaging. Morgan Hill's "Flood Information, Floodplain Management" webpage includes a link to the "2021 Flood Report" that includes the CRS 9 topics. Palo Alto's utility insert includes all three additional PPI priority messages, and the Flood Information and Winter Storm Preparedness website has a link to the utility insert which shows the three additional PPI. City of Santa Clara's "Flood Protection Information" web page includes resources for preparedness.
			(SCC OP #17) Hosts a "Storm and Flood Information and Resources" webpage available for all residents in the county, includes re-directing to www.floodsmart.gov https://www.sccgov.org/sites/opa/Pages/storm.aspx	Santa Clara County Office of Public Affairs	Year Round	N/A	Santa Clara County: No update available - non-CRS participating community
			(SCC OP #18) Hosts a "Flood Safety Information" webpage, includes re-directing to www.valleywater.org/floodready https://cpd.sccgov.org/flood-safety-information	Santa Clara County Consumer Protection Division	Year Round	N/A	Santa Clara County: No update available - non-CRS participating community
			(SCC OP #19) Hosts a "Be a Prepared Community Member" webpage that includes emergency preparedness information https://emergencymanagement.sccgov.org/be-prepared-community-member	Santa Clara County Office of Emergency Management	Year Round	N/A	Santa Clara County: No update available - non-CRS participating community
			(SCC OP #20) Hosts a "People with Access and Functional Needs (AFN)" webpage https://emergencymanagement.sccgov.org/people-access-and-functional-needs-afn	Santa Clara County Office of Emergency Management	Year Round	N/A	Santa Clara County: No update available - non-CRS participating community

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CRS Creditable Outreach and Flood Response Projects by CRS Community
Santa Clara County Multi-Jurisdictional PPI 2021
FY 2022 (Year 1) Project Accomplishments by CRS Communities

Audience	[1] Message	Outcome	Project(s) Proposed to Support the Messages (XX denotes Community acronym, and Outreach Project #)	Assignment	[2] Schedule	[3] Stakeholder	FY 2022 Project Accomplishments INPUT HERE ONLY
			(CUP OP#21) Hosts a "Citizen Preparedness" webpage that includes emergency preparedness information, includes re-directing to Valley Water's www.valleywater.org/floodready webpage https://www.cupertino.org/residents/community-services-programs/emergency-services/citizen-preparedness	City of Cupertino Office of Emergency Services	Year Round	N/A	Cupertino continues to maintain the Flood Section under the "Citizen Preparedness" webpage, including a link that redirects to Valley Water's Flood Ready webpage.
			(GIL OP #22) The city hosts an "Emergency Preparedness" webpage Emergency Preparedness | Gilroy, CA - Official Website (cityofgilroy.org) *(listed in Appendix B)*	City of Gilroy Fire Department	Year Round	N/A	Gilroy continues to maintain an "Emergency Preparedness" webpage, including a link that redirects to Valley Water's Flood Ready landing page, the National Weather Service webpage, and the City's Flood Management webpage. The Emergency Preparedness webpage is reviewed once a month and updated as needed.
			(LA OP #23) The city's Public Works Department hosts a 'Flood Zone Information' webpage on its website *(listed in Appendix B)* https://www.losaltosca.gov/publicworks/page/flood-zone-information	City of Los Altos Public Works Department	Year Round	N/A	Los Altos: The webpage is updated as needed. The webpage has been updated and new URL is: https://www.losaltosca.gov/publicworks/page/floodplain-management-information
			(LAH OP #24) The town hosts a "Flood Information" webpage on the town's website. This webpage includes information on the PPI nine topics, including a supporting message. The webpage redirects to the following key resource websites: www.valleywater.org/floodready, www.floodsmart.org, www.ready.gov, and www.weather.gov	Town of Los Altos Hills	Year Round	N/A	Town of Los Altos Hills: No update available - non-CRS participating community
			(LG OP #25) The town's website encourages residents and businesses to purchase flood insurance and redirects visitors to www.floodsmart.gov	Town of Los Gatos	Year Round	N/A	Town of Los Gatos: No update available - non-CRS participating community
			(MIL OP #26) The city's' website has a "Flood Information" webpage that contains information on several of the PPI message topics; the webpage also redirects to Valley Water, FEMA, NOAA, www.floodsmart.gov, www.Ready.gov, and USGS webpages The city's website also has a "Important Flood Hazard Information" webpage that contains information on several of the PPI message topics; the webpage also redirects to Valley Water, FEMA, NOAA, www.floodsmart.gov *(listed in Appendix B)* https://www.ci.milpitas.ca.gov/milpitas/departments/engineering/flood-information/	City of Milpitas Engineering Department	Year Round	N/A	Milpitas: On-going. Link: https://www.ci.milpitas.ca.gov/milpitas/departments/engineering/flood-information/
			(MH OP #27) The city's website has a "Flood Information, Floodplain Management" webpage that contains city's flooding information which redirects to their Floodplain Management page and includes a link to the city's annual "Flood Report." The webpage redirects Valley Water's flood ready webpage and also contains FEMA flood information http://www.morgan-hill.ca.gov/747/Flood-Information Floodplain Management | City of Morgan Hill, CA - Official Website	City of Morgan Hill Engineering Land Development	Year Round	N/A	Morgan Hill's "Flood Information, Floodplain Management" webpage includes a link to the "2021 Flood Report" brochure.

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			(MH OP #28) The city's website has an "Emergency Preparedness' webpage *(listed in Appendix B)* http://www.morgan-hill.ca.gov/133/Emergency-Preparedness	City of Morgan Hill Police Department	Year Round	N/A	Morgan Hill continues to maintain its "Emergency Preparedness" webpage. In February 2021, a link to the City's Office of Emergency Services' (OES) " Do 1 Thing" emergency preparedness campaign was added to the "Emergency Preparedness" webpage. The "Do 1 Thing" is a 12-month program with a goal of assisting the community to be better prepared for emergencies and disasters.
			(MV OP #29) Hosts a "Flood Protection and Insurance Information" webpage on its website *(listed in Appendix B)* www.mountainview.gov/depts/pw/flood_protection.asp	City of Mountain View Public Works Department	Year Round	N/A	Mountain View continues to maintain its flood protection webpage.sa
			(PA OP #30) Hosts a "Floodplain Management" webpage *(listed in Appendix B)* https://www.cityofpaloalto.org/gov/depts/pwd/stormwater/floodzones.asp	City of Palo Alto Public Works Department	Year Round	N/A	Palo Alto has a "Floodplain Management" webpage that has all relevant information regarding flood plain management topics.
			(PA OP #31) Hosts a "Flood Safety Tips" webpage www.cityofpaloalto.org/storms; flood_safe_11-16.cdr (cityofpaloalto.org)	City of Palo Alto Public Works Department	Year Round	N/A	Palo Alto's "Flood Information and Winter Storm Preparedness Webpage" has links to the "Flood Safety Tips" flier.
			(PA OP #32) Hosts a 'Creek Monitor' webpage *(listed in Appendix B)* https://www.cityofpaloalto.org/gov/depts/pwd/creek_monitor/default.asp	City of Palo Alto Public Works Department	Year Round	N/A	Palo Alto hosts a real time creek monitor webpage that warns residents of imminent danger of flooding.
			(PA OP #33) Hosts a "Flood Information and Winter Storm Preparedness" webpage which contains useful information for flood readiness *(listed in Appendix B)* https://www.cityofpaloalto.org/services/public_safety/flood_information_winter_storms/default.asp	City of Palo Alto Office of Emergency Services	Year Round	N/A	Palo Alto's "Flood Information and Winter Storm preparedness" website has useful information on flood preparedness for before storm, during storm and after storm.
			(SJ OP #34) The city's webpages includes a "Flood Hazard Zones" webpage which includes information of flood preparedness https://www.sanjoseca.gov/your-government/departments/public-works/development-services/floodplain-management	City of San Jose Public Works, Development Services	Year Round	N/A	San Jose: Website includes flood zone and flood smart information
			(SC OP #35) The city's "Flood Protection Information" webpage contains valuable information on flood related topics https://www.santaclaraca.gov/our-city/departments-g-z/public-works/engineering/flood-protection *(also listed in Appendix B)*	City of Santa Clara	Year Round	N/A	Santa Clara: Website is updated and maintains flood topic information
			(SAR OP #36) The city's website encourages residents/businesses to purchase flood insurance and redirects visitors to www.floodsmart.gov	City of Saratoga	Year Round	N/A	Saratoga: No update available - non-CRS participating community
			(SAR OP #37) The city has a "Staying Safe, Winter Storms" webpage. They have also linked the city's Winter Storms webpage to Valley Water's Flood Ready webpage https://www.saratoga.ca.us/218/Winter-Storms	City of Saratoga	Year Round	N/A	Saratoga: No update available - non-CRS participating community
			(SUN OP #38) The city has a "Flood Protection" webpage Sunnyvale, CA - Flood Protection (*listed in Appendix B*)	City of Sunnyvale	Year Round	N/A	Sunnyvale: The City continues to maintain its flood protection website.

