HISTORICAL COMMISSION
SPECIAL MEETING AGENDA

7:00 PM - Monday, August 08, 2022

Telephone/Video Conference Only

Please Note: Per California Executive Order N-29-20, the Commissions will meet via teleconference only. Members of the Public may call (253) 215-8782 to participate in the conference call (Meeting ID: 893 7726 4769 and Passcode: 031388 or via the web at https://losaltosca-gov.zoom.us/j/89377264769?pwd=dWdkekRWUS9hQnNsMkhOYnJmRnVNUT09&from=addon).

Public testimony will be taken at the direction of the Commission 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 HCPublicComment@losaltosca.gov. Emails received prior to the meeting will be included in the public record.

ESTABLISH QUORUM

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

Members of the audience may bring to the Commission's attention any item that is not on the agenda. Please complete a "Request to Speak" form and submit it to the Staff Liaison. Speakers are generally given two or three minutes, at the discretion of the Chair. Please be advised that, by law, the Commission 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 noticed on the agenda before any discussion or action.

ITEMS FOR CONSIDERATION/ACTION

1. **Historical Commission Minutes**
   Approve minutes of the regular meeting of January 24, 2022.

2. **Historical Commission Minutes**
   Approve minutes of the special meeting of April 13, 2022.

3. **Historical Commission Minutes**
   Approve minutes of the regular meeting of April 25, 2022.

DISCUSSION

4. **H22-0001 – Brownhouse Design – 151 Hawthorne Avenue**
   Advisory review application for an addition, alterations and improvements to an existing one-story house, which is a Historic Resource. The project includes a 609 square-foot one-story addition to the existing house, a new 533 square-foot detached garage, and 26 square-foot addition to the existing basement. The project is considered categorically exempt from further

environmental review under Section 15301 of the California Environmental Quality Act, and the project is classified as a historic resource restoration/rehabilitation/ preservation project and is categorically exempt from environmental review under Section 15331 of the California Environmental Quality Act. *Project Planner: Liu*

5. **HPA22-0001 - Brownhouse Design – 151 Hawthorne Avenue**
The application includes a request that the Historical Commission recommend that the City Council authorize the City Manager to execute a Mills Act agreement for the property. The project is considered categorically exempt from further environmental review under Section 15301 of the California Environmental Quality Act, and the project is classified as a historic resource restoration/rehabilitation/ preservation project and is categorically exempt from environmental review under Section 15331 of the California Environmental Quality Act. *Project Planner: Liu*

6. **H22-0002 and V22-0002 – Danielle DiVittorio – 725 University Avenue**
Advisory review for a 63 square-foot addition to an accessory structure (garage) at a historic resource property. The project is considered categorically exempt from further environmental review under Section 15301 of the California Environmental Quality Act, and the project is classified as a historic resource restoration/rehabilitation/ preservation project and is categorically exempt from environmental review under Section 15331 of the California Environmental Quality Act. *Project Planner: Gallegos*

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 at least 48 hours prior to the meeting at (650) 947-2720.

Agendas, Staff Reports and some associated documents for Historical Commission items may be viewed on the Internet at http://www.losaltosca.gov/meetings

If you wish to provide written materials, please provide the Commission Staff Liaison with **10 copies** of any document that you would like to submit to the Commissioners in order for it to become part of the public record.

For other questions regarding the meeting proceedings, please contact the City Clerk at (650) 947-2720.

MINUTES OF THE MEETING OF THE HISTORICAL COMMISSION OF THE CITY OF LOS ALTOS, HELD ON MONDAY, JANUARY 24, 2022, AT 7:00 P.M. HELD VIA VIDEO/TELECONFERENCE PER EXECUTIVE ORDER N-29-20ROLL CALL

Please Note: Per California Executive Order N-29-20, the Commissions will meet via teleconference only. Members of the Public may call (650) 242-4929 to participate in the conference call (Meeting ID: 149 298 7238 or via the web at: https://meetings.ringcentral.com/j/1492987238

ESTABLISH QUORUM

PRESENT: Chair Bartlett, Vice Chair Moore, Commissioners Horn, Lang, Paige, Trapnell

ABSENT: Commissioner Zoufonoun

PUBLIC COMMENTS

Resident Gary Hedden provided information on the new exhibit at the Los Altos History Museum and the fundraising gala which moved to April 2, 2022.

ITEMS FOR CONSIDERATION/ACTION

1. Nomination of Chair and Vice-Chair
   Nominate and elect members to serve as Chair and Vice Chair

   Staff advised the Commission that the Chair and Vice Chair terms will run from today until the first meeting of October and subsequent elections will be held every October for one-year terms. There are no limits on the number of terms.

   Public Comment

   No public comment.

   Action: Upon a motion by Chair Bartlett, seconded by Commissioner Trapnell, the Commission moved to elect Commissioner Moore as the new Historical Commission Chair for a term ending on the first meeting of October 2022.

   AYES: Bartlett, Horn, Lang, Moore, Paige, and Trapnell; NOES: None; ABSENT: Zoufonoun; ABSTAIN: None

   Action: Upon a motion by Commissioner Trapnell, seconded by Chair Bartlett, the Commission moved to elect Commissioner Horn as the new Historical Commission Vice-Chair for a term ending on the first meeting of October 2022.

   AYES: Bartlett, Horn, Lang, Moore, Paige, and Trapnell; NOES: None; ABSENT: Zoufonoun; ABSTAIN: None

2. Commission Minutes
   Approve the meeting minutes from the regular meeting of November 22, 2021.

Action: Upon a motion by Commissioner Trapnell, seconded by Commissioner Paige, the Commission moved to approve the minutes for November 22, 2021 with a revision to correct the date.

AYES: Bartlett, Horn, Lang, Moore, Paige, and Trapnell; NOES: None; ABSENT: Zoufonoun; ABSTAIN: None

3. Certified Local Government (CLG) Annual Report
Review and approve the annual report to the State Office of Historic Preservation.

Staff presented the report.

Public Comment

No public comment.

Action: Upon a motion by Vice Chair Horn, seconded by Commissioner Bartlett, the Commission moved to approve the CLG Annual Report.

AYES: Bartlett, Horn, Lang, Moore, Paige, and Trapnell; NOES: None; ABSENT: Zoufonoun; ABSTAIN: None

4. H19-002– American Legion – 347 1st Street
Consider a request to designate the American Legion Hall as a Historic Landmark.

Staff presented the report.

Public Comment

American Legion Hall member Ken Newman provided background information on the American Legion Hall.

Applicant William Bassett expressed appreciation for the staff presentation and provided background information on the American Legion Hall in support of the application.

American Legion Hall Secretary Cindy Newman provided background information on the American Legion Hall.

Action: Upon a motion by Vice Chair Horn, seconded by Commission Paige, the Commission moved to approve a recommendation to the City Council to designate the American Legion Hall at 347 First Street as a City Historic Landmark subject to the listed findings.

AYES: Horn, Lang, Moore, Paige, and Trapnell; NOES: None; ABSENT: Bartlett and Zoufonoun; ABSTAIN: None

INFORMATIONAL ITEMS

5. Halsey House Update

Staff provided an update on the Halsey House.

6. Margaret Thompson Essay Contest

   Staff provided an update on the Margaret Thompson Essay Contest.

7. Monthly staff report

   Staff provided information regarding the new staff liaisons for the Historical Commission.

   Mayor Anita Enander announced she will be serving as the Commission's Council Liaison.

COMMISSION AND STAFF REPORTS AND DIRECTIONS ON FUTURE AGENDA ITEMS

None

POTENTIAL FUTURE AGENDA ITEMS

Staff provided information on adding trees to the Historic Resource Inventory.

Council Liaison Enander indicated that recent state laws may require changes to the process for reviewing projects that may qualify to be on the Historic Resource Inventory.

Staff provided information on the Historic Resource Inventory Update Subcommittee.

ADJOURNMENT

Chair Moore adjourned the meeting at 8:23 p.m.

_____

Nazaneen Healy
Staff Liaison

MINUTES OF THE SPECIAL MEETING OF THE HISTORICAL COMMISSION OF THE CITY OF LOS ALTOS, HELD ON WEDNESDAY, APRIL 13, 2022, AT 7:00 P.M. HELD VIA VIDEO/TELECONFERENCE PER EXECUTIVE ORDER N-29-20ROLL CALL

Please Note: Per California Executive Order N-29-20, the Commissions will meet via teleconference only. Members of the Public may call (650) 242-4929 to participate in the conference call (Meeting ID: 149 103 5316 or via the web at: Historical Commission Meeting.

ESTABLISH QUORUM

PRESENT: Chair Moore, Commissioners Bartlett, Lang, Paige, and Trapnell

ABSENT: Vice Chair Horn, Commissioner Zoufonoun

PUBLIC COMMENTS

None.

ITEMS FOR CONSIDERATION/ACTION

1. Santa Clara County Historical Preservation Reward
   Consideration of nominations for the 2022 Santa Clara County Historical Preservation Award

Associate Planner Liu presented the staff report.

Public Comment

Los Altos History Museum Executive Director Dr. Elizabeth Ward said the Alliance also reached out to the History Museum. This Alliance would like to nominate the Spagnoli Tank House project that was funded by the County of Santa Clara for historical preservation for this event. The Alliance asked the Dr. Ward to fill out the nomination form. Dr. Ward would like to have this information shared with the Commissioner for their awareness.

Los Altos History Museum Board of President Gary Hayden think it is benefited to have the Spagnoli Tank House to be nominated as the first choice. If Commissioners would like to go with the list provided from staff, Gary would like to nominate Nan Geshcke.

Chair Moore closed the public comment.

Action: Upon a motion by Commissioner Lang, seconded by Commissioner Trapnell, the Commissions moved to nominate the 2021 Los Altos Historical Preservation Awardee – 1365 Grand Road – for the County Historical Preservation Reward

AYES: Bartlett, Moore, Larry, Paige, and Trapnell; NOES: None; ABSENT: Horn and Zoufonoun; ABSTAIN: None

INFORMATIONAL ITEMS

None.

COMMISSIONERS' REPORTS AND COMMENTS

None.

POTENTIAL FUTURE AGENDA ITEMS

None.

ADJOURNMENT

Chair Moore adjourned the meeting at 7:49 p.m.

_____

Jia Liu/ Nazaneen Healy
Staff Liaison

MINUTES OF THE MEETING OF THE HISTORICAL COMMISSION OF THE CITY OF LOS ALTOS, HELD ON MONDAY, APRIL 25, 2022, AT 7:00 P.M. HELD VIA VIDEO/TELECONFERENCE PER EXECUTIVE ORDER N-29-20ROLL CALL

Please Note: Per California Executive Order N-29-20, the Commissions will meet via teleconference only. Members of the Public may call (650) 242-4929 to participate in the conference call (Meeting ID: 148 403 6004 or via the web at: Historical Commission Meeting.

ESTABLISH QUORUM

PRESENT: Chair Moore, Vice Chair Horn, Commissioners Bartlett, Trapnell, and Zoufonoun

ABSENT: Commissioners Lang and Paige

PUBLIC COMMENTS

None.

ITEMS FOR CONSIDERATION/ACTION

CONSENT CALENDAR

1. City Council Attendee Assignment Schedule for 2022
   Approve the City Council Attendee Assignment Schedule for 2022.

The Commission discussed the schedule and term end dates.

Action: Upon a motion by Commissioner Trapnell, seconded by Vice Chair Horn, the Commission approved the City Council Attendee Assignment Schedule for 2022 with Commissioner Trapnell as the attendee for the June 28th meeting and as back up in case of conflicts on other dates.

AYES: Bartlett, Horn, Moore, Trapnell, and Zoufonoun; NOES: None; ABSENT: Lang and Paige; ABSTAIN: None

DISCUSSION

2. Los Altos Historical Preservation Award
Consider nominations for the 2022 Los Altos Historical Preservation Award.

Public Comment
Martha Wallace, Ann Hepenstal, Melissa Malley, Gary Hedden, and Elizabeth Ward commented on the nominees.

The Commission discussed the nominees.

Action: Upon a motion by Commissioner Trapnell, seconded by Vice Chair Horn, the Commission moved to grant the 2022 Los Altos Historical Preservation Award to Anne Roberts and Dick Liewer.

AYES: Bartlett, Horn, Moore, Trapnell, and Zoufonoun; NOES: None; ABSENT: Lang and Paige; ABSTAIN: None

Action: Upon a motion by Vice Chair Horn, seconded by Commissioner Bartlett, the Commission moved to commend the Los Altos Chapter, Daughters of the American Revolution for their contribution to the knowledge of Los Altos history.

AYES: Bartlett, Horn, Moore, Trapnell, and Zoufonoun; NOES: None; ABSENT: Lang and Paige; ABSTAIN: None

INFORMATIONAL ITEMS

3. Historic Plaque Program Update

Staff provided an update on the Historic Plaque Program.

Commissioner Trapnell left the meeting at 7:46pm.

Public Comment
Elizabeth Ward commented on the Historic Plaque Program.

4. Margaret Thompson Essay Contest Update

Staff provided an update on the Margaret Thompson Essay Contest.

COMMISSIONERS' REPORTS AND COMMENTS

None.

POTENTIAL FUTURE AGENDA ITEMS

Council Liaison Enander and staff provided information on the upcoming Santa Clara County Historic Preservation Award ceremony.

ADJOURNMENT

Chair Moore adjourned the meeting at 7:58 p.m.

Nazaneen Healy/Jia Liu
Staff Liaison

DATE: August 8, 2022

AGENDA ITEM #4

AGENDA REPORT

TO: Historical Commission

FROM: Jia Liu, Associate Planner

SUBJECT: H22-0001 – 151 Hawthorne Avenue

RECOMMENDATION:

Approve Historic Alteration Permit H22-0001 subject to the findings and conditions

---

PROJECT DESCRIPTION

The project consists of a 609 square-foot addition to the existing single-family residence, 26 square-foot addition to the existing basement, and a 544 square-foot, detached two-car garage and 296 square-foot, one-car carport attached to the proposed garage. Except for the addition, the applicant is also proposing to replace nonoriginal features including two windows and the entry door on the front elevation. The property is a Historic Resource, and the modifications and rehabilitation would constitute an exterior alteration to the structure and therefore requires review and approval from the Historical Commission. The approval must be based on the project's conformance with the City's Historical Preservation ordinance.

BACKGROUND

The existing residence is an example of a Craftsman bungalow architectural style. The one-story, Craftsman is clad with an asphalt roofing material with a series of front-facing gables. The roof is low-pitched with wide overhanging eaves and exposed roof beams and rafter tails. The unit is clad in stucco finish with entry porch that is supported by battered wood porch posts set on brick piers on the front entry gable. Eleven double-hung wood windows with lugs on the west and east elevation and rear elevation appears to be original windows including four windows that appear to be relocated during house renovation in 1950s and 1960s.

The character defining features of the structure's Craftsman bungalow design, includes the one-story structure form, multi-front-gabled form, low-pitched roof with wide overhanging eaves, exposed rafters and beams, recessed porch set under an extending porch roof, battered porch columns, wood casement windows, and double-hung wood windows.

It was not clear who the original owner of the 151 Hawthorne Avenue was because the house addresses on Hawthorne Avenue during 1920s were not the same as they are today. Until 1964, per the City Permit A 8254, the house appears to be owned by C.H. Tabrett. Through 1965 and 1972, the property owners were David and Florence Redmond. Since 1972 to 2019, before the recent

house transaction, the property was owned by Bruce Wales Palmer. Remodeling, modifications, and new construction likely occurred During Mr. Palmer's ownership, including the construction of the inground swimming pool, new fencing, new roof, and at least two kitchen and two bath remodels. Additionally, it should be noted that although no permit record was located by staff, the house appears to have been altered in 1950s including at least one rear addition or porch enclosure which was evaluated by the subject Historian, Stacey De Shazo with Evans & De Shazo, Inc.

DISCUSSION

As discussed previously, the historic character of the Craftsman bungalow style building is found in its one-story form, multi-front-gabled form, low-pitched roof with wide overhanging eaves, exposed rafters and beams, recessed porch set under an extending porch roof, battered porch columns, wood casement windows, and double-hung wood windows.

In order for the Historical Commission to complete its review and issue a decision, it must find that the work complies with the Historic Preservation Ordinance, does not adversely affect the physical integrity or the historic significance and is in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Attachment D).

Secretary of the Interior's Standards for the Treatment of Historic Structures Evaluation
Historical professional Stacey De Shazo with Evans & De Shazo, Inc. reviewed the project to ensure consistency with the Secretary of the Interior's Standards for the Treatment of Historic Structures, with the report included as Attachment C. The historical professional's evaluation found the plan to expand the existing home and other exterior modifications will not degrade the character of the original design. The historical professional's evaluation based on the Secretary of the Interior's Standards for the Treatment of Historic Structures found the following:

Standard 1. *A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.*

The proposed change encourages the continued historic use as a single family residence

Standard 2. *The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.*

Per the Secretary of the Interior's Standards, the project is a rehabilitation project. Under the rehabilitation category, it is acknowledged that the need for an addition to a historic building is at times necessary to meet the continuing or new uses, if it does not affect the integrity of the resource.

The proposed addition by adding new window openings and reconfiguration of windows will result in 13 original double-hung wood windows including two windows that were relocated in the past. The original windows for removal are located on the rear elevation and northwest corner of the house which are not visible from the street view that is consistent with the recommended practice by the Secretary of the Interior's Standards for the for the Treatment of Historic Properties (Attachment D) published by the National Park Service: New windows are recommended to be added on rear or

other secondary, less visible elevations. Furthermore, the proposed windows will be compatible with the overall design but will not duplicate the historic fenestration that would create a false sense of historical development that is also consistent with Standard 3.

It is also worth being mentioned that the current proposal will retain the existing exterior stucco. However, if during the rehabilitation exploratory or construction work the stucco is determined to be beyond repair, based on photographic evidence and reviewed by a qualified individual, the applicant shall replace the stucco with a similar in kind with like or similar acceptable stucco surface that is compatible with the Craftsman Bungalow style at the subject site, meeting the Standards for rehabilitation will be accepted. The potential exterior finish modification is conditioned further in the staff report.

Overall, the original window removal will not be visible from the street view and the new windows are found compatible with the Craftsman bungalow architectural style, but not duplicated to the historical windows. The replacement of the two primary windows and wood door are found acceptable as they were found non-original features of the 1922 house. The stucco exterior finish shall be retained unless it would be found beyond repair during construction with clear evidence by qualified individuals. If the stucco shall be replaced, it shall be replaced with the stucco surface in kind with like or similarly acceptable stucco surface.

Standard 3. *Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.*

The design of the new addition and proposed alterations to the primary façade of the ca. 1922 house, including the new windows and doors, will complement the original Craftsman Bungalow design of the ca. 1922 house but not duplicate the original features and create a false sense of historical development.

Standard 4. *Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.*

There are no proposed changes to the ca. 1922 house after its construction that have become "significant in their own right", including the in-ground swimming pool in 1972.

Standard 5. *Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.*

The historic house is in good condition. In addition to the original windows removal as discussed above, the majority of the distinctive features, finishes, and construction techniques, including the form, massing, porch with tapered columns and brick cladding, and decorative wood brackets and timbering, will be preserved.

Standard 6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

There are no proposed changes to deteriorated features.

Standard 7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

There are no proposed chemical or physical treatment to the historic resource.

Standard 8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

The project consists of additions to an existing structure. The chance to affect significant archeological resources is rare as the property was graded in the past; however, if such significant archeological resources were found during construction, as conditioned in the staff report, a professional and qualified archaeologist shall assess further and provide mitigation measures accordingly.

Standard 9. *New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.*

As discussed above, the project includes changes to the exterior of all four elevations of the ca. 1922 house. The project proposes changes that are designed in a way to be differentiated from the original ca. 1922 Craftsman Bungalow design, but compliment and conform with the style.

The project also includes the removal of an existing shed, infilling an inground swimming pool, and refining the associated landscaping. As evaluated by the subject historian, they are not associated with any known architectural style, form, or architectural landscape design or landscape planning; therefore, they are not historic characters. The proposed new garage in an approximate location of the shed is new construction and is designed to be compatible with the ca. 1922 house in design, form, scale, and materials. The new garage is constructed of wood framing, with stucco finish and a low-pitch roof to match the main house. The building is set back from the ca. 1922 house. It does not intrude on the ca. 1922 house or compete with the character-defining elements of the primary façade (south elevation), allowing the ca. 1922 house to remain the centerpiece of the subject site. In addition, the new garage will be situated behind a wooden fence and not visible from Hawthorne Avenue.

Standard 10. *New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

The new additions along the side elevations (east and west) are minor side gable additions, which would not impair the original design or form of the ca. 1922 house if removed in the future. The new detached garage will be constructed so that if in the future it is removed, it will not adversely affect the integrity of the ca. 1922 house.

The proposed additions and exterior alterations do not adversely affect the physical integrity or the historic significance of the property and are consistent with the Secretary of the Interior's Standards. The proposed additions along with the window styles will be compatible with the design but not create a false sense of historical development. As refenced above by historical professional's, the project will comply with the Secretary of the Interior's Standards for the Treatment of Historic Structure.

In order for the Historical Commission to make the findings to approve the permit, the Commission must find that the work complies with the Historic Preservation Ordinance, does not adversely affect the physical integrity or the historic significance and is in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Attachment D). Once the Commission provides a recommendation, the project will be forwarded to the Community Development Director for consideration of the Design Review application.

Cc: Brown House Design, Applicant and Designer
Karen Scussel & Curt Riffle, Owners

Attachments

A. Vicinity Map
B. 151 Hawthorne Avenue Historic Property – Department Parks and Recreation Record
C. Historic Evaluation and Secretary of the Interior Standards for the Treatment of Historic Properties Review, Stacey De Shazo
D. Secretary of the Interior's Standards for the Treatment of Historic Properties, National Park Service

FINDINGS

H22-0001 – 151 Hawthorne Avenue

With regard to the Historical Alteration Permit, the Historical Commission finds the following in accordance with Section 12.44.150 of the Municipal Code:

1. The project complies with all provisions of the Historic Preservation Ordinance (Chapter 12.44);

2. The project does not adversely affect the physical integrity or the historic significance of the subject property; and

3. The project is in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

CONDITIONS

H22-0001 – 151 Hawthorne Avenue

GENERAL

1. **Approved Plans**
   The approval is based on the plans and materials received on July 13, 2022, except as may be modified by these conditions.

2. **Stucco Finish**
   The stucco exterior surface shall be retained unless during construction the project historian finds the stucco is beyond repair, based on professional judgement and photographic evidence of the project historian, and the agreement of the Community Development Director. If the project historian based on professional judgement and finds the stucco material is original to the historic resource, the stucco surface shall be replaced in kind with like or similarly acceptable stucco surface. If the project historian based on their professional judgement and evidence finds the stucco material is not original to the subject property or beyond repair, the stucco may be replaced in kind with like or similarly acceptable materials meeting the Secretary of the Interior Standards for Rehabilitation, which may include a stucco applied in a similar style, or composition or wood shingles.

3. **New Windows Materials**
   Replacement windows and the entry door on the front elevation shall be wood materials interior and exterior. All the new windows in addition to the front windows shall be at least wood exterior and clad wood interior. The Proposed Window Schedule on Sheet 7.1 shall be revised and incorporated into the construction drawings

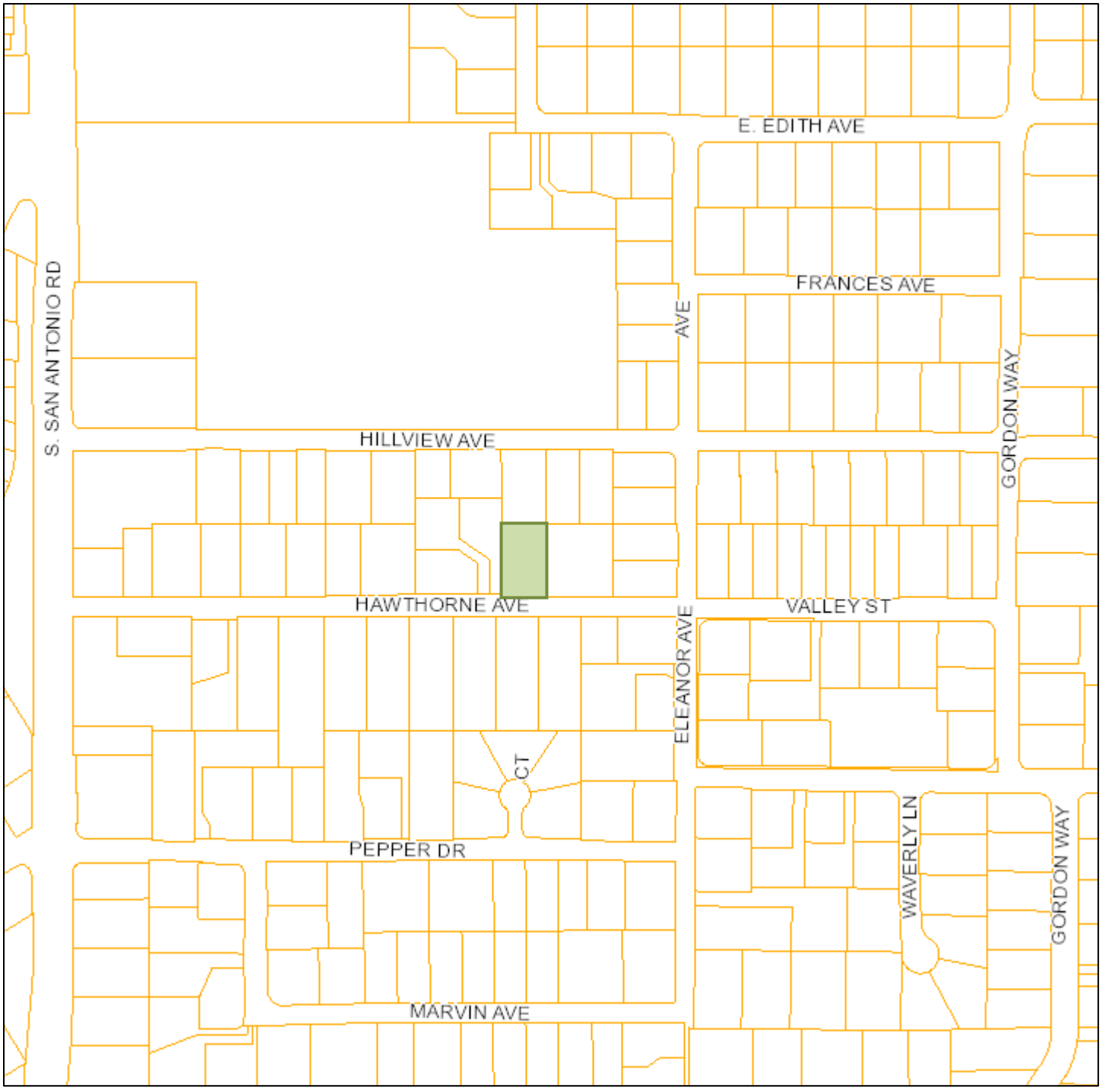
4. **Archaeological Resources**
   In the event of any archaeological resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Community Development will be notified, and a qualified archaeologist will examine the find and make appropriate recommendations.

5. **Indemnity and Hold Harmless**
   The applicant/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.

PRIOR TO BUILDING PERMIT SUBMITTAL

6. **Conditions of Approval**
   Incorporate the conditions of approval into the title page of the plans.

Vicinity Map



Print Date: July 20, 2022

1:4,514

0 0.03 0.06 0.12 mi

0 0.05 0.1 0.2 km

Schools

Park and Recreation Areas

City Limit

Road Names

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 use community

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 151 Hawthorne Avenue

P1. Other Identifier: HRI #:37

***P2. Location:** __ **Not for Publication** ✓ **Unrestricted**

***a. County** Santa Clara **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** _____ **Date** _____ **T** __; **R** ___; __ **of** __ **of Sec** __; _____**B.M.**

c. Address 151 Hawthorne Avenue City Los Altos Zip 94022

d. UTM: (Give more than one for large and/or linear resources) Zone __, _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
170 41 030

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

151 Hawthorne Avenue is a one-story Craftsman bungalow with a series of front-facing gables. The roofs are clad in rolled asphalt roofing material and have broad, open eaves elaborated with exposed rafters and projecting beam ends. Exterior walls have been recently clad in stucco siding and a brick chimney pierces the main roof plane. The foremost gable roof shelters the wide front entry porch and is supported by battered wood porch posts set on brick piers. The smaller gable shelters a large plate glass picture window. An identical picture window faces the entry porch next to the front entry door. These may have replaced the original windows with a band of smaller divided lights across the top. Flat wood trim frames the window openings and secondary elevations have one-over-one double-hung wood windows. The residence appears to be in good condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2. Single family property

***P4. Resources Present:** ✓ Building ___ Structure ___ Object ___ Site ___ District ___ Element of District ___Other (Isolates, etc.)

P5b. Description of Photo:
Primary Elevation
July 2011

***P6. Date Constructed/Age and Source:** ✓ Historic __ Prehistoric
___ Both
c.1920
(Los Altos Planning Dept)

***P7. Owner and Address:**
Bruce W. Palmer Trustee
151 Hawthorne Avenue Los Altos, CA 94022

***P8. Recorded by:**
Circa: Historic Property Development
582 Market Street, Suite 1800
San Francisco, CA 94104

***P9. Date Recorded:** _____
July 2011

***P10. Survey Type:**
Intensive

***P11. Report Citation**:
Los Altos Historic Resources Inventory Update Report (Circa: Historic Property Development, March 2012).

***Attachments:** ___NONE ___Location Map ___Continuation Sheet ✓ Building, Structure, and Object Record
___Archaeological Record ___District Record ___Linear Feature Record ___Milling Station Record ___Rock Art Record
___Artifact Record ___Photograph Record ___ Other (List): _____

State of California The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code CA Reg. 5S1

Page 2 of 2 *Resource Name or # (Assigned by recorder) 151 Hawthorne Avenue

B1. Historic Name:

B2. Common Name:

B3. Original Use: Residential B4. Present Use: Residential

*B5. Architectural Style:

*B6. Construction History: (Construction date, alterations, and date of alterations)

Built c. 1920. Pool, 1972; fence, 1972 and 1975; bath & kitchen remodel, 1985; reroof, 1999.

*B7. Moved? ☐ No ☐ Yes ☑ Unknown Date: Original Location:

*B8. Related Features:

B9a. Architect: Unknown b. Builder: Unknown

*B10. Significance: Theme Architecture/Development Area Los Altos

Period of Significance c.1920-1961 (50 year mark) Property Type Residence Applicable Criteria NR/CR/Local

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This bungalow represents a middle-class type of living in Los Altos which began to emerge in the early 1920s. With the development of the car and more businesses in the area, families could move to "the country" and stay year round, as opposed to those families who came from the City and were wealthy enough to afford summer homes. This bungalow may have been built from a pattern book. No historical research is available at this time (G. Laffey).

Character Defining Features: one-story form; front-facing gables; roof clad in wood shakes with open eaves, exposed rafters, and projecting beam ends; wood shiplap siding; brick chimney; wide front entry porch with squared wood porch posts on brick piers; original front entry door.

Evaluation: 151 Hawthorne Avenue is a good representative example of its style, and retains a good degree of integrity of workmanship, feeling, design and materials. Therefore, it is listed on the Los Altos Historic Resources Inventory as a Historic Resource and is assigned the California Register Status Code 5S1: "Individual property that is listed or designated locally." Note: This finding is based on architectural merit alone and further research for association with historically significant events and/or people should be conducted.

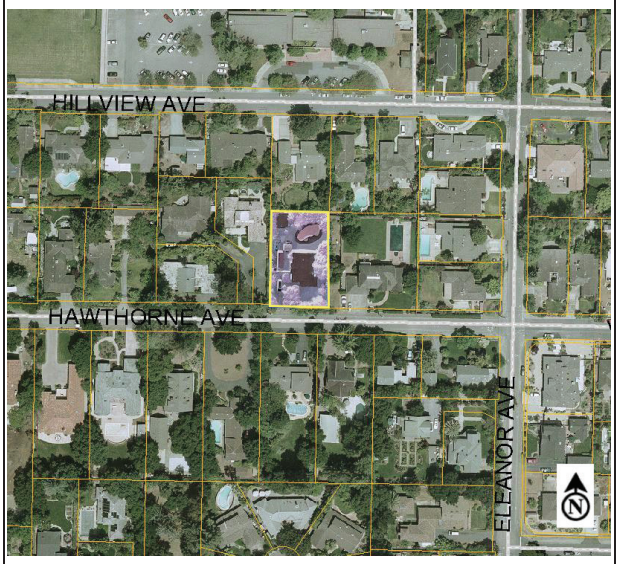
B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

Los Altos Historical Commission: Los Altos HRI (9.28.1997); McAlester, Virginia and Lee. A Field Guide to American Houses. New York: Alfred A. Knopf, 2002; DPR series forms by G. Laffey (1997); Sanborn Maps; Los Altos HRI (February 2011).

B13. Remarks:

Vicinity map provided by the City of Los Altos and amended by Circa: Historic Property Development.



*B14. Evaluator: Circa: Historic Property Development

*Date of Evaluation: July 2011

(This space reserved for official comments.)

EVANS & DE SHAZO
ARCHAEOLOGY HISTORIC PRESERVATION

HISTORIC RESOURCE EVALUATION AND SECRETARY OF INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES REVIEW OF THE PROPERTY LOCATED AT 151 HAWTHORNE AVENUE, LOS ALTOS, SANTA CLARA COUNTY, CALIFORNIA

SUBMITTED TO:
Karen Scussel and Curt Riffle
klscussel@gmail.com

SUBMITTED BY:
Stacey De Shazo, M.A.
Principal Architectural Historian
stacey@evans-deshazo.com

Updated July 8, 2022

Evans & De Shazo, Inc
1141 Gravenstein Highway South,
Sebastopol, CA 95472
707-823-7400
www.evans-deshazo.com

TABLE OF CONTENTS

INTRODUCTION

Evans & De Shazo, Inc. (EDS) completed a Historic Resource Evaluation (HRE) and a Secretary of Interior's Standards for the Treatment of Historic Properties (Standards) review for the proposed project at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California within a 0.3-acres Assessor's Parcel Number (APN) 170-41-030 (Property). The Property includes a ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape. The proposed project consists of alterations to the ca. 1922 house, including changes to the exterior primary façade, an addition along the rear of the house, demolition of the ca. 1922 shed, infilling of the 1972 inground swimming pool, and the construction of a new garage. The ca. 1922 house within the Property is currently listed on the Office of Historic Preservation's (OHP) Built Environment Resources Directory (BERD) (P-43-002072) and within the City of Los Altos Historic Inventory (2013). Therefore, the ca. 1922 house is considered a Historical Resource as defined in Section 15064.5 of the California Environmental Quality Act (CEQA); however, it does not appear that the built environment resources have been evaluated for listing on the California Register of Historical Resources (CRHR). Therefore, in compliance with the CEQA, the City of Los Altos recommended the completion of an HRE to determine if the Property is eligible for listing on the CRHR. Due to its listing as a historical resource, EDS also completed a Standards review to provide additional guidance and recommendations related to the proposed rehabilitation Project and assess potential impacts to historical resources.

The HRE follows specific guidelines and evaluation criteria of the CRHR (Code of California Regulations (CCR), Title 14, Section (§) 15064.5 and Public Resources Code (PRC) § 21084.1) and the Standards review follows the Department of Interior Standards for the Treatment of Historic Properties (36 CFR Part 67). The HRE and Standards review report was completed by EDS Principal Architectural Historian Stacey De Shazo, M.A., who exceeds the Secretary of Interior's qualification standards in Architectural History and History. The results of the report are presented herein.

PROPERTY LOCATION

The Property is located within the 0.3-acre APN 170-41-030 at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California (Figure 1). The Property is situated on the north side of Hawthorne Avenue, approximately 322 feet west of Eleanor Avenue, and about 0.2 miles east of South San Antonio Road in Los Altos.

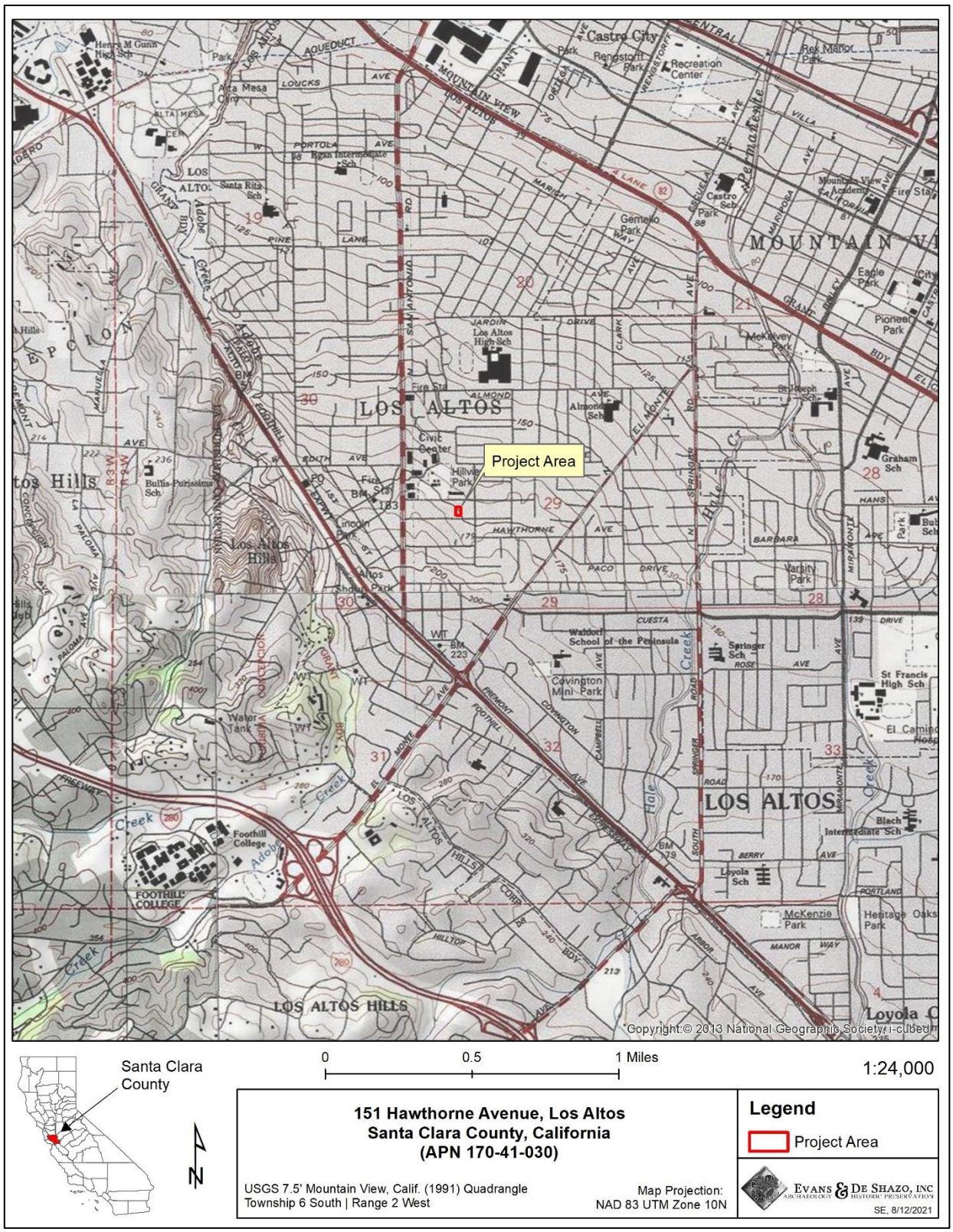


Figure 1. Location Map

REGULATORY SETTING

The CEQA regulations, as they pertain to cultural resources, and the Standards guidelines are outlined below.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA and the Guidelines for Implementing CEQA (State CEQA Guidelines § 15064.5) give direction and guidance for evaluating properties, and the preparation of Initial Studies, Categorical Exemptions, Negative Declarations, and Environmental Impact Reports. Under California State law, the City of Los Altos is legally responsible and accountable for determining the environmental impact of any land use proposal it approves. Cultural resources are aspects of the environment that require identification and assessment for potential significance under CEQA (14 CCR § 15064.5 and PRC § 21084.1).

There are five classes of cultural resources defined by the State OHP. These are:

- **Building**: A structure created principally to shelter or assist in carrying out any form of human activity. A "building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
- **Structure**: A construction made for a functional purpose rather than creating human shelter. Examples include mines, bridges, and tunnels.
- **Object**: Construction is primarily artistic in nature or relatively small in scale and simply constructed. It may be movable by nature or design or made for a specific setting or environment. Objects should be in a setting appropriate to their significant historic use or character. Examples include fountains, monuments, maritime resources, sculptures, and boundary markers.
- **Site**: The location of a significant event. A prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event and if no buildings, structures, or objects marked it at that time. Examples include trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.
- **Historic District**: Unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.

According to CCR § 15064.5, cultural resources are historically significant if they are:

(1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (PRC §5024.1, 14 CCR § 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in PRC § 5020.1(k) or identified as significant in a historical resource survey meeting the requirements PRC § 5024.1(g), shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of the evidence demonstrates that it is not

historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC § 5024.1, 14 CCR § 4852), including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources pursuant to PRC § 5020.1(k), or identified in a historical resources survey meeting the criteria in PRC § 5024.1(g) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC § 5020.1(j) or § 5024.1.

STANDARDS REVIEW

The Secretary of Interior Standards for Rehabilitation

The Standards (codified as 36 CFR 67) defines "Rehabilitation" as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values." The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation of historic materials and features.

The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy, and encompass the exterior and the interior, related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction. The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

METHODS

The **methods used to complete the HRE** included a database search conducted by the Northwest Information Center (NWIC) of the California Historical Information Systems (CHRIS) (NWIC File #20-2471) to determine if the Property has been previously documented. Based on the record search, the ca. 1922 house within the Property is currently listed on the OHP BERD (43-002072) and within the City of Los Altos Historic Inventory (2013). EDS also conducted extensive online and in-person research, including the Santa Clara County Assessor/Recorder Office records and the San Jose Public Library California Room. EDS and the current owner also requested assistance from the Los Altos History Museum, who completed a records search on behalf of EDS and the Property owners. In addition, EDS, and the current owners, requested records from the City of Los Altos (detailed in the section below) and to obtain the permit history and ownership history of the Property. EDS also conducted extensive online resources (see list below) and reviewed digital documents on file with EDS, such as historical maps, Sanborn Fire Insurance maps, historical aerial photographs, and other primary source documents. The purpose of the research was to understand the Property history and the history of the surrounding area to assist in the develop a historical context in which to evaluate the historical significance of the built environment within the Property. EDS Principal Architectural Historian Stacey De Shazo, M.A. also completed a historic architectural survey to identify the age, any known architectural style or form, character-defining features, materials, and alterations of built environment resources, at least 45 years in age, within the Property. Department of Parks and Recreation (DPR) 523 forms were also completed

for the Property (Appendix A).

The **methods used to complete the Standards review** included a review of the architectural plans and renderings submitted to EDS by Brownhouse Design (dated 5/27/2022). The Standards review was completed by EDS Principal Architectural Historian, who worked directly with Brownhouse Design to identify and address potential adverse impacts on the ca. 1922 house and ensure the current scope of work complies with the Standards for Rehabilitation.

CULTURAL RESOURCE INVENTORIES

As part of the record search, the following inventories were reviewed:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CRHR)
- California Historical Landmarks (CHL)
- California Points of Historical Interest (CPHI)
- California Inventory of Historic Resources
- California Office of Historic Preservation (OHP) Built Environment Resources Directory (BERD) for Santa Clara County, California (2020)

ONLINE RESEARCH

Online research was conducted utilizing the following sources:

- www.newspapers.com
- www.ancestry.com
- www.calisphere.org (University of California)
- http://www.library.ca.gov/ (California State Library)
- https://cdnc.ucr.edu/ (California Digital Newspaper Collection)
- http://pcad.lib.washington.edu (Pacific Coast Architecture Database [PCAD])
- https://aiahistoricaldirectory.atlassian.net (American Architects Directory)

REPOSITORIES

- Santa Clara County Assessor/Recorder Office:
    - Research was requested by EDS during COVID-19 restrictions (on two separate occasions) that at the time did not allow for in-person research or for the county to complete the research for EDS. After the COVID-19 restrictions were lifted, the current owner completed in-person research completed by the current owner.
- San Jose Public Library, MLK, California Room: October 2021, EDS conducted in-person research on

October 1, 2021, with the assistance of the research librarian.

- EDS reviewed historical maps, aerial photographs, and Sanborn Fire Insurance maps
- EDS reviewed city directories available at the California Room including 1919, 1927, 1940, 1934, and 1952.
- EDS also reviewed the county tax reel.[1]

- NWIC Record Search
  - On September 9th, 2021, the NWIC completed a database search (NWIC File #20-2471) of the Property. The record search results included a primary record (43-002072; 1997).
- City of Los Altos
  - On August 27, 2021, EDS reached out via email to the Los Altos Planning Department for assistance with research about the Property. EDS was advised by Guido Persicone, Design Review Commission Liaison, that the city did not have any information about the subject Property. GIS Technician Vency Woo also advised EDS that the city did not have records on the Property. In addition, the current owner requested a permit history in November 2021, received in December 2021, with limited results.
- Los Altos History Museum
  - EDS and the current owner requested research from the museum.

The results of the in-person local repositories, record searches on behalf of EDS and the current owner, and extensive online research are incorporated within the Historic Setting section of this report.

HISTORIC SETTING

The following section provides a brief history of the City of Los Altos and a specific history of the Property. The purpose of this section is to provide an understanding of the development of the area and the specific context within which the built environment resources within the Property were evaluated for historical significance.

MEXICAN PERIOD (1822 – 1846)

In 1821, Mexico declared its independence from Spain and took possession of "Alta California,"[2] marking the end of the Spanish period (1769 – 1821) and the beginning of the Mexican period, also referred to as the "rancho" period, in Alta California. In 1833, the Spanish missions in California were secularized by the Mexican government, and mission-owned land was dissolved. During this time, extraordinary changes occurred throughout Alta California, as the Mexican government lacked the strong oversight and military rule

[1] EDS was unable to find the Property other than information about recent owner, Bruce Palmer.

[2] Alta California was a polity of New Spain founded in 1769 and became a territory of Mexico after the Mexican War of Independence in 1821.

previously imposed by the Spanish, and as such, there were new opportunities for trade when foreign ships that had previously been held off by Spanish guarded military ports could dock and provide a variety of provisions to local settlers throughout California. These new provisions, including tea, coffee, sugars, spices, and spirits, as well as a variety of manufactured goods soon made their way into the region, and the taxes on these imported goods became the main source of revenue for the Mexican government in Alta California. Likewise, products produced in Alta California were exported, which bolstered the hide and tallow trade that became the primary business activity in Alta California during this time. During this time, the Mexican colonial authorities encouraged the settlement of Alta California by providing large land grants called ranchos to politically prominent persons that were loyal to the Mexican government and permitting foreigners to settle the land. As a result, the 20 or so ranchos in Alta California during the Spanish period increased to roughly 800 ranchos that varied from 10,000 to 20,000 acres during the Mexican era.

In 1846, the Property was within unclaimed lands of the Mexican government.

EARLY AMERICAN PERIOD (1848 - 1851)

The beginning of the American Period in California is marked by the end of the Mexican American War (1846-1848), when the United States (U.S.) took possession of Mexican territories, including California, New Mexico, Texas, and Arizona, in the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848. The Treaty of Guadalupe Hidalgo provided resident Mexicans their American citizenship and guaranteed title to ranchos obtained during the Mexican period. However, less than two weeks before the treaty's signing, on January 24, 1848, James Marshall discovered gold at Sutter's Mill, which marked the start of California's Gold Rush (1848 to 1855). Soon, the excitement of the Gold Rush and the promise of fertile and abundant land brought between 150,000 and 200,000 new settlers to California from all over the U.S. and Scotland, Ireland, England, Germany, and France.[3] During this time, many new settlers squatted on land, including Mexican rancho land and unclaimed land. To quickly resolve Mexican rancho land disputes, the U.S. Congress passed the California Land Act of 1851, which established a three-member Public Land Commission (Commission) to determine the validity of prior Spanish and Mexican land grants.[4] The act required landowners who claimed title under the former Mexican government to file a claim with the Commission within two years. Although the Commission eventually confirmed most of the original Mexican land grants, the burden was on landowners to prove their title. The cost of litigation forced many rancho owners to sell off their land to newly arriving settlers, including some who had illegally squatted on their land, as well as land speculators and the lawyers who were hired to defend their land claims in court.[5]

In 1850, the Property was within the Fremont township of Santa Clara County within 640-acres of public land

[3] Karen Clay, *Property Rights and Institutions: Congress and the California Land Act 1851*, The Journal of Economic History, Cambridge University Press, 59(01):122-142, March 1999.

[4] The Spanish government-controlled California land from approximately 1770 to 1821 and the Mexican government-controlled California land from 1821 to 1846.

[5] Nancy Olmsted. *Vanished Waters: A History of San Francisco's Mission Bay*, Mission Creek Conservancy, San Francisco, 1986.

that was surveyed under the Public Land Survey System (PLSS) in the 1850s and made available to new settlers.

HISTORY OF LOS ALTOS (1850 – 1960s)

The following history of the City of Los Altos was taken in part from the 2012 City of Los Altos Historic Resource Inventory (HRI),[6] prepared by CIRCA Preservation Consulting, with additional research conducted by EDS. The context below provides an overview of the development of the City of Los Altos.

In 1850, the present-day City of Los Altos consisted of approximately 100 residents, mostly living on large parcels of land utilized for wheat farming and cattle ranching. During this time, the Property was located within 640-acres of public land covered in dense chamisal,[7] and it was surrounded by several Mexican era ranchos, including La Purísima Concepción to the west, San Antonio to the south, Rincon de San Francisquito to the north, and Pastoria de las Boregas to the north/northeast. At this time, the largest landowner within present-day Los Altos was Juana Briones de Miranda's (Figure 2), who purchased the 4,439-acre Rancho La Purísima Concepción in 1844 from José Gorgonio and his son José Ramon, Ohlone Indians, who were granted the Rancho by then Mexican Governor Juan Alvarado in 1840. Juana, a single mother with eight children, was a medical practitioner and a well-known San Francisco merchant. Juana moved to the rancho in 1847 and built an adobe house within the northern portion of the land. Following the California Land Act of 1851, Juana filed a claim to the Commission for the rancho land, and with the help of her attorney Henry Wager Halleck she fought to retain her land.[8] However, by the early 1860s, Juana had to sell portions of her land to support her family. In 1857, she sold approximately 2,000-acres to Martin Murphy, who had arrived in California in 1844 in the Stephens-Townsend-Murphy Party, the first wagon train to cross the Sierra Nevada into California.[9] Martin paid Juana $7,000 for the land, adding to his approximately 4,800-acre land holdings in the present-day City of Sunnyvale, known then as Bay View Ranch.[10] In the early 1860s, Juana sold 2,000 acres to Joseph P. Hale, establishing the largest cattle ranch and wheat farm in Los Altos. Along with four other families (names unknown), Hale lived within the ranch, known as Hale Ranch, located west of the Property. In 1862, John Snyder arrived in the Los Altos area, where he purchased land and planted grain within what became known as the Snyder Ranch, which comprised 700 acres, of which some acreage was purchased from Juana. When Juana's land claim was finally patented on August 15, 1871,[11] most of the Rancho La Purísima Concepción had been sold to Euro-American settlers or granted to Juana's children.

In the 1850s and 1860s, Santa Clara Valley's primary crops were wheat and grain. During this time, farmers

[6] CIRCA Preservation Consulting, "City of Los Altos Historic Resources Inventory", Prepared for the City of Los Altos, 2012.

[7] Chamisal is a Mexican word that means overgrowth of chamiso, an evergreen shrub.

[8] CIRCA Preservation Consulting, "City of Los Altos Historic Resources Inventory", Prepared for the City of Los Altos, 2012.

[9] Gordon Richards, "Stephens-Townsend-Murphy Party", Truckee Donner Historical Society, accessed September 21, 2021, https://www.truckeehistory.org/the-first-pioneer-wagons-crossed-the-sierra-over-160-years-ago.html.

[10] Los Altos Hills, "Lost Altos Hills History Anthology (1956-2016)", 2016.

[11] Sacramento State Office, "Report of the Surveyor-General of the State of California from August 1, 1898 – August 1, 1898.' 1886.

living in Los Altos loaded their crops onto wagons that were then hauled to the Mountain View Station stage stop, located along the San Francisco-San Jose Stage Road, known today as El Camino Real. In 1864, the Southern Pacific Railroad established a rail line within present-day Mountain View, approximately one mile north of the Mountain View Station stage stop. In 1865, the City of Mountain View was officially laid out. Due to its proximately to the developing City of Mountain View and the new railroad stop, the small community of Los Altos began to grow. In the 1870s, Los Altos consisted of small and large farms planted with both grain and fruit crops. By the 1880s, fruit crops began to replace wheat and grain as the dominant agricultural crop in Santa Clara Valley, and by 1890, many of the larger farms and cattle ranches were subdivided and sold as small farms. During this time, the small farms produced as "much as 200 dollars per acre from prunes, apricots, peaches, cherries, pears, and other fruits."[12] By 1900, the land where the Property is located was planted with fruit trees.

In the early 1900s, land development companies and transportation companies began to buy land in Los Altos for future development. During this time, the area of present-day Los Altos saw large tracts of undeveloped land, including the area where the Property is located, subdivided as part of planned transit development. In Los Altos, Southern Pacific Railroad President Paul Shoup, and his brother, Guy Shoup, who was an attorney for the Southern Pacific, purchased a right-of-way from Palo Alto to Los Altos to run a connecting line through Los Gates and points south. This coincided with Paul Shoup's founding of the Altos Land Company in 1906. Paul, who is known as the father of Los Altos, proposed to link the cities of Palo Alto and Los Gatos with a new rail line through present-day Los Altos; however, the route where the rail line was proposed was located within two adjoining parcels owned by rifle heiress Sarah Winchester, who did not want the railway line to split the two adjacent parcels (Figure 3). On October 19, 1907, the Altos Land Company was incorporated, with Paul Shoup serving as its director. Soon after its incorporation, the Southern Pacific Railroad acquired the company as the newly formed subsidiary, Peninsular Railway. Although the Altos Land Company failed to purchase the right-of-way through Sarah Winchester's property, they instead offered to buy both lots from her. She accepted the offer, which allowed the Altos Land Company to move ahead with its plan to develop the small community. The Altos Land Company kicked off its development plans by sponsoring outdoor land sales events, which coincided with the construction of the new Southern Pacific route from Palo Alto to Los Altos to provide train service through Los Altos. On April 19, 1908, the Southern Pacific train service opened in Los Altos with five trains per day along the route of the present-day Foothill Expressway.

During the early 1900s, the Altos Land Company continued its marketing campaign to sell lots for development to support its new rail line by promoting Los Altos as "the loveliest place on the peninsula" (Figure 4 and Figure 5). As part of their marketing efforts, residents of San Francisco were offered free railroad excursions for a day in the country, with complimentary picnics alongside the tracks where lot sales were being sold. By 1911, there were 50 new houses constructed within Los Altos, as well as several office buildings and stores along Main Street (Figure 6). The 10-acre lots were priced from $400 to $650, and homes could be built from $2,000 to $4,000. The 10-acre lots were also laid out to support small family-owned fruit farmers, including the lots along Hawthorne Avenue. Shoup then laid out the town of Los Altos, and the first business

[12] Jose Salameda, *Memories of Los Altos*, publisher Joe Salameda (January 1, 1982).

to open in downtown Los Altos was Eschenbruecher's Hardware Store at 316 Main Street, which also housed the post office. The Los Altos Water Company, Los Altos Building and Loan, University Land Company, and the railroad company also occupied offices in downtown Los Altos. In 1909, the two-story Shoup Building was constructed at Main and Second streets, which housed a grocery store downstairs, managed by Paul Shoup's brother-in-law, Al Robinson, while the second floor was used as a school, and one teacher taught first through eighth grade. In 1914, the Southern Pacific constructed a new train depot in Los Altos (Figure 7). During this time, the railroad and, in particular, the electric streetcar were vital in opening the suburbs to lower and middle-income residents. Between 1910 and 1930, Los Altos prospered as a small town supported by small family-owned orchards and working-class residents who commuted to areas such as San Jose and San Francisco. During this time, small subdivisions developed, and new roads were constructed; however, housing construction within the new subdivisions was slow.

During the early 1900s, Los Altos residents were mainly of European or American descent. According to the 1910 U.S. Federal Census, no African Americans were living in Los Altos, and there was only one Japanese family and three single Japanese men working as servants, gardeners, or cooks.[13] By the 1920s, the number of Japanese residing in Los Altos had increased, making up approximately 22% of Los Altos' population; however, there were very few Chinese and only three African Americans residing in Los Altos. During the 1920s, many Japanese American and Japanese immigrants found work on the numerous fruit orchard farms throughout Santa Clara Valley, including Los Altos. Most Japanese leased land due to the restrictive and discriminatory land legislation under the California Alien Land Law of 1913, making it difficult for the Japanese to own property. However, some Japanese Americas found a way to purchase property, such as George Furuichi and his family. They moved to Los Altos in 1918 and purchased 5 acres of land on Hawthorne Avenue, 0.2 miles southeast of the Property where they planted fruit trees. During this time, the Furuichi family appeared to have been the only Japanese family who owned property within present-day Los Altos. By the late 1920s, Los Altos had remained a small town with 10-acre lots that were slowly being developed with housing.

By the mid-1930s, the nation was emerging from the Great Depression (1929 – 1933), which had created a surge of bank closures, resulting in the decrease of available capital that impacted agriculture and led to reduced market prices. In 1933, five days after taking the oath of office, Roosevelt called a conference with the secretaries of Agriculture, Interior, and War, along with several others, to discuss his ideas for recruiting 500,000 men to work in the nation's forests and eroded farmlands. Roosevelt's vision was to provide work opportunities, primarily for young men, to repair the land from decades of poor management and over-use, which became known as the "New Deal." As part of the New Deal, on March 31, 1933, the Emergency Conservation Work (ECW) Act was established under Executive Order No. 6101 and created the Civilian Conservation Corps (CCC) and the Works Progress Administration (WPA). The CCC and the WPA were established to create work opportunities that would not interfere with regular employment. As such, they were explicitly directed toward the conservation of natural resources. The Public Works Administration (PWA) was established six years later in 1939, and was created by the National Industrial Recovery Act of 1933

[13] CIRCA Preservation Consulting, "City of Los Altos Historic Resources Inventory", Prepared for the City of Los Altos, 2012.

(NIRA). The PWA projects included extensive improvements and growth to the road system in the Santa Clara Valley and Los Altos.

The 1940s brought significant change to the U.S. when on December 7, 1941, Japan bombed Pearl Harbor, Hawaii, and the U.S. declared war on Japan, marking the entrance of the U.S. into World War II (WWII). Suspecting potential spies within the Japanese American population, the U.S. government quickly enacted a series of measures to restrict the travel of Japanese-Americans and Japanese immigrants to the U.S. and Hawaii. On February 19, 1942, President Roosevelt signed Executive Order 1066, which authorized the internment of 120,000 people of Japanese descent, including Nisei, who were Japanese-Americans born to Japanese parents, and Issei, who were the first generation of Japanese to immigrate to the U.S., in 11 camps located across seven states. In March 1942, the Japanese American communities throughout San Jose were told they would have to "relocate" to military areas. Many of them were sent to the assembly center at Tanforan for assignment to internment camps. In 1942, George Furuichi and his family were sent to the Heart Mountain Relocation Center in northwest Wyoming. In 1943, George was recruited by the U.S. Army during his internment, and he served as part of the famed U.S.-Japanese "Go for Broke" 442 Regimental Combat Team.

The end of WWII also saw the return of U.S. soldiers and returning Japanese residents who were released from internment camps. The War Relocation Authority (WRA) gave each person $25 in cash and a train or bus ticket back to their hometowns for the returning Japanese residents. Some Japanese residents returning home found their belongings stored by churches or trusted neighbors. In contrast, others discovered their homes and businesses in disarray, and their things were often stolen or broken.[14] Unlike many Japanese Americans who lost everything during their internment, George Furuichi and his family could retain their land, which was maintained and protected by close friends. In 1947, George, his sister Helen, and his cousin Tom, who also interned during WWII, opened the Los Altos Nursery, which the Furuichi family-owned until it was sold in 2018.

During the late 1940s, Los Altos and Santa Clara County experienced tremendous job growth related to new industries, including the electronic and defense industries, resulting in a manufacturing boom. The town of Los Altos, like many other cities throughout the U.S., saw a housing boom with the return of soldiers after WWII. As the City grew, many, now 7,922 residents, feared that either Palo Alto or Mountain View would annex the growing town. In 1952, the citizens voted to incorporate the City of Los Altos, becoming the eleventh City in Santa Clara County. By 1960, with the economy booming and new residential housing construction, the population of Los Altos reached 19,696. By this time, the automobile had replaced the train, and in 1964 the Southern Pacific railroad ceased operations in Los Altos. During the 1970s, the technology industry was beginning to grow, and in 1976, Apple co-founders Steve Jobs and Steve Wozniak built the first 50 "Apple I" computers in Steven Jobs' parents' garage in Los Altos.

[14] James C Williams, and Kent Seavey. "Gilroy Yamato Hot Springs National Register of Historic Places Nomination", (NR#95000996), Washington, DC: National Park Service, 1995.

Figure 2. undated photograph of Juana Briones de Miranda (courtesy of the NPS).

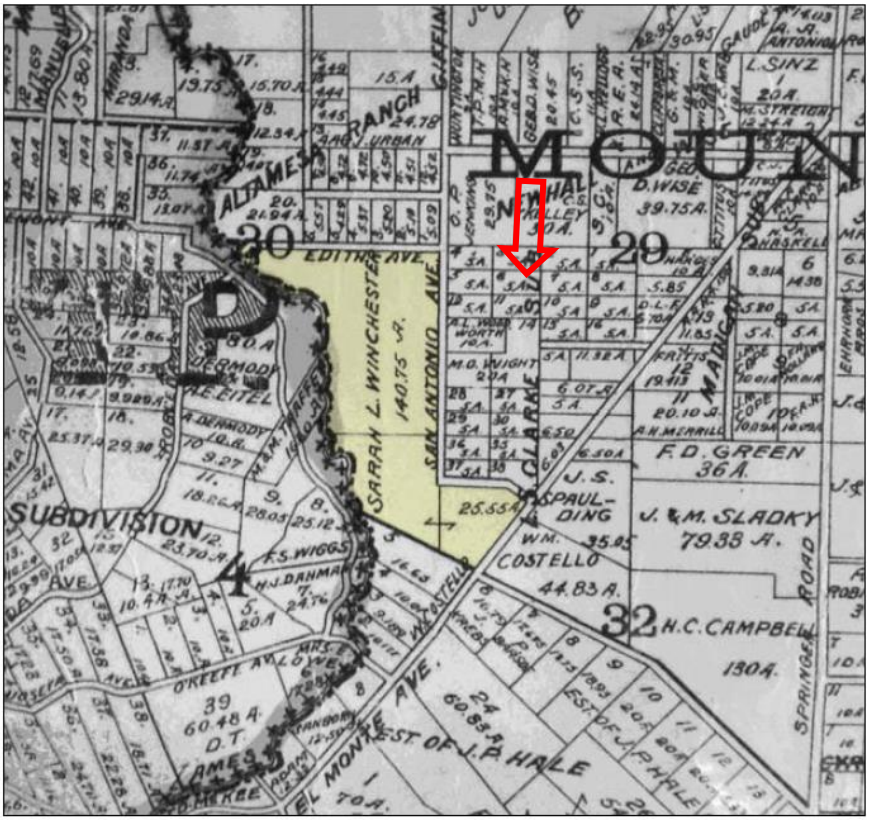


Figure 3. A 1906 tract map is showing the Property (red arrow) concerning the Sarah Winchester parcel (highlight center parcel) that was sold to the Altos Land Company and later became the townsite for Los Altos (courtesy of the Los Altos History House Museum Archives).

Figure 4. ca. 1907 bird's eye view drawing of the developing community of Los Altos (courtesy of the Los Altos History House Museum Archives).

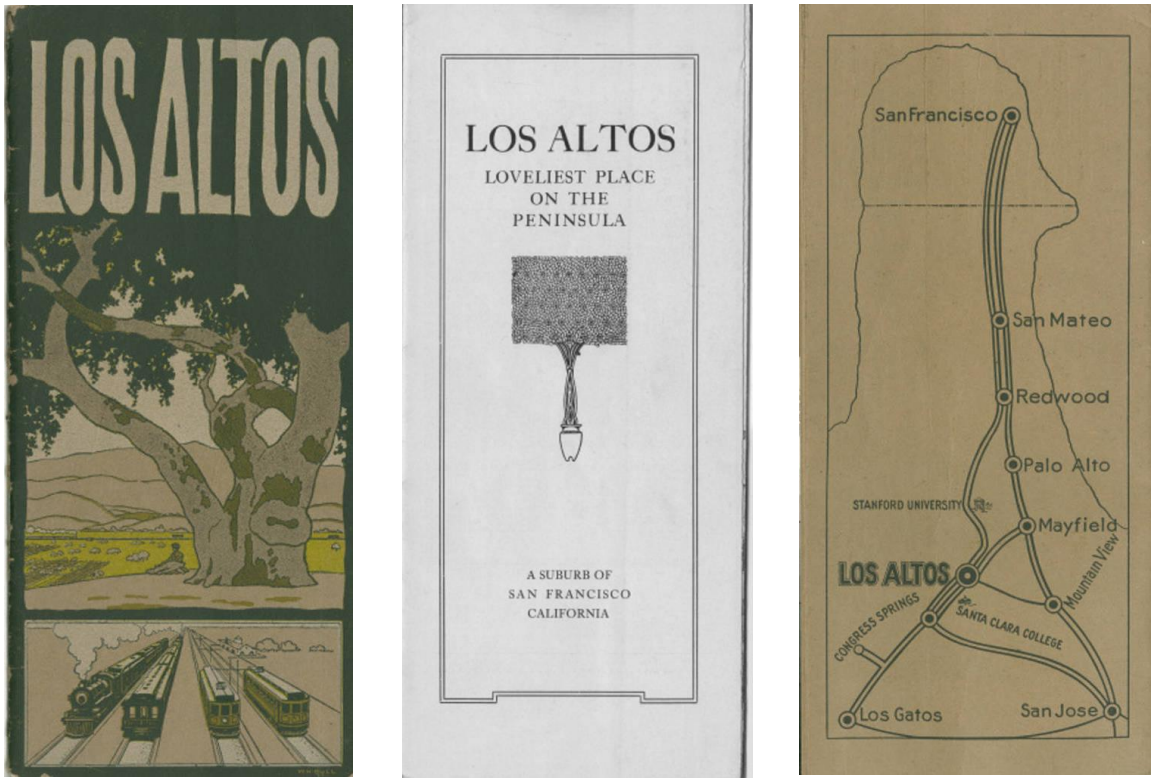


Figure 5. A marketing brochure from the Altos Land Company, advertising the Los Altos as the loveliest place on the peninsula (courtesy of the Los Altos History House Museum Archives).

LOS ALTOS

section of the State; oranges, lemons and limes, unprotected, grow without injury. The elevation, of course, insures good drainage. The water supply is abundant and wholesome —none better. The mountains with extending flanks protect the town against harsh winds.

Fruitfulness

If you will ask at the fruit canneries where the best and earliest apricots come from, they will tell you from the foothill region around Los Altos. Here, too, are produced the finest of dry wine grapes and most excellent table grapes. Prunes, peaches, plums and other fruits are grown in great quantities. Indeed, Los Altos is in the center of a vast fruit orchard, eighty per cent of the valley territory about it for a distance of three miles in any direction being already given over to finely kept orchards of apricots, prunes, olives, almonds, cherries, plums, peaches

LOS ALTOS

Los Altos homes, set amid the beauty of mountain landscape, have at their center the conveniences of good stores.

and to vineyards. Every resident of Los Altos may with little trouble have a home orchard worth while in his backyard.

Railway Facilities

Los Altos is intersected by two railways, one completed, one under construction. The Southern Pacific, to make accessible this wonderful foothill section as a suburban residence place for San Francisco people as well as to shorten the time to Santa Cruz and Santa Cruz mountain resorts, has constructed a double track railway from Mayfield on its peninsula line (a mile south of Palo Alto) twenty miles across to Los Gatos, hugging the foothills along the western side of the Santa Clara valley, thence through the mountains to Santa Cruz. The first station south of Mayfield and the principal station on the cutoff is Los Altos.

The Peninsular Electric Railway, already owning and operating lines between San

Cozy homes, many of them built by San Francisco business men, are spreading rapidly across the poppy fields at Los Altos.

Figure 6. Advertisement from the Altos Land Company, advertising Los Altos as the loveliest place on the peninsula (courtesy of the Los Altos History House Museum Archives).

Figure 7. ca. 1920 photograph of the 1913 Southern Pacific Railroad depot in Los Altos (courtesy of the Los Altos History House Museum Archives).

Figure 8. ca. 1930 photograph of George Furuichi (third from the right) and other Japanese workers. The location is unknown but may have been within his property on Hawthorne Avenue (courtesy of the Los Altos History House Museum Archives).

PROPERTY HISTORY

Prior to the construction of the current built environment resources, the Property was part of unclaimed public land acquired by the U.S. government in 1848. By 1865, the Property had been surveyed under the PLSS and became part of a 640-acre property that consisted of chamisal, a term for the overgrowth of chamiso, an evergreen shrub (Figure 9). By 1873, the 640-acre property was divided into two parcels, one belonging to "Graham" and the other belonging to "Bailey" (Figure 10). During this time, the Property was within the Fremont Township in the county of Santa Clara, and the land where the Property is located was still covered in chamisal. By 1876, the property was divided into smaller parcels, and the subject Property became part of a 40-acre property belonging to T & J.P. Dillon (Figure 11). There were two private roads within the 40-acre property during this time, one of which became South San Antonio Road, located west of the Property, and the other was South El Monte Avenue. No additional information about T. & J.P. Dillon was found.

By 1890, the 40-acre property was part of the L.S. Clarke Subdivision that consisted of 48 10-acre lots, with the Property located within Lot 11 (Figure 12). Although the Property was part of an early subdivision, housing within this area was slow to develop. According to the 1897 and 1899 USGS 15' Palo Alto Quadrangle maps, there were no houses within Lot 11 at this time (Figure 13 and Figure 14). By 1910, new roads were constructed within the subdivision, including Hawthorne Avenue within what was now known as the Altos Acres Tract residential subdivision. The Property was part of a 0.72-acre property (Figure 15); however, it was not until ca. 1922 that the Property was developed with the construction of the ca. 1922 house and ca. 1922 shed.

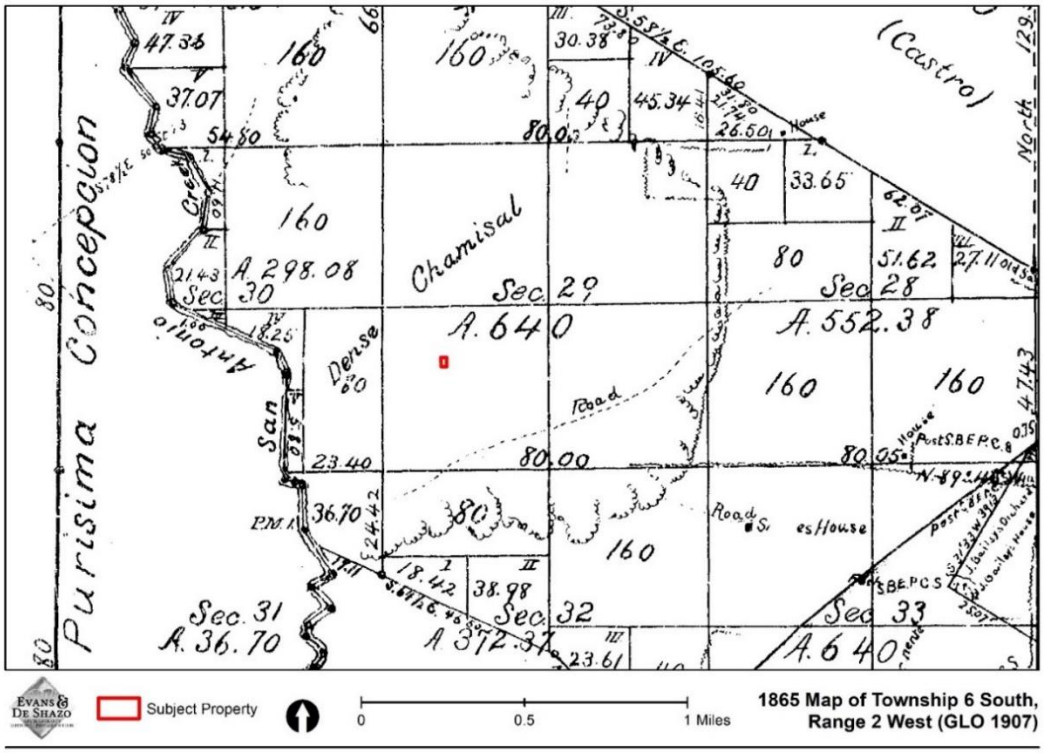


Figure 9. 1865 Government Land Office (GLO) map showing the Property within "Dense Chamisal".

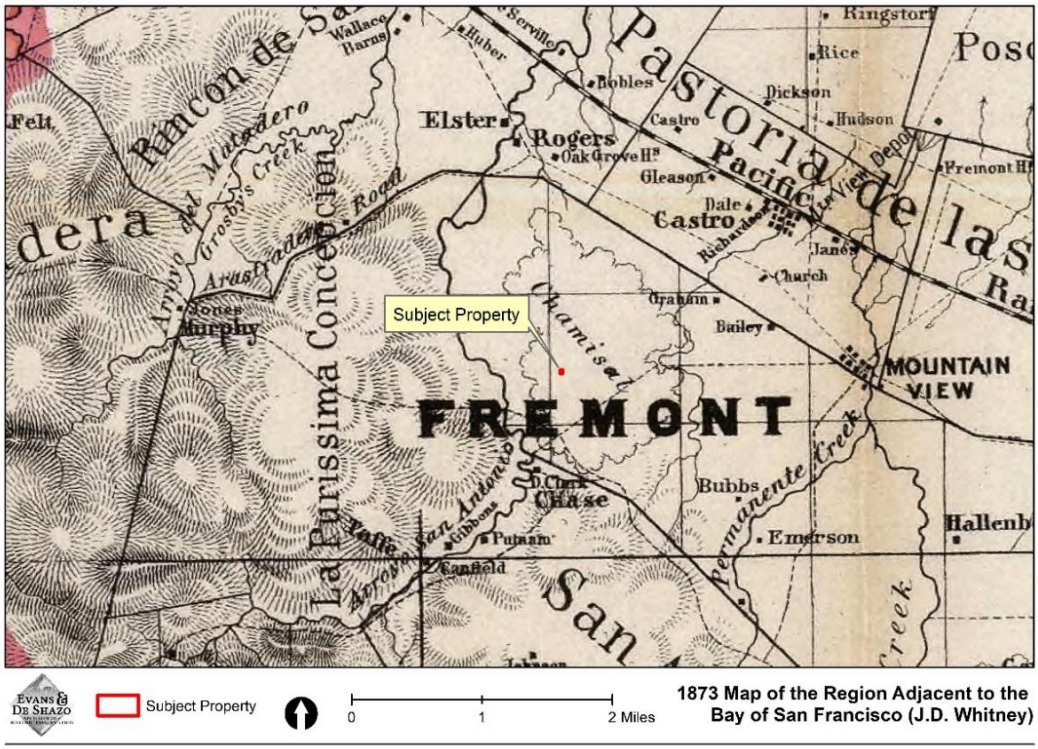


Figure 10. 1873 Hoffman and Whitney map showing the Property within an area still covered in chamisal.

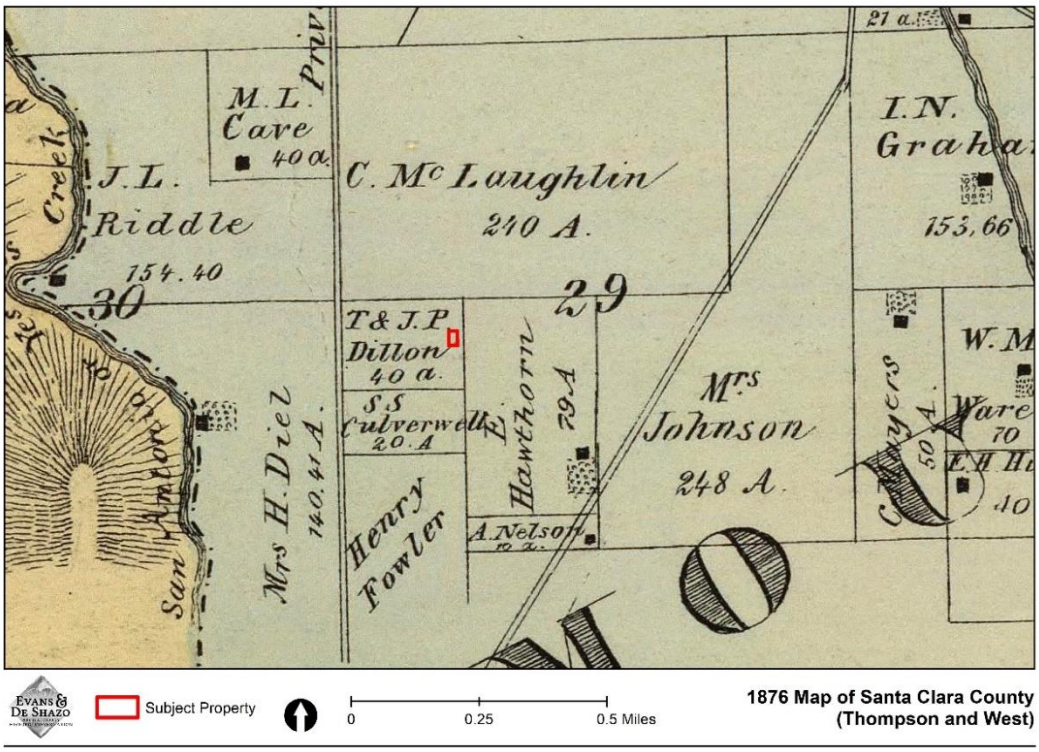


Figure 11. 1876 Thompson and West map showing the Property within T & J.P. Dillon's 40-acre property.

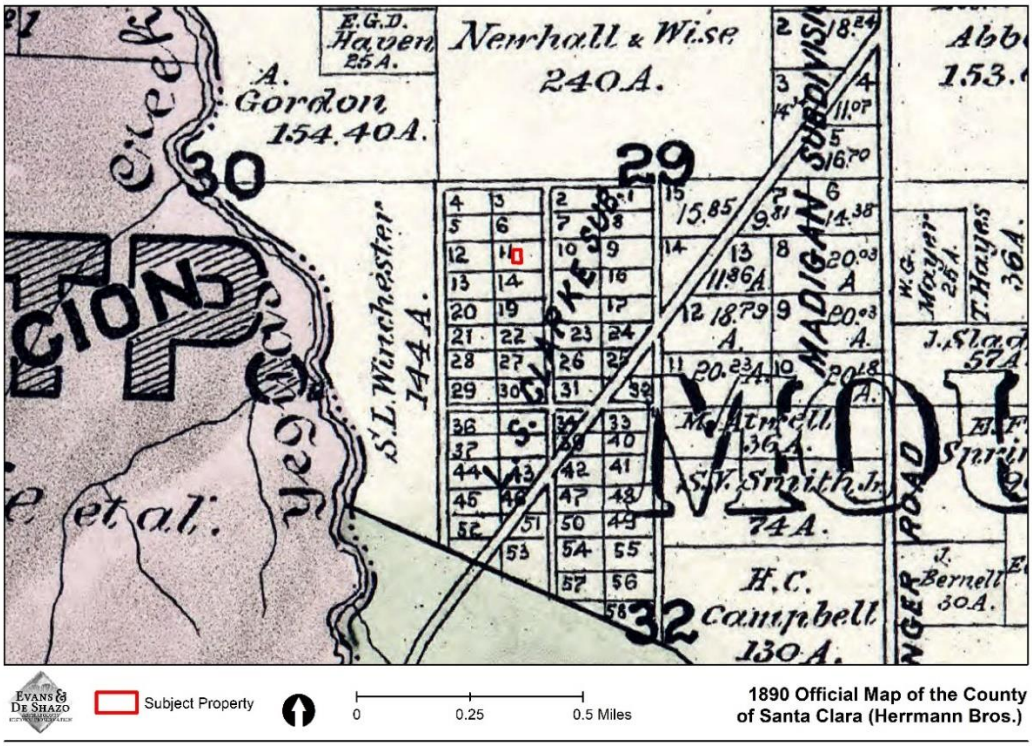


Figure 12. 1890 Hermann Bros. map shows the Property within lot 11 of L.S. Clarke Subdivision.

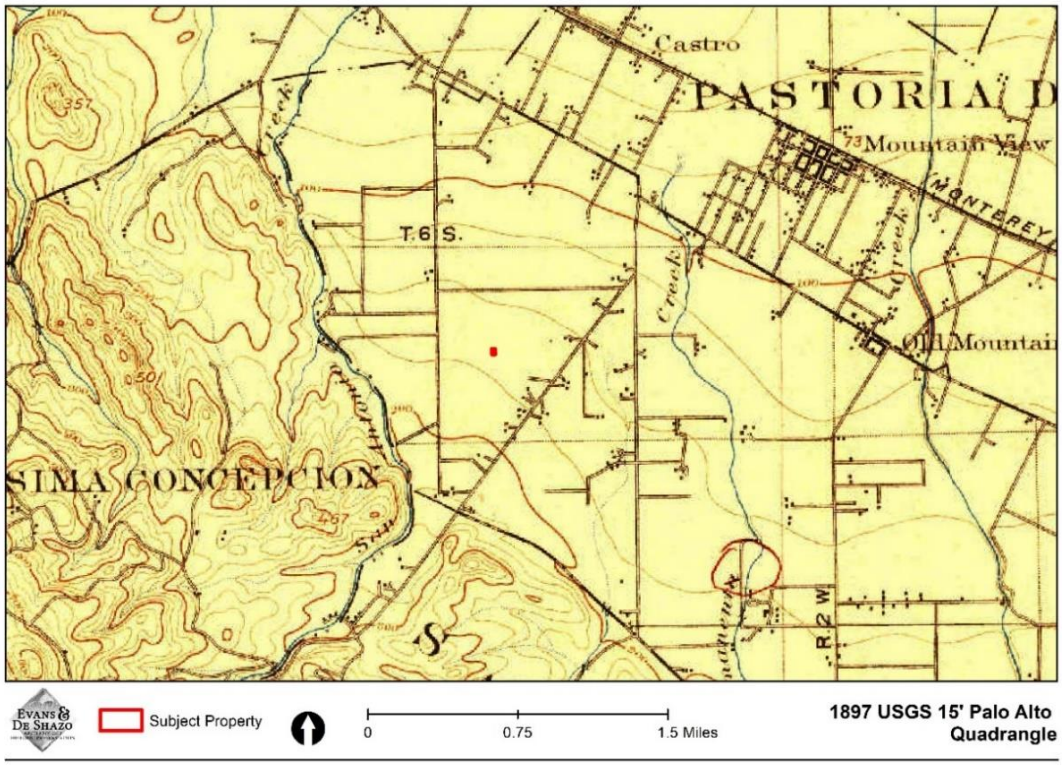


Figure 13. 1897 USGS 15' Palo Alto Quadrangle showing the Property.

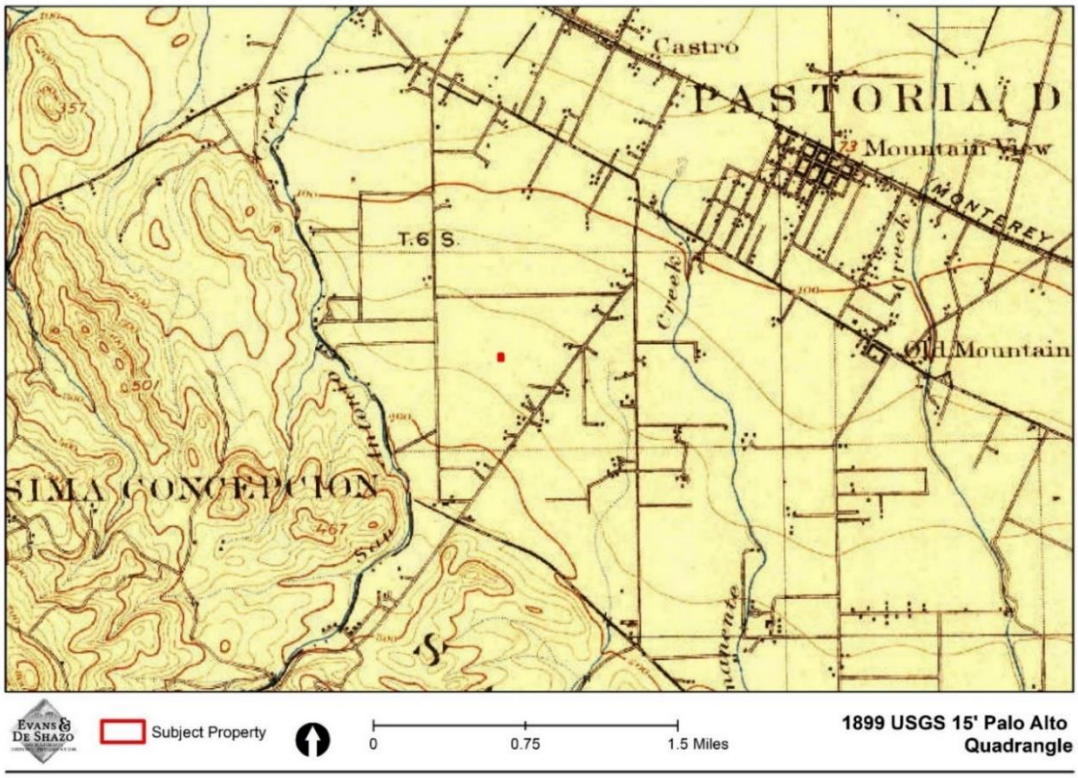


Figure 14. 1899 USGS 15' Palo Alto Quadrangle map showing the Property.