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	Topics 1-9 and supporting messages Flood Awareness Media Campaign, including social media	Educate our community on flood protection and preparedness measures	(VW OP #39) Conducts a flood awareness media campaign, reaching the community at large, including our multilingual community. Many of the Santa Clara County CRS Communities recognize Valley Water's Flood Awareness Campaign and link it on their community's flood information web page and redirect to Valley Water's Flood Ready webpage (Topics 1-9) *Campaign features social media videos and postings on various platforms (i.e. Facebook, Twitter, Instagram, Nextdoor, etc.), digital banners, newspaper advertorials, radio ads, billboards, utility bill inserts for communities to use, communities redirect to ValleyWater.org/FloodReady and television/mobile ads targeting residents who live in flood-prone areas and multilingual ethnic communities*	Valley Water Communications	Annually, for the duration of the rainy season, typically from November to April	All Santa Clara County CRS Communities	Valley Water: In addition to social media outreach, in lieu of a Flood Awareness Campaign, Valley Water mailed out 3 targeted pieces to addresses in the SFHA. All outreach projects included the 9 CRS topics and were multilanguage. 1. FPM – 60,790 were printed; 4,450 were given to the cities/county (Public Works and Planning Departments) between December 2021 – February 1, 2022; 54,790 were mailed on December 13-14, 2021; The FPM is posted on Valley Water's website 2. Postcard – 55,000 were printed; 52,502 were mailed on 10/29/21 (need soft copy of postcard) 3. "You Live in a Flood Zone – Do You Know What to Do Before, During, and After a Flood?" trifold: 54,790 mailed on January 11, 2022 We received the results of the 2021-22 Flood Awareness Probolsky Poll. The results below point to an effective campaign that was less expensive than general advertising, yielding a savings of about $150,000 with stronger results. Going forward, direct mailings to the FEMA SFHA seem to be a good outreach strategy for the flood awareness campaign vs. targeted advertising. Some highlights: • 28% increase in those who believe that Valley Water is doing an excellent job in keeping them informed of a flood (now 87% believe we do an excellent, good or fair job). • 10% increase in food zone awareness over last year (now at 50-60% awareness). • 32% increase in recall of flood mailings vs. last year (now at 59% reach) with good recall amongst Spanish, Mandarin and Vietnamese speakers. • 58% of respondents clearly understood our 3 main calls to action (find your risk, get flood insurance, develop a plan). • 12% increase in respondents who believe they have taken all steps to be ready for a flood (now at 76%). • 11% increase in respondents who have flood insurance (now at 51%). • 64% Believe home is prepared for a flood (100% of Chinese, 75% of Vietnamese believe they are ready). • 100% of high-risk residents in mobile home parks are aware of our messaging.

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							• Very good results amongst Asian respondents on all areas of polling. Areas for growth: • We have an opportunity for future outreach to renters of both single-family homes and multi-family units. Los Altos included an insert provided by Valley Water to all residents and businesses via a refuse collection bill insert in October and December 2021.
			(VW OP #40) As part of the flood awareness campaign, a 'Get Flood Ready, Social Media and Web Resources Guide' is provided to all cities/county in Santa Clara County for their use as part of their outreach efforts	Valley Water	Upon the completion of the annual FPM	All Santa Clara County CRS Communities	Valley Water: Provided all cities/county its social media and web resources guide in November 2021. Cupertino posted a series of social media posts during Flood Preparedness Week in October 2021 using Valley Water's guide. Los Altos has included links to the flood awareness campaign web resources in electronic newsletters during FY2022. Palo Alto has Valley Water's Flood Awareness Campaign linked on the City's Flood Information and Winter Storm Preparedness website. City of Santa Clara has posted social media posts for flood awareness week in Fall 2021.
			(SCC OP #41) Shares Valley Water's digital social media resource links during the flood season. The "Floods Follow Fires. Are you Ready?" and "Got Sandbags" messages redirect to Valley Water's website. Messages are used on social media, short form newsletter, short form email, web, and Nextdoor	Santa Clara County Office of Emergency Management	Year Round	N/A	Santa Clara County: No update available - non-CRS participating community
			(CUP OP #42) Recognizes the robust social media campaign led by Valley Water and has linked the city's main flood preparation webpage to Valley Water's Flood Ready webpage	City of Cupertino	Year Round	N/A	Cupertino continues to maintain the Flood Section under the "Citizen Preparedness" webpage, including a link that redirects to Valley Water's Flood Ready webpage.
			(GIL OP #43) The city recognizes Valley Water's Flood Awareness Campaign and has linked the city's main flood webpage to Valley Water's Flood Ready webpage	City of Gilroy	Year Round	N/A	Gilroy: The "Emergency Preparedness" and Public Works "Flood Management" webpage both link to Valley Water's Flood Ready webpage.
			(LAH OP #44) The town recognizes Valley Water's Flood Awareness Campaign and has linked the town's main flood webpage to Valley Water's Flood Ready webpage	Town of Los Altos Hills	Year Round	N/A	Town of Los Altos Hills: No update available - non-CRS participating community