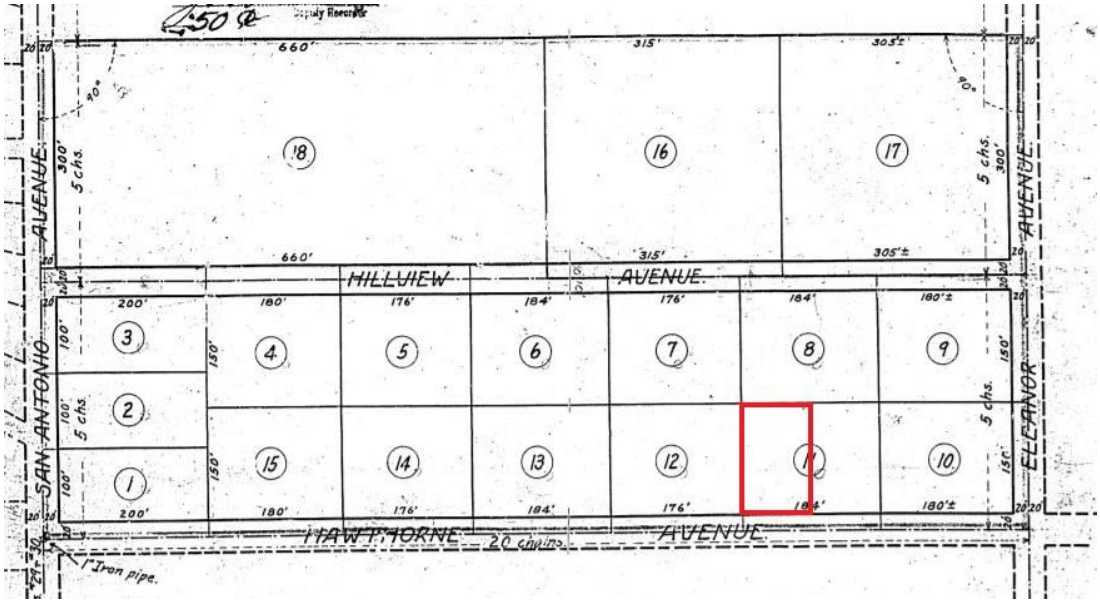


Figure 15. 1910 Subdivision Map of the Alto Acres Tract with the Property boundary outlined in red (courtesy of Santa Clara County).

Table 1. Owners and Occupants related to the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape.

Year	Owner/Occupants	Details
ca. 1922-ca. 1965	Owners: unknown	• Although EDS conducted extensive online and in-person research, the current owner, the first owners of the ca. 1922 house, ca. 1922 shed, and associated landscape were not found. • In 1922, the Property was located within Fremont Township in Santa Clara County • Based on a review of the 1930 and 1940 U.S. Federal Census records, the house addresses on Hawthorne Avenue during this time were not the same as they are today, including 151 Hawthorne Avenue; however, the research did not reveal the original address of the Property. • Aerial photographs between 1930 and 1941 show the Property, including the ca. 1922 house and ca. 1922 shed situated within an orchard. There were very few residential houses on Hawthorne Street or within the neighborhood during this time (Figure 16, Figure 17, and Figure 18). • The 1956 aerial photograph shows the ca. 1922 house and ca. 1922 shed within the Property and a reduction in the orchards and increased houses within the neighborhood (Figure 19).
1964	Owner: C.H. Tabrett	• According to a city permit record (A 8254) for repair work on the ca. 1922 house, due to termite issues, C.H. Tabrett owned the Property in 1964. However, extensive research by EDS and the current owner did not find C.H. Tabrett listed in any city directory or on any deed or any other primary documentation associated with the Property. In addition, EDS did not find anyone with this exact name living in Los Altos during this time. However, it is possible that the initials or names were misspelled, as EDS did find a C.F. Tabrett living in Los Altos, but no documentation shows he lived within the subject Property.
ca. 1965 to 1972	Owners: David Redmond and Florence Eileen Redmond	• The owners of the Property between ca. 1965 and 1972 were David and Florence Redmond. • David was born in Northampton, Northamptonshire, England, in 1904, and Florence was born in Northampton, Northamptonshire, England, in 1913. David and Florence were married in ca. 1935. From the 1930s to ca. 1950, they lived in Northampton, Northamptonshire, England.[15] During this time, David was a foreman for an engineering press shop, and Florence was a housewife. • It is unknown when David and Florence immigrated to the U.S., but in 1958, David and Florence traveled on the ship the Queen Mary from

[15] Ancestry.com, General Register Office; United Kingdom; Volume: *4;* Page: *1383.*

Year	Owner/Occupants	Details
		New York to England.[16] According to the ship's manifest, David and Florence were citizens of the United Kingdom. David's occupation was a lathe operator, and Florence was a housewife. • By ca. 1965, David and Florence were living in Saratoga, California. When they purchased the property, there was a further reduction in the surrounding orchards and an increase in houses within the neighborhood (Figure 20). • In 1970, David and Florence became naturalized citizens of the U.S. • In 1972, David and Florence sold the Property to Bruce Palmer, and David and Mary returned to Northhampton, Northamptonshire, England. Florence died in 1974 in England (Figure 21).[17]
1972 to 2019	Owner: Bruce Wales Palmer Occupants: N/A	• Bruce Palmer was the owner of the Property from 1972 to 2019. • Bruce was born in 1945 in Santa Clara County and attended school at Palo Alto High School. • Bruce appears to have initially lived in the house from 1972 to ca. 2000, but he had moved out of the Property and rented the ca. 1922 house to various occupants from 2000 to 2019. • During Bruce's ownership is when the 1972 inground swimming pool was constructed, and other changes occurred, such as the addition of a door on the west elevation, new fencing, a new roof, furnace, and at least two kitchen and two bath remodels, which may have resulted in the reconfiguration of windows on the north and west elevations of the ca. 1922 house. • No additional information about Bruce was found.

[16] Ancestry.com, The National Archives of the UK; Kew, Surrey, England; Board of Trade: Commercial and Statistical Department and successors: Inwards Passenger Lists.; Class: BT26; Piece: 1410

[17] Ancestry.com, National Archives at College Park; College Park, Maryland, U.S.A.; NAI Number: *613857;* Record Group Title: *General Records of the Department of State;* Record Group Number: *Record Group 59;* Series Number: *Publication A1 5166;* Box Number: *134;* Box Description: *1974 PL – RZ.*

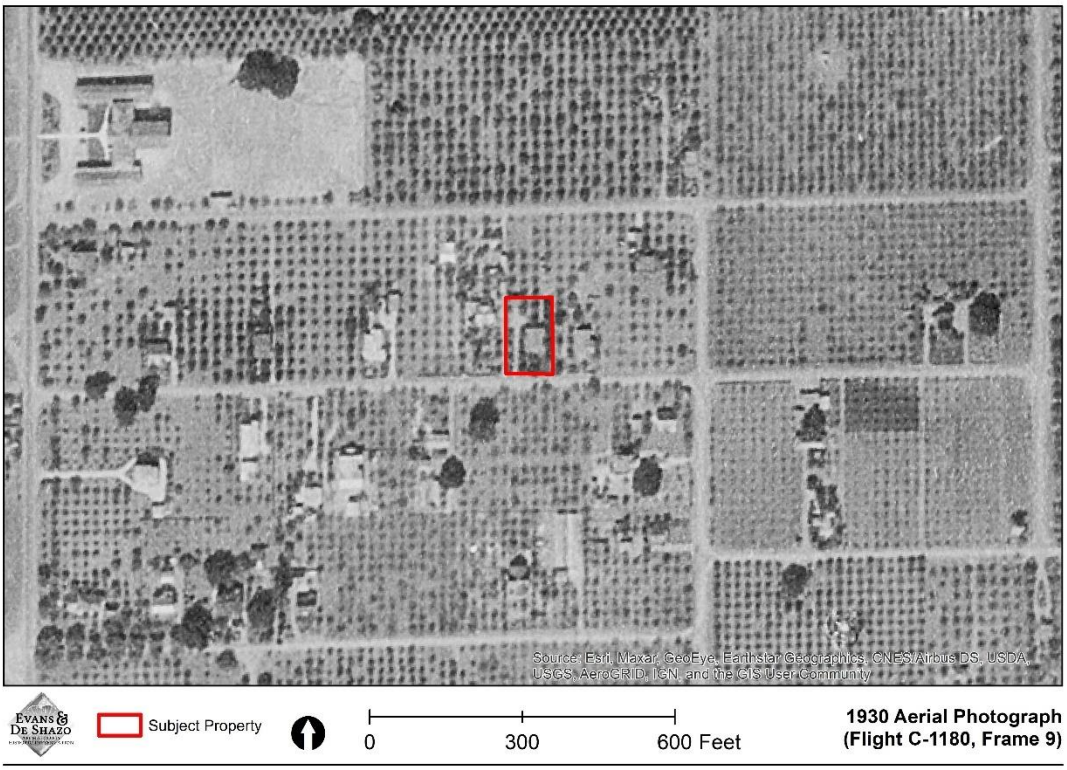


Figure 16. 1930 aerial photograph showing the Property (courtesy of the University of Santa Barbara Library).

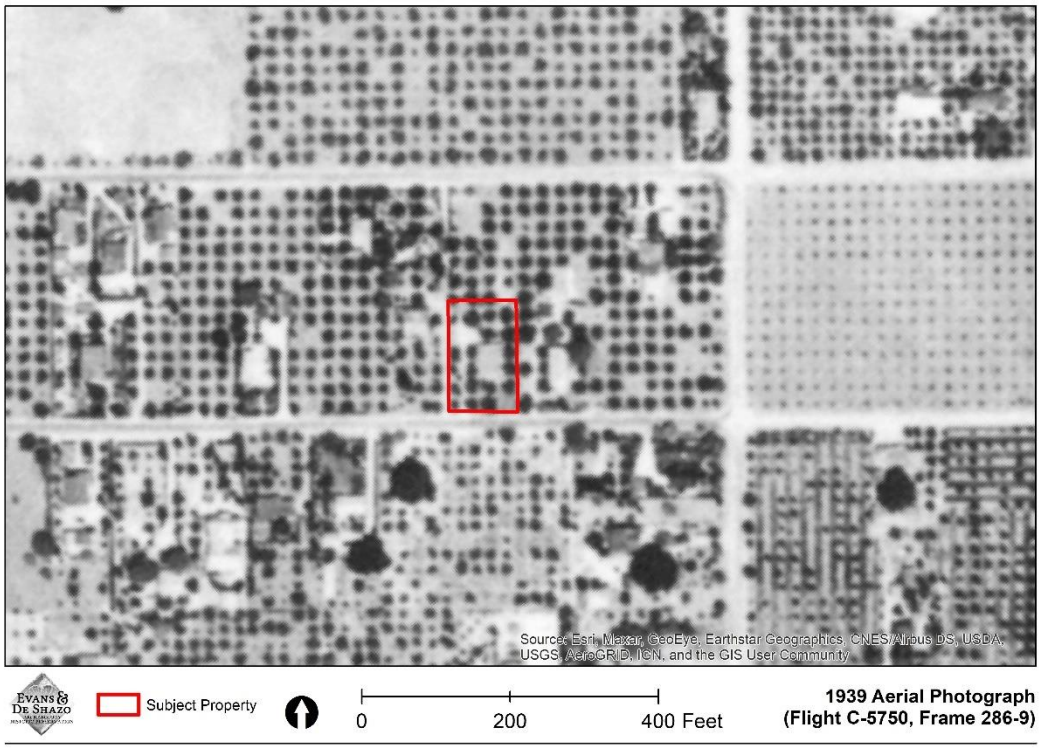


Figure 17. 1939 aerial photograph showing the Property (courtesy of the University of Santa Barbara Library).

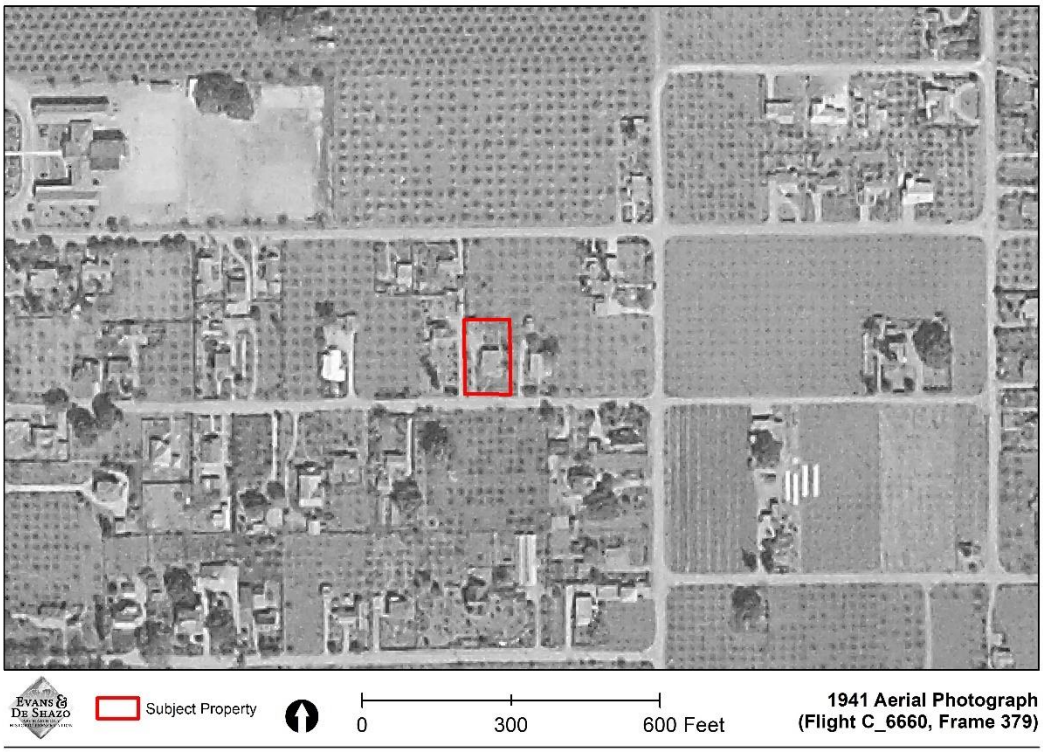
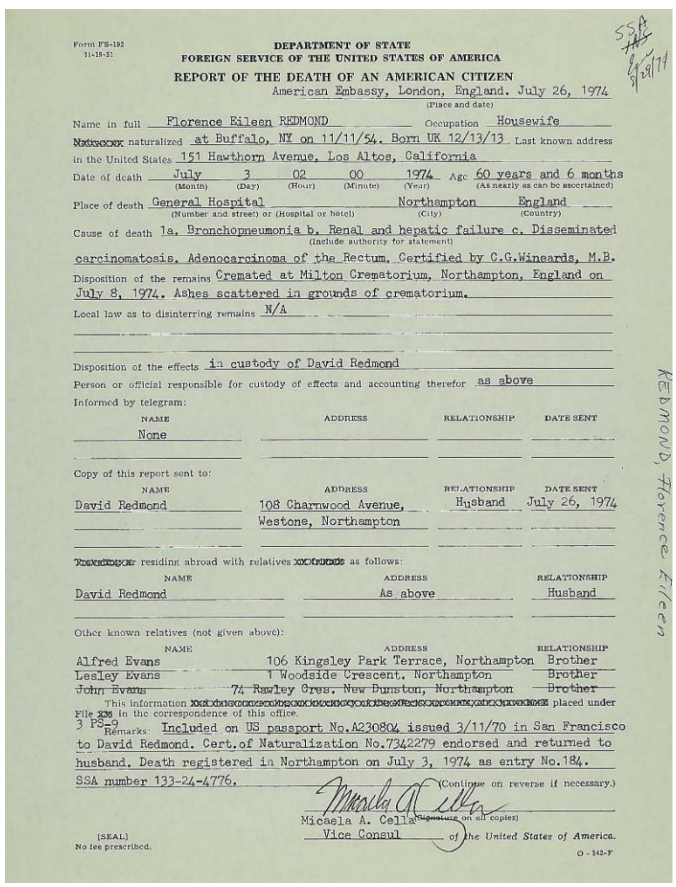


Figure 18. 1941 aerial photograph showing the Property's location surrounded by some houses, but still mainly orchards (courtesy of University of Santa Barbara Library).

Figure 19. 1956 aerial photograph showing the Property and surrounding residential growth (courtesy of the University of Santa Barbara Library).

Figure 20. 1968 aerial photograph of the Property with dense residential development around it (courtesy of University of Santa Barbara Library).



Form FS-192
11-19-51

DEPARTMENT OF STATE
FOREIGN SERVICE OF THE UNITED STATES OF AMERICA
REPORT OF THE DEATH OF AN AMERICAN CITIZEN

American Embassy, London, England. July 26, 1974
(Place and date)

Name in full Florence Eileen REDMOND Occupation Housewife

naturalized at Buffalo, NY on 11/11/54. Born UK 12/13/13 Last known address in the United States 151 Hawthorn Avenue, Los Altos, California

Date of death July (Month) 3 (Day) 02 (Hour) 00 (Minute) 1974 (Year) Age 60 years and 6 months (As nearly as can be ascertained)

Place of death General Hospital (Number and street) or (Hospital or hotel) Northampton (City) England (Country)

Cause of death 1a. Bronchopneumonia b. Renal and hepatic failure c. Disseminated carcinomatosis. Adenocarcinoma of the Rectum. Certified by C.G.Wineards, M.B. (Include authority for statement)

Disposition of the remains Cremated at Milton Crematorium, Northampton, England on July 8, 1974. Ashes scattered in grounds of crematorium.

Local law as to disinterring remains N/A

Disposition of the effects in custody of David Redmond

Person or official responsible for custody of effects and accounting therefor as above

Informed by telegram:

NAME	ADDRESS	RELATIONSHIP	DATE SENT
None			

Copy of this report sent to:

NAME	ADDRESS	RELATIONSHIP	DATE SENT
David Redmond	108 Charnwood Avenue, Westone, Northampton	Husband	July 26, 1974

residing abroad with relatives as follows:

NAME	ADDRESS	RELATIONSHIP
David Redmond	As above	Husband

Other known relatives (not given above):

NAME	ADDRESS	RELATIONSHIP
Alfred Evans	106 Kingsley Park Terrace, Northampton	Brother
Lesley Evans	1 Woodside Crescent, Northampton	Brother
~~John Evans~~	~~74 Rawley Cres. New Dunston, Northampton~~	~~Brother~~

This information placed under File in the correspondence of this office.
3 PS-9

Remarks: Included on US passport No.A230804 issued 3/11/70 in San Francisco to David Redmond. Cert.of Naturalization No.7342279 endorsed and returned to husband. Death registered in Northampton on July 3, 1974 as entry No.184. SSA number 133-24-4776.

(Continue on reverse if necessary.)

Micaela A. Cella (Signature on all copies)
Vice Consul of the United States of America.

[SEAL]
No fee prescribed.

O - 542-F

SSA ~~INS~~ 8/29/74

REDMOND, Florence Eileen

Figure 21. Department of State, report of death of an American citizen, showing the last known address of Florence Redmond as 151 Hawthorne Avenue (Ancestry.com).

ARCHITECTURAL CONTEXT

The following section briefly explains the Craftsman architectural style associated with the ca. 1922 house.

CRAFTSMAN ARCHITECTURAL STYLE (1905 - 1930)

The American Craftsman style is the quintessential house style of America. More popular and more replicated than most others, it is the sum of all that America is. It stands for simplicity, excellence, and utility, and simplicity in design, excellence in craftsmanship, and utility in its functionality. Craftsman houses were inspired mainly by two California brothers – Charles Sumner Greene and Henry Mather Greene. They practiced together in Pasadena from 1893 to 1914 (i.e., California Craftsman, Craftsman Bungalows, or California Bungalow Craftsman). In about 1903, they began to design simple Craftsman-type bungalows. By 1909, they had designed and executed several exceptional landmark examples. Influenced by the English Arts and Crafts Movement, an interest in oriental wooden architecture and their early training in the manual arts appear to have led the Greene's to design and build these intricately detailed buildings. During the early twentieth century, these and similar residences were given extensive publicity in some of the most popular magazines, thus familiarizing the rest of the nation with this style. As a result, a flood of pattern books appeared, offering plans for Craftsman bungalows; some even provided completely pre-cut packages of lumber and detailing to be assembled by local labor. Through these vehicles, the Craftsman house quickly became the most popular and fashionable smaller house in the country.[18]

Common architectural design features of Craftsman architecture include the following:

- Low-pitched roof lines gabled or hipped roof
- Deeply overhanging eaves
- Decorative half-timbering and woodwork
- Front or side-gable roofs with exposed rafters or decorative brackets under eaves
- Front porch beneath the extension of the main roof
- Tapered, square columns ("battered" columns) supporting the roof
- Double-hung windows; 3-over-1 or 6-over-1 double-hung windows
- Hand-crafted stone or woodwork, including wood and shingle siding
- Mixed materials throughout the building

HISTORIC ARCHITECTURAL SURVEY

On June 21, 2021, EDS Principal Architectural Historian Stacey De Shazo, M.A., completed a historic architectural survey of the property, including the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape. The results of the historic architectural survey are documented in the

[18] Virginia McAlester and Lee McAlester, A *Field Guild to American Houses,* New York, Alfred A. Knopf. Munro-Fraser, J.P. 2013.

following section.

CA. 1922 HOUSE

The ca. 1922 house is designed in the Craftsman Bungalow architectural style. The house is asymmetrical with multiple roof plans, including a main front-gable roof form with a lower projecting front gable and an extending front gable porch roof. The roof is low-pitched with wide overhanging eaves and exposed roof beams and rafter tails. The roof is clad in an asphalt membrane material, and the house is clad in stucco in a dash finish. There appears to be at least one rear addition/porch enclosure, which was likely altered in the 1950s. The house is slightly elevated and is situated on a board-formed concrete perimeter and post and pier foundation.

South Elevation (Primary Facade)

The south elevation consists of an asymmetrical design with a main front-gabled roof form, a lower projecting front gable, and an extending front gable porch roof (Figure 22 and Figure 23). The extending porch roof consists of decorative vertical wood boards with open slates that provide ventilation to the porch roof. The porch is supported by three battered columns that rest of square piers clad with red brick (Figure 24). There is a solid porch balustrade clad in red brick laid out in a running bond pattern. The front porch floor is accessed via a set of concrete steps along the primary façade and a set of concrete steps and a secondary entrance along the rear of the porch at the southeast corner of the house. The porch floor is stamped concrete, and the porch ceiling is clad in contemporary stucco, which likely covers the original wood-clad porch roof (Figure 25). Fenestration along this elevation includes two large picture windows that are not original to the house, set in wood window casings (not original) and wide decorative window trim and an oversized wooden front door with three vertical beveled glass and asymmetrical patterns (Figure 26).

Figure 22. South elevation, facing north.

Figure 23. South elevation, facing north.

Figure 24. South elevation, facing north.

Figure 25. Photograph showing the front porch, facing west.

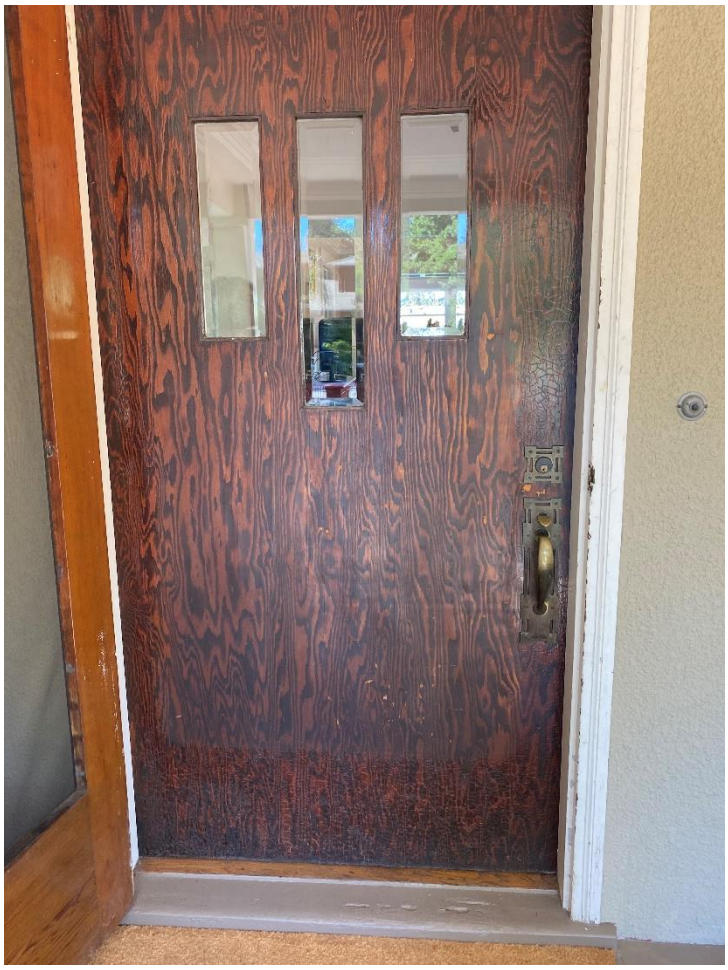


Figure 26. Photograph showing the front door, facing north.

East Elevation

The east elevation consists of a dormer side gable roof that sets above the porch roof and a projecting side gable addition/enclosed porch, both of which appear to be additions and not original to the design (Figure 27 and Figure 28). The side gable roof is set above the porch roof, consisting of exposed beams with the exterior of the original brick chimney projecting through the center of the roof along the roof ridge. The projecting side gable roof addition appears to be an enclosed porch that was altered in the ca. 1950s to allow access to the half-width basement that seems to have been initially accessed via an exterior cellar door that is no longer present. The projecting side gable addition consists of concrete steps and a contemporary hand railing that leads to a rear porch door. Fenestration along this elevation includes a series of three double-hung wood windows with lugs, two casement windows, and a basement window that appears original to the house, and a pair of double-hung wood windows with lugs and a wooden door with upper glazing and lower wood paneling that appear to have been added in the ca. 1950s or ca. 1960s as part of the rear porch enclosure.

Figure 27. East elevation, facing north.

Figure 28. Photograph showing the east elevation, facing southwest.

North Elevation

The north elevation consists of an extending gabled roof with wide overhanging eaves and wood beams (Figure 29). The rear gable mimics the front porch gable detail, with decorative, vertical wood boards with open slates that provide ventilation (Figure 30). There are changes to this elevation that includes a vinyl sliding glass door, added during the 2015 kitchen remodel, which is accessed via a set of steps constructed of what appears to be fiber cement or Hardie decking. There are two narrow, fixed windows that may be original to the house but appear to have been relocated due to either the 1985 or 2015 kitchen remodel. There are also a series of four double-hung wood windows with lugs that appear original to the house, as well as a narrow rectangular basement hopper window. There are two -square vents along this elevation that are not original and were likely added during one of the kitchen remodels.

Figure 29. Photograph showing the north elevation rear roof gable and decorative vertical wood boards along the gable, facing southwest.

Figure 30. North elevation, facing south.

West Elevation

The west elevation consists of a projecting porch side entry gable, which appears to be an addition added in 1985 or 2015 during one of the two-bathroom remodels (Figure 31). Fenestration along the west elevation consists of a pair of double-hung wood windows with lugs (of which one consists of a replacement sash without lugs), two narrow wood windows with lugs that appear to have been relocated during one of the bathroom remodels, a series of four double-hung wood windows with lugs, and a contemporary five-light glass and wood door, added in 1972, set below the projecting gable (Figure 32).

Figure 31. West elevation, facing southeast.

Figure 32. West elevation, facing east.

CA. 1922 SHED

The ca. 1922 shed is a wood-framed front gable form with a low-pitched roof and a wide eave overhang with exposed rafter tails. Along the south elevation, a portion of the building is clad in original horizontal wood boards, and the east, west, and north elevations are clad in contemporary stucco (Figure 33). There are two five-panel wood doors, one along the south elevation (primary façade) and another along the north elevation. There is a tarp covering a wide door opening (Figure 34). There are two windows, including a vinyl sliding window along the north elevation and a double-hung wood window along the east elevation.

Figure 33. Photograph showing the cladding along south and east elevations, facing northwest.

Figure 34. Photograph showing the tarp covering the wide door opening and the front entrance to the shed.

1972 INGROUND SWIMMING POOL

The 1972 inground swimming pool is kidney-shaped and includes a semicircular hot tub attached to the southern end of the swimming pool (Figure 35). The pool decking is constructed of stamped cobblestone and concrete. There is decorative blue tile along the top edge of the pool.

Figure 35. Photograph showing the 1972 inground swimming pool with the hot tub, facing north.

ASSOCIATED LANDSCAPE

The associated landscape includes original square concrete pillars clad in decorative red brick that appear original to the house (Figure 36). The brick-clad concrete pillars are linked together by contemporary iron fencing designed in a semicircular shape. A gravel driveway leads to a wooden fence, which appears to be new (Figure 37).

Figure 36. Photograph showing a concrete pillar and contemporary iron gate along the primary façade, facing north.

Figure 37. Photograph showing the gravel driveway and new wooden fence, facing north.

PREVIOUS ALTERATIONS TO THE CA. 1922 HOUSE

Although the alterations are thoroughly documented in this report's Property History section and the Historical Architectural Survey section, the following section breaks out the most significant alternations in a bulleted list. This is followed by an alternation diagram showing the ca. 1922 house and alternations (Figure 38).

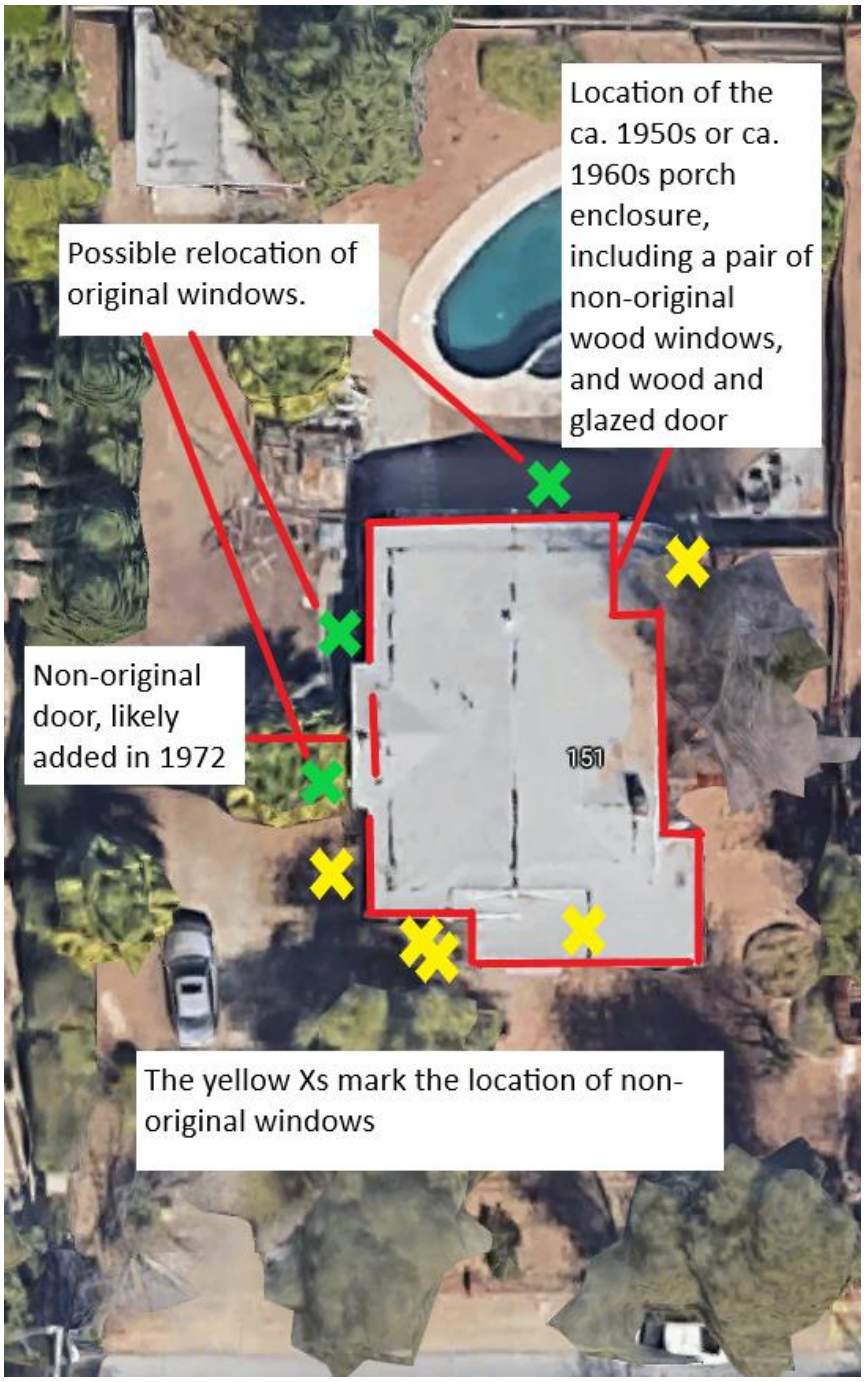


Figure 38. Google aerial view of the Property, showing the alterations.

- **Rear addition/porch enclosure**: The rear addition/porch enclosure, along the north elevation and a portion of the east elevation, consists of alterations in the ca. 1950s or ca. 1960s. These changes created a projecting side gable roof along the northeast corner of the house, enclosing what was likely an original rear porch entrance, providing interior access to the half-width basement, which was originally accessed from the house's exterior.
- **Windows:** There are 26 windows, of which four (detailed below and within Figure 38) are not original to the design of the ca. 1922 house and another four original windows appear to have been relocated due to remodeling efforts in 1985 and 2015.
    - **Replacement/Relocation of Windows**: The primary façade (south elevation) consists of two (2) large picture windows and trim work that is not original to the house (Figure 39); the east elevation consists of a pair of double-hung wood windows (2) with lugs associated with ca. 1950 or ca. 1960 addition (Figure 40); the north elevation consists of two (2) narrow, fixed windows that do not appear to be in their original location (Figure 41); the west elevation consist of two (2) new narrow wood windows with lugs that also do not appear to be in their original location due to changes that occurred in 1985 and 2015. There is also one (1) replacement window sash without lugs within the paired windows near the southwest corner of the house (Figure 42). Although the relocation of the four windows within the house is likely, there are no detailed permit or building records held by the City of Los Altos that can verify this likelihood.

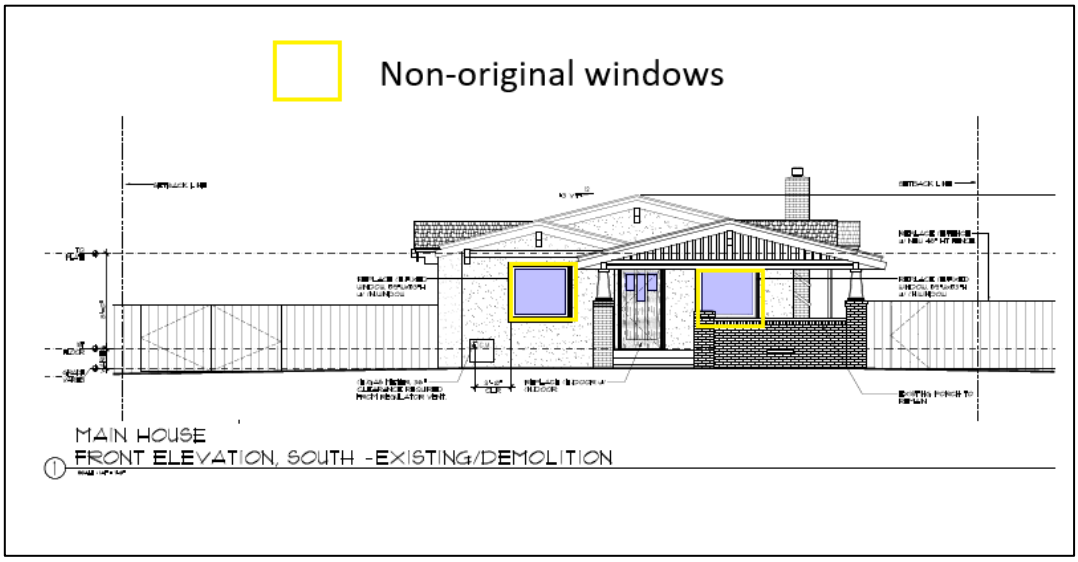


Figure 39. Primary façade (south elevation) showing the non-original windows outlined in yellow (Brownhouse Design; dated 5/27/2022).

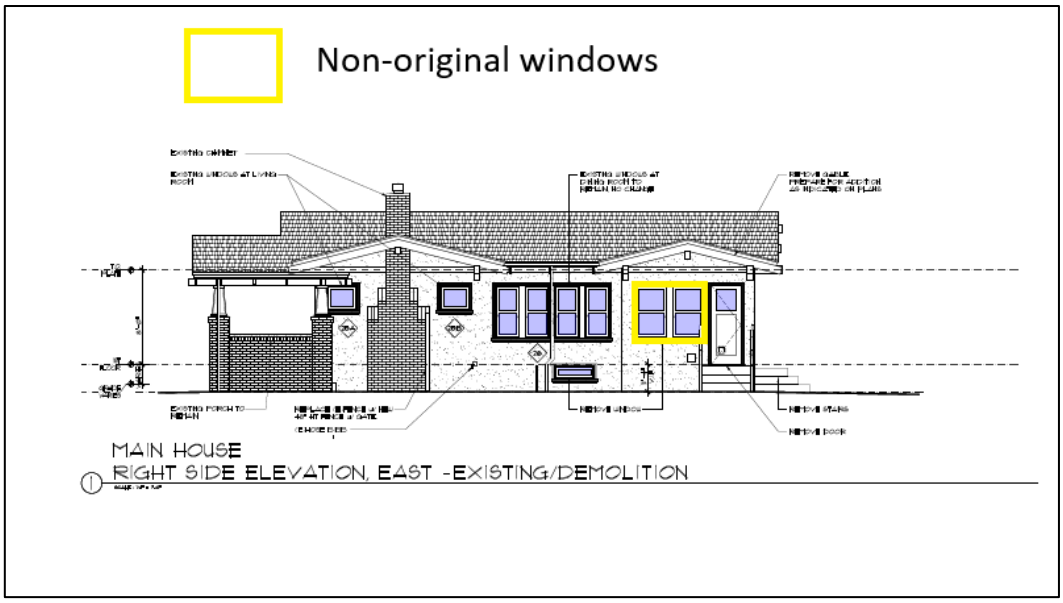


Figure 40. East elevation showing the non-original windows outlined in yellow (Brownhouse Design; dated 5/27/2022).

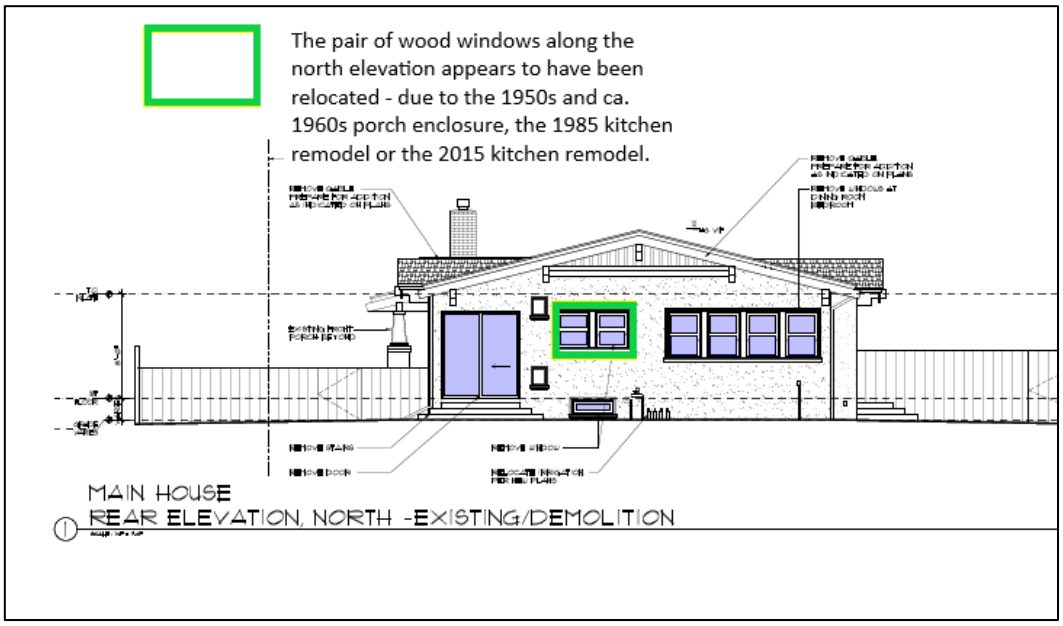


Figure 41. North elevation showing a pair of wood windows (outlined in green) that appear to have been relocated due to remodeling (Brownhouse Design; dated 5/27/2022).

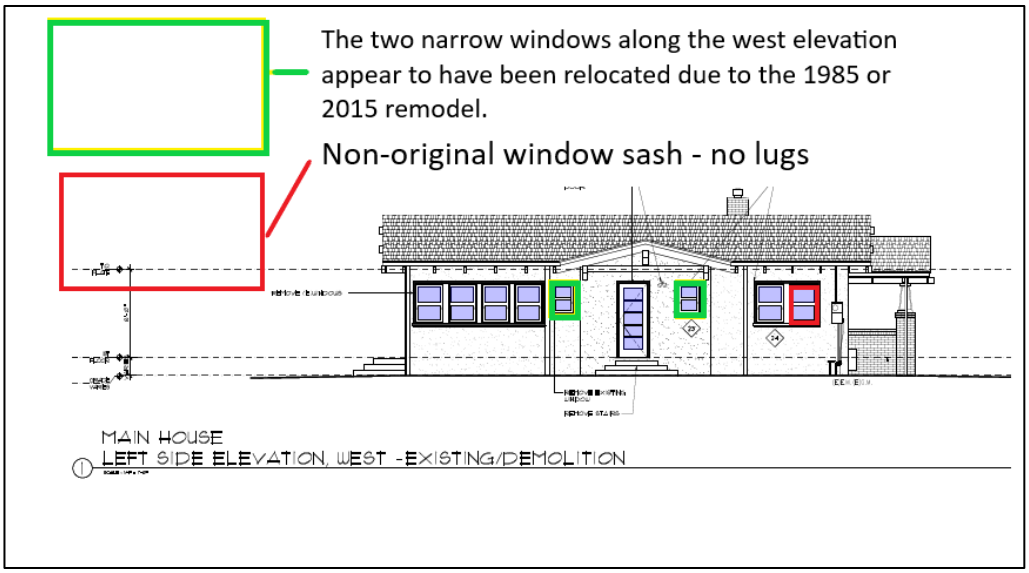


Figure 42. West elevation showing a non-original window sash (outlined in red) and two narrow wood windows (outlined in green) that appear to have been relocated due to remodeling (Brownhouse Design; dated 5/27/2022).

Stucco cladding – the addition to the rear, along the north and east elevations, and where windows were replaced or relocated, would have required the removal of stucco material; as such, within areas where there is window replacement and additions are documented, the stucco is not original.

- **New roof** - 1999, Permit No. 1999-636285
- **Kitchen and Bathroom Remodel and New Addition** – In 1985, Permit No. A 20848 was issued for the remodeling of a bathroom and kitchen within the ca. 1922 house. No further details are available, but it appears that during this addition, the changes to the north and west elevations may have occurred. In 2015 Permit No. 2015-664474 (issued 05/22/2015) to contractor Kevin Yapp. According to the City permit website, the permit is for an "addition" that includes, but not limited to, a kitchen and bath "addition," as well as new plumbing, sheetrock, tile lath, "Rg Fr/El/Mech/Pl", wall and ceiling insulation, and shower pan. The changes not listed, but those that also appear to have been completed under this permit, include a vinyl sliding glass door on the north elevation, providing access to the new kitchen, and a set of steps constructed of what appears to be fiber cement or Hardie decking. Although the permit was issued in 2015, and the work appears to have been completed at this time, the permit was not finalized by the City until 9/6/2020.