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			(LG OP #45) Recognizes Valley Water's Flood Awareness Campaign and has linked the Town's main flood webpage to Valley Water's Flood Ready webpage	Town of Los Gatos	Year Round	N/A	Town of Los Gatos: No update available - non-CRS participating community
			(MV OP #46) The city does a social media notification about storm preparation for winter storms ahead of time. The notification directs residents to their "Flood Protection and Insurance Information" webpage. The city has also linked the city's webpage to Valley Water's Flood Ready webpage	City of Mountain View	Year Round	N/A	Mountain View shared a Facebook post in October 2021 regarding preparing for the upcoming rain. A post regarding flood preparedness was featured in our email distribution "City Hall Connection" in celebration of Flood Preparedness Week in October 2021.
			(SC FRP #47) City publishes social media posts, on Facebook, Twitter, and other platforms, focused on safety The city has prepared a pre-flood plan (FRP) for public information projects that will be implemented before, during, and after a storm/flood, as well as identifying who is responsible for posting these messages, what type of events they apply to, what social media platforms to post to and how often	City of Santa Clara Office of Emergency Services	During the storm season	N/A	Santa Clara: Information was posted on social media for flood awareness week led by city streets division
			(SJ OP #48) Recognizes Valley Water's Flood Awareness Campaign and has linked the city's main flood webpage to Valley Water's Flood Ready webpage. Keeps Valley Water's floodplain mailer static location at City Hall for residents to pick-up and is also distributed at various events throughout the year	City of San Jose	Year Round	N/A	San Jose: Floodplain mailer available at City Hall and website linked to Valley Water's Flood Ready webpage.
			(SAR OP #49) Recognizes Valley Water's Flood Awareness Campaign and has linked the city's main flood webpage to Valley Water's Flood Ready webpage	City of Saratoga	Year Round	N/A	Saratoga: No update available - non-CRS participating community
			(SAR OP #50) The city does a social media notification about storm preparation for winter storms ahead of time	City of Saratoga	Year Round	N/A	Saratoga: No update available - non-CRS participating community
			(SUN OP #51) The city actively posts flood safety and preparedness messaging through social media platforms (i.e., Facebook and Twitter)	City of Sunnyvale Environmental Services	During the rainy season (October – March)	N/A	Sunnyvale: City staff posted information to Facebook regarding keeping the storm drain clear to prevent clogging.
	Topics 1-9 and supporting messages Community Events – Distribute flood preparedness materials to the community	Educate our community on flood protection and preparedness measures Increase in 'hits' on Valley Water and cities Flood Protection Resources pages and improve Valley Water's Flood Campaign results Residents less stress during emergencies and	(VW OP #52) Copies of Valley Water's multilanguage floodplain mailer is made available to all Santa Clara County CRS Communities to disseminate at various events, including keeping the mailer static in lobby areas for visitors to pick-up. Valley Water attends various communities' events/fairs throughout the county and disseminates flood readiness materials, including various FEMA flood-related publications and Valley Water flood ready materials (Topics 1– 9)	Valley Water	Annually, September - May	All Santa Clara County CRS Communities	Valley Water's multilanguage (English, Spanish, Chinese, and Vietnamese) annual FPM were provided to all Santa Clara County city/county Public Works and Planning Departments between December 2021 - February 1, 2022. The FPM is posted on our website. 60,790 FPMs were printed: 54,790 were mailed to addresses in the SFHA on December 13-14, 2021; 4,450 provided to the cities/county (Public Works and Planning Departments) between December 2021 - February 1, 2022; and remaining copies were used as needed by Valley Water CRS, Communications and Government Relations staff.

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		better prepared before a flood event					Cupertino distributes copies of Valley Water's Floodplain Mailer at various fairs/events and provides additional copies for the public on display at City Hall. Los Altos has mailer available at city hall and public library. During FY2022, events were limited due to COVID-19. Palo Alto distributes Valley Water's multi-language floodplain mailer during fairs during Earth Day event and Palo Alto's Open House every year. Santa Clara: Fliers and additional information are currently at city hall and public library.
			(CUP OP #53) Distributes flood readiness outreach materials at various events/ facilities	City of Cupertino	Year Round, as needed	N/A	Cupertino distributes copies of Valley Water's Floodplain Mailer and other promotional items provided by Valley Water at various fairs/events and provides additional copies of the mailer for the public on display at City Hall.
			(GIL OP #54) Participates in two fair/events: Gilroy Garlic Festival (GF) and city's Public Works Week Community Open House (PWWCOH)	City of Gilroy	End of July (GF) Typically, in May (PWWCOH)	N/A	Gilroy: There was no Garlic Festival or Public Works Week Community Open House in 2021, so no materials were distributed.
			(LAH OP #55) Hosts two events - Earth Day (ED) and the Town Picnic (TP)	Town of Los Altos Hills	Annually, Spring (ED) and late Summer (TP)	N/A	Town of Los Altos Hills: No update available - non-CRS participating community
			(MIL OP #56) Distributes FEMA flood-related publications at various events	City of Milpitas	Year Round	N/A	Milpitas: Ongoing. Distributed at the most recent event "Holiday Magic" which was held in December 2021.
			(MV OP #57) The city participates Mountain View Art & Wine Festival (MVA&WF) and Thursday Night Live (TNL) and distributes flood preparedness information	City of Mountain View	Each September (MVA&WF) Months of June/July (TNL)	Valley Water	Mountain View: Due to COVID restrictions these events did not happen or were modified from the previous years. Therefore, we were not able to distribute the materials. If COVID restrictions allow, we plan to resume attendance and distribution of materials in future years.
			(PA OP #58) Staff hosts a flood readiness table at city's annual Earth Day (ED) event and at the city Municipal Corporation Open House (MCOH). Upon request, the city also participates in other fairs and promotes flood readiness, including Creekwise mailer/brochure	City of Palo Alto	Each April (ED) and July (MCOH)	Can vary depending on requests made to City to support fairs	Palo Alto hosts a flood readiness table at the Earth Day Event and City Municipal Corporation Open House. The City distributes flood readiness fliers during the event.
			(SJ OP #59) Staff hosts and participates in the 'Building Permits and Home Safety Open House.' The city's also hosts 'Pumpkins in the Park' event which Valley Water staff participates in and promotes flood preparedness	City of San Jose	Each May and October	Valley Water	San Jose: City hosts annual Building and Home Safety open house. However, this year's event is on hold due to COVID-19 pandemic.

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			(SC OP #60) City hosts a flood readiness table at the Art & Wine Festival. Valley Water also sponsors a table at the festival promoting flood preparedness and distributes various flood readiness materials to the community	City of Santa Clara	Each September	N/A	Santa Clara: In progress with this year's Art & Wine festival which is in fall
	Topic 3: Protect people from the flood hazard Message 3A - Put your 3-day emergency kit together Message 3B - Follow evacuation orders Message 3C – Learn the best route to high ground Topic 9: Understand shallow flooding risks – don't drive through standing water Message 9A - Understand shallow flooding risks - don't drive through standing water FEMA's message: "Turn Around Don't Drown®."	Less damage due to the floods; improve sandbag distribution Fewer accidents and rescues	(SUN OP #61) City has permanent "Road May Flood" street signs in areas of the City prone to flooding and promotes the "Flood Zone Look Up" featured on the city's website	City of Sunnyvale	Year Round	N/A	Sunnyvale: Ongoing. City staff still promote the use of the "Flood Zone Lookup."
	Topic 4: Protect your property from the flood hazard Message 4A - Protect your property from the flood hazard Message 4B - Prepare your home Message 4C - Sandbags can offer protection against a foot or less of floodwater Message 4E - Get sandbags before a flood Topic 5: Build responsibility Message 5A - Build responsibly in floodplains Message 5B - Comply with development requirements Message 5C - Check with your local floodplain manager before you build	Increase in inquiries on retrofitting measures. Decrease the number of repairs and elevations without permits. Increase number of repairs with permits Ensure people who are interested in protecting their property from flooding are getting the help they need Keep families safe	(CUP OP #62) The city offers Flood Protection Assistance, Property Protection Advice. Staff provides in-person flood risk consultation at the front counter and/or site visits when requested	City of Cupertino	Year Round	N/A	Cupertino: Ongoing. The City maintains a log of FEMA-related requests.
			(MIL OP # 63) The city offers Flood Protection Assistance, Property Protection Advice and provides in-person flood risk consultation at the front counter	City of Milpitas	Year Round	N/A	Milpitas: Ongoing. City maintains logs of FEMA-related requests.
			(SC OP #64) The city offers Flood Protection Assistance, Property Protection Advice	City of Santa Clara	Year Round	N/A	Santa Clara: On-going per requests to the city
	Topic 6: Protect natural floodplain functions Message 6A -Keep creeks clean and flowing Message 6B - Keep debris and trash out of our streams Message 6C - Don't pollute, dump, or drain anything in creeks	Cleaner streams and fewer dumping violations Fewer debris blockages during high-flow events Drainage inspectors report fewer calls and a decrease in the amount of trash removed	(VW OP #65) "Do Not Dump"/illegal dumping message is sent each year to all Santa Clara County residents in Valley Water's CWM and FPM	Valley Water Communications	Each late October or November (CWM) Each November/ December (FPM)	All Santa Clara County CRS Communities	Valley Water's FY22 FPM included the 'Do Not Dump' messaging. Additionally, Valley Water's website flood ready landing page contains 'Do not pollute, dump, or drain anything in creeks' under the Before a Flood section. https://www.valleywater.org/flooding-safety/flood-ready/flood-safety-advice Valley Water hosted Coastal Cleanup Day (CCD) on September 18, 2021 (*Results: 913 people participated; 99.5 distance cleaned miles; 28,084.76, includes recyclables, weight of trash collected; 1,346.90 weight of recyclables collected*), and National River Cleanup Day (NRCD) on May 21, 2022 (*Results: 596 people participated; 36.07 distance cleaned miles; 22,695.04 includes recyclables, weight of trash collected; 2,569.57 weight of recyclables collected*). Several of our CRS communities participated. https://cleanacreek.org/past-results-2/