EVALUATION OF HISTORICAL SIGNIFICANCE

The Property includes the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape were evaluated to determine eligibility for listing on the CRHR. The ca. 1922 house was evaluated for its association with Craftsman Bungalow architecture with a period of significance of ca. 1922, which is the date when the house is estimated to be constructed. The ca. 1922 shed, 1972 inground swimming pool, and associated landscape are not associated with any known architectural style, form, or architectural landscape design or landscape planning.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The CRHR is an inventory of significant architectural, archaeological, and historical resources in California. Resources can be listed in the CRHR through several methods. State Historical Landmarks and NRHP listed properties are automatically listed in the CRHR. Properties can also be nominated to the CRHR by local governments, private organizations, or citizens. The CRHR follows *similar* guidelines to those used for the NRHP.[19] One difference is that the CRHR identifies the Criteria for Evaluation numerically instead of alphabetically. Another difference, according to the OHP is that "It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the NRHP, but they may still be eligible for listing in the California Register. A resource that has lost its historical character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data".[20]

To qualify for listing in the CRHR, a property must possess significance under one of the four criteria and have historic integrity. Determining integrity consists of evaluating seven variables or aspects that include location, design, setting, materials, workmanship, feeling, and association. According to the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, these seven characteristics are defined as follows:

- **Location** is the place where the historic property was constructed.
- **Design** is the combination of elements that create the form, plans, space, structure, and style of the property.
- **Setting** addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the building(s).
- **Materials** refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.
- **Workmanship** is the physical evidence of the crafts of a particular culture or people during any given period in history.
- **Feeling** is the property's expression of the aesthetic or historic sense of a particular period of time.
- **Association** is the direct link between an important historical event or person and a historic property.

The following section examines the eligibility of the ca. 1922 house, ca. 1922 shed, and associated landscape.

CRHR EVALUATION

1. **(Event): Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.**

   The ca. 1922 house and ca. 1922 shed within the Property were constructed in a planned subdivision

[19] California Code of Regulations, Title 14, Chapter 11.5, Section 4850 et seq

[20] California Office of Historic Preservation Technical Assistance Series #6 California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register).

in a prosperous time in Los Altos; however, the development of the Property is not associated with any housing boom or any event that made a significant contribution to the broad patterns of California's history or cultural heritage. As such, the Property containing the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape does not appear eligible for listing on the CRHR.

Therefore, the Property does not appear individually eligible for listing in the CRHR under Criterion 1.

2. **(Person): Is associated with the lives of persons important in our past.**

   An exhaustive record search and review was completed by EDS, as well as the current owner. Although research included Thorough research of the Property containing the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape was completed; however, the research did not reveal that any person associated with the Property that is important to our past.

   Therefore, the Property does not appear individually eligible for listing in the CRHR under Criterion 2.

3. **(Construction/Architecture): Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.**

   Architecture: The ca. 1922 house is associated with the Craftsman Bungalow architectural style, which was popular throughout the U.S. from 1905 to 1930. The ca. 1922 house retains character-defining features associated with Craftsman Bungalow design, including the multi-front-gabled form, low-pitched roof with wide overhanging eaves, exposed rafters and beams, recessed porch set under an extending porch roof, battered porch columns, wood casement windows, and double-hung wood windows.

   The ca. 1922 shed and associated landscape are not associated with any known architectural style or form, landscape architectural style, or landscape planning design.

   Therefore, the ca. 1922 house within the Property appears individually eligible for listing in the CRHR under Criterion 3.

4. **(Information potential): Has yielded, or may be likely to yield, information important in prehistory or history.**

   Criterion 4 most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion 4 can also apply to built environment resources that contain important information. For a building to be eligible under Criterion 4, it must be a principal source of important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

   The ca. 1922 house does not appear to have the ability to convey information about Craftsman Bungalow architecture. None of the built environment resources within the Property are eligible for listing in the CRHR under Criterion 4.

INTEGRITY

A Property must possess significance under one or more of the above-listed criteria and have historic integrity to qualify for listing in the CRHR. There are seven variables, or aspects, used to judge historic integrity, including location, design, setting, materials, workmanship, feeling, and association.[21] A resource must possess the aspects of integrity that relate to the historical theme(s) and period of significance identified for the built-environment resources. National Register Bulletin 15 explains, "only after significance is fully established can you proceed to the issue of integrity."

The ca. 1922 house within the Property was found to be eligible for listing on the CRHR under Criterion 3; as such, an integrity analysis was completed.

- **Location.** The ca. 1922 house remains at its original location where it was constructed.

  Therefore, the ca. 1922 house retains integrity of location.

- **Design**. There do not appear to have been any significant changes to the 1922 house except for a rear porch enclosure that appears to have been constructed in the 1950s or 1960s and the removal of some original windows along the primary facade. However, the porch enclosure and changes to the primary façade windows are not significant changes. Overall, the ca. 1922 design retains its Craftsman Bungalow design elements such as the multi-gable form with a low-pitched roof with wide eaves and exposed rafters, decorative brackets, a recessed porch set under the roof extension support by battered wood columns, and original wood casement windows and double-hung wood windows.

  Therefore, the ca. 1922 house retains integrity of design from ca. 1922.

- **Setting.** The surrounding area of the ca. 1922 house has not changed and retains its feeling of the setting. The area also retains its feeling of a neighborhood that developed within the early twentieth century. In addition, the 1972 inground swimming pool does not compromise the setting.

  Therefore, the ca. 1922 house retains integrity of setting.

- **Materials**. The 1922 house retains integrity of materials from its original date of construction. The 1922 house materials include original wood windows, brick cladding, decorative wood elements such as roof beams, rafter tails, wood porch columns, and a brick chimney.

  Therefore, the ca. 1922 house retains integrity of materials.

- **Workmanship.** Workmanship is evidenced by skill or craft from a particular period or region. The ca. 1922 house retains workmanship regarding the knowledge and application of materials associated with woodworking.

  Therefore, the ca. 1922 house retains integrity of workmanship.

- **Feeling**. Integrity of feeling is the quality that a historic property has in evoking the aesthetic or

[21] National Park Service, *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: United States Department of the Interior, 1997).

historical sense of a past period. The ca. 1922 house evokes the feeling of the Craftsman Bungalow architecture, including the low-pitched roof and multi-gable form, wide overhanging roof eaves, and front porch, casement, and double-hung wood windows.

Therefore, the ca, 1922 house retains integrity of feeling.

- **Association.** The ca. 1922 house retains association with Craftsman Bungalow architecture.

  Therefore, the ca. 1922 house retains integrity of association from its date of construction.

An assessment of integrity found that the ca. 1922 house retains all seven aspects of integrity.

STANDARDS REVIEW

The Standards review was conducted to ensure compliance with Section 106 of the NHPA and address the proposed Project's potential impacts on the ca. 1922 house, which was determined to be eligible for listing on the CRHR. The Standards review utilized architectural drawings and renderings provided to EDS by Brownhouse Design (dated 5/27/2022).

Secretary of Interior Standards for Rehabilitation Review

The following section addresses the proposed Project within the context of the Secretary of the Interior's Standards for Rehabilitation. **Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values**. When repair and replacement of deteriorated features are necessary, when alterations or additions to the property are planned for a new or continued use, and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment.

According to the Standards, "some exterior and interior alterations to a historic building are generally needed as part of a Rehabilitation project to ensure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include changes to the site or setting, such as the selective removal of buildings or other features of the building site or setting that are intrusive, not character-defining, or outside the building's period of significance."

The Standards, and EDS' analysis of the proposed Project as it relates to the Standards, is presented below. The Project was reviewed using the Project description provided by the architect, which was applied to each of the Standards. The results of the Standards analysis are presented below with an "EDS Response" and a "EDS Analysis" that identifies if the Project conforms with Standards. "EDS Recommendations" are also provided, if warranted.

The following Standards review assesses potential impacts on the ca. 1922 house within the Property.

1. **A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.**

   The ca. 1922 house will continue to be for residential use.

EDS Analysis: The proposed Project complies with Standard 1

2. **The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.**

Potential Stucco Removal and Replacement – Evidenced by Exploratory or Construct Work

Currenty the proposed project will retain the exterior stucco – however, if during the rehabitation exploratory or construction work the stucco is determined to be beyond repair, based on photographic evidence and reviewed by a qualified individual, the following section provides an acceptable alternative to the stucco, meeting the Standards for rehabilitation.

The ca. 1922 house is clad is stucco applied in a dash finish, which was used on Craftsman houses in the 1920s. However stucco was not the typical or preferred cladding for Craftsman architecture, which was more often clad in horizontal wood boards or wood shingles that better convey this style, which was focused on decorative wood elements and woodworking craftsmanship that Craftsman architecture is known for. As such, if the stucco is determined to be beyond repair, a suitable replacement material meeting the Standards for Rehabilstiaon would be stucco, wood shingles, or horizontal wood cladding.

EDS Analysis: *If due to evidence obtained and submitted to the city during exploraty or construction work the stucco will need to be removed, it is not considered a character-defining feature of the ca. 1922 Craftsman house. As such, the stucco, if beyond repair, does not need to be retained or preserved under the Standards for Rehabilitation. Also, the Standards for Rehabilitation allow for changes to the material if the replaced material is a "compataible material" in keeping with the Craftsman design. However, to make this change, the condition of the stucco must be documented and submitted to the city prior to making any changes to the stucco cladding. Furthermore, EDS recommends the replacement with wood shingles or horizontal wood boards, which supports the Craftsman Bungalow design and is material that is compatible with the style.*

Window Replacement

The ca. 1922 house consists of 26 windows, of which four (4) are non-original windows added in ca. 1950s or ca. 1960s, and an additional four appear to have been relocated during remodeling efforts,

The Project proposes to remove **two non-original fixed picture windows along the primary façade (south elevation)** that do not conform with Craftsman architectural style and are replacement windows. These two picture windows will be replaced with multi-light wood windows that are appropriate for the Craftsman design of the house but do not mimic any original windows within the house. Instead, they are compatible with the original Craftsman design in material and style (Figure 43). The two new windows along the primary façade will be custom-made, multi-light, wood and replace the two non-original picture windows.

In addition, the Project proposes to add new window openings and a reconfiguration of windows that would require the removal of 13 double-hung wood windows (north, west, and east elevations), of which two (2), on the east elevation, were added in the 1950s or 1960s and are not original to the ca.

1922 house and the remaining eleven (11), which are original double-hung wood windows, are mainly along the rear (north elevation) and the northwest corner of the house and are not visible from the street view. The windows will be replaced with Marvin wood windows, including divided light fixed, casement, French casement, and awning type windows that are compatible with the Craftsman design.

In summary, the Project proposes to replace two (2) non-original picture windows along the primary façade that do not conform with the Craftsman architectural style and the removal of 13 double-hung windows, of which eleven (11) are original double-hung windows (though four of these appear to have been relocated) and two (2) are non-original windows that will be replaced with Marvin windows.

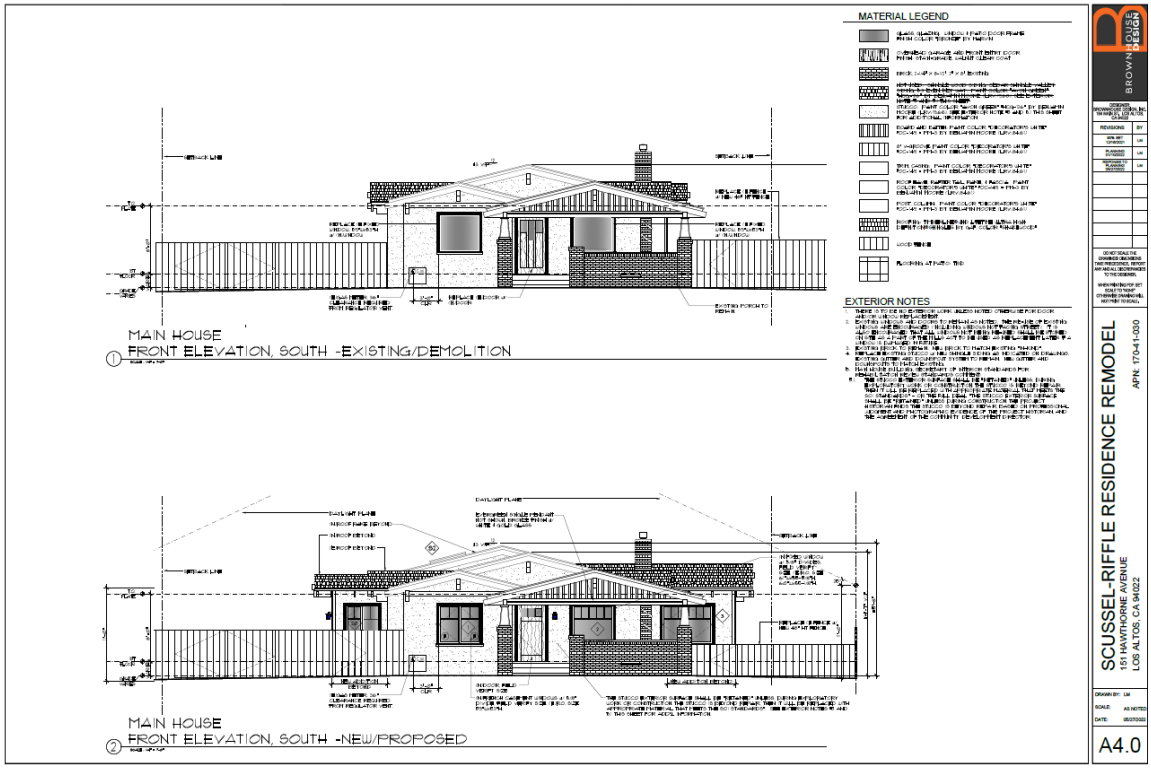


Figure 43. Existing and proposed primary façade (south elevation) of the ca. 1922 house, showing changes to the windows and front door and the side gable additions (Brownhouse Design; dated 5/27/2022).

The Project proposes the removal of two (2) picture windows along the primary façade (south elevation) and replacement with 13 (11 original, of which four have been relocated, and two non-original) double-hung wood windows allowing for the expansion of the house's original form without compromising the integrity of the original Craftsman design. Eight double-hung wood windows (making up a ribbon of four on each elevation) at the northwest corner of the ca. 1922 house will be removed as part of the expansion of the house, which will be set behind the original extending projecting roof form and will not be visible from the public right-of-way. The new window

replacements will be hand-crafted, double-sash Marvin wood windows, with a divided light upper sash and a lower sash without lugs, complementing the Craftsman architectural style and will not impact its integrity or its' CRHR eligibility.

EDS Analysis: *"When alterations or additions to the property are planned for a new or continued use",* [22] *Rehabilitation is the appropriate method under the Standards. The current Project is rehabilitation, not preservation, and as such this method allows for a range of changes provided the project does "**not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes.**"*[23] *This does not mean there cannot be changes, this means that the changes must not affect the integrity of the resource that would make it is no longer eligible for listing under its associated significance.*

*The house currently consists of 26 windows, of which the Project proposes the **removal of eleven (11) original windows**. The new wood windows are designed to conform with the Craftsman architectural style and will be constructed of a wood material that is consistent with the design within its period of significance of ca. 1922. In addition, the primary façade (south elevation) will consist of the restoration of the original Craftsman design but removing the non-conforming picture windows that were added in the 1950s or 1960s. All windows will have wood exteriors, though windows along the side elevations and the rear that are not visible from the street view can have exterior wood cladding. However, wood exteriors are preferable. Although 11 of the 26 windows are original to the house, their removal and replacement will also not affect the integrity of the Craftsman design.*

The proposed Project complies with Standard 2.

3. **Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.**

   The design of the new addition and proposed alterations to the primary façade of the ca. 1922 house, including the new windows and doors, have been carefully considered to complement the original Craftsman Bungalow design of the ca. 1922 house and will not create a false sense of historical development (Figure 44). The new detached garage consists of a modern garage door and extended covered parking supported by narrow and shorten tapered columns set on tall pillars clad in 1/3 running bond pattern, which does not mimic the original tapered columns along the primary façade of the ca. 1922 house (Figure 45).

   EDS Analysis: The proposed Project complies with Standard 3.

[22] National Park Service, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings*, 2017.

[23] Ibid.

Figure 44. The rendering shows the proposed primary façade with shingle cladding and new windows, with narrow upper sash windows (Brownhouse Design; dated 5/27/2022).

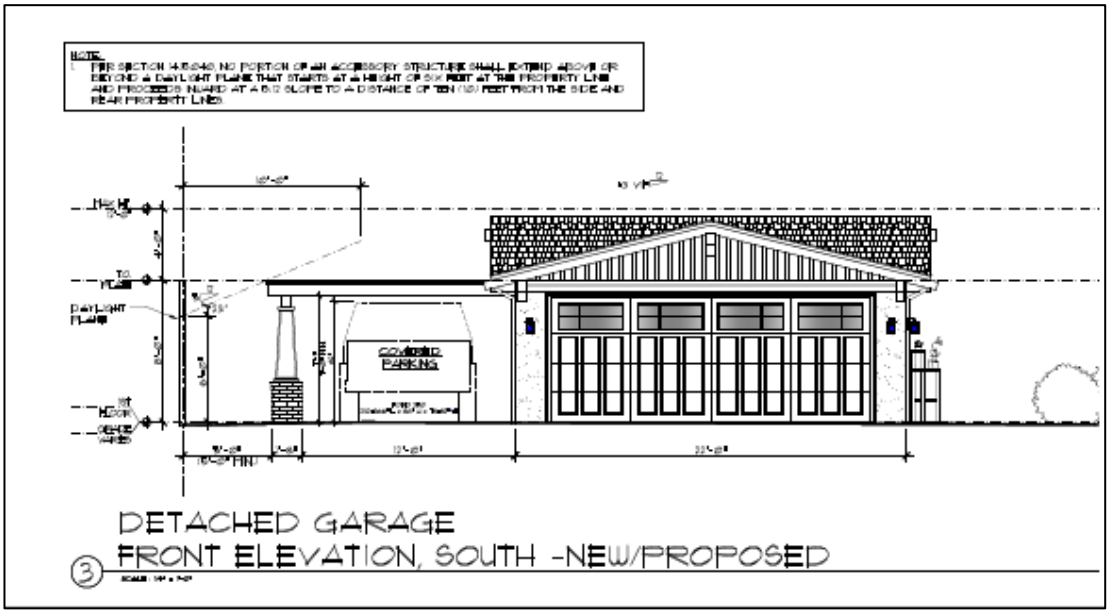


Figure 45. The drawing shows the new detached garage, with a subordinate roof, contemporary garage door, and variation of the porch columns that conform but do not mimic the original tapered columns along the primary façade of the ca. 1922 house (Brownhouse Design; dated 5/27/2022).

4. **Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.**

   There are no proposed changes to the ca. 1922 house after its construction that have become "significant in their own right", including the in-ground swimming pool in 1972.

   EDS Analysis: The proposed Project complies with Standard 4.

5. **Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.**

   Although 11 double-hung wood windows will be removed, these windows are not original to the house. In addition, if the the stucco is removed – after review and approval by the city – it is not a feature that is typical of Craftsman Bungalow architecture, and the stucco is not a distinctive feature of the ca. 1922 house. In addition, the majority of the distinctive features, finishes, and construction techniques, including the form, massing, porch with tapered columns and brick cladding, and decorative wood brackets and timbering, will be preserved.

   EDS Analysis: The proposed Project complies with Standard 5.

6. **Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.**

   There are no proposed changes to deteriorated features.

   EDS Analysis: As such, Standard 6 does not appear to apply.

7. **Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.**

   EDS Analysis: Not applicable to the Project.

8. **Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.**

   EDS Analysis: Not applicable to the HRE, as a professional archaeologist would need to make this determination.

9. **New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.**

   Exterior Alternations

   The Project consists of changes to the exterior of all four elevations of the ca. 1922 house. The Project proposes changes that are designed in a way to be differentiated from the original ca. 1922 Craftsman

Bungalow design, but compliments and conforms with the style.

If it is determined that the existing stucco needs to be replaced, addressed in item 2, EDS recommends wood shingle exterior cladding or horizontal wood boards. Since the the stucco does not characterize the Craftsman Bungalow design and is not a character-defining element of the ca. 1922 house there would be no effect to integrity. In addition, stucco cladding is not typical of this style and does not contribute to the significance of the ca. 1922 house as a good example of Craftsman Bungalow design. According to the Standards, replacing exterior cladding can be done if an acceptable substitute material, such as horizontal wood boards or wood shingles, is utilized so that the new material does not impair the historic character of the resource and will also not impact its ability to be recognized as a Craftsman Revival design.

The **proposed changes to the north and west elevations** would require the removal of historical materials, such as double-hung wood windows, and the introduction of new window openings. However, given these changes are focused on areas of the building that are not visible from the public right-of-way, these changes would not destroy historic materials that characterize the property. The design changes to the north elevation (rear façade) are also compatible with the ca. 1922 house. They include compatible materials, such as multi-light wood windows and differentiated but compatible gabled roof form that is flush with the existing massing and scale of the ca. 1922 house. These changes along the rear and west elevation would not be visible from the public right-of-way. Thus, they would protect the property's historical integrity and its environment.

The proposed **new garage** is new construction and is designed to be compatible with the ca. 1922 house in design, form, scale, and materials. The new garage is constructed of wood framing, with horizontal wood cladding and a low-pitch roof. The building is set back from the ca. 1922 house. It does not intrude on the ca. 1922 house or compete with the character-defining elements of the primary façade (south elevation), allowing the ca. 1922 house to remain the centerpiece of the Property (Figure 46). In addition, the new garage will be situated behind a wooden fence and not visible from Hawthorne Avenue.

EDS Analysis: The proposed Project complies with Standard 9.

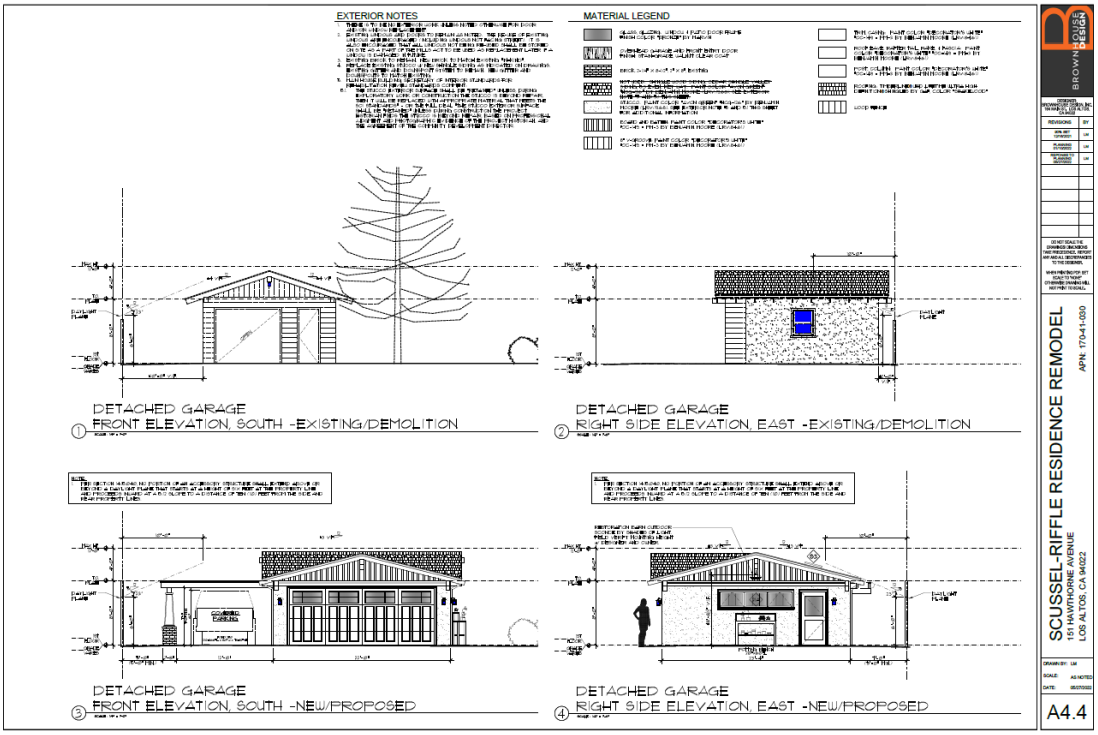


Figure 46. Architectural drawing of the existing detached ca. 1922 shed and the proposed detached garage (Brownhouse Design; dated 5/27/2022).

10. **New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.**

    The new additions along the side elevations (east and west) are minor side gable additions, which would not impair the original design or form of the ca. 1922 house if removed in the future. The new detached garage will be constructed so that if in the future it is removed, it will not adversely affect the integrity of the ca. 1922 house.

    EDS Analysis: The proposed Project does comply with Standard 10.

CONCLUSION

In accordance with CEQA regulations and guidelines, EDS completed an HRE for the Property at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California, within the 0.3-acre (APN 170-41-030) containing the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape to determine if the Property or any of the built environment resources within the Property are eligible for listing on the CRHR. The methods used to complete the HRE included extensive research and an intensive level historic architectural survey conducted by EDS Principal Architectural Historian Stacey De Shazo, M.A., who exceeds the Secretary of the Interior's qualification standards in Architectural History and History. The HRE was completed following CEQA regulations (PRC § 21000) and the Guidelines for Implementing CEQA (14 CCR § 15000 et seq.).

The ca. 1922 house is currently listed on the OHP's BERD (P-43-002072) and within the City of Los Altos Historic Inventory (2013); therefore, the ca. 1922 house is considered a Historical Resource as defined in Section 15064.5 of the CEQA. Furthermore, the HRE determined that the ca. 1922 house appears individually eligible for listing on the CRHR under Criterion 3 for its association with Craftsman Bungalow architecture with a period of significance of ca. 1922 and retains all seven aspects of integrity. Therefore, due to potential impacts to the historical resource, a Standards review was completed to determine if the proposed Project would impact the integrity of the ca. 1922 house. Based on the Standards review of the architectural drawings by Brownhouse Design (dated 5/27/2022), EDS determined that the proposed Project meets the Standards for Rehabilitation. As such, the proposed Project will have no impact on historical resources. In addition, the property is a qualified historc property and appears eligible for Mills Act tax program.

BIBLIOGRAPHY

American Architects Directory, Published by R.R. Bowker for the American Institute of Architects, 1956, 1962, 1970.

Ancestry.com

General Register Office; United Kingdom; Volume: *4;* Page: *1383*

1940; Census Place: *Santa Clara County*

The National Archives of the UK; Kew, Surrey, England; Board of Trade: Commercial and Statistical Department and successors: Inwards Passenger Lists.; Class: BT26; Piece: 1410

National Archives at College Park; College Park, Maryland, U.S.A.; NAI Number: *613857;* Record Group Title: *General Records of the Department of State;* Record Group Number: *Record Group 59;* Series Number: *Publication A1 5166;* Box Number: *134;* Box Description: *1974 PL – RZ*

Bancroft, Hubert Howe. *History of California: 1801 – 1924.* A.L. Bancroft, 1885.

CIRCA Preservation Consulting, "City of Los Altos Historic Resources Inventory"*,* Prepared for the City of Los Altos, 2012.

Clay, Karen, *Property Rights and Institutions: Congress and the California Land Act 1851*, The Journal of Economic History, Cambridge University Press, 59(01):122-142, March 1999.

Kenneth T. Jackson, Crabgrass Frontier: The Suburbanization of the United States, Oxford University Press, 1985.

Los Altos Hills, "Lost Altos Hills History Anthology (1956-2016)", 2016.

McAlester, Virginia, and Lee McAlester, A Field Guild to American Houses. New York, Alfred A. Knopf. Munro-Fraser, J.P. 2013.

National Park Service, National Register Bulletin: How to Apply the National Register Criteria for Evaluation. Washington, D.C.: United States Department of the Interior. 1990, revised 1997.

Olmsted, Nancy, *Vanished Waters: A History of San Francisco's Mission Bay*, Mission Creek Conservancy, San Francisco, 1986.

Richards Gordon, "Stephens-Townsend-Murphy Party", Truckee Donner Historical Society, accessed September 21, 2021, https://www.truckeehistory.org/the-first-pioneer-wagons-crossed-the-sierra-over-160-years-ago.html.

Sacramento State Office, "Report of the Surveyor-General of the State of California from August 1, 1898 – August 1, 1898.' 1886.

Salameda, Jose, *Memories of Los Altos*, publisher Joe Salameda (January 1, 1982).

Tyler, Norman, Ted Ligibel, and Ilene R. Tyler, Historic Preservation: An Introduction to Its History, Principles, and Practice, New York: W.W. Norton & Co., 2009.

Appendix A:

DPR Forms

ATTACHMENT C

THE SECRETARY OF THE INTERIOR'S **STANDARDS** FOR THE TREATMENT OF HISTORIC PROPERTIES

WITH

GUIDELINES FOR PRESERVING, REHABILITATING, RESTORING & RECONSTRUCTING HISTORIC BUILDINGS

U.S. Department of the Interior
National Park Service
Technical Preservation Services

Under the National Historic Preservation Act (NHPA), the Secretary of the Interior is responsible for establishing professional standards and for providing guidance on the preservation of the nation's historic properties. *The Secretary of the Interior's Standards for the Treatment of Historic Properties* apply to all grants-in-aid projects assisted through the Historic Preservation Fund (authorized by the NHPA) and are intended to be applied to a wide variety of resource types, including buildings, sites, structures, objects, and districts. The Standards address four treatments: preservation, rehabilitation, restoration, and reconstruction. The treatment Standards, developed in 1992, were codified as 36 CFR Part 68 in the July 12, 1995, Federal Register (Vol. 60, No. 133). They replaced the 1978 and 1983 versions of 36 CFR Part 68, entitled *The Secretary of the Interior's Standards for Historic Preservation Projects.* The revised Guidelines herein replace the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, published in 1995 to accompany the treatment Standards.

The Secretary of the Interior's Standards for the Treatment of Historic Properties are regulatory only for projects receiving Historic Preservation Fund grant assistance and other federally-assisted projects. Otherwise, these Guidelines are intended to provide general guidance for work on any historic building.

Another regulation, 36 CFR Part 67, focuses on "certified historic structures" as defined by the Internal Revenue Service Code of 1986. The Standards for Rehabilitation cited in 36 CFR Part 67 should always be used when property owners are seeking certification for federal tax benefits.

THE SECRETARY OF THE INTERIOR'S **STANDARDS** FOR THE TREATMENT OF HISTORIC PROPERTIES WITH **GUIDELINES** FOR PRESERVING, REHABILITATING, RESTORING & RECONSTRUCTING HISTORIC BUILDINGS

Revised by Anne E. Grimmer

from *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*
Kay D. Weeks and Anne E. Grimmer (1995)

U.S. Department of the Interior
National Park Service
Technical Preservation Services
Washington, D.C.

2017

CONTENTS

Contents Restoration (cont.)

PHOTO CREDITS

Front Cover: Spooner Hall, University of Kansas, Lawrence, KS, Henry van Brunt, 1894.

HISTORICAL OVERVIEW

Masonry. Detail, decorative sandstone door surround.

Wood. Detail, Pope-Leighey House, Alexandria, VA, Frank Lloyd Wright, 1940. Photo: Courtesy National Trust for Historic Preservation, Paul Burk, photographer.

Metals. Detail, Dunbar Molasses Factory, New Orleans, LA, c. 1920.

Glass. Detail, St. John's Abbey, Collegeville, MN, Marcel Breuer, 1958-61.

Paint and Other Coatings. Interior detail, Mabel Tainter Memorial Theater, Menomonie, WI, Harvey Ellis, 1889. Photo: Miller Dunwiddie Architecture.

Composite Materials. Composite siding, Private Residence, Washington, DC, William Lescaze, 1940.

Simulative Materials. Detail, wood used to simulate cut stone.

Roofs. Asphalt roof shingles on a 1920s-era house.

Windows. Paired wood windows with stained glass lunette on a Romanesque revival-style rowhouse.

Entrances and Porches. Decorative stone entrance with etched-glass revolving door on early-20th century office building.

Storefronts. Ellicott City, MD.

Curtain Walls. Simms Building, Albuquerque, NM, Flatow & Moore, 1954. Photo: Harvey M. Kaplan.

Structural Systems. Boiler Maker Shops, Navy Yard Annex, Washington, DC, 1919.

Mechanical Systems. Historic Radiator.

Spaces, Features, and Finishes. Interior, Saenger Theater, New Orleans, LA, Emile Weil, 1927. Photo: Courtesy Saenger Theater.

Site. Vineyard, Charles Krug Winery, St. Helena, CA. Photo: Rocco Ceselin. Inset: Redwood Cellar, 1872, Charles Krug Winery. Photo: Rien van Rijthoven.

Setting. Late-19th-century residential historic district.

Accessibility. Gradual slope added to sidewalk and paving for accessibility. Schmidt Brewery, St. Paul, MN, late 19th–early 20th century.

Life Safety. Code-required, supplemental stair railing.

Resilience to Natural Hazards. Farnsworth House, Plano, IL, Mies van der Rohe, 1951. Photo: Courtesy Farnsworth, A Site of the National Trust for Historic Preservation.

Sustainability. Traditional sustainable features include deep porches and window shutters in southern architecture.

New Additions and Related New Construction. Private Residence, Washington, DC, Cunningham/Quill Architects. Photo: © Maxwell MacKenzie.

CHAPTER HEADS

Preservation. Old Santa Fe Trail Building (National Park Service Intermountain Regional Office), Santa Fe, NM. This adobe building was designed by John Gaw Meem in the Spanish-Pueblo Revival style, and constructed for the National Park Service through the auspices of the Civilian Conservation Corps (CCC) and the Works Project Administration (WPA) in 1939. Photo: MRWM Landscape Architects.

Rehabilitation. The Arcade, Providence, RI, 1828. Photo: Northeast Collaborative Architects, Ben Jacobson, photographer.

Restoration. Montpelier, Montpelier Station, VA. National Trust for Historic Preservation, Administered by The Montpelier Foundation. Photo: Courtesy The Montpelier Foundation.

Reconstruction. The Cathedral of Saint Michael the Archangel, Sitka, AK, built early 1840s, reconstructed 1961. Photo: Barek at Wikimedia Commons.

Photographs not individually credited are from National Park Service files.

ACKNOWLEDGEMENTS

This edition of *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* has been produced in part to ensure that the National Park Service continues to fulfill its responsibility to promote the preservation of the historic buildings that are part of the nation's cultural heritage. This has been a collaborative effort undertaken by the office of Technical Preservation Services (TPS) in the National Park Service, with the assistance of other National Park Service programs, State Historic Preservation Offices (SHPO), the Advisory Council on Historic Preservation, Federal Agency Historic Preservation Officers, the National Trust for Historic Preservation, and others. The comments and suggestions provided by these agencies and organizations, together with important contributions from the TPS professional staff, have been invaluable in the development of this revised and updated guidance on preserving, rehabilitating, restoring, and reconstructing historic buildings that accompany *The Secretary of the Interior's Standards for the Treatment of Historic Properties.*

PREFACE

The year 2016 was significant as the Centennial of the National Park Service, which was established as a new bureau within the Department of the Interior by the Organic Act on August 25, 1916. As directed in this legislation, the National Park Service has served for one hundred years as steward of the "Federal areas known as national parks, monuments and reservations…to conserve the scenery and the natural and historic objects and the wild life therein and to…leave them unimpaired for the enjoyment of future generations."

The year 2016 also marked the 50th anniversary of the passage of the National Historic Preservation Act on October 15, 1966. The Act increased the scope and responsibilities of the National Park Service with regard to the preservation of cultural resources. The National Historic Preservation Act charges the National Park Service (through authority delegated by the Secretary of the Interior) to establish and administer a national historic preservation program and to develop and promulgate standards and guidelines for the treatment of historic properties.

The Secretary of the Interior's Standards for Historic Preservation Projects were first issued in 1978. In 1979 they were published with Guidelines for Applying the Standards and reprinted in 1985. The Standards were revised in 1992, when they were retitled *The Secretary of the Interior's Standards for the Treatment of Historic Properties*.

The Standards were codified in the Federal Register in 1995, the same year that they were published with guidelines as *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. These Standards and Guidelines provide a critical part of the framework of the national preservation program. They are widely used at the federal, state, and local levels to guide work on historic buildings, and they also have been adopted by Certified Local Governments and historic preservation commissions across the nation.

In 2010 the National Park Service issued *A Call to Action: Preparing for a Second Century of Stewardship and Engagement*, a plan to chart a path for its next 100 years. This plan identified a number of actions with the goal to "preserve America's special places in the next century," which included updating National Park Service policies and guidance. The project to update *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* was undertaken as part of this broader effort.

Since these Guidelines were first published in 1995, a greater number of buildings and building types, telling a broader range of stories that are part of the nation's heritage, have been recognized as "historic"

and eligible for listing in the National Register of Historic Places. These guidelines have been updated and expanded to address the treatment of these buildings constructed with newer materials and systems from the mid- and late-20th century.

The updated Guidelines have the same organization as the prior version, beginning with an introduction and a historical overview, followed by chapters that focus on each of the four treatments: preservation, rehabilitation, restoration, and reconstruction. The historical overview has been expanded; not only has the information on historic materials, systems, features, and special issues that comprised the previous edition been more fully developed, but new entries have been added on glass, paint and other coatings, composite materials, imitative materials, and curtain walls.

In each of the four chapters, the "Recommended" and "Not Recommended" treatments have been updated and revised throughout to ensure that they continue to promote the best practices in preservation. The section on exterior additions to historic buildings in the Rehabilitation Guidelines has been broadened also to address related new construction on a building site. A section on code-required work is now included in all of the chapters. "Energy Efficiency" has been eliminated, since it is more fully covered by the guidance provided on sustainability in *The Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings* (published in 2011), which has general applicability to all the treatments and is incorporated here by reference. Sections on "Resilience to Natural Hazards" have been added, but these topics will be more fully addressed in separate documents and web features. Finally, the updated Guidelines feature all new, and many more, illustrations in color.

Herewith Technical Preservation Services issues the National Park Service Centennial edition of *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*, updated and revised in recognition of the 50th anniversary of the National Historic Preservation Act, to ensure that the preservation guidance for historic buildings provided by the National Park Service continues to be meaningful and relevant in the 21st century.

Technical Preservation Services
National Park Service

Technical Preservation Services
National Park Service

The office of Technical Preservation Services (TPS) in the Cultural Resources directorate of the National Park Service is responsible for developing and promulgating preservation standards and guidance specifically as it relates to historic buildings. TPS has produced an extensive amount of technical, educational, and policy guidance on the maintenance and preservation of historic buildings. TPS developed the original and current versions of *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. The many technical publications and web features on preserving historic buildings prepared by TPS are well known, especially the *Preservation Briefs* and the *Preservation Tech Notes* series. It is not feasible to include a complete list here of all the materials available from TPS because of the sheer volume of information. Materials developed by TPS are available in printed form and/or online from the TPS website at https://www.nps.gov/tps (or search for Technical Preservation Services at https://www.nps.gov). TPS also administers the Federal Historic Preservation Tax Incentives Program, which encourages private sector investment in the rehabilitation and reuse of historic buildings.

INTRODUCTION

Using the Standards and Guidelines for Preservation, Rehabilitation, Restoration, and Reconstruction Projects

The Secretary of the Interior's Standards for the Treatment of Historic Properties address four treatments: preservation, rehabilitation, restoration, and reconstruction. As stated in the regulations (36 CFR Part 68) promulgating the Standards, "one set of standards ...will apply to a property undergoing treatment, depending upon the property's significance, existing physical condition, the extent of documentation available, and interpretive goals, when applicable. The Standards will be applied taking into consideration the economic and technical feasibility of each project." These Standards apply not only to historic buildings but also to a wide variety of historic resource types eligible to be listed in the National Register of Historic Places. This includes buildings, sites, structures, objects, and districts.

Guidelines, however, are developed to help apply the Standards to a specific type of historic resource. Thus, in addition to these Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, there are also guidelines for cultural landscapes, historic lighthouses, historic vessels, historic furnished interiors, and historic covered bridges.

The purpose of *The Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* is to provide guidance to historic building owners and building managers, preservation consultants, architects, contractors, and project reviewers prior to beginning work. It is always recommended that preservation professionals be consulted early in any project.

The Guidelines are intended as an aid to assist in applying the Standards to all types of historic buildings. They are not meant to give case-specific advice or address exceptions or unusual conditions. They address both exterior and interior work on historic buildings. Those approaches to work treatments and techniques that are consistent with The Secretary of the Interior's Standards for the Treatment of Historic Properties are listed in the "Recommended" column on the left; those which are inconsistent with the Standards are listed in the "Not Recommended" column on the right.

There are four sections, each focusing on one of the four treatment Standards: Preservation, Rehabilitation, Restoration, and Reconstruction. Each section includes one set of Standards with accompanying Guidelines that are to be used throughout the course of a project.

Preservation *is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project. However, new exterior additions are not within the scope of this treatment.* The Standards for Preservation require retention of the greatest amount of historic fabric along with the building's historic form.

Rehabilitation *is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.* The Rehabilitation Standards acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character.

Restoration *is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.* The Restoration Standards allow for the depiction of a building at a particular time in its history by preserving materials, features, finishes, and spaces from its period of significance and removing those from other periods.

Reconstruction *is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.* The Reconstruction Standards establish a limited framework for recreating a vanished or non-surviving building with new materials, primarily for interpretive purposes.

The Guidelines are introduced with a brief overview of the primary materials used in historic buildings; the exterior and interior architectural features and systems; the building's site and setting; code-compliance requirements regarding accessibility and life-safety resilience to natural hazards; sustainability; and new additions and related new construction. This overview establishes the format of the Guidelines that follow.

Choosing an Appropriate Treatment for the Historic Building

The Guidelines are intended to promote responsible preservation practices that help protect the nation's irreplaceable cultural resources. For example, they cannot, in and of themselves, be used to make essential decisions about which features of the historic building should be saved and which can be changed. But, once a treatment is selected, the Standards and Guidelines provide a consistent philosophical approach to the work.

Choosing the most appropriate treatment for a building requires careful decision making about a building's historical significance, as well as taking into account a number of other considerations:

Level of Significance. National Historic Landmarks, designated for their "exceptional significance in American history," and other properties important for their interpretive value may be candidates for *Preservation* or *Restoration*. *Rehabilitation*, however, is the most commonly used treatment for the majority of historic buildings *Reconstruction* has the most limited application because so few resources that are no longer extant can be documented to the degree necessary to accurately recreate the property in a manner that conveys its appearance at a particular point in history.

Physical condition. *Preservation* may be appropriate if distinctive materials, features, and spaces are essentially intact and convey the building's historical significance. If the building requires more extensive repair and replacement, or if alterations or a new addition are necessary for a new use, then *Rehabilitation* is probably the most appropriate treatment.

Proposed use. Many historic buildings can be adapted for a new use or updated for a continuing use without seriously impacting their historic character. However, it may be very difficult or impossible to convert some special-use properties for new uses without major alterations, resulting in loss of historic character and even integrity.

Code and other regulations. Regardless of the treatment, regulatory requirements must be addressed. But without a sensitive design approach such work may damage a building's historic materials and negatively impact its character. Therefore, because the ultimate use of the building determines what requirements will have to be met, some potential uses of a historic building may not be appropriate if the necessary modifications would not preserve the building's historic character. This includes adaptations to address natural hazards as well as sustainability.

HISTORICAL OVERVIEW

Masonry

Stone is one of the more lasting masonry building materials and has been used throughout the history of American building construction. Stones most commonly used in historic buildings in the U.S. are quarried stone, including sandstone, limestone, marble, granite, slate, basalt, and coral stone, and gathered stone, such as fieldstone, river rock, and boulders. Types of stone differ considerably in hardness, durability, and other qualities. Building stones were usually laid with mortar, but sometimes they were laid without mortar using a dry-stack method of construction. Brick varies in size and permanence. Before 1870, brick clays were pressed into molds and were often unevenly fired. The quality of historic brick depended on the type of clay available and the brick-making technique; by the 1870s, with the perfection of an extrusion process, bricks became more uniform and durable. ***Architectural terra cotta*** is also a kiln-fired clay product popular from the late 19th century until the 1930s. Its use became more widespread with the development of steel-frame, high-rise office buildings in the early 20th century. ***Glazed ceramic architectural siding*** was also used as cladding in high-rise buildings somewhat later. ***Adobe,*** which consists of sun-dried earthen bricks, was one of the earliest building materials used in the U.S., primarily in the Southwest where it is still popular.

Mortar is used to bond together masonry units. Historic mortar was generally quite soft, consisting primarily of lime and sand with other additives. Portland cement, which creates a more rigid mortar, was first manufactured in the U.S. in the early 1870s, but it was not in common use throughout the country until the early 20th century. Thus, mortar used in buildings from around 1873 until the 1930s ranged from a traditional lime-cement mix to a variety of sand and Portland cement combinations. After this time, most mortar mixes were based on Portland cement. Like historic mortar, early ***stucco*** was also heavily lime based, increasing in hardness with the addition of Portland cement in the late 19th century.

Concrete has a long history. It is composed of sand, crushed stone, or gravel bound together with lime and, sometimes, natural hydraulic cements. As a construction material concrete is used in a variety of forms, including blocks or units, poured or cast-in-place, and precast panels. ***Cast stone*** and other manufactured products began to be used around the 1860s as substitutes for natural stone. There are also cementitious materials specific to certain regions, such as ***tabby,*** which includes crushed shells and is found primarily in coastal areas in the southeastern part of the country. In the 20th century, ***reinforced concrete*** was developed and has since become one of the most commonly used materials in modern building construction.

While masonry is one of the most durable historic building materials, it is also very susceptible to damage by exposure, improper maintenance or repairs, abrasive cleaning, or the application of non-permeable coatings.

Wood

Wood is one of the most essential materials used in American buildings of every period and style. Its many and varied attributes make it suitable for multiple uses, including structural members, siding, roofing, interior finishes, and decorative features. Many of the first structures in the earliest settlements were built with logs, which were readily available, did not require much finishing, and could be quickly erected with basic tools.

Water-powered sawmills cut logs into timbers and boards, but detailed ornamental features were generally crafted on site using hand tools until after the Civil War. Mechanized production increased the efficiency of cutting logs into timbers, boards, and more intricate components, and the structural and decorative potential of wood's use in building construction expanded. With more efficient production came lower costs, but also the standardization of ready-made moldings and assemblies for windows, doors, and decorative features. Initially, wood was primarily sourced locally, but improved transportation systems made a greater variety of wood species more accessible all over the country. With broader availability, a particular wood could be selected for its suitability in a specific application; however, local species were used most often.

The extensive use of wood in buildings can be attributed to its many properties that include strength in both tension and compression; ease with which it can be cut and shaped; capability to be connected using a variety of fasteners and adhesives; ability to be painted or varnished; and resistance to wear and weather. All of these characteristics, and some more than others, vary according to the species of wood. Although many types and species of wood used historically are no longer available, wood selection and construction practices have always capitalized on its attributes and compensated for it is weaknesses. Their resistance to decay made white oak and cedar common choices for roofing shingles, while oak and maple were frequently chosen for flooring because of their hardness. Pine and yellow poplar have often been used for siding and trim because of their straight grain and ease of milling, but they must be painted to protect them from decay.

Plywood is an engineered product formed by laminating thin sheets of wood together; it was introduced to the U.S. building industry in the early 20th century. Because plywood has greater structural potential than wood, and as a sheet can be installed more efficiently, it soon replaced boards as sheathing before being replaced itself by less-expensive ***particle board*** for many applications. By applying surface veneers and adhesives, plywood can also be used as siding or for fine interior finishes on paneling or cabinetry. ***Glued laminated timber*** (glulam), first manufactured in the 1930s, is another engineered wood material. It is an important material in mid-20th-century buildings and often used for massive arches and trusses in sports arenas and similar large, open, column-free spaces.

Many historic buildings have wood structural systems and features, such as stairs or columns. The majority of both practical and decorative features, particularly on the interior, are made of wood, such as flooring and paneling.

Metals

Metal features—including steps, porches, railings, balconies, and entire facades; cornices, siding, cladding, roofs, roof cresting, and storefronts; and doors, window sash, entablatures, and hardware—are often highly decorative as well as practical and are important in defining the overall character of historic American buildings.

Metals commonly used in historic buildings include ***lead, tinplate, terneplate, zinc, copper, bronze, brass, iron, steel, aluminum, stainless steel,*** and a variety of other ***alloys.*** Historic metal building components were often designed by highly-skilled artisans. By the late 19th century, many of these components were prefabricated and available from catalogues in standardized sizes and designs.

Wrought iron is the form in which iron was first used in America. In the beginning, most wrought-iron architectural elements were small, such as nails, tie rods, straps, and hardware. Wrought-iron features

gradually increased in size to include balconies, railings, porches, steps, and fencing. It was not used for structural components until around the mid 19th century, when manufacturing equipment became more sophisticated. ***Cast iron*** was initially imported from England. Although there were some iron-casting works established before the Revolution, by the early 19th century production had expanded to make a variety of cast-iron features. Structural cast-iron columns were first used in the 1820s, and cast-iron building fronts and decorative structural and ornamental features followed soon after. Cast and wrought iron are often used on the interior of historic buildings as both structural and decorative features, such as columns, staircases, railings, and light fixtures.

Steel, which is an alloy of iron and usually carbon, increased in popularity as manufacturing processes and production improved in the mid-19th century. Structural steel played an important role in the development of high-rise buildings and the skyscraper.

Lead was first used in historic buildings for roofing. ***Tinplate or terneplate,*** which was made by applying a lead and tin coating to sheet metal or steel, became a common roofing material after it was first produced in the 1820s. (Pure tin was rarely used as a building material because it is so soft.) The application of a ***zinc coating*** on sheet metal created ***galvanized iron***, which was used for roofing and decorative roofing features, such as steeples and roof cresting, as well as other ornamental architectural features, such as door and window hood molds, lintels, and oriel and bay windows. Prefabricated Quonset huts constructed of ***corrugated galvanized steel*** began to be manufactured during World War II for the military on the battlefield for housing, storage, and other uses.

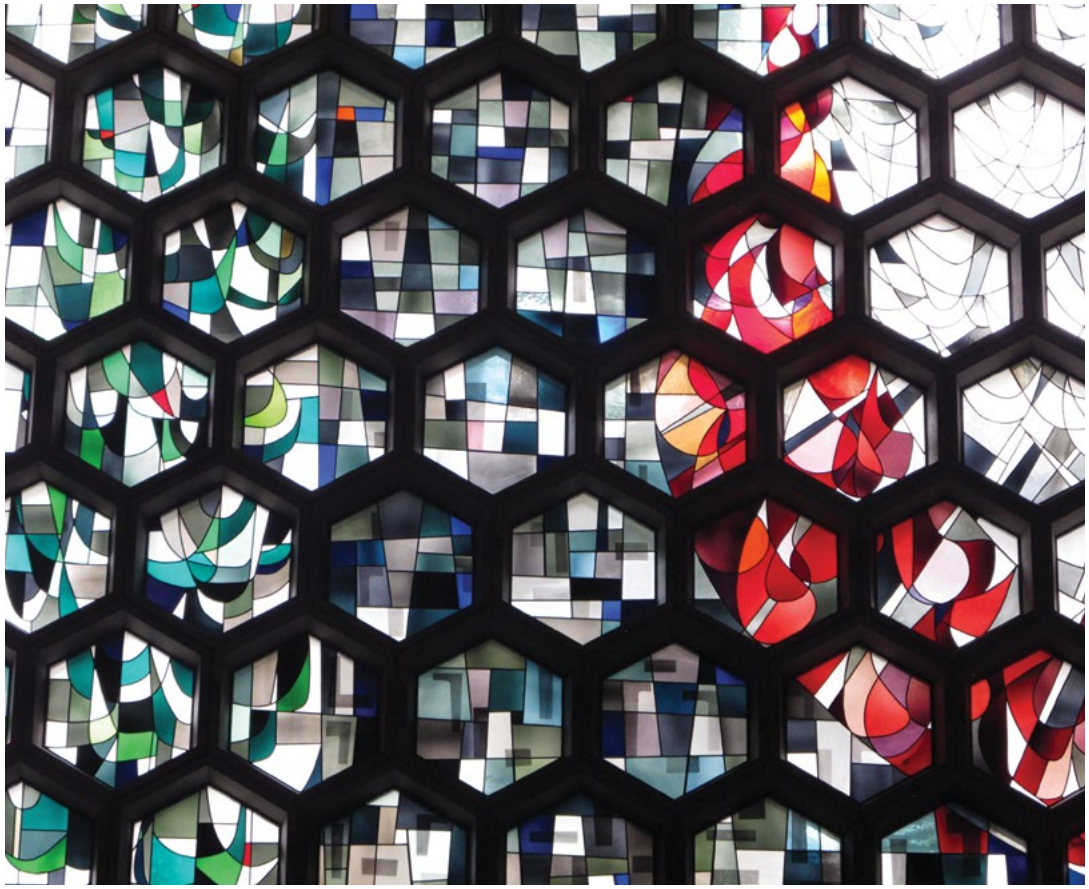
Entire pressed-metal and galvanized-iron storefronts and individual decorative features were manufactured to simulate wood, stone, or cast iron from the latter part of the 19th century into the early years of the 20th century. ***Copper*** roofs were installed on many public buildings from the 1790s through the first quarter of the 19th century. Copper continues to be used, often for porch roofs as well as gutters, downspouts, and flashing. ***Bronze*** and ***brass*** are both alloys of copper. Bronze, which weathers well, appears as entrance doors and historic storefronts. Brass, usually polished, is used for decorative interior features, such as grilles and elevator doors. **Nickel**, when employed as a building component, is in the form of an alloy, usually ***nickel silver, Monel,*** or some ***stainless steel***. In comparison to other construction metals, stainless steel is quite new, essentially only coming into use in the 1920s when it became a favorite material for Art Deco-style buildings.

Aluminum—lightweight and corrosion-resistant—was not utilized much in buildings because it was so expensive until the 1920s, when expanded production reduced its cost. Aluminum siding, which was advertised as maintenance free, became a popular siding material for single-family residences after it was introduced in the late 1930s. Some of the uses of aluminum include roofing and roofing features, such as gutters, downspouts, and flashing, as well as windows and storefront surrounds.

Porcelain enamel, or ***vitreous enamel,*** is composed of a thin coating of glass fused to cast-iron or steel sheets, panels, tiles, or shingles. Although developed in the late 19th century, it was not commonly used in buildings until the late 1920s and 1930s for Art Deco and Art Moderne storefronts. Lustron houses, constructed of prefabricated, enameled steel panels and intended for mass production, were introduced in the late 1940s in anticipation of the need for housing after the war. These houses were promoted for their low maintenance, in part because the walls, ceilings, and other interior surfaces were also enameled steel panels and easily washable.

Glass

For centuries, only blown ***cylinder*** and ***crown*** glass in small pieces was available and it was expensive. Thus, the glass in early windows in American buildings consisted of small panes which gradually increased in size over the years. With the invention of cast plate glass in 1848, large plates of glass could be manufactured which were strong and inexpensive. ***Plate glass*** was first used in the early 1850s as the primary exterior material (with a cast-iron framework) for such structures as international exhibition buildings, worlds' fair pavilions, and greenhouses and conservatories. In the early 20th century, architects began using glass curtain walls in Art Moderne-style architecture and, most notably, the International Style. ***Tempered glass*** is a hardened or toughened glass which began to be used in building construction around 1940. By the middle of the 20th century, glass as a cladding system became synonymous with curtain wall systems.



In addition to clear glass—flat or sometimes curved—there is also stained glass, tinted, patterned, textured, etched, frosted, leaded, painted, colored opaque glass and spandrel glass, prism glass, decorative Val de Verre glass (colored art glass), ceramic frit (pigmented glass enamel fused to a glass surface), and glass block. Many of these types of glass can be found in windows, transoms, doors and entrances, and storefront display windows, whereas some of them—especially opaque, pigmented structural glass with trade names such as Vitrolite, Carrara Glass, and Sani Onyx—are more likely to appear as exterior cladding on Art Deco-style or Art Moderne storefronts. ***Spandrel glass*** was first introduced on mid-20th-century buildings, particularly in storefront and curtain wall systems. Glass was also used historically in skylights and monitors; in theater, hotel, and apartment building marquees and canopies; and as a component of lightning rods and weathervanes, address plates, and signage.

Glass features on the interior of historic buildings include transoms, windows, privacy screens, office dividers, wall partitions for borrowed light in office corridors, teller windows in banks, ticket windows in train stations and movie theaters, doorknobs, light fixtures, mirrored wall inlay, and also, beginning in the latter part of the 20th century, wall mosaics. Pigmented structural glass can be found in bathrooms and some kitchens because of its sanitary qualities.

Low-e (low emissivity) ***glass***, which is primarily used in windows to minimize solar gain, was developed in the last quarter of the 20th century. ***Impact-resistant glass*** is another more-recently developed type of glass designed to withstand hurricane-force wind and which can also be installed as a blast-resistant security feature.

Paint and Other Coatings

Paints and paint-like coatings have been used on historic buildings in America as protective coatings and for decorative treatments. What is commonly considered to be paint is a liquid consisting of a pigment which makes it opaque and colors it, a binder or base to hold it together, and sometimes a vehicle to carry the pigment. Many historic paints contained lead in the form of lead white, included as a "concealing" pigment that provided opacity, although zinc oxide was also used as an alternative. Lead increased durability and prevented mold and mildew. Titanium dioxide was sometimes used as a substitute for lead in the early 20th century, but lead continued to be an ingredient in most paints until it was banned as a hazardous substance in the U.S. in 1978. Traditional paints had an oil base, usually linseed, and the earliest paint colors were, for the most part, derived from natural pigments. Like today, both glossy and flat (or matte-finish) paints were used historically on the exterior and the interior of a building. After 1875, factory-made paints were readily available. Masonry and wood stains are traditional coatings which also consist of a pigment, a solvent, and little, if any, binder. They have a flat finish and are transparent rather than opaque so that the substrate is still visible.

Other historic paints, such as ***whitewash***, are water based and have a flat finish. In addition to water, whitewash is composed of hydrated (slaked) lime, salt, and various other materials and sometimes includes a natural pigment. Whitewash was used on interior plaster, in cellars, and on wood structural components, but not on wood doors, windows, or trim because its flat finish easily rubs off. Whitewash was also used on the exterior of brick or stone buildings, wood fences, and farm outbuildings as a protective coating. Often it was reapplied on an annual basis when it got dirty or if it wore off due to exposure to the weather. ***Calcimine*** (or ***kalsomine***) and ***distemper*** paints were also water based and included natural glues, gelatin, gums, and whiting to which colored pigments could be added. They were used only on the interior and usually on plaster surfaces. ***Casein*** is a milk-based paint composed of hydrated lime, pigment, often oil, and a variety of additives to increase its durability. It was used on both the exterior and the interior of buildings.

The interiors of historic buildings can exhibit a multitude of decorative painted treatments. Marbleized and grained finishes were applied to wood, stone, and plaster to give them the appearance of more exotic and costly materials. Other interior painted treatments, such as murals and stencils, are purely decorative. ***Tempera*** and ***gouache*** are traditional water-based paints used almost exclusively for decorative painting.

Experimentation that began early in the 20th century resulted in the development of acrylic water-based paint, commonly known as ***latex paint***. ***Oil-based/alkyd paint*** continues to be used in the 21st century and is still preferred for certain applications. Latex paint tends to be more popular not only because it is water-based (making clean up easy during and after painting), but it also has fewer toxic vapors and, like solvent-based oil/alkyd paints, is very durable.

Varnish, which is used primarily on interior wood features but also on exterior entrance doors, is another traditional coating. Unlike paint, varnish is transparent, composed of a resin, a drying oil, and a solvent. It has a glossy finish, which dulls over time.

Composite Materials: Plastic, Resin, and Vinyl; Fiber-Reinforced Cement Siding; Fiberboard; and Floor Coverings

Plastic is a malleable material composed of synthetic or natural organic materials made from various organic polymers, such as ***polyethylene*** and ***polyvinyl chloride*** (**PVC**), which can be poured into molds or rolled in sheets. It is generally agreed that the term ***plastic*** was introduced into popular usage in 1907 to describe the first fully synthetic plastic. Improved plastics were available in America by World War I. Production soared during World War II because plastics were needed to make up for the shortage of other materials. In mass production by the 1950s, the industry continued to expand with the development of increasingly more sophisticated plastics.

Vinyl siding came on the market in the late 1950s, and its use, primarily in residential construction, increased as the product improved over the years. Coating canvas awnings with vinyl helped to extend their lifespan, evolving, eventually, into awnings manufactured solely of vinyl. Plastic signs on the exterior of historic commercial buildings changed and radically expanded the role of signage as advertising as well as being important design features themselves. Plastic was used sometimes for decorative trim on storefronts. Vinyl-coated wallpaper was used as early as the 1920s and is still selected for restaurants, commercial spaces, and hospitals because it is durable and washable. Other plastic materials became popular in the 1950s in the form of plastic-laminate sheeting and wall tiles.

Fiber-reinforced plastic (***FRP***), is made of a polymer matrix mixed with fiber, usually ***fiberglass***, to add strength; it is noted for its ability to be molded in thin shells. FRP is sometimes used as a substitute material to recreate missing or deteriorated architectural features in historic buildings. ***Acrylic plastic*** is a transparent synthetic plastic, generally identified by one of its trade names—***Plexiglass*** or ***Lucite***—which was patented in the 1950s as an alternative to glass. ***Foamed polystyrene***, better known as ***Styrofoam***, was first used in the mid-1950s as building insulation.

Fiber-Reinforced Cement Siding is a composite material made of sand, cement, and cellulose fibers. It was developed in the latter part of the 20th century as a less-hazardous replacement for asbestos cement siding, which preceded it, and was used for siding and roofing shingles from the early 20th century to the 1970s. Fiber-reinforced cement siding is frequently installed in the form of horizontal boards or vertical panels as exterior siding. Fiber-reinforced cement is used on both residential and commercial buildings.

Fiberboard is a composite hardboard material made from pressure-molded wood fibers. It had early precedents in the late 18th century, but was first manufactured in large quantities in the 1920s, with its use expanding in the 1930s and 40s. Fiberboard (or wallboard, as it is commonly known) was marketed by various companies, such as ***Masonite***. It was used as sheathing for roofing and siding on the exterior, for insulation, and for interior walls.

The first composite floor covering was ***Linoleum***, made from oxidized linseed oil and ground cork or wood flour. Its manufacture in the U.S. began in the late 19th century, about the same time synthetic ***rubber floor tile*** was also introduced. ***Asphalt floor tiles*** were first used in the 1920s and remained popular into the 1950s. ***Plastic/vinyl*** replaced asphalt as a binder in floor tiles in the late 1920s, in part because plastic, unlike asphalt, could be made in lighter colors and a greater variety of colors. Semi-flexible vinyl flooring, manufactured in the form of tiles or rolled sheets, was developed by the 1930s. After the war, it became more affordable and frequently was chosen for both residential and commercial interiors.

Imitative Materials

Imitative building materials are generally common and readily available materials used to simulate a more expensive material. They have a long history in American building construction. ***Wood***, cut and planed and sometimes coated with a sand paint, has been used since the 18th century to replicate cut blocks of stone and quoins on the exterior of a building. ***Stucco***, applied over any kind of construction (from log to rubble masonry) and scored to resemble stone, could make even a log house look elegant. ***Cast iron*** and ***pressed metal***, whether as a complete façade, a storefront, or an individual feature such as a window hood, cornice, or decorative pilaster, were also used on the exterior of buildings to replicate stone. Not only ***architectural terra cotta***, but ***cast stone*** served as a substitute for stone. ***Metal*** and ***concrete*** roofing tiles were used as less-costly alternatives to clay roofing tiles.

In the 20th century, the use of exterior imitative materials expanded as new products were developed. ***Asphalt roll siding*** that resembled brick could be applied to a wood building, and ***asbestos composite shingles*** were produced to replace not only wood shingle siding, but also slate roofing shingles. ***Aluminum siding*** has been used as a replacement for wood siding, followed by ***vinyl siding***, ***pressed wood siding,*** and, more recently, ***composite*** or ***fiber-cement siding***. Manufactured ***faux slate roofing*** became popular because it costs less than slate and is lighter weight. Over the years, imitative materials have increased in variety as synthetic materials continue to be introduced, including a substitute, an ***exterior insulation and finish system*** (***EIFS***), for another imitative material—stucco. Imitative materials are also used to recreate missing or deteriorated architectural features in historic buildings.

On the interior, imitative materials, such as ***scored plaster***, were historically applied to walls to give the appearance of stone. ***Painted*** or ***marbleized finishes*** on plaster or wood could further simulate stone, and ***decorative graining*** could transform the surface of a common wood into a more exotic species. ***Scagliola***, which is often applied to brick columns, is a very old technique that uses a plaster-like composite material to simulate marble. ***Lincrusta***, an embossed wall covering, was developed in the late 19th century to simulate pressed metal. ***Embossed wall coverings*** continue to be produced in the 21st century. Concrete, vinyl, and other manufactured flooring materials are designed in many patterns and colors to replicate brick, stone, clay tile, and wood.

Roofs

The roof—with its form; features such as cresting, dormers, cupolas, and chimneys; and the size, color, and patterning of the roofing material—is an important design element of many historic buildings. In addition, a weathertight roof is essential to the long-term preservation of the entire structure. Historic roofing reflects availability of materials, levels of construction technology, climate, and cost.

Throughout all periods of American history, with only minor exception, ***wood*** has been used for roofing; despite the early use of many other materials, wood shingles remained the most common roofing material throughout much of the 19th century. Initially the species of wood used would have been specific to a region, but the quality and design of a building were usually the prime determinants in the way wood was used, ranging from wide, lapped boards to small, uniform, geometrically-shaped shingles.

Clay tile was used at least in a limited way in the first settlements on the East coast and it was manufactured in America by the mid 17th century. The Spanish influence in the use of clay roofing tiles is apparent in buildings in the south, southwest, and western parts of the country. ***Slate*** was also an early roofing material, but it was imported until the end of the 18th century when the first slate quarry opened. Both slate and tile roofs provided fire protection, especially important in urban areas. The use of slate expanded quickly in the second half of the 19th century with the development of the railroads, and it remained a preferred roofing material until the middle of the 20th century.

Lead and ***copper*** were the first metals used for roofing, later joined by ***zinc*** and ***iron*** in the beginning of the 19th century. Lead was used in the mid 19th century for flashing and sometimes for the roofs of bay windows, domed, or steeply-pitched sections of a larger roof, and steeples. Copper has continued in use for roofing, gutters, downspouts, and flashing.

Painted iron was initially used in large sheets, but it was replaced with smaller sheets of iron plated with ***tin*** or ***terne***—a lead-tin mix—which were a more successful roofing material. As plated iron and, later, ***steel*** became widely available, their light weight, fire resistance, and low cost made them the ideal alternative to wood shingles. ***Galvanized metal***—base steel coated with an alloy of zinc—gained widespread popularity in the 20th century. Galvanizing not only protects metal from rusting, but it also adds strength; corrugated sheet metal, when galvanized, became the preferred metal roofing material because it reduced the need for sheathing. Galvanized steel also could be stamped into sheets simulating shingles and clay tiles.

In the late 19th century, ***concrete*** roofing tiles began to be produced as a substitute for clay tiles. At about the same time, ***composition*** roofing (built-up or roll roofing) was developed. This is a layered assembly of felt sheets and coal tar or asphalt, topped with gravel that is suitable for waterproofing flat and low-sloped roofs. Shortly after the start of the 20th century, ***asbestos fiber cement*** and ***asphalt*** shingles came into use as less-expensive alternatives to slate. Later in the 20th century, sheets of ***modified bitumen*** and ***synthetic rubber*** provided more options for a flat roof. By the end of the 20th century, ***liquid*** and ***vinyl membranes*** were also installed on flat roofs, and ***synthetic recycled materials*** were used increasingly for both new and replacement roofs.

Windows

Technology and prevailing architectural styles shaped the history of windows in America. The earliest windows were essentially medieval in their form. Small panes of glass, usually diamond-shaped and held together with lead, were set in a hinged casement sash of wood or iron. By the beginning of the 18th century, the glass had increased in size and had become rectangular, with putty holding it in place. Wood muntins replaced lead cames between the panes, and two sashes were placed in a frame where the lower one could slide vertically. Such simple windows remained common in utilitarian buildings well into the 20th century. With the introduction of iron pulleys, the sash could be hung from cords connected to counterweights, which resulted in single-hung windows, or double hung when both sashes were counterbalanced.

Sash increased in depth as it evolved, providing additional strength that allowed narrower muntins. As the production of glass (blown initially as a disk and later as a cylinder) improved, larger pieces of glass became more affordable, resulting in fewer panes of glass in a window. A sash that would have had twelve panes of glass in the 18th century often had only two by the mid 19th century. After about 1850, with the advent of mass-produced millwork, standard profiles and sizes of windows were established with a wide variety of designs and glazing configurations that could be purchased from catalogues. The Chicago window, which featured a large fixed pane of glass in the center with a narrow, double-hung, operable sash window on either side of it, was introduced in the last decades of the 19th century as a feature of the Chicago School-style of architecture. The picture window, popular in ranch-style houses in the mid 20th century, evolved from this.

Steel was employed beginning at the end of the 19th century to build fire-resistant windows in tight urban environments. These hollow-core windows were frequently galvanized. Windows with solid, rolled steel sections were first produced in the first decade of the 20th century in many forms, ranging from casements (especially popular in domestic construction) to large, multi-pane units that provided whole walls of natural light in industrial and warehouse buildings. Operable vents in these large windows pivoted on simple pins. Their relatively small panes and the fact that they were puttied in from the interior made the inevitable breakage easy and inexpensive to repair. Rolled steel was also used for double-hung windows, which were common in high-rise buildings in the 1920s and beyond. Aluminum windows were developed in the 1930s and, by the 1970s, rivaled wood in popularity, particularly in commercial and institutional buildings. They were produced in a variety of styles and functionality, including casement, hopper, awning, and double-hung sash.

Metal-clad (initially copper) wood windows appeared early in the 20th century but were not common until the later part of the century, when enameled aluminum cladding replaced copper. Although used primarily as replacements in older buildings, vinyl windows were developed in the latter part of the 20th century and marketed as inexpensive and thermally efficient. Modern windows are also made of fiberglass and polymer-based composites.

Storm windows were used historically and are still used to help regulate interior temperatures. Limited commercial use of thermal-pane or insulated glass in windows began in the 1930s, but it was not readily available until about 1950. Tempered glass also came into use about this time. Since then, work has continued to improve its efficiency and to reduce the effect of ultra-violet rays with tinted and low-e (low emissivity) glass. Impact-resistant glass is not new, but its use in windows continues to expand to meet modern hurricane code requirements as well as protection and security requirements.

Entrances and Porches

Entrances and porches are often the focus of historic American buildings. With their functional and decorative features (such as doors, steps, balustrades, columns, pilasters, and entablatures), they can be extremely important in defining the historic character of a building. In many cases, porches were also energy-saving features and remain so today, shading southern and western elevations. Usually, entrances and porches were integral components of a historic building's design; for example, porches on Greek Revival houses, with pediments and Doric or Ionic columns, echoed the architectural elements and features of the building itself. Center, single-bay porches or arcaded porches are evident in Italianate-style buildings of the 1860s. Doors of Renaissance Revival-style buildings frequently featured entablatures or pediments. Porches characterized by lathe-turned porch posts, railings, and balusters were especially prominent and decorative features of Eastlake, Queen Anne, and Stick-style houses. Deep porches on bungalows and Craftsman-style houses of the early 20th century feature tapered posts, exposed posts and beams, rafter tails, and low-pitched roofs with wide overhangs.

Late 19th- and early 20th-century high-rise buildings are often distinguished by highly-ornamented entrances, some with revolving doors, which were introduced around the turn of the 20th century. Some commercial structures in the early- to mid-20th century have recessed entrances with colorful terrazzo flooring. Entrances to Art Deco-style residential and commercial buildings often feature stylized glass and stainless-steel doors with geometric designs. Entrances on modernist buildings may have simple glazing and, frequently, projecting concrete or metal canopies.

Porches can have regional variations, not only in style, but also in nomenclature. For instance, in Hawaii, ***lanai*** is used to describe a type of porch which might be known as a ***veranda*** in some parts of the South, a ***piazza*** in Charleston, or a ***gallery*** in New Orleans.

Storefronts

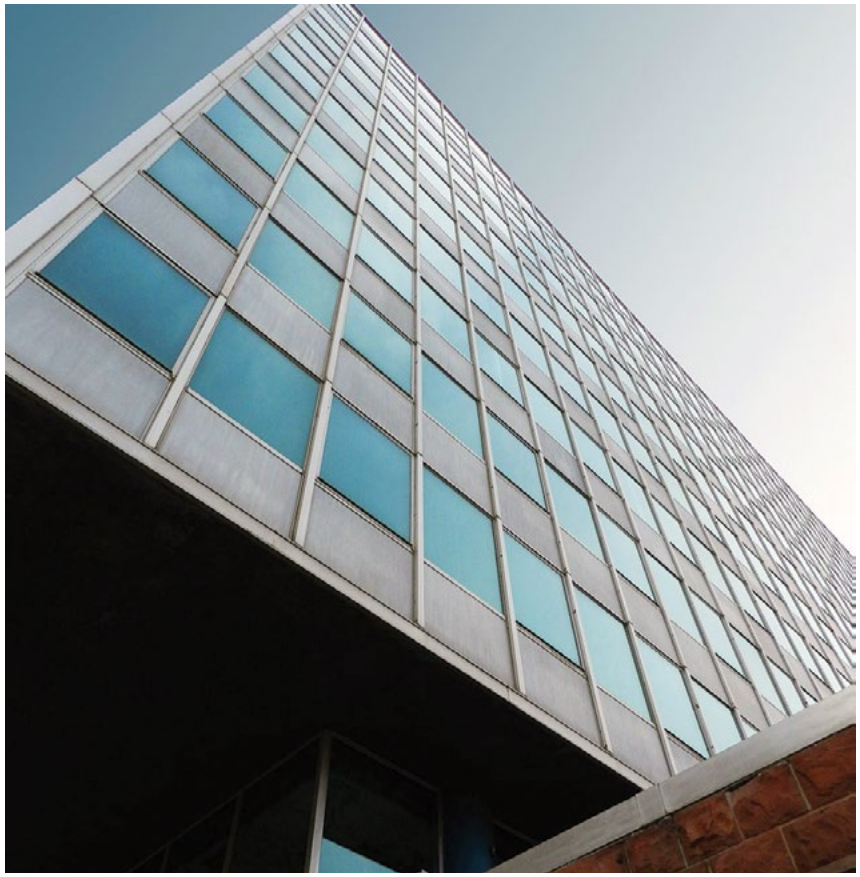
The storefront is often the most prominent feature of a historic commercial building, playing a crucial role in a store's advertising and merchandising strategy. The earliest storefronts in America, dating from the late 18th and early 19th centuries, had small, residential-style windows with limited display space. A few featured oriel windows or glass vitrine cases (sometimes added later) that projected out from the façade. Early storefront systems were frequently wood. In the 19th century, storefront display windows progressively increased in size as plate glass became available in larger units. This reflected the fact that cast-iron columns and lintels were thinner, allowing larger sheets of glazing that became available at about the same time. In some regions, storefronts and the entire building façade were constructed entirely of cast iron, later followed by galvanized metal, copper, bronze, and aluminum.

Historic storefront systems have many different configurations: they may have multiple entrance doors (including one to access an upstairs apartment if one exists); they may be symmetrical or asymmetrical; and entrances may be flush or recessed from the shop's windows. Transoms, sometimes with prism glass, are often a component of storefronts. In the 19th century, awnings added another feature to the storefront. Permanent metal canopies attached to the façade or supported by free-standing posts or columns, as well as retractable canvas awnings, provided shelter for customers and merchandise alike. As the 20th century progressed, new storefront designs were introduced, some with deeply recessed entrances with expanded display cases or "floating display islands." In the 1920s, 1930s, and later, structural pigmented glass such as Carrara Glass, Vitrolite, and Sani Onyx; aluminum and stainless steel; porcelain enamel; glass block; neon signs; and other new materials were introduced in Art Deco-style and Art Moderne storefronts. Modular storefront systems were introduced after World War II.

Storefronts are typically altered more than any other building feature to reflect the latest architectural styles and appear up-to-date to attract customers. Older storefronts were often remodeled with a new design and materials by installing pigmented structural glass, for instance, and other 20th-century materials. These altered storefronts may have acquired significance in their own right and, in this case, should be retained.

Curtain Walls

Curtain wall construction was originally based on a steel framework. Today, most curtain wall construction utilizes an extruded aluminum framework, which became popular in the 1930s in the U.S. and came into its own after World War II. A curtain wall is not a structural system and, although it is self supporting, does not carry the weight of the building. Rather, it is an exterior wall hung or attached to the structural system. Curtain wall construction most frequently employs glass, metal panels, thin stone veneer, and other cladding materials, although louvers and vents, like glass panels, can also be set into the metal framework. Newer curtain wall systems may incorporate rain screens and glass fiber reinforced concrete panels (GFRC). Because curtain wall construction uses relatively lightweight and less expensive materials, it reduces building costs, which, in part, explains its popularity.



There are essentially two types of curtain wall systems: ***stick*** systems and ***unitized*** or ***modular*** systems. A ***stick*** system is a framing system composed of long metal pieces (sticks) put together individually using vertical pieces (mullions) between floors and horizontal pieces between the vertical members. The framing members may sometimes be assembled in a factory, but the installation and glazing is done on site. A ***unitized*** or ***modular*** curtain wall system consists of ready-to-hang, pre-assembled modules which already include glazing or other panel infill. These modular units are usually one story in height and approximately five- to six-feet wide. Both types of curtain walls are attached to floor slabs or columns with field-drilled bolts in mated, adjustable anchor brackets.

Glass panels in curtain wall systems can be fixed or operable and can include spandrel glass, clear, or tinted glass. Stone veneer panels may be slate, granite, marble, travertine, or limestone. Metal panels can be aluminum plate, stainless steel, copper, or other non-corrosive types of metal. Other materials used in curtain wall systems include composite panels (such as honeycomb composite panels, consisting of two thin sheets of aluminum bonded to a thin plastic layer or rigid insulation in the middle); architectural terra cotta; glazed ceramic tile; and fiber-reinforced plastic (FRP).

Structural Systems

Numerous types of structural systems have been employed in the construction of buildings throughout American history. Some systems and building methods overlapped, and many remained in use for years. These systems—listed according to the period when they were first introduced—include but are not limited to: ***wood-frame*** construction (17th century), ***load-bearing masonry*** construction (18th century), ***balloon-frame*** construction (19th century), ***brick cavity-wall*** construction (19th century), ***heavy-timber post and beam*** industrial construction (19th century), ***fireproof iron*** construction (19th century), ***heavy masonry and steel*** construction (19th century), ***skeletal steel construction*** (19th century), ***light frame and veneer brick*** construction (20th century), and ***cast-in-place concrete, concrete block,*** and ***slab and post*** construction (20th century).

Exposed iron and steel structural systems are character defining in many utilitarian and industrial structures of the late 19th and early 20th centuries that have large open interior spaces, such as train sheds and armories. Exposed wood structural systems became an important interior decorative element during the Arts and Crafts period and in Craftsman-style bungalows in the early 20th century. Exposed cast-concrete structural systems and system components define the character of many industrial interiors and, later, other interior spaces in 20th-century buildings.

If features of the historic structural system are exposed (such as load-bearing brick walls, cast-iron columns, roof trusses, posts and beams, vigas, and outriggers, or masonry foundation walls), they are likely to be important in defining the building's overall historic character. A concealed structural system, although not character defining, may still be significant as an example of historic building technology.

Mechanical Systems

Mechanical, lighting, and plumbing systems improved significantly with the onset of the Industrial Revolution. The 19th-century interest in hygiene, personal comfort, and reducing the spread of disease resulted in the development of central heating, piped water, piped gas, and networks of underground cast-iron sewers in urban areas. The mass production of cast-iron radiators made central heating affordable to many. By the turn of the 20th century, it was common for heating, lighting, and plumbing to be an integral part of most buildings.

The increasing availability of electricity as the 20th century progressed had a tremendous effect on the development of mechanical systems and opened up a new age of technology. Electric lighting brightened the interiors of all types of buildings, as well as building exteriors, their sites, and settings. Electricity not only improved heating systems, but in the 1920s it also brought central air conditioning to movie theaters and auditoriums, where it was first installed. By the middle of the 20th century, forced-air systems provided both heat and cooling in many buildings. In the late 20th century, as HVAC systems increased in efficiency, they decreased in size, with smaller components, such as split ductless systems with wall-mounted air handlers, cassette ceiling-mounted diffusers, or high-velocity mini duct systems. These systems can be especially useful for retrofitting historic buildings because they are small and unobtrusive. Heat pumps, another late-20th century invention, can help to supplement existing HVAC systems.

Replacing hydraulic elevators, which were invented in the mid-19th century, with electric elevators in the early decades of the 20th century resulted in a boom in the construction of taller high-rise buildings and skyscrapers. Escalators, also invented in the mid 19th century, became more and more common as the 20th century advanced. By the latter part of the century, moving walkways helped facilitate travelers' passage from one place to another in transportation centers, such as airports.

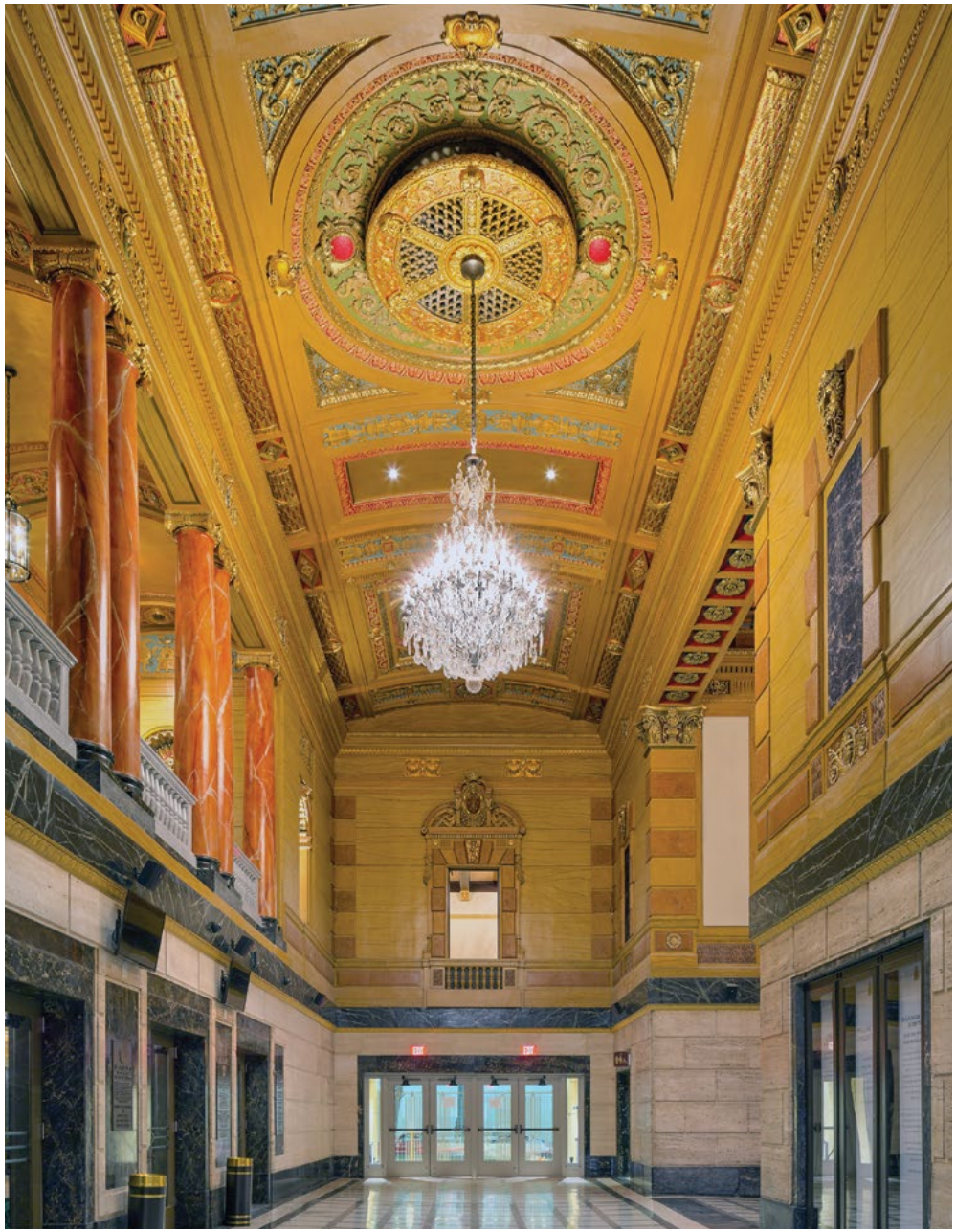
The visible decorative features that remain of historic mechanical systems (such as grilles, lighting fixtures, elevator doors, and escalators) themselves may contribute to the overall historic character of the building and should be retained when feasible. Reusing an existing, functioning system and upgrading it as needed, should always be considered when feasible. However, because a mechanical system needs to work efficiently, most historic or older systems will likely need to be replaced to meet modern requirements.

INTERIOR SPACES, FEATURES, AND FINISHES

Spaces

The earliest buildings in America were very basic and likely to have only one or, perhaps, two rooms. As communities became more established and prosperous, buildings—houses in particular—increased in size, and construction became more elaborate and sophisticated, reflecting the wealth and tastes of individual owners. Larger buildings inevitably included multiple rooms designed to accommodate a variety of purposes. Thus, the interior floor plan, the arrangement and sequence of spaces, and built-in features and applied finishes are individually and collectively important in defining the historic character of the building. With the exception of most historic utilitarian buildings, manufacturing and industrial buildings, garages, and maintenance facilities, interiors are typically composed of a series of primary and secondary spaces. This succession of spaces is applicable to many historic buildings, from courthouses to cathedrals to cottages and commercial structures. Primary spaces, including entrance halls, lobbies, double parlors, living rooms, corridors, and assembly spaces, are defined not only by their function, but also by their location, features, finishes, size, and proportion.

Secondary spaces in historic interiors are generally more functional than decorative and, depending on the building's use, may include kitchens, bathrooms, utility rooms, attics, basements, mail rooms, rear hallways, and most office spaces. Although these spaces were important to how the building functioned historically, they are generally less significant than primary spaces and, thus, are usually the most appropriate places to make changes which may be necessary in a historic building, such as those required to meet code or to install mechanical equipment. The traditional sequence of interior spaces in late 19th- through early 20th-century high-rise buildings went from public areas (such as the lobby) on the first floor



and corridors on upper floors to the private spaces behind them (i.e., offices, apartments, or hotel rooms). This hierarchy of spaces continues to define the historic character of many high-rise buildings. However, in commercial structures built on speculation with open floor plans, the upper floors, especially, are likely to have been reconfigured many times. In some cases, these interiors may have little historic character but, in others, the spaces and their appearance may have acquired significance because of a specific tenant, use (such as a boardroom or executive office), or an event.

Features and Finishes

Historic character-defining features and finishes can range from very elaborate to very simple and plain, or from formal to utilitarian. The interior features that are important to a particular building generally reflect its original or historic use. Thus, the interior features and finishes of industrial and factory buildings are basic and practical, with exposed structural systems; wood, brick, or concrete walls and floors; large windows or monitors with clerestory windows to provide natural light; and minimal or no door and window surrounds. Commercial, office, hotel, and high-rise apartment buildings have public spaces that often include highly-decorated lobbies, elevator lobbies with marble flooring, wood or marble wainscoting in the upper corridors and, particularly in office buildings, offices separated from hallways by heavy doors with glass transoms and glass wall partitions for borrowed light. The repetitive pattern itself of the corridors on the upper floors in these multi-story buildings is also often significant in defining their historic character. Individual historic residential structures frequently have painted plaster walls and ceilings, door and window trim, fireplaces with mantels, wood flooring, and a staircase if the house has more than one story. Some mid-to late-20th-century houses that are less traditional in design have simpler and less-ornamented interiors.