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							Cupertino's Flood Section under the "Citizen Preparedness" webpage has a link to Valley Water's Floodplain Mailer. The City also includes the "Do Not Dump" messaging in The Cupertino Scene's annual flood preparedness article. Palo Alto has Valley Water's CWM and FPM linked on the City's Flood Information and Winter Storm Preparedness website.
			(VW OP #66) "Do Not Dump" signs placed by waterways/channels	Valley Water O&M	Year Round	N/A	Valley Water's Operations & Maintenance continues its practice of placing 'Do Not Dump' signs on waterways/ channels.
			(VW OP #67) Lists Pollution Hotline number in all Project Notices	Valley Water Communications	Year Round	N/A	Valley Water's project notices lists the pollution hotline number. https://www.valleywater.org/project-updates/your-neighborhood
			(SCC OP #68) Storm Drain Stenciling/Medallion Program	Santa Clara County	Year Round	All Santa Clara County CRS Communities	Palo Alto installs Storm Drain Stenciling/Medallion on all public right of way catch basin and inlets. City of Santa Clara: Stenciling/Medallion installed on public catch basins/inlets. Santa Clara County: No update available - non-CRS participating community.
			(SUN OP #69) The city's "Horizon" newsletter, includes Do Not Dump messaging	City of Sunnyvale	Annually, fall	N/A	Sunnyvale: The City still produces the Horizon newsletter and includes a "Do Not Dump" message.
			(ALL OP #70) Developments that are modifying or constructing new catch basins/storm drains/inlets are required, per the below-noted permits, to stencil the "No Dumping! Flows to Bay." In addition, some of these cities require all bid documents for capital projects which are modifying or constructing new catch basins, and require the contractors to install the same stencil. The program is also highlighted on cities' websites. ▪ *South County municipalities are subject to the statewide "Phase II" NPDES Permit* ▪ *North County municipalities are subject to the SF Bay Municipal Regional Stormwater NPDES Permit*	All	Year Round	N/A	Valley Water mark's each inlet with a "No Dumping! Flows to Bay" message on Valley Water properties. Gilroy requires all new storm inlets and catch basins to include a stencil or medallion with no dumping, flows to creek/waterway language for development projects. Morgan Hill requires all storm drain inlets and catch basins within the project area of development applications to be stenciled with prohibitive language (such as: "NO DUMPING – DRAINS TO CREEK") and/or graphical icons to discourage illegal dumping.
			(CUP OP #71) The city's annual flood notice in the local newsletter, 'The Cupertino Scene,' contains dumping is illegal messaging and how to report	City of Cupertino	Annually, October - November	N/A	Cupertino includes the "Do Not Dump" messaging in The Cupertino Scene's annual flood preparedness article.

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			(CUP OP #72) Participates in clean-up events: the annual National River Clean-up Day (NRCD) and Coastal Clean-Up Day (CCD). They coordinate with Valley Water on both these clean-up efforts. The city also participates in Valley Water's Adopt-a-Creek Program	City of Cupertino	Each May (NRCD) and September (CCD)	Volunteers Valley Water Stream Stewardship	Cupertino participated in Coastal Clean-Up Day on 9/18/21 at Calabazas Creek. Cupertino also helped to advertise and support Valley Water's "virtual" cleanups (cleaning up your own neighborhood) every Saturday in May 2021.
			(LAH OP #73) The town participates in annual clean-up events: National River Clean-up Day (each May) and Coastal Clean-up Day (each September) and coordinates volunteers. They coordinate with Valley Water on both these clean-up efforts. The town also participates in Valley Water's Adopt-a-Creek Program	Town of Los Altos Hills	Each May (NRCD) and September (CCD)	Volunteers Valley Water Stream Stewardship	Town of Los Altos Hills: No update available - non-CRS participating community.
			(MIL OP #74) "Flood Public Advisory" brochure contains dumping is illegal messaging and how to report	City of Milpitas	Each December or January	N/A	Milpitas: The City's flood advisory utility bill insert has information about illegal dumping and how to report it.
			(MIL OP #75) Participates in annual clean-up events: National River Clean-up Day (NRCD) and Coastal Clean-Up Day (CCD). They coordinate with Valley Water on both these clean-up efforts. The city also participates in Valley Water's Adopt-a-Creek Program	City of Milpitas	Each May (NRCD) and September (CCD)	Volunteers Valley Water Stream Stewardship	Milpitas: CCD held as a hybrid in-person group and individual led in September 2021. NRCD is planned for May 2022 with two cleanup locations.
			(MH OP #76) "Flood Report" contains message on keeping debris and trash out of streams – Do Not Dump messaging	City of Morgan Hill	Annually, close to or during the start of the rainy season	N/A	Morgan Hill's "2021 Flood Report" brochure contained the messages "Keep debris and trash out of our streams" and "It's illegal to dump into our creeks".
			(PA OP #77) "Are You Ready for Winter Storms?" utilities insert contains the Do Not Dump and report illegal dumping messages	City of Palo Alto	Each fall	N/A	Palo Alto includes Do Not Dump and Report Illegal Messages on City's utility insert.
			(PA OP #78) Utility bill insert includes a 'Utility Announcement on Flood Safety Tips,' including Protect natural floodplains - keep rain gutters and drainage channels free of debris	City of Palo Alto	Annually, March-April	N/A	Palo Alto includes Protect Natural Floodplains-keep rain gutters and creeks free of debris messages on flood safety tips sent as Utility Announcement and the flier sent as an attachment on utility bills every year.
			(PA OP #79) Participates in annual clean-up events: National River Clean-up Day (NRCD) and Coastal Clean-Up Day (CCD). They coordinate with Valley Water on both these clean-up efforts. Additionally, the city participates in Valley Water's Adopt-a-Creek Program	City of Palo Alto	Each May (NRCD) and September (CCD)	Volunteers Valley Water Stream Stewardship	Palo Alto participates every year during National River Clean-up Day on Matadero and Adobe Creek. Palo Alto also participates in the multi-jurisdictional effort on creek clean-up of San Francisquito Creek.
			(PA OP #80) Clean-ups of trash booms located in Matadero Creek and Adobe Creek are done annually on an as-needed basis. The city also assesses its hot spots and cleans up the local drainage system on an ongoing basis and part of its operations and maintenance	City of Palo Alto	Annually, as needed	N/A	Palo Alto City staff clean-ups trash booms on Matadero Creek and Adobe Creek, assess hot spots and clean ups on an ongoing basis on the entire City's storm drain network system.
			(SUN OP #81) "Horizon" newsletter includes a "Know How to Be FloodSafe" article that promotes the Do Not Dump message	City of Sunnyvale	Each October, Fall Edition	N/A	Sunnyvale: The City still includes a "flood Safe" message in the fall Horizon.
Residents and Businesses in the	Topic 1: Know your flood hazard Message 1A - Know your flood risk Message 1B - Contact your floodplain manager to find out if your property is in a floodplain	Residents/businesses in the SFHA are aware they're in the SFHA and prepare before floods	(VW OP #82) Multi-language floodplain mailer (FPM) to all residents and businesses within the SFHA in Santa Clara County (Topics 1– 9)	Valley Water	Each November/ December	All	Valley Water's multi-language (English, Spanish, Chinese, and Vietnamese) FY 21-22 FPM was sent to all SC County parcels in the FEMA SFHA; 54,790 FPMs were mailed on December 13-14, 2021.

Appendix A
CRS Creditable Outreach and Flood Response Projects by CRS Community
Santa Clara County Multi-Jurisdictional PPI 2021
FY 2022 (Year 1) Project Accomplishments by CRS Communities

Audience	[1] Message	Outcome	Project(s) Proposed to Support the Messages (XX denotes Community acronym, and Outreach Project #)	Assignment	[2] Schedule	[3] Stakeholder	FY 2022 Project Accomplishments INPUT HERE ONLY
Special Flood Hazard Area (SFHA) – *Low Lying Areas, Along Rivers and Creeks* – *Coastal Communities at Risk for Sea Level Rise/Tsunamis* – *Repetitive Loss (RL) Areas*	Message 1C - Check if your home or business is in a Special Flood Hazard Area Topic 2: Insure your property for your flood hazard Message 2A - Get flood insurance ahead of time Message 2B – Insure your property Message 2C – There is a 30-day waiting period for the policy to take place Topic 3: Protect people from the flood hazard Message 3A - Put your 3-day emergency kit together Message 3B - Follow evacuation orders Message 3C – Learn the best route to high ground Topic 4: Protect your property from the flood hazard Message 4A - Protect your property from the flood hazard Message 4B - Prepare your home Message 4C - Sandbags can offer protection against a foot or less of floodwater Message 4E - Get sandbags before a flood Topic 5: Build responsibility Message 5A - Build responsibly in floodplains Message 5B - Comply with development requirements Message 5C - Check with your local floodplain manager before you build Topic 6: Protect natural floodplain functions Message 6A -Keep creeks clean and flowing Message 6B - Keep debris and trash out of our streams Message 6C - Don't pollute, dump, or drain anything in creeks Topic 7: Develop a Family Emergency Plan Message 7A: Develop an emergency plan Topic 8: Download disaster Apps Message 8A - Download disaster emergency apps Topic 9: Understand shallow flooding risks – don't drive through standing water Message 9A - Understand shallow flooding risks - don't drive through standing water FEMA's message: "Turn Around Don't Drown®."	Increase in number of flood insurance policies in the SFHAs and RLAs in the county in general Prospective buyers understand flood risks Increase number of elevation certificates on file, and structures repaired with permits; decrease the number of repetitive loss increase homes Increase in the number of flood insurance policies with contents coverage					Los Altos supports this effort.
			(CUP OP #83) Flood notice in the local newsletter, The Cupertino Scene, which reaches residents and businesses in the SFHA (Topics 1-9)	City of Cupertino	Each October or November issue	N/A	Cupertino published the annual flood preparation article in the November 2021 issue of "The Cupertino Scene".
			(LA OP #84) Letter, along with a "Are You Prepared for a Flood in Your Neighborhood?" brochure to property owners in the SFHA (Topics 1-8)	City of Los Altos	Annually, each fall	N/A	Los Altos: A utility bill insert was sent out to all residential customers in October and all commercial customers in December via Mission Trail (Refuse Collection partner). A letter to all SFHA property owners will be sent during FY2022.
			(LAH OP #85) The town's "Our Town" quarterly newsletter includes information on flood preparedness. The newsletter is mailed out town-wide and is also available online on the town's website (*Topics TBD during cycle visit*)	Town of Los Altos Hills	Each fall	N/A	Town of Los Altos Hills: No update available - non-CRS participating community.
			(MIL OP #86) "Flood Public Advisory" brochure to residents and businesses within SFHA (Topics 1-6)	City of Milpitas	Each December or January	N/A	Milpitas: A utility bill insert was sent to every address in Milpitas on 12/10/21. This was sent in four languages (English, Vietnamese, Spanish and Chinese).
			(MH OP #87) Sends a citywide "Flood Report" brochure, including to those in the SFHA (Topics 1-9)	City of Morgan Hill	Annually, close to or during the start of the rainy season	N/A	Morgan Hill's "2021 Flood Report" brochure was sent out citywide.
			(MV OP #88) Sends "The View" citywide newsletter, Winter version, includes information on flood risk, flood safety, and the importance of buying flood insurance (Topics 1-9)	City of Mountain View	Fall newsletter edition	N/A	Mountain View published the Volume 2, 2021 edition of the View in September 2021 that featured information on flood awareness, flood insurance, and preparing for the winter storm.
			(MV OP #89) Mails a utility bill insert to all resident and businesses that contains information on flood risk, flood safety, and the importance of buying flood insurance (Topics 9)	City of Mountain View	Between July - September	N/A	Mountain View sent out Valley Water's Get Flood Ready flier as a utility billing insert to every City utility customer between 9/6/2021 and 10/25/2021.
			(PA OP #90) Sends the "Are You Ready for Winter Storms?' flier (*aka utilities mailer*) to all residents and businesses in the city, including to those in the SFHA, along with their utility bills (Topics 1-9)	City of Palo Alto	Each fall	N/A	Palo Alto sent "Are you Ready for Winter Storms?" flier as utility inserts during fall of 2021.
			(PA OP #91) Sends out utility announcement, "Anytime it can rain, it can flood. Don't get caught off-guard" (Topics 1, 2,3, 4, 5, 6, 7, & 9 – *will pursue adding other topic*)	City of Palo Alto	Each March/April	N/A	Palo Alto sent flood safety tips as a utility announcement in March 2021.
			(SC OP #92) Mails out a citywide, including all addresses in the SFHA, newsletter for residents and businesses called "Inside Santa Clara" (Topics 1-9)	City of Santa Clara	Each fall	N/A	Santa Clara: Newsletter was sent on November 1, 2021, and available on City website.