Building Site

The building site consists of a historic building or buildings, structures, and associated landscape features and their relationship within a designed or legally-defined parcel of land. A site may be significant in its own right or because of its association with the historic building or buildings.

Setting (District/Neighborhood)

The setting is the larger area or environment in which a historic building is located. It may be an urban, suburban, or rural neighborhood or a natural landscape in which buildings have been constructed. The relationship of buildings to each other, setbacks, fence patterns, views, driveways and walkways, and street trees and other landscaping together establish the character of a district or neighborhood.

Special Requirements: Code-Required Work

Sensitive solutions to meeting code requirements are an important part of protecting the historic character of the building. Thus, work that must be done to meet accessibility and life-safety requirements must always be assessed for its potential impact on the historic building.

Accessibility

It is often necessary to make modifications to a historic building to make it compliant with accessibility code requirements. Federal rules, regulations, and standards provide guidance on how to make historic buildings accessible. Work must be carefully planned and undertaken in a manner that results in minimal or no loss of historic exterior and interior character-defining spaces, features, or finishes. The goal should be to provide the highest level of access with the least impact to the historic building.

Life Safety

When undertaking work on historic buildings, it is also necessary to consider the impact that meeting life-safety codes (public health, occupational health, life safety, electrical, seismic, structural, and building codes) will have on both exterior and interior spaces, features, and finishes. Historic building materials that are hazardous, such as lead paint and asbestos, will require abatement or encapsulation. Some newer life-safety codes are more flexible and allow greater leniency for historic buildings when making them code compliant. It is also possible that there may be an alternative approach to meeting codes that will be less damaging to the historic building. Coordinating with code officials early in project planning will help ensure that code requirements can be met in a historic building without negatively impacting its character.

Resilience to Natural Hazards

The potential future impacts of natural hazards on a historic building should be carefully evaluated and considered. If foreseeable loss, damage, or destruction to the building or its features can be reasonably anticipated, treatments should be undertaken to avoid or minimize the impacts and to ensure the continued preservation of the building and its historic character. In some other instances, the effects may be minimal or more gradual and the impacts unknown or not anticipated to affect the property until sometime in the future. In all instances, a building should be maintained in good condition and monitored regularly, and historic documentation should be prepared as a record of the building and to help guide future treatments.

Some impacts of natural hazards may be particularly sudden and destructive to a historic building (such as riverine flash flooding, coastal storm surge, an earthquake, or a tornado) and may require adaptive treatments that are more invasive. When a treatment is proposed for a building that addresses such potential impacts and will affect the building's historic character, other feasible alternatives that would require less change should always be considered first. In some instances, a certain degree of impact on a building's historic character may be necessary to ensure its retention and continued preservation. In other instances, a proposed treatment may have too great an impact to preserve the historic character of the building. A historic building may have existing characteristics or features that help to address or minimize the impacts of natural hazards. Some historic buildings may have been altered previously or be in regions where it has been traditional to adapt buildings frequently subject to damage from natural hazards, such as flooding. All these factors should be taken into consideration when planning preventive treatments. The goal should always be to minimize the impacts to the building's historic character to the greatest extent possible in adapting the building to be more resilient.

Sustainability

Before implementing any energy improvements to enhance the sustainability of a historic building, the existing energy-efficient characteristics of the building should be evaluated. Historic building construction methods and materials often maximized natural sources of heating, lighting, and ventilation to respond to local climatic conditions. The key to a successful project is to identify and understand any lost original and existing energy-efficient aspects of the historic building, as well as to identify and understand its character-defining features to ensure they are taken into account. The most sustainable building may be one that already exists. Thus, good preservation practice is very often synonymous with sustainability. There are numerous treatments—traditional as well as new technological innovations—that may be used to upgrade a historic building to help it operate more efficiently while retaining its character.

The topic of sustainability is addressed in detail in *The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings.* Although specifically developed for the treatment Rehabilitation, the Sustainability Guidelines can be used to help guide the other treatments.

New Exterior Additions and Related New Construction

A new exterior addition to a historic building should be considered in a rehabilitation project only after determining that requirements for a new or continuing use cannot be successfully met by altering non-significant interior spaces. If the existing building cannot accommodate such requirements in this way, then an exterior addition or, in some instances, separate new construction on a site may be acceptable alternatives.

A new addition must preserve the building's historic character, form, significant materials, and features. It must be compatible with the massing, size, scale, and design of the historic building while differentiated from the historic building. It should also be designed and constructed so that the essential form and integrity of the historic building would remain if the addition were to be removed in the future. There is no formula or prescription for designing a compatible new addition or related new construction on a site, nor is there generally only one possible design approach that will meet the Standards.

New additions and related new construction that meet the Standards can be any architectural style—traditional, contemporary, or a simplified version of the historic building. However, there must be a balance between differentiation and compatibility to maintain the historic character and the identity of the building being enlarged.

New additions and related new construction that are either identical to the historic building or in extreme contrast to it are not compatible. Placing an addition on the rear or on another secondary elevation helps to ensure that it will be subordinate to the historic building. New construction should be appropriately scaled and located far enough away from the historic building to maintain its character and that of the site and setting. In urban or other built-up areas, new construction that appears as infill within the existing pattern of development can also preserve the historic character of the building, its site, and setting.

STANDARDS FOR PRESERVATION & GUIDELINES FOR PRESERVING HISTORIC BUILDINGS

Preservation

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Standards for Preservation

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

GUIDELINES FOR PRESERVING HISTORIC BUILDINGS

INTRODUCTION

Preservation is the appropriate treatment when the objective of the project is to retain the building as it currently exists. This means that not only the original historic materials and features will be preserved, but also later changes and additions to the original building. The expressed goal of the **Standards for Preservation and Guidelines for Preserving Historic Buildings** is retention of the building's existing form, features, and materials. This may be as simple as maintaining existing materials and features or may involve more extensive repair. Protection, maintenance, and repair are emphasized while replacement is minimized.

Identify, Retain, and Preserve Historic Materials and Features

The guidance for the treatment **Preservation** begins with recommendations to identify the form and detailing of those architectural materials and features that are important in defining the building's historic character and which must be retained to preserve that character. Therefore, guidance on ***identifying, retaining, and preserving*** character-defining features is always given first.

Stabilize Deteriorated Historic Materials and Features as a Preliminary Measure

Deteriorated portions of a historic building may need to be protected through preliminary stabilization measures until additional work can be undertaken. ***Stabilizing*** may begin with temporary structural reinforcement and progress to weatherization or correcting unsafe conditions. Although it may not be necessary in every preservation project, stabilization is nonetheless an integral part of the treatment **Preservation**; it is equally applicable to the other treatments if circumstances warrant.

Protect and Maintain Historic Materials and Features

After identifying those materials and features that are important and must be retained in the process of **Preservation** work, then ***protecting and maintaining*** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. Protection includes the maintenance of historic materials and features as well as ensuring that the property is protected before and during preservation work.

Repair (Stabilize, Consolidate, and Conserve) Historic Materials and Features

Next, when the physical condition of character-defining materials and features warrants additional work, ***repairing*** by ***stabilizing, consolidating, and conserving*** is recommended. The intent of **Preservation** is to retain existing materials and features while introducing as little new material as possible. Consequently, guidance for repairing a historic material, such as masonry, begins with the least degree of intervention possible, such as strengthening materials through consolidation, when necessary, or repointing with mortar of an appropriate strength. Repairing masonry, as well as wood and metal features, may include patching, splicing, or other treatments using recognized preservation methods. All work should be physically and visually compatible.

Limited Replacement in Kind of Extensively Deteriorated Portions of Historic Features

The greatest level of intervention in this treatment is the ***limited replacement in kind*** of extensively deteriorated or missing components of features when there are surviving prototypes or when the original features can be substantiated by documentary and physical evidence. The replacement material must match the old, both physically and visually (e.g., wood with wood). Thus, with the exception of hidden structural reinforcement, such as steel rods, substitute materials are not appropriate in the treatment **Preservation.** If prominent features are missing, such as an interior staircase or an exterior cornice, then a Rehabilitation or Restoration treatment may be more appropriate.

Code-Required Work: Accessibility and Life Safety

These sections of the **Preservation** guidance address work that must be done to meet accessibility and life-safety requirements. This work may be an important aspect of preservation projects, and it, too, must be assessed for its potential negative impact on the building's character. For this reason, particular care must be taken not to obscure, damage, or destroy character-defining materials or features in the process of undertaking work to meet code requirements.

Resilience to Natural Hazards

Resilience to natural hazards should be addressed as part of a **Preservation** project. A historic building may have existing characteristics or features that help to address or minimize the impacts of natural hazards. These should always be used to best advantage when planning new adaptive treatments so as to have the least impact on the historic character of the building, its site, and setting.

Sustainability

Sustainability should be addressed as part of a **Preservation** project. Good preservation practice is often synonymous with sustainability. Existing energy-efficient features should be retained and repaired. New sustainability treatments should generally be limited to updating existing features and systems so as to have the least impact on the historic character of the building.

The topic of sustainability is addressed in detail in *The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings*. Although specifically developed for the treatment Rehabilitation, the Sustainability Guidelines can be used to help guide the other treatments.

Preservation as a Treatment. *When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for Preservation should be developed.*

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving masonry features that are important in defining the overall historic character of the building (such as walls, brackets, railings, cornices, window and door surrounds, steps, and columns) and decorative ornament and other details, such as tooling and bonding patterns, coatings, and color.	Altering masonry features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic masonry features instead of repairing or replacing only the deteriorated masonry. Applying paint or other coatings (such as stucco) to masonry that has been historically unpainted or uncoated. Removing paint from historically-painted masonry.
Stabilizing deteriorated or damaged masonry as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize deteriorated or damaged masonry until additional work is undertaken, thereby allowing further damage to occur to the historic building
Protecting and maintaining masonry by ensuring that historic drainage features and systems that divert rainwater from masonry surfaces (such as roof overhangs, gutters, and downspouts) are intact and functioning properly.	Failing to identify and treat the causes of masonry deterioration, such as leaking roofs and gutters or rising damp.
Cleaning masonry only when necessary to halt deterioration or remove heavy soiling.	Cleaning masonry surfaces when they are not heavily soiled to create a "like-new" appearance, thereby needlessly introducing chemicals or moisture into historic materials.
Carrying out masonry cleaning tests when it has been determined that cleaning is appropriate. Test areas should be examined to ensure that no damage has resulted and, ideally, monitored over a sufficient period of time to allow long-range effects to be predicted.	Cleaning masonry surfaces without testing or without sufficient time for the testing results to be evaluated.

[1] A test patch should always be done before using a chemical cleaner to ensure that it will not damage historic masonry, as in this instance, terra cotta.

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Cleaning soiled masonry surfaces with the gentlest method possible, such as using low-pressure water and detergent and natural bristle or other soft-bristle brushes.	Cleaning or removing paint from masonry surfaces using most abrasive methods (including sandblasting, other media blasting, or high-pressure water) which can damage the surface of the masonry and mortar joints. Using a cleaning or paint-removal method that involves water or liquid chemical solutions when there is any possibility of freezing temperatures. Cleaning with chemical products that will damage some types of masonry (such as using acid on limestone or marble), or failing to neutralize or rinse off chemical cleaners from masonry surfaces.
Using biodegradable or environmentally-safe cleaning or paint-removal products.	
Using paint-removal methods that employ a poultice to which paint adheres, when possible, to neatly and safely remove old lead paint.	
Using coatings that encapsulate lead paint, when possible, where the paint is not required to be removed to meet environmental regulations.	
Allowing only trained conservators to use abrasive or laser-cleaning methods, when necessary, to clean hard-to-reach, highly-carved, or detailed decorative stone features.	

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Removing damaged or deteriorated paint only to the next sound layer using the gentlest method possible (e.g., hand scraping) prior to repainting.	Removing paint that is firmly adhered to masonry surfaces.
Applying compatible paint coating systems to historically-painted masonry following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting masonry features.
Repainting historically-painted masonry features with colors that are appropriate to the building and district.	Using paint colors on historically-painted masonry features that are not appropriate to the building or district.
Protecting adjacent materials when working on masonry features.	Failing to protect adjacent materials when working on masonry features.
Evaluating the overall condition of the masonry to determine whether more than protection and maintenance, such as repairs to masonry features, will be necessary.	Failing to undertake adequate measures to ensure the protection of masonry features.
Repairing masonry by patching, splicing, consolidating, or otherwise reinforcing the masonry using recognized preservation methods.	Removing masonry that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or unskilled personnel, potentially causing further damage to historic materials.
Repairing masonry walls and other masonry features by repointing the mortar joints where there is evidence of deterioration, such as disintegrating mortar, cracks in mortar joints, loose bricks, or damaged plaster on the interior.	Removing non-deteriorated mortar from sound joints and then repointing the entire building to achieve a more uniform appearance.
Removing deteriorated lime mortar carefully by hand raking the joints to avoid damaging the masonry.	

[2] **Not Recommended:** The use of inappropriate Portland cement mortar to repoint these soft 19th-century bricks has caused some of them to spall. *Photo: Courtesy Nebraska State Historic Preservation Office.*

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Using power tools only on horizontal joints on brick masonry in conjunction with hand chiseling to remove hard mortar that is deteriorated or that is a non-historic material which is causing damage to the masonry units. Mechanical tools should be used only by skilled masons in limited circumstances and generally not on short, vertical joints in brick masonry.	Allowing unskilled workers to use masonry saws or mechanical tools to remove deteriorated mortar from joints prior to repointing.
Duplicating historic mortar joints in strength, composition, color, and texture when repointing is necessary. In some cases, a lime-based mortar may also be considered when repointing Portland cement mortar because it is more flexible.	Repointing masonry units with mortar of high Portland cement content (unless it is the content of the historic mortar).
Duplicating historic mortar joints in width and joint profile when repointing is necessary.	Using "surface grouting" or a "scrub" coating technique, such as a "sack rub" or "mortar washing," to repoint exterior masonry units instead of traditional repointing methods. Changing the width or joint profile when repointing.
Repairing stucco by removing the damaged material and patching with new stucco that duplicates the old in strength, composition, color, and texture.	Removing sound stucco or repairing with new stucco that is different in composition from the historic stucco. Patching stucco or concrete without removing the source of deterioration. Replacing deteriorated stucco with synthetic stucco, an exterior insulation and finish system (EIFS), or other non-traditional materials.
Using mud plaster or a compatible lime-plaster adobe render, when appropriate, to repair adobe.	Applying cement stucco, unless it already exists, to adobe.
Sealing joints in concrete with appropriate flexible sealants and backer rods, when necessary.	Repointing masonry units (other than concrete) with a synthetic caulking compound instead of mortar.

[3] **Not Recommended:** Cracks in the stucco have not been repaired, thereby allowing ferns to grow in the moist substrate which will cause further damage to the masonry.

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Cutting damaged concrete back to remove the source of deterioration, such as corrosion on metal reinforcement bars. The new patch must be applied carefully so that it will bond satisfactorily with, and match, the historic concrete.	Patching damaged concrete without first removing the source of deterioration.
Using a non-corrosive, stainless-steel anchoring system when replacing damaged stone, concrete, or terra-cotta units that have failed.	

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Applying non-historic surface treatments, such as water-repellent coatings, to masonry only after repointing and only if masonry repairs have failed to arrest water penetration problems.	Applying waterproof, water-repellent, or non-original historical coatings (such as stucco) to masonry as a substitute for repointing and masonry repairs.
Applying permeable, anti-graffiti coatings to masonry when appropriate.	Applying water-repellent or anti-graffiti coatings that change the appearance of the masonry or that may trap moisture if the coating is not sufficiently permeable.
The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation****, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of masonry features when there are surviving prototypes, such as terra-cotta brackets or stone balusters, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire masonry feature, such as a column or stairway, when limited replacement of deteriorated and missing components is appropriate. Using replacement material that does not match the historic masonry feature.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving wood features that are important in defining the overall historic character of the building (such as siding, cornices, brackets, window and door surrounds, and steps) and their paints, finishes, and colors.	Altering wood features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic wood features instead of repairing or replacing only the deteriorated wood. Changing the type of finish, coating, or historic color of wood features

[4] Hand scraping to remove peeling paint from wood siding in preparation for repainting is an important part of regularly-scheduled maintenance.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Stabilizing deteriorated or damaged wood as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize deteriorated or damaged wood until additional work is undertaken, thereby allowing further damage to occur to the historic building.
Protecting and maintaining wood features by ensuring that historic drainage features that divert rainwater from wood surfaces (such as roof overhangs, gutters, and downspouts) are intact and functioning properly. Finding and eliminating sources of moisture that may damage wood features, such as clogged gutters and downspouts, leaky roofs, or moisture-retaining soil that touches wood around the foundation.	Failing to identify and treat the causes of wood deterioration, such as faulty flashing, leaking gutters, cracks and holes in siding, deteriorated caulking in joints and seams, plant material growing too close to wood surfaces, or insect or fungal infestation.
Finding and eliminating sources of moisture that may damage wood features, such as clogged gutters and downspouts, leaky roofs, or moisture-retaining soil that touches wood around the foundation.	
Applying chemical preservatives or paint to wood features that are subject to weathering, such as exposed beam ends, outriggers, or rafter tails.	Using chemical preservatives (such as creosote) which, unless they were used historically, can change the appearance of wood features.

[5] Rotted wood shingles have been replaced in kind with matching wood shingles.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Implementing an integrated pest management plan to identify appropriate preventive measures to guard against insect damage, such as installing termite guards, fumigating, and treating with chemicals. Retaining coatings (such as paint) that protect the wood from moisture and ultraviolet light. Paint removal should be considered only when there is paint surface deterioration and as part of an overall maintenance program which involves repainting or applying other appropriate coatings	Stripping paint or other coatings from wood features without recoating.
Removing damaged or deteriorated paint to the next sound layer using the gentlest method possible (e.g., hand scraping and hand sanding) prior to repainting.	Using potentially-damaging paint-removal methods on wood surfaces, such as open-flame torches, orbital sanders, abrasive methods (including sandblasting, other media blasting, or high-pressure water), or caustic paint-removers. Removing paint that is firmly adhered to wood surfaces.
Using chemical strippers primarily to supplement other methods such as hand scraping, hand sanding, and thermal devices.	Failing to neutralize the wood thoroughly after using chemical paint removers so that new paint may not adhere. Removing paint from detachable wood features by soaking them in a caustic solution which can roughen the surface, split the wood, or result in staining from residual acid leaching out through the wood.
Using biodegradable or environmentally-safe cleaning or paint-removal products.	
Using paint-removal methods that employ a poultice to which paint adheres, when possible, to neatly and safely remove old lead paint.	Using a thermal device to remove paint from wood features without first checking for and removing any flammable debris behind them.
Using thermal devices (such as infrared heaters) carefully to remove paint when it is so deteriorated that total removal is necessary prior to repainting.	Using thermal devices without limiting the amount of time the wood feature is exposed to heat.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Using coatings that encapsulate lead paint, when possible, where the paint is not required to be removed to meet environmental regulations.	
Applying compatible paint coating systems to historically-painted wood following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting wood features.
Repainting historically-painted wood features with colors that are appropriate to the building or district.	Using paint colors on historically-painted wood features that are not appropriate to the building or district.
Protecting adjacent materials when working on wood features.	Failing to protect adjacent materials when working on wood features.
Evaluating the overall condition of the wood to determine whether more than protection and maintenance, such as repairs to wood features, will be necessary.	Failing to undertake adequate measures to ensure the protection of wood features.
Repairing wood by patching, splicing, consolidating, or otherwise reinforcing the wood using recognized preservation methods.	Removing wood that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or unskilled personnel, potentially causing further damage to historic materials.
The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation****, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind (i.e., with wood, but not necessarily the same species) extensively deteriorated or missing components of wood features when there are surviving prototypes, such as brackets, molding, or sections of siding, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish	Replacing an entire wood feature, such as a column or stairway, when limited replacement of deteriorated and missing components is appropriate. Using replacement material that does not match the historic wood feature.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving metal features that are important in defining the overall historic character of the building (such as columns, capitals, pilasters, spandrel panels, or stairways) and their paint, finishes, and colors. The type of metal should be identified prior to work because each metal has its own properties and may require a different treatment.	Altering metal features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic metal features instead of repairing or replacing only the deteriorated metal. Changing the type of finish, coating, or historic color of metal features.
Stabilizing deteriorated or damaged metal as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize deteriorated or damaged metals until additional work is undertaken, thereby allowing further damage to occur to the historic building.
Protecting and maintaining metals from corrosion by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved decorative features.	Failing to identify and treat the causes of corrosion, such as moisture from leaking roofs or gutters. Placing incompatible metals together without providing an appropriate separation material. Such incompatibility can result in galvanic corrosion of the less noble metal (e.g., copper will corrode cast iron, steel, tin, and aluminum).
Cleaning metals, when necessary, to remove corrosion prior to repainting or applying other appropriate protective coatings.	Failing to reapply coating systems after cleaning metals that require protection from corrosion. Removing the patina from historic metals. The patina may be a protective layer on some metals (such as bronze or copper) as well as a distinctive finish.
Identifying the particular type of metal prior to any cleaning procedure and then testing to ensure that the gentlest cleaning method possible is selected; or, alternatively, determining that cleaning is inappropriate for the particular metal.	Using cleaning methods which alter or damage the historic color, texture, and finish of the metal, or cleaning when it is inappropriate for the particular metal.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

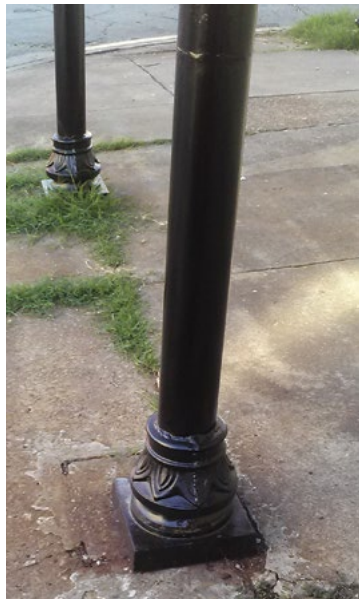
RECOMMENDED	NOT RECOMMENDED
Using non-corrosive chemical methods to clean soft metals (such as lead, tinplate, terneplate, copper, and zinc) whose finishes can be easily damaged by abrasive methods.	Cleaning soft metals (such as lead, tinplate, terneplate, copper, and zinc) with abrasive methods (including sandblasting, other media blasting, or high-pressure water) which will damage the surface of the metal.
Using the least abrasive cleaning method for hard metals (such as cast iron, wrought iron, and steel) to remove paint buildup and corrosion. If hand scraping and wire brushing have proven ineffective, low-pressure abrasive methods may be used as long as they do not damage the surface.	Using high-pressure abrasive techniques (including sandblasting, other media blasting, or high-pressure water) without first trying gentler cleaning methods prior to cleaning cast iron, wrought iron, or steel.
Applying appropriate paint or other coating systems to historically-coated metals after cleaning to protect them from corrosion.	Applying paint or other coatings to metals (such as copper, bronze or stainless steel) if they were not coated historically.
Repainting historically-painted metal features with colors that are appropriate to the building and district.	Using paint colors on historically-painted metal features that are not appropriate to the building or district.
Applying an appropriate protective coating (such as lacquer or wax) to a metal feature that was historically unpainted, such as a bronze door, which is subject to heavy use.	

[6] A standing-seam sheet metal roof, like the one on the turret of this late 19th century row house, must be kept painted to ensure its preservation.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Protecting adjacent materials when working on metal features.	Failing to protect adjacent materials when working on metal features.
Evaluating the overall condition of metals to determine whether more than protection and maintenance, such as repairs to metal features, will be necessary.	Failing to undertake adequate measures to ensure the protection of metal features.
Repairing, stabilizing, and reinforcing metal by using recognized preservation methods	Removing metals that could be stabilized, repaired, and conserved, or using improper repair techniques, or untrained personnel, potentially causing further damage to historic materials.
The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation,*** *and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of metal features when there are surviving prototypes, such as porch balusters, column capitals or bases, or porch cresting, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire metal feature, such as a column or balustrade, when limited replacement of deteriorated or missing components is appropriate. Using replacement material that does not match the historic metal feature.

[7] (a) After the damaged portions of the base were repaired, (b) the cast-iron columns were cleaned and repainted to protect the metal from rusting.



ROOFS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving roofs and their functional and decorative features that are important in defining the overall historic character of the building. The form of the roof (gable, hipped, gambrel, flat, or mansard) is significant, as are its decorative and functional features (such as cupolas, cresting, parapets, monitors, chimneys, weather vanes, dormers, ridge tiles, and snow guards), roofing material (such as slate, wood, clay tile, metal, roll roofing, or asphalt shingles), and size, color, and patterning.	Altering the roof and roofing materials which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic roofing material instead of repairing or replacing only the deteriorated material. Changing the type or color of roofing materials.
Stabilizing deteriorated or damaged roofs as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize a deteriorated or damaged roof until additional work is undertaken, thereby allowing further damage to occur to the historic building
Protecting and maintaining a roof by cleaning gutters and downspouts and replacing deteriorated flashing. Roof sheathing should also be checked for indications of moisture due to leaks or condensation.	Failing to clean and maintain gutters and downspouts properly so that water and debris collect and cause damage to roof fasteners, sheathing, and the underlying structure
Providing adequate anchorage for roofing material to guard against wind damage and moisture penetration.	Allowing flashing, caps, and exposed roof fasteners to corrode, which accelerates deterioration of the roof.
Protecting a leaking roof with a temporary waterproof membrane with a synthetic underlayment, roll roofing, plywood, or a tarpaulin until it can be repaired.	Leaving a leaking roof unprotected so that accelerated deterioration of historic building materials (such as masonry, wood, plaster, paint, and structural members) occurs.
Repainting a roofing material that requires a protective coating and was painted historically (such as a terneplate metal roof or gutters) as part of regularly-scheduled maintenance.	Failing to repaint a roofing material that requires a protective coating and was painted historically as part of regularly-scheduled maintenance.
Protecting a roof covering when working on other roof features.	Failing to protect roof coverings when working on other roof features.
Evaluating the overall condition of the roof to determine whether more than protection and maintenance, such as repairs to roof features, will be necessary.	Failing to undertake adequate measures to ensure the protection of roof features.
Repairing a roof by ensuring that the existing historic roof or compatible non-historic roof covering is sound and waterproof.	Removing historic materials that could be repaired or using improper repair techniques. Failing to reuse intact slate or tile when only the roofing substrate or fasteners need replacement.

[8] Regular maintenance includes removing leaves that can clog gutters and cause water damage to the exterior and interior walls of a house.

ROOFS

RECOMMENDED	NOT RECOMMENDED
Using corrosion-resistant roof fasteners (e.g., nails and clips) to repair a roof to help extend its longevity.	
*The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment **Preservation**, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of roof features when there are surviving prototypes, such as ridge tiles, roof cresting, or dormer trim, slates, or tiles, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire roof feature, such as a chimney or dormer, when limited replacement of deteriorated or missing components is appropriate. Using replacement material that does not match the historic roof feature.

[9] Distinctively-shaped roofs are important in defining the historic character of these early 20th-century structures: (a) an asphalt shingle roof on a house; (b) and a concrete roof on Fonthill, Doylestown, PA (1908-1912), designed and built by Henry Chapman Mercer.

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving windows and their functional and decorative features that are important to the overall historic character of the building. The window material and how the window operates (e.g., double hung, casement, awning, or hopper) are significant, as are its components (including sash, muntins, ogee lugs, glazing, pane configuration, sills, mullions, casings, or brick molds) and related features, such as shutters.	Altering windows or window features which are important in defining the historic character of the building so that, as a result, the character is diminished. Changing the appearance of windows that contribute to the historic character of the building by replacing materials, finishes, or colors which noticeably change the sash, depth of reveal, and muntin configuration; the reflectivity and color of the glazing; or the appearance of the frame. Obscuring historic wood window trim with metal or other material.
Stabilizing deteriorated or damaged windows as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize deteriorated or damaged windows as a preliminary measure, when necessary, prior to undertaking preservation work.
Protecting and maintaining the wood or metal which comprises the window jamb, sash, and trim through appropriate surface treatments, such as cleaning, paint removal, and reapplication of the same protective coating systems.	Failing to protect and maintain materials on a cyclical basis so that deterioration of the window results.
Protecting windows against vandalism before work begins by covering them and by installing alarm systems that are keyed into local protection agencies.	Leaving windows unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected windows.
Installing impact-resistant glazing, when necessary for security, so that it is compatible with the historic windows and does not damage them or negatively impact their character.	Installing impact-resistant glazing, when necessary for security, that is not compatible with the historic windows and damages them or negatively impacts their character.
Making windows weathertight by recaulking gaps in fixed joints and replacing or installing weatherstripping.	Replacing windows rather than maintaining the sash, frame, or glazing.
Protecting windows from chemical cleaners, paint, or abrasion during work on the exterior of the building.	Failing to protect historic windows from chemical cleaners, paint, or abrasion when work is being done on the exterior of the building.
Protecting and retaining historic glass when replacing putty or repairing other components of the window.	Failing to protect the historic glass when making repairs.

[10] Historic exterior storm windows preserve and help to insulate wood windows.

[11] Old and brittle glazing putty should be removed carefully before reputtying to keep window glazing weathertight.

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Sustaining the historic operability of windows by lubricating friction points and replacing broken components of the operating system (such as hinges, latches, sash chains or cords) or replacing deteriorated gaskets or insulating units.	Failing to maintain windows and window components so that windows are inoperable, or sealing operable sash permanently. Failing to repair and reuse window hardware such as sash lifts, latches, and locks
Adding storm windows with a matching or a one-over-one pane configuration that will not obscure the characteristics of the historic windows. Storm windows improve energy efficiency and are especially beneficial when installed over wood windows because they also protect them from accelerated deterioration.	
Protecting adjacent materials when working on windows.	Failing to protect adjacent materials when working on windows.
Evaluating the overall condition of windows to determine whether more than protection and maintenance, such as repairs to windows and window features, will be necessary.	Failing to undertake adequate measures to ensure the protection of windows.
Repairing window frames and sash by patching, splicing, consolidating, or otherwise reinforcing them using recognized preservation methods.	Removing window frames or sash that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or untrained personnel, potentially causing furthur damage to historic buildings.
Using corrosion-resistant roof fasteners (e.g., nails and clips) to repair a roof to help extend its longevity.	
*The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment **Preservation**, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of windows when there are surviving prototypes, such as frames or sash, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire window when limited replacement of deteriorated or missing components is appropriate. Using replacement material that does not match the historic window.

ENTRANCES AND PORCHES

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving entrances and porches and their functional and decorative features that are important in defining the overall historic character of the building. The materials themselves (including wood, masonry, and metal) are significant, as are the features, such as doors, transoms, pilasters, columns, balustrades, stairs, roofs, and projecting canopies.	Altering entrances and porches which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic entrance and porch features instead of repairing or replacing only the deteriorated material.
Stabilizing deteriorated or damaged entrances and porches as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize a deteriorated or damaged entrance or porch until additional work is undertaken, thereby allowing further damage to occur to the historic building.

[13] It is important that exposed swallow tail porch rafters be kept painted to protect them from water damage.

[12] Repair and limited replacement in kind to match deteriorated wood porch features is always a recommended preservation treatment.

ENTRANCES AND PORCHES

RECOMMENDED	NOT RECOMMENDED
Protecting and maintaining the masonry, wood, and metals which comprise entrances and porches through appropriate surface treatments, such as cleaning, paint removal, and reapplication of protective coating systems.	Failing to protect and maintain historic materials on a cyclical basis so that deterioration of entrances and porches results.
Protecting entrances and porches against arson and vandalism before work begins by covering them and by installing alarm systems keyed into local protection agencies.	Leaving entrances and porches unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected entrances.
Protecting entrance and porch features when working on other features of the building.	Failing to protect historic entrances and porches when working on other features of the building.
Evaluating the overall condition of entrances and porches to determine whether more than protection and maintenance, such as repairs to entrance and porch features, will be necessary.	Failing to undertake adequate measures to ensure the protection of entrance and porch features.
Repairing entrances and porches by patching, splicing, consolidating, or otherwise reinforcing them using recognized preservation methods.	Removing entrances and porches or their features that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or untrained personnel, potentially causing further damage to historic materials.
*The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment **Preservation**, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of entrance and porch features when there are surviving prototypes, such as railings, balustrades, cornices, columns, sidelights, stairs, and roofs, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire entrance or porch feature when limited replacement of deteriorated and missing components is appropriate. Using replacement material that does not match the historic entrance or porch feature.

STOREFRONTS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving storefronts and their functional and decorative features that are important in defining the overall historic character of the building. The storefront materials (including wood, masonry, metals, ceramic tile, clear glass, and pigmented structural glass) and the configuration of the storefront are significant, as are features, such as display windows, base panels, bulkheads, signs, doors, transoms, kick plates, corner posts, piers, and entablatures.	Altering storefronts and their features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic storefront features instead of repairing or replacing only the deteriorated material.
Stabilizing deteriorated or damaged storefronts as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize a deteriorated or damaged storefront until additional work is undertaken, thereby allowing further damage to occur to the historic building.
Protecting and maintaining masonry, wood, glass, ceramic tile, and metals which comprise storefronts through appropriate treatments, such as cleaning, paint removal, and reapplication of protective coating systems.	Failing to protect and maintain historic materials on a cyclical basis so that deterioration of storefront features results.
Protecting storefronts against arson and vandalism before work begins by covering windows and doors and by installing alarm systems keyed into local protection agencies.	Leaving the storefront unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through an unprotected storefront.
Protecting the storefront when working on other features of the building.	Failing to protect the storefront when working on other features of the building.

[14] The signage is an original and integral part of this historic Carrara glass storefront.

STOREFRONTS

RECOMMENDED	NOT RECOMMENDED
Evaluating the overall condition of the storefront to determine whether more than protection and maintenance, such as repairs to storefront features, will be necessary.	Failing to undertake adequate measures to ensure the protection of storefront features.
Repairing storefronts by patching, splicing, consolidating, or otherwise reinforcing them using recognized preservation methods.	Removing historic material that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or untrained personnel, potentially causing further damage to historic materials.
The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation****, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of storefronts when there are surviving prototypes, such as doors, transoms, kick plates, base panels, bulkheads, piers, or signs, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire feature or storefront when limited replacement of deteriorated and missing components is appropriate. Using replacement material that does not match the historic storefront feature.

[15] Regular maintenance has helped to preserve this historic storefront, which retains all of its character-defining features, including the granite bulkhead, multi-paned transom glazing, and recessed entrance.

CURTAIN WALLS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving curtain wall systems and their components that are important in defining the overall historic character of the building. The design of the curtain wall is significant, as are its component materials (metal stick framing and panel materials, such as clear or spandrel glass, stone, terra cotta, metal, and fiber-reinforced plastic), appearance (e.g., glazing color or tint, transparency, and reflectivity), and whether the glazing is fixed, operable, or louvered glass panels. How a curtain wall is engineered and fabricated, and the fact that it expands and contracts at a different rate from the building's structural system, are important to understand when undertaking the preservation of a curtain wall system.	Altering curtain wall components which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic curtain wall features instead of repairing or replacing only the deteriorated components.
Stabilizing deteriorated or damaged curtain walls as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize deteriorated or damaged curtain walls until additional work is undertaken, thereby allowing further damage to occur to the historic building.
Protecting and maintaining curtain walls and their components through appropriate surface treatments, such as cleaning and reapplication of protective coating systems; and by making them watertight and ensuring that sealants and gaskets are in good condition.	Failing to protect and maintain curtain wall components on a cyclical basis so that deterioration of curtain walls results. Failing to identify and treat the various causes of curtain wall failure, such as open gaps between components where sealants have deteriorated or are missing.
Protecting ground-level curtain walls from vandalism before work begins by covering them, while ensuring adequate ventilation, and by installing alarm systems keyed into local protection agencies.	Leaving ground-level curtain walls unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected entrances.
Installing impact-resistant glazing in a curtain wall system, when necessary for security or to meet code requirements, so that it is compatible with the historic curtain walls and does not damage them or negatively impact their character.	Installing impact-resistant glazing in a curtain wall system, when necessary for security, that is not compatible with the historic curtain walls and damages them or negatively impacts their character.

CURTAIN WALLS

RECOMMENDED	NOT RECOMMENDED
Cleaning curtain wall systems only when necessary to halt deterioration or to remove heavy soiling.	Cleaning curtain wall systems when they are not heavily soiled, thereby needlessly introducing chemicals or moisture into historic materials.
Carrying out cleaning tests, when it has been determined that cleaning is appropriate, using only cleaning materials that will not damage components of the system, including factory-applied finishes. Test areas should be examined to ensure that no damage has resulted.	Cleaning curtain wall systems without testing first or using cleaning materials that may damage components of the system.
Evaluating the overall condition of curtain walls to determine whether more than protection and maintenance, such as repairs to curtain wall components, will be necessary.	Failing to undertake adequate measures to ensure the protection of curtain wall components.
Repairing curtain walls by ensuring that they are watertight by augmenting existing components or replacing deteriorated or missing sealants or gaskets, where necessary, to seal any gaps between system components.	Removing curtain wall components that could be stabilized, repaired, and conserved, or using improper repair techniques, or untrained personnel, potentially causing further damage to historic materials.
The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation****, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of a curtain wall system when there are surviving prototypes or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire curtain wall feature when limited replacement of deteriorated and missing components is appropriate. Using replacement material that does not match the historic curtain wall feature.

[16] Plywood provides temporary protection for an opening where a damaged spandrel panel was removed until a matching replacement panel can be installed.

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving structural systems and visible features of systems that are important in defining the overall historic character of the building. This includes the materials that comprise the structural system (i.e., wood, metal, and masonry), the type of system, and its features, such as posts and beams, trusses, summer beams, vigas, cast-iron or masonry columns, above-grade stone foundation walls, or load-bearing masonry walls.	Altering visible features of historic structural systems which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Overloading the existing structural system, or installing equipment or mechanical systems which could damage the structure. Replacing a load-bearing masonry wall that could be augmented and retained. Leaving known structural problems untreated, such as deflected beams, cracked and bowed walls, or racked structural members.
Stabilizing deteriorated or damaged structural systems as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize a deteriorated or damaged structural system until additional work is undertaken, thereby allowing further damage to occur to the historic building. Failing to protect and maintain the structural system on a cyclical basis so that deterioration of the structural system results.
Protecting and maintaining the structural system by keeping gutters and downspouts clear and roofing in good repair; and by ensuring that wood structural members are free from insect infestation.	Using treatments or products that may retain moisture, which accelerates deterioration of structural members.

[17] Distinctive examples of traditional construction techniques should be preserved, such as this wooden peg, which is part of the structural system of this late-19th-century warehouse.

[18] A massive, exposed, concrete structural system defines the historic character of the interior of St. John's Abbey, Collegeville, MN, designed by Marcel Breuer and constructed in 1961.

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
Evaluating the overall condition of the structural system to determine whether more than protection and maintenance, such as repairs to structural features, will be necessary.	Failing to undertake adequate measures to ensure the protection of structural systems.
Repairing the structural system by augmenting individual components, using recognized preservation methods. For example, weakened structural members (such as floor framing) can be paired or sistered with a new member, braced, or otherwise supplemented and reinforced.	Upgrading the building structurally in a manner that diminishes the historic character of the exterior (such as installing strapping channels or removing a decorative cornice) or that damages interior features or spaces. Replacing a structural member or other feature of the structural system when it could be augmented and retained.
The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation****, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind those visible portions or features of the structural system that are either extensively deteriorated or missing when there are surviving prototypes, such as cast-iron columns and sections of load-bearing walls, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire curtain wall feature when limited replacement of deteriorated and missing components is appropriate. Using replacement material that does not match the historic curtain wall feature.
Considering the use of substitute material to replace structural features that are not visible. Substitute material must be structurally sufficient and physically compatible with the rest of the system.	Using substitute material that does not equal the load-bearing capabilities of the historic material or is physically incompatible with the structural system.

MECHANICAL SYSTEMS:
HEATING, AIR CONDITIONING, ELECTRICAL, AND PLUMBING

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving visible features of early mechanical systems that are important in defining the overall historic character of the building, such as radiators, vents, fans, grilles, and plumbing and lighting fixtures.	Removing or altering visible features of mechanical systems that are important in defining the overall historic character of the building so that, as a result, the character is diminished.
Stabilizing functioning mechanical systems as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize a functioning mechanical system and its visible features until additional work is undertaken.
Protecting and maintaining functioning mechanical, plumbing, and electrical systems and their features through cyclical maintenance.	Failing to protect and maintain functioning mechanical, plumbing, and electrical systems on a cyclical basis so that their deterioration results.
Improving the energy efficiency of existing mechanical systems to help reduce the need for a new system by installing storm windows, insulating attics and crawl spaces, or adding awnings, if appropriate.	
Evaluating the overall condition of functioning mechanical systems to determine whether more than protection and maintenance, such as repairs to mechanical system components, will be necessary.	Failing to undertake adequate measures to ensure the protection of structural systems.
Repairing mechanical systems by augmenting or upgrading system components (such as installing new pipes and ducts), rewiring, or adding new compressors or boilers.	Replacing a mechanical system when its components could be upgraded and retained.

MECHANICAL SYSTEMS:
HEATING, AIR CONDITIONING, ELECTRICAL, AND PLUMBING

RECOMMENDED	NOT RECOMMENDED
*The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment **Preservation**, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind those extensively deteriorated or missing visible features of mechanical systems when there are surviving prototypes, such as ceiling fans, radiators, grilles, or lighting fixtures.	Installing a visible replacement feature that does not convey the same appearance.
*The following work should be considered in a **Preservation** project when the installation of new mechanical equipment or an entire system is required to make the building functional.*	
Installing a new mechanical system, if required, so that it results in the least alteration possible to the historic building and its character-defining features.	Installing a new mechanical system so that character-defining structural or interior features are radically changed, damaged, or destroyed.
Providing adequate structural support for new mechanical equipment.	Failing to consider the weight and design of new mechanical equipment so that, as a result, historic structural members or finished surfaces are weakened or cracked.
Installing new mechanical and electrical systems and ducts, pipes, and cables in closets, service areas, and wall cavities to preserve the historic character of the interior space.	Installing ducts, pipes, and cables where they will obscure character-defining features or negatively impact the historic character of the interior. Concealing mechanical equipment in walls or ceilings in a manner that results in extensive loss or damage or otherwise obscures historic building materials and character-defining features.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving a floor plan or interior spaces, features, and finishes that are important in defining the overall historic character of the building. Significant spatial characteristics include the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves, such as lobbies, lodge halls, entrance halls, parlors, theaters, auditoriums, gymnasiums, and industrial and commercial interiors. Color, texture, and pattern are important characteristics of features and finishes, which can include such elements as columns, plaster walls and ceilings, flooring, trim, fireplaces and mantels, paneling, light fixtures, hardware, decorative radiators, ornamental grilles and registers, windows, doors, and transoms; plaster, paint, wallpaper and wall coverings, and special finishes, such as marbleizing and graining; and utilitarian (painted or unpainted) features, including wood, metal, or concrete exposed columns, beams, and trusses and exposed load-bearing brick, concrete, and wood walls.	Altering a floor plan, interior spaces (including individual rooms), features, or finishes which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic interior features and finishes instead of repairing or replacing only the deteriorated portion. Installing new material that obscures or damages character-defining interior features and finishes. Removing paint, plaster, or other finishes from historically-finished interior surfaces and leaving the features exposed (e.g., removing plaster to expose brick walls or a brick chimney breast, stripping paint from wood to stain or varnish it, or removing a plaster ceiling to expose unfinished beams). Applying paint, plaster, or other coatings to surfaces that have been unfinished historically, thereby changing their character. Changing the type of finish or its color, such as painting a historically-varnished wood feature, or removing paint from a historically-painted feature.
Stabilizing deteriorated or damaged interior features and finishes as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize a deteriorated or damaged interior feature or finish until additional work can be undertaken, thereby allowing further damage to occur to the interior.
Protecting and maintaining historic materials (including plaster, masonry, wood, and metals) which comprise interior features through appropriate surface treatments, such as cleaning, paint removal, and reapplication of protective coating systems.	Failing to protect and maintain interior materials and finishes on a cyclical basis so that deterioration of interior features results.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Protecting interior features and finishes against arson and vandalism before project work begins by erecting temporary fencing or by covering broken windows and open doorways, while ensuring adequate ventilation, and by installing alarm systems keyed into local protection agencies.	Leaving the building unprotected and subject to vandalism before work begins, thereby allowing the interior to be damaged if it can be accessed through unprotected openings.
Protecting interior features (such as a staircase, mantel, flooring, or decorative finishes) from damage during project work by covering them with plywood, heavy canvas, or plastic sheeting.	Failing to protect interior features and finishes when working on the interior.

[19] The sweeping staircase with its metal railing, chandelier, and terrazzo floor in the lobby of the 1954 Simms Building, Albuquerque, NM, are character-defining features. *Photo: Harvey M. Kaplan.*

[20] It is important to protect decorative interior features, such as this highly-glazed tile wainscoting in a historic train station, when painting the walls above it.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Removing damaged or deteriorated paint and finishes only to the next sound layer using the gentlest method possible prior to repainting or refinishing using compatible paint or other coating systems.	Removing paint that is firmly adhered to interior materials and features.
Using abrasive cleaning methods only on the interior of industrial or warehouse buildings with utilitarian, unplastered masonry walls and where wood features are not finished, molded, beaded, or worked by hand. Low-pressure abrasive cleaning (e.g., sand-blasting or other media blasting) should only be considered if test patches show no surface damage and after gentler methods have proven ineffective.	Using abrasive methods anywhere but utilitarian and industrial interior spaces or when there are other cleaning methods that are less likely to damage the surface of the material.
Evaluating the overall condition of the interior materials, features, and finishes to determine whether more than protection and maintenance, such as repairs to features and finishes, will be necessary.	Failing to undertake adequate measures to ensure the protection of interior materials, features, and finishes.
Repairing interior features and finishes by patching, splicing, consolidating, or otherwise reinforcing the materials using recog-nized preservation methods.	Removing interior features or finishes that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or untrained personnel, potentially causing fur-ther damage to historic materials.
The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation****, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of interior features when there are surviving prototypes (such as stairs, balustrades, wood paneling, columns, decorative wall finishes, and ornamental plaster or pressed-metal ceilings); or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire interior feature when limited replacement of deteriorated and missing components is appropriate. Using replacement material that does not match the historic interior feature or finish.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving features of the building site that are important in defining its overall historic character. Site features may include walls, fences, or steps; circulation systems, such as walks, paths, or roads; vegetation, such as trees, shrubs, grass, orchards, hedges, windbreaks, or gardens; landforms, such as hills, terracing, or berms; furnishings and fixtures, such as light posts or benches; decorative elements, such as sculpture, statuary, or monuments; water features, including fountains, streams, pools, lakes, or irrigation ditches; and subsurface archeological resources, other cultural or religious features, or burial grounds which are also important to the site.	Altering buildings and their features or site features which are important in defining the overall historic character of the property so that, as a result, the character is diminished.
Retaining the historic relationship between buildings and the landscape.	Removing or relocating buildings or landscape features, thereby destroying the historic relationship between buildings and the landscape.

[21] (a) The formal garden on the property of the 1826 Beauregard-Keyes House in New Orleans (b) is integral to the character of the site.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Stabilizing deteriorated or damaged building and site features as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize a deteriorated or damaged building or site feature until additional work can be undertaken, thereby allowing further damage to occur to the building site.
Protecting and maintaining buildings and site features by providing proper drainage to ensure that water does not erode foundation walls, drain toward the building, or damage or erode the landscape.	Failing to ensure that site drainage is adequate so that buildings and site features are damaged or destroyed; or, alternatively, changing the site grading so that water does not drain properly.
Minimizing disturbance of the terrain around buildings or elsewhere on the site, thereby reducing the possibility of destroying or damaging important landscape features, archeological resources, other cultural or religious features, or burial grounds.	Using heavy machinery or equipment in areas where it may disturb or damage important landscape features, archeological resources, other cultural or religious features, or burial grounds.
Protecting (e.g., preserving in place) important site features, archeological resources, other cultural or religious features, or burial grounds.	Leaving known site features or archeological material unprotected so that it is damaged during preservation work.
Planning and carrying out any necessary investigation before preservation begins, using professional archeologists and methods when preservation in place is not feasible.	Allowing unqualified personnel to perform data recovery on archeological resources, which can result in damage or loss of important archeological material.
Preserving important landscape features through regularly-scheduled maintenance of historic plant material.	Allowing important landscape features or archeological resources to be lost, damaged, or to deteriorate due to inadequate protection or lack of maintenance.
Protecting the building site and landscape features against arson and vandalism before preservation work begins by erecting temporary fencing and by installing alarm systems keyed into local protection agencies.	Leaving the property unprotected and subject to vandalism before work begins so that the building site and landscape features, archeological resources, other cultural or religious features, or burial grounds can be damaged or destroyed.
Installing protective fencing, bollards, and stanchions on a building site, when necessary for security, that are as unobtrusive as possible.	Installing protective fencing, bollards, and stanchions on a building site, when necessary for security, without taking into consideration their location and visibility so that they negatively impact the historic character of the site.
Providing continued protection and maintenance of buildings and landscape features on the site through appropriate grounds or landscape management.	Removing or destroying features from the site, such as fencing, paths or walkways, masonry balustrades, or plant material.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Protecting building and landscape features when working on the site.	Failing to protect building and landscape features during work on the site.
Evaluating the overall condition of the site to determine whether more than protection and maintenance, such as repairs to materials and features, will be necessary.	Failing to undertake adequate measures to ensure the protection of the site.
Repairing building and site features which have damaged, deteriorated, or missing components to reestablish the whole feature and to ensure retention of the integrity of historic materials.	Failing to repair damaged or deteriorated site features.
The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment ***Preservation****, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing features of the site when there are surviving prototypes, such as part of a fountain, portions of a walkway, or a hedge, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, and color.	Replacing an entire feature of the building or site when limited replacement of deteriorated or missing components is appropriate. Using replacement material that does not match the historic site feature.

[22 a-b] The 1907 Commander General's Quarters facing Continental Park is one of many important structures that contribute to the historic significance and character of Fort Monroe, a National Monument, in Hampton, VA.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving building and landscape features that are important in defining the overall historic character of the setting. Such features can include circulation systems, such as roads and streets; furnishings and fixtures, such as light posts or benches; vegetation, gardens, and yards; adjacent open space, such as fields, parks, commons, or woodlands; and important views or visual relationships.	Altering those building and landscape features of the setting which are important in defining its historic character so that, as a result, the character is diminished.
Retaining the historic relationship between buildings and landscape features in the setting. For example, preserving the relationship between a town common or urban plaza and the adjacent houses, municipal buildings, roads, and landscape and streetscape features.	Altering the relationship between the buildings and landscape features in the setting by widening existing streets, changing landscape materials, or locating new streets or parking areas where they may negatively impact the historic character of the setting. Removing or relocating historic buildings or landscape features, thereby destroying the historic relationship between buildings and the landscape in the setting.

[23] The city square is important in defining the character of the historic setting in this small town.

[24] Cast-iron porches and wrought-iron fences from the late 19th century typify this block in an urban historic district.

[25] Street names in tile set into the sidewalk are distinctive features in this historic district.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Stabilizing deteriorated or damaged building or landscape features in the setting as a preliminary measure, when necessary, prior to undertaking preservation work.	Failing to stabilize a deteriorated or damaged building or landscape feature in the setting until additional work can be undertaken, thereby allowing further damage to occur to the setting.
Protecting and maintaining historic features in the setting through regularly-scheduled maintenance and landscape management.	Failing to protect and maintain materials in the setting on a cyclical basis so that deterioration of building and landscape features results. Stripping or removing historic features from buildings or the setting, such as a porch, fencing, walkways, or plant material.
Installing protective fencing, bollards, and stanchions in the setting, when necessary for security, that are as unobtrusive as possible.	Installing protective fencing, bollards, and stanchions in the setting, when necessary for security, without taking into consideration their location and visibility so that they negatively impact the historic character of the setting.
Protecting building and landscape features when undertaking work in the setting.	Failing to protect building and landscape features during work in the setting.
Evaluating the overall condition of materials and features to determine whether more than protection and maintenance, such as repairs to materials and features in the setting, will be necessary.	Failing to undertake adequate measures to ensure the protection of materials and features of the setting.
Repairing features in the setting by reinforcing the historic materials, using recognized preservation methods.	Removing material that could be repaired or using improper repair techniques.
*The following work is highlighted to indicate that it represents the greatest degree of intervention generally recommended within the treatment **Preservation**, and should only be considered after protection, stabilization, and repair concerns have been addressed.*	
Limited Replacement in Kind	
Replacing in kind extensively deteriorated or missing components of building and landscape features in the setting when there are surviving prototypes, such as balustrades or paving materials, or when the replacement can be based on documentary or physical evidence. The new work should match the old in material, design, scale, and color.	Replacing an entire feature of the building or landscape when limited replacement of deteriorated or missing components is appropriate. Using replacement material that does not match the historic building or landscape feature.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Sensitive solutions to meeting code requirements are an important part of protecting the historic character of the building and site. Thus, work that must be done to meet accessibility and life-safety requirements in the treatment ***Preservation*** *must also be assessed for its potential impact on the historic building and site.*	
ACCESSIBILITY	
Identifying the historic building's character-defining exterior features, interior spaces, features, and finishes, and features of the site and setting which may be affected by accessibility code-required work.	Undertaking accessibility code-required alterations before identifying those exterior features, interior spaces, features, and finishes, and features of the site and setting which are character defining and, therefore, must be preserved.
Complying with barrier-free access requirements in such a manner that the historic building's character-defining exterior features, interior spaces, features, and finishes, and features of the site and setting are preserved or impacted as little as possible.	Altering, damaging, or destroying character-defining exterior features, interior spaces, features, and finishes, or features of the site and setting while making modifications to a building, its site, or setting to comply with accessibility requirements.
Working with specialists in accessibility and historic preservation to determine the most sensitive solutions to comply with access requirements in a historic building, its site, and setting.	Making changes to historic buildings, their sites, and setting without first consulting with specialists in accessibility and historic preservation to determine the most appropriate solutions to comply with accessibility requirements.
Providing barrier-free access that promotes independence for the user while preserving significant historic features.	Making access modifications that do not provide independent, safe access or preserve historic features.
Finding solutions to meet accessibility requirements that minimize the impact of any necessary alteration for accessibility on the historic building, its site, or setting, such as compatible ramps, paths, and lifts.	Making modifications for accessibility without considering the impact on the historic building, its site, and setting.

CODE-REQUIRED WORK

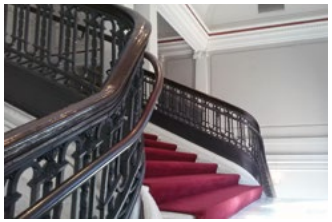
RECOMMENDED	NOT RECOMMENDED
Using relevant sections of existing codes regarding accessibility for historic buildings that provide alternative means of compliance when code-required work would otherwise negatively impact the historic character of the property.	
Minimizing the visual impact of accessibility ramps by installing them on secondary elevations when it does not compromise accessibility or by screening them with plantings.	
Adding a gradual slope or grade to the sidewalk, if appropriate, to access the entrance rather than installing a ramp that would be more intrusive to the historic character of the building and the district.	
Installing a lift as inconspicuously as possible when it is necessary to locate it on a primary elevation of the historic building.	Installing a lift at a primary entrance without considering other options or locations.

[26] A temporary ramp–unobtrusive and easily removed–facilitates access to the entrance of this museum and does not affect its historic character.

[27] The access ramp at the left of the entrance is concealed by a hedge which minimizes its visibility and impact on the character of the historic apartment building.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
LIFE SAFETY	
Identifying the historic building's character-defining exterior features, interior spaces, features, and finishes, and features of the site and setting which may be affected by life-safety code-required work.	Undertaking life-safety code-required alterations before identifying those exterior features, interior spaces, features, and finishes, and features of the site and setting which are character defining and, therefore, must be preserved.
Complying with life-safety codes (including requirements for impact-resistant glazing, security, and seismic retrofit) in such a manner that the historic building's character-defining exterior features, interior spaces, features, and finishes, and features of the site and setting are preserved or impacted as little as possible.	Altering, damaging, or destroying character-defining exterior features, interior spaces, features, and finishes, or features of the site and setting while making modifications to a building, its site, or setting to comply with life-safety code requirements.
Removing building materials only after testing has been conducted to identify any hazardous materials, and using only the least damaging abatement methods.	Removing building materials without testing first to identify any hazardous materials, or using potentially damaging methods of abatement.
Providing workers with appropriate personal equipment for protection from hazards on the worksite.	Removing hazardous or toxic materials without regard for workers' health and safety or environmentally-sensitive disposal of the materials.
Working with code officials and historic preservation specialists to investigate systems, methods, or devices to make the building compliant with life-safety codes to ensure that necessary alterations will be compatible with the historic character of the building.	Making life-safety code-required changes to the building without consulting code officials and historic preservation specialists, with the result that alterations negatively impact the historic character of the building.
Using relevant sections of existing codes regarding life safety for historic buildings that provide alternative means of code compliance when code-required work would otherwise negatively impact the historic character of the building.	
Upgrading historic stairways and elevators to meet life-safety codes so that they are not damaged or otherwise negatively impacted.	Damaging or making inappropriate alterations to historic stairways and elevators or to adjacent spaces, features, or finishes in the process of doing work to meet code requirements.
Installing sensitively-designed fire-suppression systems, such as sprinklers, so that historic features and finishes are preserved.	Covering character-defining wood features with fire-retardant sheathing, which results in altering their appearance.
Applying fire-retardant coatings when appropriate, such as intumescent paint, to protect steel structural systems.	Using fire-retardant coatings if they will damage or obscure character-defining features.



[28] A simple railing added on the inner side of an elaborate wood and cast-iron stair railing meets life-safety code requirements without greatly impacting its historic character.

[29] A safety cone outside of a house where lead paint is being removed warns of the hazardous conditions on the site.

RESILIENCE TO NATURAL HAZARDS

RECOMMENDED	NOT RECOMMENDED
Resilience to natural hazards should be addressed as part of a ***Preservation*** *project. A historic building may have existing characteristics or features that help to address or minimize the impacts of natural hazards. These should always be used to best advantage when considering new adaptive treatments so as to have the least impact on the historic character of the building, its site, and setting.*	
Identifying the vulnerabilities of the historic property to the impacts of natural hazards (such as wildfires, hurricanes, or tornadoes) using the most current climate information and data available.	Failing to identify and periodically reevaluate the potential vulnerability of the building, its site, and setting to the impacts of natural hazards.
Assessing the potential impacts of known vulnerabilities on character-defining features of the building, its site, and setting, and reevaluating and reassessing potential impacts on a regular basis.	
Documenting the property and its character-defining features as a record and guide for future repair work, should it be necessary, and storing the documentation in a weatherproof location.	Failing to document the historic property and its character-defining features with the result that such information is not available in the future to guide repair or reconstruction work, should it be necessary.
Ensuring that historic resource inventories and maps are accurate, up to date, and accessible in an emergency.	
Maintaining the building, its site, and setting in good repair, and regularly monitoring character-defining features.	Failing to regularly monitor and maintain the property and building systems in good repair.
Using and maintaining existing characteristics and features of the historic building, its site, setting, and larger environment (such as shutters for storm protection or a site wall that keeps out flood waters) that may help to avoid or minimize the impacts of natural hazards.	
Undertaking work to prevent or minimize the loss, damage, or destruction of the historic property while retaining and preserving significant features and the overall historic character of the building, its site, and setting.	Allowing loss, damage, or destruction to occur to the historic building, its site, or setting by failing to evaluate potential future impacts of natural hazards or to plan and implement adaptive measures, if necessary to address possible threats.
Ensuring that, when planning work to adapt for natural hazards, all feasible alternatives are considered, and that options requiring the least alteration are considered first.	

RESILIENCE TO NATURAL HAZARDS

RECOMMENDED	NOT RECOMMENDED
Implementing local and regional traditions (such as elevating residential buildings at risk of flooding or reducing flammable vegetation around structures in fire-prone areas) for adapting buildings and sites to specific natural hazards, when appropriate. Such traditional methods may be appropriate if they are compatible with the historic character of the building, its site, and setting.	Implementing a treatment traditionally used in another region or one typically used for a different property type or architectural style which is not compatible with the historic character of the property.
Using special exemptions and variances when adaptive treatments to protect buildings from known hazards would otherwise negatively impact the historic character of the building, its site, or setting.	
Considering adaptive options, whenever possible, that would protect multiple historic resources, if the treatment can be implemented without negatively impacting the historic character of the setting or district, or archeological resources, other cultural or religious features, or burial grounds.	

[30] Historic window shutters still serve their original function as protection in hurricane-prone areas.

Sustainability

Sustainability should be addressed as part of a **Preservation** project. Good preservation practice is often synonymous with sustainability. Existing energy-efficient features should be retained and repaired. New sustainability treatments generally should be limited to updating existing features and systems to have the least impact on the historic character of the building.

The topic of sustainability is addressed in detail in ***The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings***. Although specifically developed for the treatment Rehabilitation, the Sustainability Guidelines can be used to help guide the other treatments.

[31] An interior screen door at the entrance to individual apartments is a historic feature traditionally used to help circulate air throughout the building.

STANDARDS FOR REHABILITATION & GUIDELINES FOR REHABILITATING HISTORIC BUILDINGS

Rehabilitation

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Standards for Rehabilitation

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

GUIDELINES FOR REHABILITATING HISTORIC BUILDINGS

INTRODUCTION

In **Rehabilitation,** historic building materials and character-defining features are protected and maintained as they are in the treatment Preservation. However, greater latitude is given in the **Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings** to replace extensively deteriorated, damaged, or missing features using either the same material or compatible substitute materials. Of the four treatments, only **Rehabilitation** allows alterations and the construction of a new addition, if necessary for a continuing or new use for the historic building.

Identify, Retain, and Preserve Historic Materials and Features

The guidance for the treatment **Rehabilitation** begins with recommendations to identify the form and detailing of those architectural materials and features that are important in defining the building's historic character and which must be retained to preserve that character. Therefore, guidance on ***identifying, retaining, and preserving*** character-defining features is always given first.

Protect and Maintain Historic Materials and Features

After identifying those materials and features that are important and must be retained in the process of **Rehabilitation** work, then ***protecting and maintaining*** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. Protection includes the maintenance of historic materials and features as well as ensuring that the property is protected before and during rehabilitation work. A historic building undergoing rehabilitation will often require more extensive work. Thus, an overall evaluation of its physical condition should always begin at this level.

Repair Historic Materials and Features

Next, when the physical condition of character-defining materials and features warrants additional work, ***repairing*** is recommended. **Rehabilitation** guidance for the repair of historic materials, such as masonry, again begins with the least degree of intervention possible. In rehabilitation, repairing also includes the limited replacement in kind or with a compatible substitute material of extensively deteriorated or missing components of features when there are surviving prototypes features that can be substantiated by documentary and physical evidence. Although using the same kind of material is always the preferred option, a substitute material may be an acceptable alternative if the form, design, and scale, as well as the substitute material itself, can effectively replicate the appearance of the remaining features.

Replace Deteriorated Historic Materials and Features

Following repair in the hierarchy, **Rehabilitation** guidance is provided for ***replacing*** an entire character-defining feature with new material because the level of deterioration or damage of materials precludes repair. If the missing feature is character defining or if it is critical to the survival of the building (e.g., a roof), it should be replaced to match the historic feature based on physical or his-

toric documentation of its form and detailing. As with repair, the preferred option is always replacement of the entire feature in kind (i.e., with the same material, such as wood for wood). However, when this is not feasible, a compatible substitute material that can reproduce the overall appearance of the historic material may be considered.

It should be noted that, while the National Park Service guidelines recommend the replacement of an entire character-defining feature that is extensively deteriorated, the guidelines never recommend removal and replacement with new material of a feature that could reasonably be repaired and, thus, preserved.

Design for the Replacement of Missing Historic Features

When an entire interior or exterior feature is missing, such as a porch, it no longer plays a role in physically defining the historic character of the building unless it can be accurately recovered in form and detailing through the process of carefully documenting the historic appearance. If the feature is not critical to the survival of the building, allowing the building to remain without the feature is one option. But if the missing feature is important to the historic character of the building, its replacement is always recommended in the **Rehabilitation** guidelines as the first, or preferred, course of action. If adequate documentary and physical evidence exists, the feature may be accurately reproduced. A second option in a rehabilitation treatment for replacing a missing feature, particularly when the available information about the feature is inadequate to permit an accurate reconstruction, is to ***design*** a new feature that is compatible with the overall historic character of the building. The new design should always take into account the size, scale, and material of the building itself and should be clearly differentiated from the authentic historic features. For properties that have changed over time, and where those changes have acquired significance, reestablishing missing historic features generally should not be undertaken if the missing features did not coexist with the features currently on the building. Juxtaposing historic features that did not exist concurrently will result in a false sense of the building's history.

Alterations

Some exterior and interior alterations to a historic building are generally needed as part of a **Rehabilitation** project to ensure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include changes to the site or setting, such as the selective removal of buildings or other features of the building site or setting that are intrusive, not character defining, or outside the building's period of significance.

Code-Required Work: Accessibility and Life Safety

Sensitive solutions to meeting code requirements in a **Rehabilitation** project are an important part of protecting the historic character of the building. Work that must be done to meet accessibility and life-safety requirements must also be assessed for its potential impact on the historic building, its site, and setting.

Resilience to Natural Hazards

Resilience to natural hazards should be addressed as part of a **Rehabilitation** project. A historic building may have existing characteristics or features that help to address or minimize the impacts of natural hazards. These should always be used to best advantage when considering new adaptive treatments so as to have the least impact on the historic character of the building, its site, and setting.

Sustainability

Sustainability should be addressed as part of a **Rehabilitation** project. Good preservation practice is often synonymous with sustainability. Existing energy-efficient features should be retained and repaired. Only sustainability treatments should be considered that will have the least impact on the historic character of the building.

The topic of sustainability is addressed in detail in *The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings.*

New Exterior Additions and Related New Construction

Rehabilitation is the only treatment that allows expanding a historic building by enlarging it with an addition. However, the **Rehabilitation** guidelines emphasize that new additions should be considered only after it is determined that meeting specific new needs cannot be achieved by altering non-character-defining interior spaces. If the use cannot be accommodated in this way, then an attached exterior addition may be considered. New additions should be designed and constructed so that the character-defining features of the historic building, its site, and setting are not negatively impacted. Generally, a new addition should be subordinate to the historic building. A new addition should be compatible, but differentiated enough so that it is not confused as historic or original to the building. The same guidance applies to new construction so that it does not negatively impact the historic character of the building or its site.

Rehabilitation as a Treatment. *When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.*

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

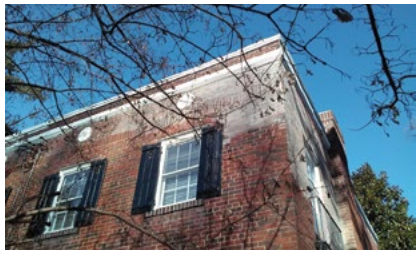
RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving masonry features that are important in defining the overall historic character of the building (such as walls, brackets, railings, cornices, window and door surrounds, steps, and columns) and decorative ornament and other details, such as tooling and bonding patterns, coatings, and color.	Removing or substantially changing masonry features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing or rebuilding a major portion of exterior masonry walls that could be repaired, thereby destroying the historic integrity of the building. Applying paint or other coatings (such as stucco) to masonry that has been historically unpainted or uncoated to create a new appearance. Removing paint from historically-painted masonry.
Protecting and maintaining masonry by ensuring that historic drainage features and systems that divert rainwater from masonry surfaces (such as roof overhangs, gutters, and downspouts) are intact and functioning properly.	Failing to identify and treat the causes of masonry deterioration, such as leaking roofs and gutters or rising damp.
Cleaning masonry only when necessary to halt deterioration or remove heavy soiling.	Cleaning masonry surfaces when they are not heavily soiled to create a "like-new" appearance, thereby needlessly introducing chemicals or moisture into historic materials.
Carrying out masonry cleaning tests when it has been determined that cleaning is appropriate. Test areas should be examined to ensure that no damage has resulted and, ideally, monitored over a sufficient period of time to allow long-range effects to be predicted.	Cleaning masonry surfaces without testing or without sufficient time for the testing results to be evaluated.

[1] An alkaline-based product is appropriate to use to clean historic marble because it will not damage the marble, which is acid sensitive.

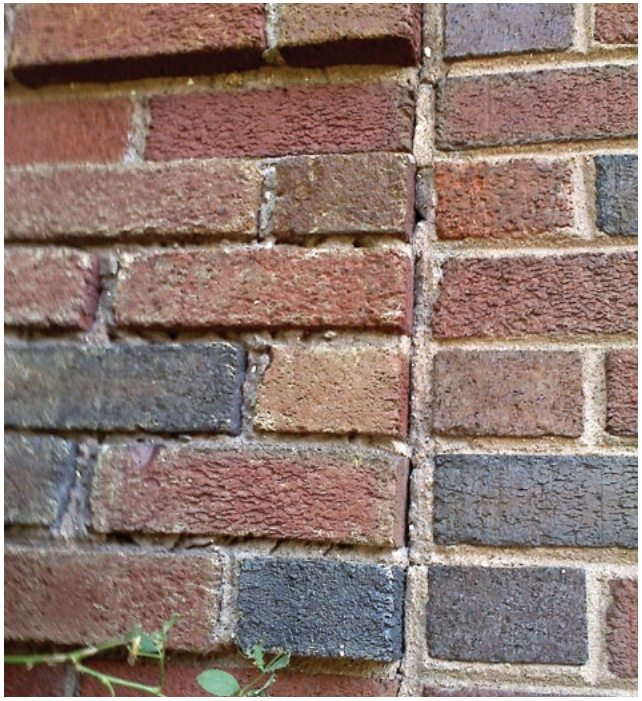
[2] Mid-century modern building technology made possible the form of this parabola-shaped structure and its thin concrete shell construction. Built in 1961 as the lobby of the La Concha Motel in Las Vegas, it was designed by Paul Revere Williams, one of the first prominent African-American architects. It was moved to a new location and rehabilitated to serve as the Neon Museum, and is often cited as an example of Googie architecture. *Credit: Photographed with permission at The Neon Museum, Las Vegas, Nevada.*

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Cleaning soiled masonry surfaces with the gentlest method possible, such as using low-pressure water and detergent and natural bristle or other soft-bristle brushes.	Cleaning or removing paint from masonry surfaces using most abrasive methods (including sandblasting, other media blasting, or high-pressure water) which can damage the surface of the masonry and mortar joints. Using a cleaning or paint-removal method that involves water or liquid chemical solutions when there is any possibility of freezing temperatures. Cleaning with chemical products that will damage some types of masonry (such as using acid on limestone or marble), or failing to neutralize or rinse off chemical cleaners from masonry surfaces.



[3] **Not Recommended:**
The white film on the upper corner of this historic brick row house is the result of using a scrub or slurry coating, rather than traditional repointing by hand, which is the recommended method.



[4] **Not Recommended:**
The quoins on the left side of the photo show that high-pressure abrasive blasting used to remove paint can damage even early 20th-century, hard-baked, textured brick and erode the mortar, whereas the same brick on the right, which was not abrasively cleaned, is undamaged.

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Using biodegradable or environmentally-safe cleaning or paint-removal products.	
Using paint-removal methods that employ a poultice to which paint adheres, when possible, to neatly and safely remove old lead paint.	
Using coatings that encapsulate lead paint, when possible, where the paint is not required to be removed to meet environmental regulations.	
Allowing only trained conservators to use abrasive or laser-cleaning methods, when necessary, to clean hard-to-reach, highly-carved, or detailed decorative stone features.	
Removing damaged or deteriorated paint only to the next sound layer using the gentlest method possible (e.g., hand scraping) prior to repainting.	Removing paint that is firmly adhered to masonry surfaces, unless the building was unpainted historically and the paint can be removed without damaging the surface.
Applying compatible paint coating systems to historically-painted masonry following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting masonry features.
Repainting historically-painted masonry features with colors that are appropriate to the historic character of the building and district.	Using paint colors on historically-painted masonry features that are not appropriate to the historic character of the building and district.
Protecting adjacent materials when cleaning or removing paint from masonry features.	Failing to protect adjacent materials when cleaning or removing paint from masonry features.
Evaluating the overall condition of the masonry to determine whether more than protection and maintenance, such as repairs to masonry features, will be necessary.	Failing to undertake adequate measures to ensure the protection of masonry features.
Repairing masonry by patching, splicing, consolidating, or otherwise reinforcing the masonry using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing parts of masonry features when there are surviving prototypes, such as terra-cotta brackets or stone balusters.	Removing masonry that could be stabilized, repaired, and conserved, or using untested consolidants and unskilled personnel, potentially causing further damage to historic materials. Replacing an entire masonry feature, such as a cornice or balustrade, when repair of the masonry and limited replacement of deteriorated or missing components are feasible.

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Repairing masonry walls and other masonry features by repointing the mortar joints where there is evidence of deterioration, such as disintegrating mortar, cracks in mortar joints, loose bricks, or damaged plaster on the interior.	Removing non-deteriorated mortar from sound joints and then repointing the entire building to achieve a more uniform appearance.
Removing deteriorated lime mortar carefully by hand raking the joints to avoid damaging the masonry.	
Using power tools only on horizontal joints on brick masonry in conjunction with hand chiseling to remove hard mortar that is deteriorated or that is a non-historic material which is causing damage to the masonry units. Mechanical tools should be used only by skilled masons in limited circumstances and generally not on short, vertical joints in brick masonry.	Allowing unskilled workers to use masonry saws or mechanical tools to remove deteriorated mortar from joints prior to repointing.
Duplicating historic mortar joints in strength, composition, color, and texture when repointing is necessary. In some cases, a lime-based mortar may also be considered when repointing Portland cement mortar because it is more flexible.	Repointing masonry units with mortar of high Portland cement content (unless it is the content of the historic mortar). Using "surface grouting" or a "scrub" coating technique, such as a "sack rub" or "mortar washing," to repoint exterior masonry units instead of traditional repointing methods. Repointing masonry units (other than concrete) with a synthetic caulking compound instead of mortar.
Duplicating historic mortar joints in width and joint profile when repointing is necessary.	Changing the width or joint profile when repointing.
Repairing stucco by removing the damaged material and patching with new stucco that duplicates the old in strength, composition, color, and texture.	Removing sound stucco or repairing with new stucco that is different in composition from the historic stucco. Patching stucco or concrete without removing the source of deterioration. Replacing deteriorated stucco with synthetic stucco, an exterior finish and insulation system (EFIS), or other non-traditional materials.

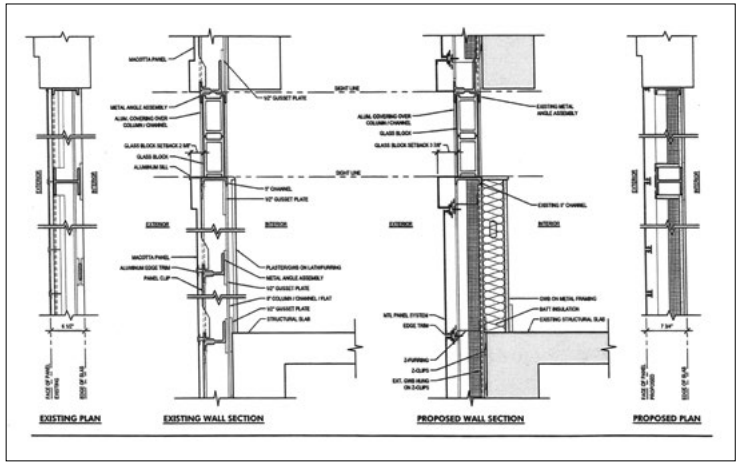
MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Using mud plaster or a compatible lime-plaster adobe render, when appropriate, to repair adobe.	Applying cement stucco, unless it already exists, to adobe.
Sealing joints in concrete with appropriate flexible sealants and backer rods, when necessary.	
Cutting damaged concrete back to remove the source of deterioration, such as corrosion on metal reinforcement bars. The new patch must be applied carefully so that it will bond satisfactorily with and match the historic concrete.	Patching damaged concrete without removing the source of deterioration.

[5] Rebars in the reinforced concrete ceiling have rusted, causing the concrete to spall. The rebars must be cleaned of rust before the concrete can be patched.

[6] Some areas of the concrete brise soleil screen on this building constructed in 1967 are badly deteriorated. If the screen cannot be repaired, it may be replaced in kind or with a composite substitute material with the same appearance as the concrete.

[7] (a) J.W. Knapp's Department Store, built 1937-38, in Lansing, MI, was constructed with a proprietary material named "Maul Macotta" made of enameled steel and cast-in-place concrete panels. Prior to its rehabilitation, a building inspection revealed that, due to a flaw in the original design and construction, the material was deteriorated beyond repair. The architects for the rehabilitation project devised a replacement system (b) consisting of enameled aluminum panels that matched the original colors (c). Photos and drawing (a-b): Quinn Evans Architects; *Photo (c): James Haefner Photography.*



MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Using a non-corrosive, stainless-steel anchoring system when replacing damaged stone, concrete, or terra-cotta units that have failed.	
Applying non-historic surface treatments, such as water-repellent coatings, to masonry only after repointing and only if masonry repairs have failed to arrest water penetration problems.	Applying waterproof, water-repellent, or non-original historic coatings (such as stucco) to masonry as a substitute for repointing and masonry repairs.
Applying permeable, anti-graffiti coatings to masonry when appropriate.	Applying water-repellent or anti-graffiti coatings that change the historic appearance of the masonry or that may trap moisture if the coating is not sufficiently permeable.
Replacing in kind an entire masonry feature that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples can include large sections of a wall, a cornice, pier, or parapet. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Removing a masonry feature that is unrepairable and not replacing it, or replacing it with a new feature that does not match. Using substitute material for the replacement that does not convey the same appearance of the surviving components of the masonry feature.
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a replacement masonry feature, such as a step or door pediment, when the historic feature is completely missing. It may be an accurate restoration based on documentary and physical evidence, but only when the historic feature to be replaced coexisted with the features currently on the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing masonry feature is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature to be replaced did not coexist with the features currently on the building. Introducing a new masonry feature that is incompatible in size, scale, material, or color.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving wood features that are important in defining the overall historic character of the building (such as siding, cornices, brackets, window and door surrounds, and steps) and their paints, finishes, and colors.	Removing or substantially changing wood features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Removing a major portion of the historic wood from a façade instead of repairing or replacing only the deteriorated wood, then reconstructing the façade with new material to achieve a uniform or "improved" appearance. Changing the type of finish, coating, or historic color of wood features, thereby diminishing the historic character of the exterior. Failing to renew failing paint or other coatings that are historic finishes. Stripping historically-painted surfaces to bare wood and applying a clear finish rather than repainting. Stripping paint or other coatings to reveal bare wood, thereby exposing historically-coated surfaces to the effects of accelerated weathering. Removing wood siding (clapboards) or other covering (such as stucco) from log structures that were covered historically, which changes their historic character and exposes the logs to accelerated deterioration.
Protecting and maintaining wood features by ensuring that historic drainage features that divert rainwater from wood surfaces (such as roof overhangs, gutters, and downspouts) are intact and functioning properly.	Failing to identify and treat the causes of wood deterioration, such as faulty flashing, leaking gutters, cracks and holes in siding, deteriorated caulking in joints and seams, plant material growing too close to wood surfaces, or insect or fungal infestation.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Applying chemical preservatives or paint to wood features that are subject to weathering, such as exposed beam ends, outriggers, or rafter tails.	Using chemical preservatives (such as creosote) which, unless they were used historically, can change the appearance of wood features.
Implementing an integrated pest management plan to identify appropriate preventive measures to guard against insect damage, such as installing termite guards, fumigating, and treating with chemicals.	
Retaining coatings (such as paint) that protect the wood from moisture and ultraviolet light. Paint removal should be considered only when there is paint surface deterioration and as part of an overall maintenance program which involves repainting or applying other appropriate coatings.	Stripping paint or other coatings from wood features without recoating.

[8] Rotted clapboards have been replaced selectively with new wood siding to match the originals.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Removing damaged or deteriorated paint to the next sound layer using the gentlest method possible (e.g., hand scraping and hand sanding) prior to repainting.	Using potentially-damaging paint-removal methods on wood surfaces, such as open-flame torches, orbital sanders, abrasive methods (including sandblasting, other media blasting, or high-pressure water), or caustic paint-removers. Removing paint that is firmly adhered to wood surfaces.
Using chemical strippers primarily to supplement other methods such as hand scraping, hand sanding, and thermal devices.	Failing to neutralize the wood thoroughly after using chemical paint removers so that new paint may not adhere. Removing paint from detachable wood features by soaking them in a caustic solution, which may roughen the surface, split the wood, or result in staining from residual acids leaching out of the wood.
Using biodegradable or environmentally-safe cleaning or paint-removal products.	
Using paint-removal methods that employ a poultice to which paint adheres, when possible, to neatly and safely remove old lead paint.	
Using thermal devices (such as infrared heaters) carefully to remove paint when it is so deteriorated that total removal is necessary prior to repainting.	Using a thermal device to remove paint from wood features without first checking for and removing any flammable debris behind them. Using thermal devices without limiting the amount of time the wood feature is exposed to heat.
Using coatings that encapsulate lead paint, when possible, where the paint is not required to be removed to meet environmental regulations.	
Applying compatible paint coating systems to historically-painted wood following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting wood features.
Repainting historically-painted wood features with colors that are appropriate to the building and district.	Using paint colors on historically-painted wood features that are not appropriate to the building or district.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Protecting adjacent materials when working on other wood features.	Failing to protect adjacent materials when working on wood features.
Evaluating the overall condition of the wood to determine whether more than protection and maintenance, such as repairs to wood features, will be necessary.	Failing to undertake adequate measures to ensure the protection of wood features.

[9] Smooth-surfaced cementitious siding (left) may be used to replace deteriorated wood siding only on secondary elevations that have minimal visibility.

[10] **Not Recommended:** Cementitious siding with a raised wood-grain texture is not an appropriate material to replace historic wood siding, which has a smooth surface when painted.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Repairing wood by patching, splicing, consolidating, or otherwise reinforcing the wood using recognized conservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of wood features when there are surviving prototypes, such as brackets, molding, or sections of siding.	Removing wood that could be stabilized, repaired, and conserved, or using untested consolidants and unskilled personnel, potentially causing further damage to historic materials. Replacing an entire wood feature, such as a cornice or balustrade, when repair of the wood and limited replacement of deteriorated or missing components is feasible.
Replacing in kind an entire wood feature that is too deteriorated to repair (if the overall form and detailing are still evident) using physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples of such wood features include a cornice, entablature, or a balustrade. If using wood is not feasible, then a compatible substitute material may be considered.	Removing a wood feature that is unrepairable and not replacing it, or replacing it with a new feature that does not match. Using substitute material for the replacement that does not convey the same appearance of the surviving components of the wood feature.
Replacing a deteriorated wood feature or wood siding on a *primary or other highly-visible* elevation with a new matching wood feature.	Replacing a deteriorated wood feature or wood siding on a *primary or other highly-visible elevation* with a composite substitute material.
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a replacement masonry feature, such as a step or door pediment, when the historic feature is completely missing. It may be an accurate restoration based on documentary and physical evidence, but only when the historic feature to be replaced coexisted with the features currently on the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing masonry feature is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature to be replaced did not coexist with the features currently on the building. Introducing a new wood feature that is incompatible in size, scale, material, or color.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving metal features that are important in defining the overall historic character of the building (such as columns, capitals, pilasters, spandrel panels, or stairways) and their paints, finishes, and colors. The type of metal should be identified prior to work because each metal has its own properties and may require a different treatment.	Removing or substantially changing metal features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Removing a major portion of the historic metal from a façade instead of repairing or replacing only the deteriorated metal, then reconstructing the façade with new material to achieve a uniform or "improved" appearance.
Protecting and maintaining metals from corrosion by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved decorative features.	Failing to identify and treat the causes of corrosion, such as moisture from leaking roofs or gutters. Placing incompatible metals together without providing an appropriate separation material. Such incompatibility can result in galvanic corrosion of the less noble metal (e.g., copper will corrode cast iron, steel, tin, and aluminum).
Cleaning metals when necessary to remove corrosion prior to repainting or applying appropriate protective coatings.	Leaving metals that must be protected from corrosion uncoated after cleaning.

[11] The stainless steel doors at the entrance to this Art Deco apartment building are important in defining its historic character and should be retained in place.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Identifying the particular type of metal prior to any cleaning procedure and then testing to ensure that the gentlest cleaning method possible is selected; or, alternatively, determining that cleaning is inappropriate for the particular metal.	Using cleaning methods which alter or damage the color, texture, or finish of the metal, or cleaning when it is inappropriate for the particular metal. Removing the patina from historic metals. The patina may be a protective layer on some metals (such as bronze or copper) as well as a distinctive finish.
Using non-corrosive chemical methods to clean soft metals (such as lead, tinplate, terneplate, copper, and zinc) whose finishes can be easily damaged by abrasive methods.	Cleaning soft metals (such as lead, tinplate, terneplate, copper, and zinc) with abrasive methods (including sandblasting, other abrasive media, or high-pressure water) which will damage the surface of the metal.
Using the least abrasive cleaning method for hard metals (such as cast iron, wrought iron, and steel) to remove paint buildup and corrosion. If hand scraping and wire brushing have proven ineffective, low-pressure abrasive methods may be used as long as they do not abrade or damage the surface.	Using high-pressure abrasive techniques (including sandblasting, other media blasting, or high-pressure water) without first trying gentler cleaning methods prior to cleaning cast iron, wrought iron, or steel.
Applying appropriate paint or other coatings to historically-coated metals after cleaning to protect them from corrosion.	Applying paint or other coatings to metals (such as copper, bronze or stainless steel) if they were not coated historically, unless a coating is necessary for maintenance.
Repainting historically-painted metal features with colors that are appropriate to the building and district.	Using paint colors on historically-painted metal features that are not appropriate to the building or district.
Applying an appropriate protective coating (such as lacquer or wax) to a metal feature that was historically unpainted, such as a bronze door, which is subject to heavy use.	

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Protecting adjacent materials when cleaning or removing paint from metal features.	Failing to protect adjacent materials when working on metal features.
Evaluating the overall condition of metals to determine whether more than protection and maintenance, such as repairs to metal features, will be necessary.	Failing to undertake adequate measures to ensure the protection of metal features.

[12] This historic steel window has been cleaned, repaired, and primed in preparation for painting and reglazing.

[13] The gold-colored, anodized aluminum geodesic dome of the former Citizen's State Bank in Oklahoma City, OK, built in 1958 and designed by Robert Roloff, makes this a distinctive mid-20th century building.

[14] Interior cast-iron columns have been cleaned and repainted as part of the rehabilitation of this historic market building for continuing use.