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Audience	[1] Message	Outcome	Project(s) Proposed to Support the Messages (XX denotes Community acronym, and Outreach Project #)	Assignment	[2] Schedule	[3] Stakeholder	FY 2022 Project Accomplishments INPUT HERE ONLY
			(SUN OP #93) Sends two (2) mailers and one (1) "Horizon" newsletter article "Know How to Be Flood Safe" that promotes flood safety and flood preparedness messaging targeted to all residents and businesses within the SFHA (Topics 2 and 4)	City of Sunnyvale	Each fall around October	N/A	Sunnyvale: The City still sends out mailers to targeted residents and a flood safe newsletter article.
			(SUN OP #94) Sends mailer to all those in the SFHA (Topics 1-4, and 7)	City of Sunnyvale	Each October	N/A	Sunnyvale: The City still sends out these mailers. The mailers were sent October 2021.
	Topic 2: Insure your property for your flood hazard Message 2A - Get flood insurance ahead of time Message 2B – Insure your property Message 2C – There is a 30-day waiting period for the policy to take place	Increase in number of flood insurance policies in the SFHAs, RLAs, and in the county in general Prospective buyers understand flood risks Increase in the number of flood insurance policies with contents coverage	(SCC OP #95) Sends letters to the properties in the unincorporated section in the areas of the county's mapped repetitive loss areas	Santa Clara County	Annually, each fall	N/A	Santa Clara County: No update available - non-CRS participating community.
			(CUP OP #96) Continues to send a letter to former repetitive loss properties	City of Cupertino	Annually, mid-year	N/A	Cupertino continues to send out an annual letter to former repetitive loss properties.
			(MH OP #97) Sends a notice to repetitive loss (RL) areas as required by FEMA	City of Morgan Hill	Annually, each summer	N/A	Morgan Hill sent letters to properties in the City's mapped repetitive loss areas in July 2021.
			(PA OP #98) Sends letters to the properties in the city's mapped repetitive loss areas, highlighting flood safety tips	City of Palo Alto	Annually, typically August - September	N/A	Palo Alto sent letters to properties in the City's mapped repetitive loss areas, highlighting flood safety tips in August 2021.
			(SJ OP #99) Sends letters to the properties in the city's mapped repetitive loss areas	City of San Jose	Annually, each typically between September - December	N/A	San Jose: Letters sent to general repetitive loss property areas in March 2022.
Messengers to Other Target Audiences (Organizations & Businesses Serving the Community)	Topic 1: Know your flood hazard Message 1A - Know your flood risk Message 1B - Contact your floodplain manager to find out if your property is in a floodplain Message 1C - Check if your home or business is in a Special Flood Hazard Area Topic 2: Insure your property for your flood hazard Message 2A - Get flood insurance ahead of time Message 2B – Insure your property Message 2C – There is a 30-day waiting period for the policy to take place Topic 3: Protect people from the flood hazard Message 3A - Put your 3-day emergency kit together Message 3B - Follow evacuation orders Message 3C – Learn the best route to high ground Topic 4: Protect your property from the flood hazard Message 4A - Protect your property from the flood hazard Message 4B - Prepare your home	Educate our community on flood protection and preparedness measures by working and coordinating with groups who serve as messengers, to people who are at risk of flooding, as they provide their respective business service	(VW OP #100) Administers a "Let's Talk Water" Speakers Bureau Program that customizes presentations to update groups on specific issues provide updates on Valley Water projects, including flood protection projects and to educate residents on existing flood risks as well as provide resources and tips to be flood ready. https://www.valleywater.org/learning-center/lets-talk-water-speakers-bureau	Valley Water Communications Unit	On a project-specific basis or as requested	Could vary from year-to-year Kiwanis Rotary Clubs Homeowners and Neighborhood Associations Forum Groups Association of Realtors	Valley Water's 'Let's Talk Water' Speakers Bureau Program is active and available to the community. General presentations discuss Valley Water's flood protection, including flood preparedness and awareness, and our creeks and ecosystems. Customized presentations for groups on specific issues are also available.
			(VW OP #101) Participates in booth duty support at various events and fairs throughout the county, including Valley Water Capital project meetings or other events, as reque sted by various organizations	Valley Water Office of Government Relations	Annually. During the flood season *(starting in September – May)*	All Santa Clara County CRS Communities	Valley Water did not undertake booth support during FY22 due to the COVID-19 pandemic.
			(VW OP #102) Partner with local Second Harvest Food Bank with distributing FEMA and Valley Water flood preparedness materials, including promotional item(s) as available	Valley Water CRS Program	In October (*during CFPW*)	Second Harvest Food Bank of Silicon Valley	Valley Water partnered with Second Harvest Food Bank (SHFB) of Silicon Valley in October 2021. 2,000 'Get Flood Ready' emergency starter kit donations were distributed by SHFB on behalf of all Santa Clara County CRS communities.

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	Message 4C - Sandbags can offer protection against a foot or less of floodwater Message 4E - Get sandbags before a flood Topic 5: Build responsibility Message 5A - Build responsibly in floodplains Message 5B - Comply with development requirements Message 5C - Check with your local floodplain manager before you build Topic 6: Protect natural floodplain functions Message 6A -Keep creeks clean and flowing Message 6B - Keep debris and trash out of our streams Message 6C - Don't pollute, dump, or drain anything in creeks Topic 7: Develop a Family Emergency Plan Message 7A: Develop an emergency plan Topic 8: Download disaster Apps Message 8A - Download disaster emergency apps Topic 9: Understand shallow flooding risks – don't drive through standing water Message 9A - Understand shallow flooding risks - don't drive through standing water FEMA's message: "Turn Around Don't Drown®."		(ALL OP #103) Other New Initiatives *(as noted in the PPI document)* 1. Continue and expand the standardized flood message prepared for each community to include flood messages in utility bills each year, including PG&E. 2. Expand on partnerships with local chambers of commerce to disseminate and share flood preparedness information. 3. Expand on outreach to the Asian and Latino communities who live in flood prone areas. 4. Expand on outreach to "hot spot" flood prone areas by hosting on-site or virtual events. 5. Expand on reaching local homeowners associations (HOA)s and apartment associations (*i.e. Executive Council of Homeowners (ECHO)*) 6. Expand on reaching residents in marginal and low-income communities through partnering with organizations that reach these communities. *(i.e. Second Harvest Food Bank and others*) 7. Communities could pursue FEMA Matching Funds Grants for severe Repetitive Loss Areas. 8. Review and expand other public information activities, such as Flood Protection Assistance (Activity 360) and Flood Insurance Promotion (Activity 370). 9. Develop a region-wide Flood Response Preparations (FRP) messaging plan.	All	TBD	TBD	Valley Water, as the lead agency for the Santa Clara County CRS Group/PPI Committee, included the 'New Initiative' topic for discussion on its August 2021, March 10, 2022, and May 19, 2022 meeting agendas. The following new initiatives were accomplished in FY22: 1). Valley Water continues to offer assistance to all communities for standardizing flood messaging to include as a utility bill insert. 5). Valley Water's 'Let's Talk Water: Speakers Bureau Program offers presentations on the history of the district and how we operate and includes information on flood preparedness. Presentations can be customized for groups, as requested. 6). Due to the COVID-19 pandemic, countywide in-person community events in FY22 were postponed or canceled. Instead, Valley Water partnered with Second Harvest Food Bank of Silicon Valley to distribute 2,000 emergency preparedness starter kits of emergency supplies to underserved communities in October 2021. 9). At the May 19, 2022 CRS Users Group/PPI Committee Meeting, this initiative was discussed. The idea was to develop an FRP similar to the one submitted by the City of Santa Clara for which full FRP credit was yielded. As we are looking at the feasibility of regionalizing the CRS Program for our area, this initiative will be evaluated in conjunction with the Feasibility Study being conducted.
			(CUP OP #104) The city provides a Winter Preparedness notification informing contractors that during the winter season, they need to winterize their project(s) site as certain soil disturbance activities are not allowed during the rainy season	City of Cupertino	On a project-specific basis	Various contractors	Cupertino continues to prepare and mail the rainy season letters every year to applicable projects. These letters were mailed in late August 2021.
			(MIL OP#105) On a project-specific basis, the city provides contractors a Winter Preparedness notification that informs them that during the winter season, they need to winterize their project(s) site. Certain soil disturbance activities are not allowed during the rainy season	City of Milpitas	On a project-specific basis	Various contractors	Milpitas: On-going. The City of Milpitas will be sending out winterization notices to larger development projects this winter.
	Topic 2: Insure your property for your flood hazard Message 2A - Get flood insurance ahead of time Message 2B – Insure your property Message 2C – There is a 30-day waiting period for the policy to take place	Increase in number of flood insurance policies in the SFHAs and in the county in general Prospective buyers understand flood risks	(MH OP #106) The city mails out a newsletter, "Ask Before You Buy: Know Your Flood Risk!" to local real estate agents which are provided to homebuyers to help determine the flood risk of the property being purchased *(listed in Appendix B)*	City of Morgan Hill	During the rainy season	Real Estate Agencies/Agent	Morgan Hill will be sending the brochure to real estate agents in Fall 2022.
			(PA OP #107) Sends out letters to real estate agencies informing them of their responsibility to identify flood hazard areas and to take advantage of the Flood Zone Lookup on the city's website	City of Palo Alto	Annually, beginning of flood season (September/ October)	Real Estate Agencies/Agent	Palo Alto sent letters to real estate agencies informing of their responsibility to identify flood hazard areas in August 2021.

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Audience	[1] Message	Outcome	Project(s) Proposed to Support the Messages (XX denotes Community acronym, and Outreach Project #)	Assignment	[2] Schedule	[3] Stakeholder	FY 2022 Project Accomplishments INPUT HERE ONLY
		*These projects are **credited under Activity 340** (DFH and REB) – Additional credit is provided if the PPI states that real estate agents should (or have agreed to) advise house hunters about the flood hazard and that real estate agents give house hunters a REB brochure*	(SJ OP #108) Sends out letters to real estate and insurance agencies and lenders, informing them of their responsibility to identify flood hazard areas and to take advantage of the Flood Zone Lookup on the city's website on the "Flood Hazard Zones webpage and advises to contact the city for map reading services and elevation certificates on file	City of San Jose	At the beginning of the flood season (September – December)	Real Estate Agencies/Agent	San Jose: Email letters to real estate, insurance agencies and lenders in January 2022.
			(SUN OP #109) Sends mailer/postcard targeted to real estate agents informing them of the client's responsibility for identification and purchase of flood insurance and the availability of the automatic 15% discount	City of Sunnyvale	Each October	Real Estate Agencies/Agents	Sunnyvale: The City sent the mailers to real estate agents September 2021.

Agenda

Santa Clara County CRS Users Group & Program for Public Information (PPI) Committee Me

Agenda Item # 15.

March 10, 2022 | 1-3 p.m.

Zoom Meeting

https://valleywater.zoom.us/j/88438590277?pwd=VDBFbWs5aEVBSlAyQ2FaT3BValNoZz09&from=addon

Meeting ID: 884 3859 0277 | Passcode: 568494 | +1 669 900 9128 US (San Jose)

Purpose: PPI Stakeholder Committee Annual Evaluation Meeting to monitor the Implementation of the 2021 Santa Clara County Multi-Jurisdictional Program for Public Information per Activity 330, Outreach Project, Element 332.c. Program for Public Information (PPI), Step 7 requirement (*See page 2 of this agenda*)

Outcome: 2021 PPI Annual Evaluation Report, Year 1 of 5 (*See page 2 of this agenda*)

Section	Meeting Topic	Presenter	Time
1.	Introductions	All	10 min
2.	Review of the meeting Purpose and Outcome	Merna Leal	2 min
3.	350 – Flood Protection Information Element c). Flood Protection Website (WEB): • Monthly *(links)* and annual review *(content)* of communities' Flood Information landing page	Merna Leal	2 min
4.	Best practices for the Verification Cycle Visit - Discussion by Insurance Services Office (ISO) ▪ Addendum to the 2017 CRS Coordinators Manual (Edition: 2021) *Effective January 1, 2021* - Class 8 New Prerequisite: Enforcement of a freeboard standard for residential buildings - Class 6 Updated Prerequisite: New subsection inserted - Class 9 New/modified Prerequisite: Subsection (3) replaced, and first sentence of Subsection (5) replaced ▪ Need to see all higher NFIP regulations marked up in community's ordinance or regulations ▪ Correlate Open Spaces with required parcel spreadsheet(s)	Heidi Carlin, ISO CRS Specialist	5 min
5.	2021 Multi-Jurisdictional Program for Public Information (PPI) Annual Evaluation Report, Year 1 of 5 ▪ Assess whether the desired outcomes were achieved and what, if anything, should be changed ▪ Which communities have adopted the PPI? Conformed/enacted copy should be in Egnyte; please upload and send copy to VW ▪ Using the 2021 PPI and Activity 330 Outreach Project worksheets provided on 5/20/21, discuss how communities will submit updates to Valley Water for consolidating report input ▪ Communities' updates due by next CRS Users Group Meeting or sooner	All	45 min
6.	Next meeting – Joint CRS Users Group/Program for Public Information (PPI) Committee Meeting	All	2 min
7.	Adjourn		

Step 7: Implement, monitor, and evaluate the program. The Program for Public Information committee meets at least annually to monitor the implementation of the outreach projects. The committee assesses whether the desired outcomes were achieved and what, if anything, should be changed. This work is described in an evaluation report that is prepared each year, sent to the governing body, and included in the annual recertification.

Documentation for PPI Provided by the Community

In addition to the materials provided for OP and FRP credit:

(1) At the initial verification visit,

(a) A copy of the Program for Public Information document.

(b) Minutes of the meetings, sign-in sheets, or other documentation of the committee members' participation.

(c) Documentation that the Program for Public Information has been adopted by the community.

(2) At each annual recertification,

(a) Documentation that the Program for Public Information document has been reviewed and adjusted annually. This is in the form of a report, table, or spreadsheet that summarizes each outreach project, what was done, and the outcomes.

(b) Minutes of the meetings, sign-in sheets, or other documentation of the committee members' participation in the annual review.

(3) At subsequent verification visits when a Program for Public Information update is due,

(a) Documentation that the Program for Public Information document has been updated. This can be a new document or an addendum to the existing document that updates the needs assessment and all sections that should be changed based on evaluations of the projects. The update must be adopted following the same process as approval of the original document.

(b) Minutes of the meetings, sign-in sheets, or other documentation of the committee members' participation in the update.

(c) Documentation that the Program for Public Information update has been adopted by the community.

Santa Clara County CRS Users Group / PPI Committee Meeting Attendance Sheet

March 10, 2022
1:00 - 3:00pm
Zoom

Attendees

Name (Original Name)	Guest
Merna Leal, Valley Water	No
Sherilyn Tran, Valley Water	No
Warren Wettenstein, Milpitas External Stakeholder	Yes
Brian Petrovic, Milpitas	Yes
Evelyn Liang, Santa Clara	Yes
Lea Velasco, Sunnyvale	Yes
Christian Tran, Santa Clara	Yes
Maria Angeles, Morgan Hill	Yes
Amy Fonseca, Valley Water	No
Vency Woo, Los Altos	Yes
Heidi M. Carlin, CFM - ISO	Yes
Jennifer Chu, Cupertino	Yes
Gabrielle Abdon, Mountain View	Yes
Arlene Lew, San Jose	Yes
Renee Gunn, Moutain View	Yes
Marlene Jacobs - ISO	Yes
Roberto Alonzo, Milpitas	Yes
Rajeev Hada, Palo Alto	Yes
Suzanne Park, Sunnyvale	Yes
Elizabeth Koo, Miplitas	Yes
Vivian Tom, San Jose	Yes
Steve Golden, Los Altos	Yes
Gary Heap, Gilroy	Yes
Daryl Jordan, Gilroy	Yes
Tamara Davis, Sunnyvale	Yes
Steven Erickson, Milpitas	Yes
David Dorcich, Saratoga	Yes
Peter Pirnejad, Town of Los Altos Hills	Yes

Quorum Met: Missing communities, County of Santa Clara, Town of Los Gatos

Agenda

Santa Clara County CRS Users Group & Program for Public Information (PPI) Committee Meeting

May 19, 2022 | 10:00am – 12:00 noon

Join Zoom Meeting

https://valleywater.zoom.us/j/82332622770?pwd=bVBXa3pYcG54Y2d6WjRzMEFxVzB3dz09
Meeting ID: 823 3262 2770
Passcode: 174435
+1 669 900 9128 US (San Jose)

Purpose: PPI Stakeholder Committee Annual Evaluation Meeting to monitor the Implementation of the 2021 Santa Clara County Multi-Jurisdictional Program for Public Information per Activity 330, Outreach Project, Element 332.c. Program for Public Information (PPI), Step 7 requirement

Outcome: 2021 PPI Annual Evaluation Report, Year 1 of 5

Section	Meeting Topic	Presenter	Time
1.	Introductions	Amy Fonseca	10 min
2.	Review of the meeting goals and agenda	Amy Fonseca	5 min
3.	FY21-22 Flood Awareness Campaign *new approach: targeted outreach items to all addresses in the FEMA SFHA* FY22-23 Flood Awareness Campaign	Paola Giles	20 min
4.	Public Event Giveaway Items (All) • Emergency starter kits	Amy Fonseca	5 min
5.	California Flood Preparedness Week (October 2022) • Statewide Agency Coordination Calls leading up to CFPW (*kicks off mid-May to early June 2022*) • Annual Valley Water Board Resolution • Flood event kits for all cities/county • Lobby display example	Amy Fonseca	20 min
6.	Complete development of the 2021 Multi-Jurisdictional Program for Public Information (PPI) Annual Report, Year 1 of 5 **Note**: Due during 5-year cycle visit or as part of annual re-certification, due 8/1/22)	Merna Leal	30 min
7.	Activity 350 – Flood Protection Information • Annual comprehensive review of communities' flood information websites	Amy Fonseca	5 min
8.	Other items • ISO training - TBD	Amy Fonseca	5 min
9.	Adjourn		

For questions, please contact Amy Fonseca at (408) 630-3005 (office) or (408) 691-8889 (cell) or afonseca@valleywater.org

Santa Clara County CRS Users Group / PPI Committee Meeting Attendance Sheet

May 19, 2022
10:00 - 12:00noon
Zoom

Name (Original Name)	Guest
Merna Leal (Valley Water)	No
Amy Fonseca (Valley Water)	No
Gabrielle Abdon (City of Mountain View)	Yes
Lea Velasco (City of Sunnyvale)	Yes
Meghan Azralon (Valley Water)	No
Christian Tran (City of Santa Clara)	Yes
Paola Giles (Valley Water)	No
Falguni Amin (City of Santa Clara)	Yes
David Dorcich (City of Saratoga)	Yes
Elizabeth Koo (City of Milpitas)	Yes
Gary Heap (City of Gilroy)	Yes
Vivian Tom (City of San Jose)	Yes
Jenn Chu (City of Cupertino)	Yes
Darrell Wong (Santa Clara County)	Yes
Roberto Alonzo (City of Milpitas)	Yes
Steve Golden (City of Los Altos)	Yes
Rajeev Hada (City of Palo Alto)	Yes
Peri Newby (City of Campbell)	Yes
Brian Petrovic (City of Milpitas)	Yes
Swanee Edwards (City of Morgan Hill Ext. Stakeholder)	Yes
Renee Gunn (City of Mountain View)	Yes

Quorum Met: Missing communities, Town of Los Altos Hills, Town of Los Gatos

1 North San Antonio Road
Los Altos, California 94022-3087

M E M O R A N D U M

DATE: September 20, 2022

TO: Gabriel Engeland, City Manager

FROM: Anthony Carnesecca, Economic Development Administrator

SUBJECT: **CITY OF LOS ALTOS COMMITTEES AND COMMISSIONS OUTREACH AND ENGAGEMENT POLICY**

PURPOSE:

The purpose of this policy is to establish a policy and process for formal outreach and engagement by City commissioners and committee members.

BACKGROUND:

The City did not have a formal policy or guidelines for commissioners or committee members that would like to conduct outreach or feedback with the community on behalf of the City. City staff has implemented this policy that will be incorporated into the Commissioner handbook.

POLICY:

Commissioners and committee members are able to conduct informal outreach and engagement with their neighbors and residents on potential community concerns. Some examples of this include attendance at community events, individual interactions with community members or groups, or any interactions representing themselves individually. Informal outreach does not require review by City staff.

Commissioners and committee members must speak directly with their board or commission staff liaison if they plan to conduct any formal outreach or engagement on behalf of the City. A formal outreach or engagement would be defined as the following:

- Any representation or notation that the information is provided officially by the City, commission, or committee as a whole
- Any inclusion of the City name, logo, or brand

Some examples of this include, but are not limited to, community engagement webinars, direct residential mailers, and formal questionnaires or surveys.

Commissions and committees may conduct this formal outreach themselves as part of their specified workplan, but are not allowed to direct any City staff members to complete formal outreach.

This formal outreach requires a review by City staff, including the Public Information Officer, in order to ensure that the content is appropriately representing the City and that all copy material meets the City's brand guidelines. The formal outreach will then need to be reviewed and approved by the commission or committee in a formal vote after approval by City staff.

Commissioners and committee members may not conduct any formal outreach without prior written approval by their City staff liaison or staff member and the commission or committee.

City of Los Altos 2022 Tentative Council Agenda Calendar

September 12, 2022

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Date	Agenda Item (Date identified by Council)	Agenda Section (Consent, Discussion Item - note in red if Public Hearing)	Dept/ Date of request to add.
October 11, 2022	REGULAR COUNCIL MEETING		
	Raising Flag Policy	Consent	Anthony C
	151 Hawthorn – Mills Act	Consent	Jia
	Holidays to be referenced on employee rules	Consent	HR
	FY 22/23 Agreement with Traffic Patterns	Consent	Marisa
	Fee Waiver Policy	Discussion	Anthony C
	Compost Event – Budget Allocation	Consent	Aida
	Current Reach Code extension	Public Hearing	Nick
	Changes to Compensation Classification Matrix	Consent	Irene
	POA MOU Agreement	Consent	Irene
	LAMEA MOU Agreement	Consent	Irene
October 25, 2022	Study Session – Downtown Vision – 6 pm start	Study Session	Anthony C
October 25, 2022	REGULAR COUNCIL MEETING		
	Ceding time	Consent	Anthony
	Restriction of Fire Arms on Public Property (JW/NF/AE 7/12)	Discussion	
	Request for Park in Lieu funds; Shade Structure	Consent	Manny

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Date	Agenda Item (Date identified by Council)	Agenda Section (Consent, Discussion Item - note in red if Public Hearing)	Dept.
	Complete Streets Master Plan	Consent	Marisa
	MRP 3.0 Overview of new reqs	Consent	Aida
	Assembly Bill AB 1266	Public Hearing	Aida
November 1, 2021	Joint w/Commissions		
November 15, 2022 *	REGULAR COUNCIL MEETING		
	1st Quarter report FY 2021/2022		
	Commission Appointments	Consent	Anthony C
	Updated to Dec Council Meeting dates	Discussion	Angel
November 29, 2022	REGULAR COUNCIL MEETING		
December 6, 2022	ACFR and Year End – 1st meeting December	Discussion	Finance
December 13, 2022	Special meeting REORG.		

City of Los Altos Tentative Council Agenda Calendar

September 12, 2022

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Date	Agenda Item (Date identified by Council)	Agenda Section (Consent, Discussion Item - note in red if Public Hearing)	Dept.

Future Agenda Topics To Be Scheduled….

Proposed City policy that modifies the environmental analysis standard for circulation impacts from a Level of Service (LOS) analysis to a Vehicle Miles Traveled (VMT) analysis.	Public Hearing	
League of California Cities – Role and Representation	Presentation/Discussion	Council Initiated
Subcommittee on Grants		NF 03.25.2022
Comprehensive multi-modal traffic study (analysis of recent projects projected parking, trip generation, & traffic impacts to actuals; ECR impacts should include adjacent streets)		ES
PCI Report		
Funding mechanisms for housing and housing programs		
Open Government Cmte		
MWENDO		
Dark Skies Ordinance (LLE/AE/NF 7/12)		