[15] New enameled-metal panels were replicated to replace the original panels, which were too deteriorated to repair, when the storefront of this early 1950s building was recreated.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Repairing metal by reinforcing the metal using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of features when there are surviving prototypes, such as column capitals or bases, storefronts, railings and steps, or window hoods.	Removing metals that could be stabilized, repaired, and conserved, or using improper repair techniques, or unskilled personnel, potentially causing further damage to historic materials.
Replacing in kind an entire metal feature that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples of such a feature could include cast-iron porch steps or steel-sash windows. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Replacing an entire metal feature, such as a column or balustrade, when repair of the metal and limited replacement of deteriorated or missing components are feasible. Removing a metal feature that is unrepairable and not replacing it, or replacing it with a new metal feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of the metal feature or that is physically or chemically incompatible.
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a replacement metal feature, such as a metal cornice or cast-iron column, when the historic feature is completely missing. It may be an accurate restoration based on documentary and physical evidence, but only when the historic feature to be replaced coexisted with the features currently on the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing metal feature is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature to be replaced did not coexist with the features currently on the building. Introducing a new metal feature that is incompatible in size, scale, material, or color.

ROOFS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving roofs and their functional and decorative features that are important in defining the overall historic character of the building. The form of the roof (gable, hipped, gambrel, flat, or mansard) is significant, as are its decorative and functional features (such as cupolas, cresting, parapets, monitors, chimneys, weather vanes, dormers, ridge tiles, and snow guards), roofing material (such as slate, wood, clay tile, metal, roll roofing, or asphalt shingles), and size, color, and patterning.	Removing or substantially changing roofs which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Removing a major portion of the historic roof or roofing material that is repairable, then rebuilding it with new material to achieve a more uniform or "improved" appearance. Changing the configuration or shape of a roof by adding highly visible new features (such as dormer windows, vents, skylights, or a penthouse). Stripping the roof of sound historic material, such as slate, clay tile, wood, or metal.
Protecting and maintaining a roof by cleaning gutters and downspouts and replacing deteriorated flashing. Roof sheathing should also be checked for indications of moisture due to leaks or condensation.	Failing to clean and maintain gutters and downspouts properly so that water and debris collect and cause damage to roof features, sheathing, and the underlying roof structure.
Providing adequate anchorage for roofing material to guard against wind damage and moisture penetration.	Allowing flashing, caps, and exposed fasteners to corrode, which accelerates deterioration of the roof.
Protecting a leaking roof with a temporary waterproof membrane with a synthetic underlayment, roll roofing, plywood, or a tarpaulin until it can be repaired.	Leaving a leaking roof unprotected so that accelerated deterioration of historic building materials (such as masonry, wood, plaster, paint, and structural members) occurs.
Repainting a roofing material that requires a protective coating and was painted historically (such as a terneplate metal roof or gutters) as part of regularly-scheduled maintenance.	Failing to repaint a roofing material that requires a protective coating and was painted historically as part of regularly-scheduled maintenance.
Applying compatible paint coating systems to historically-painted roofing materials following proper surface preparation.	Applying paint or other coatings to roofing material if they were not coated historically.
Protecting a roof covering when working on other roof features.	Failing to protect roof coverings when working on other roof features.
Evaluating the overall condition of the roof and roof features to determine whether more than protection and maintenance, such as repairs to roof features, will be necessary.	Failing to undertake adequate measures to ensure the protection of roof features.

ROOFS

RECOMMENDED	NOT RECOMMENDED
Repairing a roof by ensuring that the existing historic or compatible non-historic roof covering is sound and waterproof. Repair may include the limited replacement in kind or with a compatible substitute material of missing materials (such as wood shingles, slates, or tiles) on a main roof, as well as those extensively deteriorated or missing components of features when there are surviving prototypes, such as ridge tiles, dormer roofing, or roof monitors. Using corrosion-resistant roof fasteners (e.g., nails and clips) to repair a roof to help extend its longevity.	Replacing an entire roof feature when repair of the historic roofing materials and limited replacement of deteriorated or missing components are feasible.

[16] The deteriorated asphalt shingles of this porch roof are being replaced in kind with matching shingles.

ROOFS

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire roof covering or feature that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples of such a feature could include a large section of roofing, a dormer, or a chimney. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Removing a feature of the roof that is unrepairable and not replacing it, or replacing it with a new roof feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the roof covering or the surviving components of the roof feature or that is physically or chemically incompatible.
Replacing only missing or damaged roofing tiles or slates rather than replacing the entire roof covering.	Failing to reuse intact slate or tile in good condition when only the roofing substrate or fasteners need replacement.
Replacing an incompatible roof covering or any deteriorated non-historic roof covering with historically-accurate roofing material, if known, or another material that is compatible with the historic character of the building.	
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a new roof covering for a missing roof or a new feature, such as a dormer or a monitor, when the historic feature is completely missing. It may be an accurate restoration based on documentary and physical evidence, but only when the historic feature to be replaced coexisted with the features currently on the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing roof feature is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature to be replaced did not coexist with the features currently on the building. Introducing a new roof feature that is incompatible in size, scale, material, or color.

ROOFS

RECOMMENDED	NOT RECOMMENDED
Alterations and Additions for a New Use	
Installing mechanical and service equipment on the roof (such as heating and air-conditioning units, elevator housing, or solar panels) when required for a new use so that they are inconspicuous on the site and from the public right-of-way and do not damage or obscure character-defining historic features.	Installing roof-top mechanical or service equipment so that it damages or obscures character-defining roof features or is conspicuous on the site or from the public right-of-way.
Designing rooftop additions, elevator or stair towers, decks or terraces, dormers, or skylights when required by a new or continuing use so that they are inconspicuous and minimally visible on the site and from the public right-of-way and do not damage or obscure character-defining historic features.	Changing a character-defining roof form, or damaging or destroying character-defining roofing material as a result of an incompatible rooftop addition or improperly-installed or highly-visible mechanical equipment.
Installing a green roof or other roof landscaping, railings, or furnishings that are not visible on the site or from the public right-of-way and do not damage the roof structure.	Installing a green roof or other roof landscaping, railings, or furnishings that are visible on the site and from the public right-of-way.

[17] New wood elements have been used selectively to replace rotted wood on the underside of the roof in this historic warehouse.

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving windows and their functional and decorative features that are important to the overall character of the building. The window material and how the window operates (e.g., double hung, casement, awning, or hopper) are significant, as are its components (including sash, muntins, ogee lugs, glazing, pane configuration, sills, mullions, casings, or brick molds) and related features, such as shutters.	Removing or substantially changing windows or window features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Changing the appearance of windows that contribute to the historic character of the building by replacing materials, finishes, or colors which noticeably change the sash, depth of the reveal, and muntin configurations; the reflectivity and color of the glazing; or the appearance of the frame. Obscuring historic wood window trim with metal or other material. Replacing windows solely because of peeling paint, broken glass, stuck sash, or high air infiltration. These conditions, in themselves, do not indicate that windows are beyond repair.
Protecting and maintaining the wood or metal which comprises the window jamb, sash, and trim through appropriate treatments, such as cleaning, paint removal, and reapplication of protective coating systems.	Failing to protect and maintain window materials on a cyclical basis so that deterioration of the window results.
Protecting windows against vandalism before work begins by covering them and by installing alarm systems that are keyed into local protection agencies.	Leaving windows unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected windows.
Making windows weathertight by recaulking gaps in fixed joints and replacing or installing weatherstripping.	
Protecting windows from chemical cleaners, paint, or abrasion during work on the exterior of the building.	Failing to protect historic windows from chemical cleaners, paint, or abrasion when work is being done on the exterior of the building.
Protecting and retaining historic glass when replacing putty or repairing other components of the window.	Failing to protect the historic glass when making window repairs.

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Sustaining the historic operability of windows by lubricating friction points and replacing broken components of the operating system (such as hinges, latches, sash chains or cords) and replacing deteriorated gaskets or insulating units.	Failing to maintain windows and window components so that windows are inoperable, or sealing operable sash permanently. Failing to repair and reuse window hardware such as sash lifts, latches, and locks.
Adding storm windows with a matching or a one-over-one pane configuration that will not obscure the characteristics of the historic windows. Storm windows improve energy efficiency and are especially beneficial when installed over wood windows because they also protect them from accelerated deterioration.	
Adding interior storm windows as an alternative to exterior storm windows when appropriate.	

[18] The historic metal storm windows in this 1920s office building were retained and repaired during the rehabilitation project.

[19] Installing a mockup of a proposed replacement window can be helpful to evaluate how well the new windows will match the historic windows that are missing or too deteriorated to repair.

[20 a-d] The original steel windows in this industrial building were successfully repaired as part of the rehabilitation project (left).

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Installing sash locks, window guards, removable storm windows, and other reversible treatments to meet safety, security, or energy conservation requirements.	
Evaluating the overall condition of the windows to determine whether more than protection and maintenance, such as repairs to windows and window features, will be necessary.	Failing to undertake adequate measures to ensure the protection of window features.
Repairing window frames and sash by patching, splicing, consolidating, or otherwise reinforcing them using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated, broken, or missing components of features when there are surviving prototypes, such as sash, sills, hardware, or shutters.	Removing window features that could be stabilized, repaired, or conserved using untested consolidants, improper repair techniques, or unskilled personnel, potentially causing further damage to the historic materials. Replacing an entire window when repair of the window and limited replacement of deteriorated or missing components are feasible.
Removing glazing putty that has failed and applying new putty; or, if glass is broken, carefully removing all putty, replacing the glass, and reputtying.	
Installing new glass to replace broken glass which has the same visual characteristics as the historic glass.	
Replacing in kind an entire window that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Removing a character-defining window that is unrepairable or is not needed for the new use and blocking up the opening, or replacing it with a new window that does not match. Using substitute material for the replacement that does not convey the same appearance of the surviving components of the window or that is physically incompatible.

WINDOWS

[21] The windows on the lower floor, which were too deteriorated to repair, were replaced with new steel windows matching the upper-floor historic windows that were retained.

RECOMMENDED	NOT RECOMMENDED
Modifying a historic single-glazed sash to accommodate insulated glass when it will not jeopardize the soundness of the sash or significantly alter its appearance.	Modifying a historic single-glazed sash to accommodate insulated glass when it will jeopardize the soundness of the sash or significantly alter its appearance.
Using low-e glass with the least visible tint in new or replacement windows.	Using low-e glass with a dark tint in new or replacement windows, thereby negatively impacting the historic character of the building.
Using window grids rather than true divided lights on windows on the upper floors of high-rise buildings if they will not be noticeable.	Using window grids rather than true divided lights on windows in low-rise buildings or on lower floors of high-rise buildings where they will be noticeable, resulting in a change to the historic character of the building.
Ensuring that spacer bars in between double panes of glass are the same color as the window sash.	Using spacer bars in between double panes of glass that are not the same color as the window sash.
Replacing all of the components in a glazing system if they have failed because of faulty design or materials that have deteriorated with new material that will improve the window performance without noticeably changing the historic appearance.	Replacing all of the components in a glazing system with new material that will noticeably change the historic appearance.
Replacing incompatible, non-historic windows with new windows that are compatible with the historic character of the building; or reinstating windows in openings that have been filled in.	
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a new window or its components, such as frames, sash, and glazing, when the historic feature is completely missing. It may be an accurate restoration based on documentary and physical evidence, but only when the historic feature to be replaced coexisted with the features currently on the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing window is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature to be replaced did not coexist with the features currently on the building. Installing replacement windows made from other materials that are not the same as the material of the original windows if they would have a noticeably different appearance from the remaining historic windows.

(a)

(b)

(c)

[22] **Not Recommended:** (a-b) The original wood windows in this late-19th-century building, which were highly decorative, could likely have been repaired and retained. (c) Instead, they were replaced with new windows that do not match the detailing of the historic windows and, therefore, do not meet the Standards (above).

[23] (a)This deteriorated historic wood window was repaired and retained (b) in this rehabilitation project.

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Alterations and Additions for a New Use	
Adding new window openings on rear or other secondary, less-visible elevations, if required by a new use. The new openings and the windows in them should be compatible with the overall design of the building but, in most cases, not duplicate the historic fenestration.	Changing the number, location, size, or glazing pattern of windows on primary or highly-visible elevations which will alter the historic character of the building. Cutting new openings on character-defining elevations or cutting new openings that damage or destroy significant features. Adding balconies at existing window openings or new window openings on primary or other highly-visible elevations where balconies never existed and, therefore, would be incompatible with the historic character of the building.
Replacing windows that are too deteriorated to repair using the same sash and pane configuration, but with new windows that operate differently, if necessary, to accommodate a new use. Any change must have minimal visual impact. Examples could include replacing hopper or awning windows with casement windows, or adding a realigned and enlarged operable portion of industrial steel windows to meet life-safety codes.	Replacing a window that contributes to the historic character of the building with a new window that is different in design (such as glass divisions or muntin profiles), dimensions, materials (wood, metal, or glass), finish or color, or location that will have a noticeably different appearance from the historic windows, which may negatively impact the character of the building.
Installing impact-resistant glazing, when necessary for security, so that it is compatible with the historic windows and does not damage them or negatively impact their character.	Installing impact-resistant glazing, when necessary for security, that is incompatible with the historic windows and that damages them or negatively impacts their character.
Using compatible window treatments (such as frosted glass, appropriate shades or blinds, or shutters) to retain the historic character of the building when it is necessary to conceal mechanical equipment, for example, that the new use requires be placed in a location behind a window or windows on a primary or highly-visible elevation.	Removing a character-defining window to conceal mechanical equipment or to provide privacy for a new use of the building by blocking up the opening.

ENTRANCES AND PORCHES

[24] Rotted boards in the beaded-board porch ceiling are being replaced with new matching beaded board.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving entrances and porches and their functional and decorative features that are important in defining the overall historic character of the building. The materials themselves (including masonry, wood, and metal) are significant, as are their features, such as doors, transoms, pilasters, columns, balustrades, stairs, roofs, and projecting canopies.	Removing or substantially changing entrances and porches which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Cutting new entrances on a primary façade. Altering utilitarian or service entrances so they compete visually with the historic primary entrance; increasing their size so that they appear significantly more important; or adding decorative details that cannot be documented to the building or are incompatible with the building's historic character.
Retaining a historic entrance or porch even though it will no longer be used because of a change in the building's function.	Removing a historic entrance or porch that will no longer be required for the building's new use.
Protecting and maintaining the masonry, wood, and metals which comprise entrances and porches through appropriate surface treatments, such as cleaning, paint removal, and reapplication of protective coating systems.	Failing to protect and maintain entrance and porch materials on a cyclical basis so that deterioration of entrances and porches results.
Protecting entrances and porches against arson and vandalism before work begins by covering them and by installing alarm systems keyed into local protection agencies.	Leaving entrances and porches unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected entrances.
Protecting entrance and porch features when working on other features of the building.	Failing to protect materials and features when working on other features of the building.
Evaluating the overall condition of entrances and porches to determine whether more than protection and maintenance, such as repairs to entrance and porch features, will be necessary.	Failing to undertake adequate measures to ensure the protection of entrance and porch features.
Repairing entrances and porches by patching, splicing, consolidating, and otherwise reinforcing them using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated features or missing components of features when there are surviving prototypes, such as balustrades, columns, and stairs.	Removing entrances and porches that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or unskilled personnel, potentially causing further damage to historic materials. Replacing an entire entrance or porch feature when repair of the feature and limited replacement of deteriorated or missing components are feasible.

ENTRANCES AND PORCHES

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire entrance or porch that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Removing an entrance or porch that is unrepairable and not replacing it, or replacing it with a new entrance or porch that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of entrance or porch features or that is physically incompatible.

[25] The new infill designs for the garage door openings in this commercial building (a) converted for restaurant use and in this mill building (b) rehabilitated for residential use are compatible with the historic character of the buildings.

ENTRANCES AND PORCHES

RECOMMENDED	NOT RECOMMENDED
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a new entrance or porch when the historic feature is completely missing or has previously been replaced by one that is incompatible. It may be an accurate restoration based on documentary and physical evidence, but only when the historic entrance or porch to be replaced coexisted with the features currently on the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing entrance or porch is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature to be replaced did not coexist with the features currently on the building.
Alterations and Additions for a New Use	
Enclosing historic porches on secondary elevations only, when required by a new use, in a manner that preserves the historic character of the building (e.g., using large sheets of glass and recessing the enclosure wall behind existing posts and balustrades).	Enclosing porches in a manner that results in a diminution or loss of historic character by using solid materials rather than clear glazing, or by placing the enclosure in front of, rather than behind, the historic features.
Designing and constructing additional entrances or porches on secondary elevations when required for the new use in a manner that preserves the historic character of the building (i.e., ensuring that the new entrance or porch is clearly subordinate to historic primary entrances or porches).	Constructing secondary or service entrances and porches that are incompatible in size and scale or detailing with the historic building or that obscure, damage, or destroy character-defining features.

[26] **Not Recommended:** Installing a screened enclosure is never recommended on a front or otherwise prominent historic porch. In limited instances, it may be possible to add screening on a porch at the rear or on a secondary façade; however, the enclosure should match the color of the porch and be placed behind columns and railings so that it does not obscure these features.

STOREFRONTS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving storefronts and their functional and decorative features that are important in defining the overall historic character of the building. The storefront materials (including wood, masonry, metals, ceramic tile, clear glass, and pigmented structural glass) and the configuration of the storefront are significant, as are features, such as display windows, base panels, bulkheads, signs, doors, transoms, kick plates, corner posts, piers, and entablatures. The removal of inappropriate, non-historic cladding, false mansard roofs, and other later, non-significant alterations can help reveal the historic character of the storefront.	Removing or substantially changing storefronts and their features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Changing the storefront so that it has a residential rather than commercial appearance. Introducing features from an earlier period that are not compatible with the historic character of the storefront. Changing the location of the storefront's historic main entrance. Replacing or covering a glass transom with solid material or inappropriate signage, or installing an incompatible awning over it.
Retaining later, non-original features that have acquired significance over time.	Removing later features that may have acquired significance.

[28] This new storefront, which replaced one that was missing, is compatible with the historic character of the building.

STOREFRONTS

RECOMMENDED	NOT RECOMMENDED
Protecting and maintaining masonry, wood, glass, ceramic tile, and metals which comprise storefronts through appropriate treatments, such as cleaning, paint removal, and reapplication of protective coating systems.	Failing to protect and maintain storefront materials on a cyclical basis so that deterioration of storefront features results.
Protecting storefronts against arson and vandalism before work begins by covering windows and doors and by installing alarm systems keyed into local protection agencies.	Leaving the storefront unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected entrances.
Protecting the storefront when working on other features of the building.	Failing to protect the storefront when working on other features of the building.
Evaluating the overall condition of the storefront to determine whether more than protection and maintenance, such as repairs to storefront features, will be necessary.	Failing to undertake adequate measures to ensure the protection of storefront features.

[27] This original c. 1940s storefront, with its character-defining angled and curved glass display window and recessed entrance with a decorative terrazzo paving, is in good condition and should be retained in a rehabilitation project.

STOREFRONTS

RECOMMENDED	NOT RECOMMENDED
Repairing storefronts by patching, splicing, consolidating, or otherwise reinforcing them using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of storefronts when there are surviving prototypes, such as transoms, base panels, kick plates, piers, or signs.	Removing storefronts that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or unskilled personnel, potentially causing further damage to historic materials.
Replacing in kind an entire storefront that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Replacing a storefront feature when repair of the feature and limited replacement of deteriorated or missing components are feasible. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of the storefront or that is physically incompatible. Removing a storefront that is unrepairable and not replacing it or replacing it with a new storefront that does not match.
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a new storefront when the historic storefront is completely missing or has previously been replaced by one that is incompatible. It may be an accurate restoration based on documentary and physical evidence, but only when the historic storefront to be replaced coexisted with the features currently on the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing storefront is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature to be replaced did not coexist with the features currently on the building. Using new, over-scaled, or internally-lit signs unless there is a historic precedent for them or using other types of signs that obscure, damage, or destroy character-defining features of the storefront and the building.

STOREFRONTS

RECOMMENDED	NOT RECOMMENDED
Replacing missing awnings or canopies that can be historically documented to the building, or adding new signage, awnings, or canopies that are compatible with the historic character of the building.	Adding vinyl awnings, or other awnings that are inappropriately sized or shaped, which are incompatible with the historic character of the building; awnings that do not extend over the entire length of the storefront; or large canopies supported by posts that project out over the sidewalk, unless their existence can be historically documented.
Alterations and Additions for a New Use	
Retaining the glazing and the transparency (i.e., which allows the openness of the interior to be experienced from the exterior) that is so important in defining the character of a historic storefront when the building is being converted for residential use. Window treatments (necessary for occupants' privacy) should be installed that are uniform and compatible with the commercial appearance of the building, such as screens or wood blinds. When display cases still exist behind the storefront, the screening should be set at the back of the display case.	Replacing storefront glazing with solid material for occupants' privacy when the building is being converted for residential use. Installing window treatments in storefront windows that have a residential appearance, which are incompatible with the commercial character of the building. Installing window treatments that are not uniform in a series of repetitive storefront windows.

[29] The rehabilitation of the 1910 Mā'alaea General Store (a), which served the workers' camp at the Wailuku Sugar Company on the Hawaiian island of Maui, included the reconstruction of the original parapet (b).

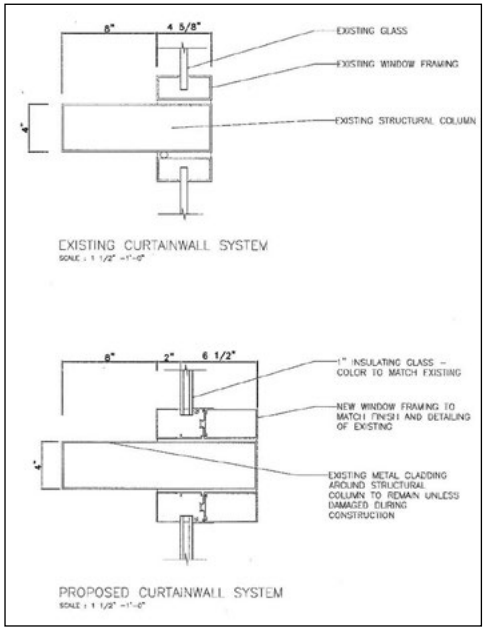
CURTAIN WALLS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving curtain wall systems and their components (metal framing members and glass or opaque panels) that are important in defining the overall historic character of the building. The design of the curtain wall is significant, as are its component materials (metal stick framing and panel materials, such as clear or spandrel glass, stone, terra cotta, metal, and fiber-reinforced plastic), appearance (e.g., glazing color or tint, transparency, and reflectivity), and whether the glazing is fixed, operable or louvered glass panels. How a curtain wall is engineered and fabricated, and the fact that it expands and contracts at a different rate from the building's structural system, are important to understand when undertaking the rehabilitation of a curtain wall system.	Removing or substantially changing curtain wall components which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Replacing historic curtain wall features instead of repairing or replacing only the deteriorated components.
Protecting and maintaining curtain walls and their components through appropriate surface treatments, such as cleaning, paint removal, and reapplication of protective coating systems; and by making them watertight and ensuring that sealants and gaskets are in good condition.	Failing to protect and maintain curtain wall components on a cyclical basis so that deterioration of curtain walls results. Failing to identify, evaluate, and treat various causes of curtain wall failure, such as open gaps between components where sealants have deteriorated or are missing.
Protecting ground-level curtain walls from vandalism before work begins by covering them, while ensuring adequate ventilation, and by installing alarm systems keyed into local protection agencies.	Leaving ground-level curtain walls unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected glazing.
Protecting curtain walls when working on other features of the building.	Failing to protect curtain walls when working on other features of the building.
Cleaning curtain wall systems only when necessary to halt deterioration or to remove heavy soiling.	Cleaning curtain wall systems when they are not heavily soiled, thereby needlessly introducing chemicals or moisture into historic materials.

CURTAIN WALLS

RECOMMENDED	NOT RECOMMENDED
Carrying out cleaning tests, when it has been determined that cleaning is appropriate, using only cleaning materials that will not damage components of the system, including factory-applied finishes. Test areas should be examined to ensure that no damage has resulted.	Cleaning curtain wall systems without testing or using cleaning materials that may damage components of the system.
Evaluating the overall condition of curtain walls to determine whether more than protection and maintenance, such as repair of curtain wall components, will be necessary.	Failing to undertake adequate measures to protect curtain wall components.
Repairing curtain walls by ensuring that they are watertight by augmenting existing components or replacing deteriorated or missing sealants or gaskets, where necessary, to seal any gaps between system components. Repair may include the limited replacement of those extensively deteriorated or missing components of curtain walls when there are surviving prototypes.	Removing curtain wall components that could be repaired or using improper repair techniques. Replacing an entire curtain wall system when repair of materials and limited replacement of deteriorated or missing components are feasible.
Applying sealants carefully so that they are not readily visible.	
Replacing in kind a component or components of a curtain wall system that are too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature. If using the same kind of material is not feasible, then a compatible substitute material may be considered as long as it has the same finish and appearance.	Removing a curtain wall component or the entire system, if necessary, that is unrepairable and not replacing it or replacing it with a new component or system that does not convey the same appearance.
Replacing masonry, metal, glass, or other components of a curtain wall system (or the entire system, if necessary) which have failed because of faulty design with substitutes that match the original as closely as possible and which will reestablish the viability and performance of the system.	Using substitute material for the replacement that does not convey the same appearance of the surviving components of the curtain wall or that is physically incompatible.

[30] Rather than replace the original curtain wall system of the 1954 Simms Building in Albuquerque, NM, with a different color tinted glass or coat it with a non-historic reflective film, the HVAC system was updated to improve energy efficiency. *Photo: Harvey M. Kaplan.*



[31 a-c:] (a) The rehabilitation of the First Federal Savings and Loan Association building in Birmingham, AL, constructed in 1961, required replacing the deteriorated historic curtain wall system because the framing and the fasteners holding the spandrel glass and the windows had failed. (b) Comparative drawings show that the differences between the replacement system, which incorporated new insulated glass to meet wind-load requirements, and the original system are minimal. (c) The replacement system, shown after completion of the project, has not altered the historic character of the building.

CURTAIN WALLS

RECOMMENDED	NOT RECOMMENDED
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a new curtain wall or its components when the historic feature is completely missing. It may be an accurate restoration based on documentary and physical evidence, but only when the historic feature to be replaced coexisted with the features currently on the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing curtain wall component is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature did not coexist with the features currently on the building. Introducing a new curtain wall component that is incompatible in size, scale, material, color, and finish.
Alterations and Additions for a New Use	
Installing new glazing or an entire new curtain wall system, when necessary to meet safety-code requirements, with dimensions, detailing, materials, colors, and finish as close as possible to the historic curtain wall components.	Installing new glazing or an entire new curtain wall system, when necessary to meet safety-code requirements, with dimensions and detailing that is significantly different from the historic curtain wall components.
Installing impact-resistant glazing, when necessary for security, so that it is compatible with the historic windows and does not damage them or negatively impact their character.	Installing impact-resistant glazing in a curtain wall system, when necessary for security, that is incompatible with the historic curtain walls and damages them or negatively impacts their character.

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving structural systems and visible features of systems that are important in defining the overall historic character of the building. This includes the materials that comprise the structural system (i.e., wood, metal and masonry), the type of system, and its features, such as posts and beams, trusses, summer beams, vigas, cast-iron or masonry columns, above-grade stone foundation walls, or load-bearing masonry walls.	Removing or substantially changing visible features of historic structural systems which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Overloading the existing structural system, or installing equipment or mechanical systems which could damage the structure. Replacing a load-bearing masonry wall that could be augmented and retained. Leaving known structural problems untreated, such as deflected beams, cracked and bowed walls, or racked structural members.
Protecting and maintaining the structural system by keeping gutters and downspouts clear and roofing in good repair; and by ensuring that wood structural members are free from insect infestation.	Failing to protect and maintain the structural system on a cyclical basis so that deterioration of the structural system results. Using treatments or products that may retain moisture, which accelerates deterioration of structural members.

[33] Retaining as much as possible of the historic wood sill plate and replacing only the termite-damaged wood is always the preferred and recommended treatment.

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
Evaluating the overall condition of the structural system to determine whether more than protection and maintenance, such as repairs to structural features, will be necessary.	Failing to undertake adequate measures to ensure the protection of structural systems.
Repairing the structural system by augmenting individual components, using recognized preservation methods. For example, weakened structural members (such as floor framing) can be paired or sistered with a new member, braced, or otherwise supplemented and reinforced.	Upgrading the building structurally in a manner that diminishes the historic character of the exterior or that damages interior features or spaces. Replacing a historic structural feature in its entirety or in part when it could be repaired or augmented and retained.

[32] (a-b) The rehabilitation of the 1892 Carson Block Building in Eureka, CA, for its owner, the Northern California Indian Development Council, included recreating the missing corner turret and sensitively introducing seismic reinforcement (c) shown here (opposite page) in a secondary upper floor office space. *Photos: Page & Turnbull.*

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
Installing seismic or structural reinforcement, when necessary, in a manner that minimizes its impact on the historic fabric and character of the building.	
Replacing in kind or with a compatible substitute material large portions or entire features of the structural system that are either extensively damaged or deteriorated or that are missing when there are surviving prototypes, such as cast-iron columns, trusses, or masonry walls. Substitute material must be structurally sufficient, physically compatible with the rest of the system, and, where visible, must have the same form, design, and appearance as the historic feature.	Using substitute material that does not equal the load-bearing capabilities of the historic material; does not convey the same appearance of the historic material, if it is visible; or is physically incompatible. Installing a visible or exposed structural replacement feature that does not match.
Replacing to match any interior features or finishes that may have to be removed to gain access to make structural repairs, and reusing salvageable material.	

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Alterations and Additions for a New Use	
Limiting any new excavations next to historic foundations to avoid undermining the structural stability of the building or adjacent historic buildings. The area next to the building foundation should be investigated first to ascertain potential damage to site features or archeological resources.	Carrying out excavations or regrading land adjacent to a historic building which could cause the historic foundation to settle, shift, or fail, or which could destroy significant archeological resources.
Correcting structural deficiencies needed to accommodate a new use in a manner that preserves the structural system and individual character-defining features.	Making substantial changes to significant interior spaces or damaging or destroying features or finishes that are character defining to correct structural deficiencies.
Designing and installing new mechanical or electrical equipment, when necessary, in a manner that minimizes the number and size of cuts or holes in structural members.	Installing new mechanical or electrical equipment in a manner which reduces the load-bearing capacity of historic structural members.
Inserting a new floor when required for the new use if it does not negatively impact the historic character of the interior space; and if it does not damage the structural system, does not abut window glazing, and is not visible from the exterior of the building.	Inserting a new floor that damages or destroys the structural system or abuts window glazing and is visible from the exterior of the building and, thus, negatively impacts its historic character.
Creating an atrium, light court, or lightwell to provide natural light when required for a new use only when it can be done in a manner that preserves the structural system and the historic character of the building.	Removing structural features to create an atrium, light court, or lightwell if it negatively impacts the historic character of the building.

MECHANICAL SYSTEMS: HEATING, AIR CONDITIONING, ELECTRICAL, AND PLUMBING

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving visible features of early mechanical systems that are important in defining the overall historic character of the building, such as radiators, vents, fans, grilles, and plumbing and lighting fixtures.	Removing or substantially changing visible features of mechanical systems that are important in defining the overall historic character of the building so that, as a result, the character is diminished.
Protecting and maintaining mechanical, plumbing, and electrical systems and their features through cyclical maintenance.	Failing to protect and maintain a functioning mechanical system, plumbing, and electrical systems and their visible features on a cyclical basis so that their deterioration results.
Improving the energy efficiency of existing mechanical systems to help reduce the need for a new system by installing storm windows, insulating attics and crawl spaces, or adding awnings, if appropriate.	
Evaluating the overall condition of mechanical systems to determine whether more than protection and maintenance, such as repairs to mechanical system components, will be necessary.	Failing to undertake adequate measures to ensure the protection of mechanical system components.
Repairing mechanical systems by augmenting or upgrading system components (such as installing new pipes and ducts), rewiring, or adding new compressors or boilers.	Replacing a mechanical system when its components could be upgraded and retained.
Replacing in kind or with a compatible substitute material those extensively deteriorated or missing visible features of mechanical systems when there are surviving prototypes, such as ceiling fans, radiators, grilles, or plumbing fixtures.	Installing a visible replacement feature of a mechanical system, if it is important in defining the historic character of the building, that does not convey the same appearance.

MECHANICAL SYSTEMS: HEATING, AIR CONDITIONING, ELECTRICAL, AND PLUMBING

RECOMMENDED	NOT RECOMMENDED
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Alterations and Additions for a New Use	
Installing a new mechanical system, if required, so that it results in the least alteration possible to the historic building and its character-defining features.	Installing a new mechanical system so that character-defining structural or interior features are radically changed, damaged, or destroyed.
Providing adequate structural support for the new mechanical equipment.	Failing to consider the weight and design of new mechanical equipment so that, as a result, historic structural members or finished surfaces are weakened or cracked.
Installing new mechanical and electrical systems and ducts, pipes, and cables in closets, service areas, and wall cavities to preserve the historic character of the interior space.	Installing systems and ducts, pipes, and cables in walls or ceilings in a manner that results in extensive loss or damage or otherwise obscures historic building materials and character-defining features.
Concealing HVAC ductwork in finished interior spaces, when possible, by installing it in secondary spaces (such as closets, attics, basements, or crawl spaces) or in appropriately-located, furred-down soffits.	Leaving HVAC ductwork exposed in most finished spaces or installing soffits in a location that will negatively impact the historic character of the interior or exterior of the building.
Installing exposed ductwork in a finished space when necessary to protect and preserve decorative or other features (such as column capitals, pressed-metal or ornamental plaster ceilings, coffers, or beams) that is painted, and appropriately located so that it will have minimal impact on the historic character of the space.	Installing exposed ductwork in a finished space when necessary to protect and preserve decorative or other features that is not painted, or is located where it will negatively impact the historic character of the space.
Lowering ceilings, installing a dropped ceiling, or constructing soffits to conceal ductwork in a finished space when this will not result in extensive loss or damage to historic materials or decorative and other features, and will not change the overall character of the space or the exterior appearance of the building (i.e., lowered ceilings or soffits visible through window glazing).	Lowering ceilings, installing a dropped ceiling, or constructing soffits to conceal ductwork in a finished space in a manner that results in extensive loss or damage to historic materials or decorative and other features, and will change the overall character of the space or the exterior appearance of the building.

MECHANICAL SYSTEMS: HEATING, AIR CONDITIONING, ELECTRICAL, AND PLUMBING

RECOMMENDED	NOT RECOMMENDED
Installing appropriately located, exposed ductwork in historically-unfinished interior spaces in industrial or utilitarian buildings.	
Installing a split system mechanical unit in a manner that will have minimal impact on the historic character of the interior and result in minimal loss of historic building material.	Installing a split system mechanical unit without considering its impact on the historic character of the interior or the potential loss of historic building material.
Installing heating or air conditioning window units only when the installation of any other system would result in significant damage or loss of historic materials or features.	
Installing mechanical equipment on the roof, when necessary, so that it is minimally visible to preserve the building's historic character and setting.	Installing mechanical equipment on the roof that is overly large or highly visible and negatively impacts the historic character of the building or setting.
Placing air conditioning compressors in a location on a secondary elevation of the historic building that is not highly visible.	Placing air conditioning compressors where they are highly visible and negatively impact the historic character of the building or setting.

[34] The new ceiling ducts installed during the conversion of this historic office building into apartments are minimal in design and discretely placed above the windows.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving a floor plan or interior spaces, features, and finishes that are important in defining the overall historic character of the building. Significant spatial characteristics include the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves, such as lobbies, lodge halls, entrance halls, parlors, theaters, auditoriums, gymnasiums, and industrial and commercial interiors. Color, texture, and pattern are important characteristics of features and finishes, which can include such elements as columns, plaster walls and ceilings, flooring, trim, fireplaces and mantels, paneling, light fixtures, hardware, decorative radiators, ornamental grilles and registers, windows, doors, and transoms; plaster, paint, wallpaper and wall coverings, and special finishes, such as marbleizing and graining; and utilitarian (painted or unpainted) features, including wood, metal, or concrete exposed columns, beams, and trusses and exposed load-bearing brick, concrete, and wood walls.	Altering a floor plan, or interior spaces (including individual rooms), features, and finishes, which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Altering the floor plan by demolishing principal walls and partitions for a new use. Altering or destroying significant interior spaces by inserting additional floors or lofts; cutting through floors to create lightwells, light courts, or atriums; lowering ceilings; or adding new walls or removing historic walls. Relocating an interior feature, such as a staircase, so that the circulation pattern and the historic relationship between features and spaces are altered. Installing new material that obscures or damages character-defining interior features or finishes. Removing paint, plaster, or other finishes from historically-finished interior surfaces to create a new appearance (e.g., removing plaster to expose brick walls or a brick chimney breast, stripping paint from wood to stain or varnish it, or removing a plaster ceiling to expose unfinished beams). Applying paint, plaster, or other coatings to surfaces that have been unfinished historically, thereby changing their character. Changing the type of finish or its color, such as painting a historically-varnished wood feature, or removing paint from a historically-painted feature.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Retaining decorative or other character-defining features or finishes that typify the showroom or interior of a historic store, such as a pressed-metal ceiling, a beaded-board ceiling, or wainscoting.	Removing decorative or other character-defining features or finishes that typify the showroom or interior of a historic store, such as a pressed-metal ceiling, a beaded-board ceiling, or wainscoting.
Protecting and maintaining historic materials (including plaster, masonry, wood, and metals) which comprise interior spaces through appropriate surface treatments, such as cleaning, paint removal, and reapplication of protective coating systems.	Failing to protect and maintain interior materials and finishes on a cyclical basis so that deterioration of interior features results.
Protecting interior features and finishes against arson and vandalism before project work begins by erecting temporary fencing or by covering broken windows and open doorways, while ensuring adequate ventilation, and by installing alarm systems keyed into local protection agencies.	Leaving the building unprotected and subject to vandalism before work begins, thereby allowing the interior to be damaged if it can be accessed through unprotected entrances.
Protecting interior features (such as a staircase, mantel, flooring, or decorative finishes) from damage during project work by covering them with plywood, heavy canvas, or plastic sheeting.	Failing to protect interior features and finishes when working on the interior.

[35] (a) Although deteriorated, the historic school corridor, shown on the left, with its character-defining features, including doors and transoms, was retained and repaired as part of the rehabilitation project (b).

[36] The elaborate features and finishes of this historic banking hall in the Union Trust Company Building, in Cleveland, OH, were retained and repaired as part of its conversion into a food market.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Removing damaged or deteriorated paint and finishes only to the next sound layer using the gentlest method possible prior to repainting or refinishing using compatible paint or other coating systems.	Using potentially damaging methods, such as open-flame torches or abrasive techniques, to remove paint or other coatings. Removing paint that is firmly adhered to interior surfaces.
Using abrasive cleaning methods only on the interior of industrial or warehouse buildings with utilitarian, unplastered masonry walls and where wood features are not finished, molded, beaded, or worked by hand. Low-pressure abrasive cleaning (e.g., sand-blasting or other media blasting) should only be considered if test patches show no surface damage and after gentler methods have proven ineffective.	Using abrasive methods anywhere but utilitarian and industrial interior spaces or when there are other methods that are less likely to damage the surface of the material.
Evaluating the overall condition of the interior materials, features, and finishes to determine whether more than protection and maintenance, such as repairs to features and finishes, will be necessary.	Failing to undertake adequate measures to ensure the protection of interior materials, features, and finishes.
Repairing interior features and finishes by patching, splicing, consolidating, or otherwise reinforcing the materials using rec-ognized preservation methods. Repairs may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing parts of interior features when there are surviving prototypes, such as stairs, balustrades, wood paneling, columns, decorative wall finishes, and ornamental pressed-metal or plaster ceilings. Repairs should be physically and visually compatible.	Removing materials that could be repaired or using improper repair techniques. Replacing an entire interior feature (such as a staircase, mantel, or door surround) or a finish (such as a plaster) when repair of materi-als and limited replacement of deteriorated or missing components are feasible.

[37] Exposed and painted ducts were appropriately installed here in a retail space in Denver's historic Union Station after considering other options that would have impacted the ceiling height, or damaged or obscured the ornamental plaster crown molding. *Photo: Heritage Consulting Group.*

[39] Leaving the ceiling structure exposed and installing exposed ductwork where it does not impact the windows, are appropriate treatments when rehabilitating an industrial building for another use.

[38] The rehabilitation project retained the industrial character of this historic factory building, which included installation of a fire-rated, clear glass enclosure that allows the stairway, an important interior feature, to remain visible.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire interior feature that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature. Examples could include wainscoting, window and door surrounds, or stairs. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Removing a character-defining interior feature that is unrepairable and not replacing it, or replacing it with a new feature or finish that does not match the historic feature. Using a substitute material for the replacement that does not convey the same appearance of the interior feature or that is physically incompatible. Using a substitute material for the replacement that does not convey the same appearance of the interior feature or that is physically incompatible.
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a new interior feature or finish when the historic feature or finish is completely missing. This could include missing walls, stairs, mantels, wood trim, and plaster, or even entire rooms if the historic spaces, features, and finishes are missing or have been destroyed by inappropriate alterations. The design may be an accurate restoration based on documentary and physical evidence, but only when the feature or finish to be replaced coexisted with the features currently in the building. Or, it may be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating an inaccurate appearance because the replacement for the missing feature is based upon insufficient physical or historic documentation; is not a compatible design; or because the feature did not coexist with the feature currently on the building. Introducing a new interior feature or finish that is incompatible in size, scale, material, color, and finish.
Alterations and Additions for a New Use	
Installing new or additional systems required for a new use for the building, such as bathrooms and mechanical equipment, in secondary spaces to preserve the historic character of the most significant interior spaces.	Subdividing primary spaces, lowering ceilings, or damaging or obscuring character-defining features (such as fireplaces, windows, or stairways) to accommodate a new use for the building.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Installing new mechanical and electrical systems and ducts, pipes, and cables in closets, service areas, and wall cavities to preserve the historic character of interior spaces, features, and finishes.	Installing ducts, pipes, and cables where they will obscure character-defining features or negatively impact the historic character of the interior.
Creating open work areas, when required by the new use, by selectively removing walls only in secondary spaces, less significant upper floors, or other less-visible locations to preserve primary public spaces and circulation systems.	
Retaining the configuration of corridors, particularly in buildings with multiple floors with repetitive plans (such as office and apartment buildings or hotels), where not only the floor plan is character defining, but also the width and the length of the corridor, doorways, transoms, trim, and other features, such as wainscoting and glazing.	Making extensive changes to the character of significant historic corridors by narrowing or radically shortening them, or removing their character-defining features.
Reusing decorative material or features that had to be removed as part of the rehabilitation work (including baseboards, door casing, paneled doors, and wainscoting) and reusing them in areas where these features are missing or are too deteriorated to repair.	Discarding historic material when it can be reused to replace missing or damaged features elsewhere in the building, or reusing material in a manner that may convey a false sense of history.
Installing permanent partitions in secondary, rather than primary, spaces whenever feasible. Removable partitions or partial-height walls that do not destroy the sense of space often may be installed in large character-defining spaces when required by a new use.	Installing partitions that abut windows and glazing or that damage or obscure character-defining spaces, features, or finishes.
Enclosing a character-defining interior stairway, when required by code, with fire-rated glass walls or large, hold-open doors so that the stairway remains visible and its historic character is retained.	Enclosing a character-defining interior stairway for safety or functional reasons in a manner that conceals it or destroys its character.
Locating new, code-required stairways or elevators in secondary and service areas of the historic building.	Making incompatible changes or damaging or destroying character-defining spaces, features, or finishes when adding new code-required stairways and elevators.

[41] **Not Recommended**: Leaving fragments of deteriorated or "sculpted" plaster is not a compatible treatment for either finished or unfinished interior spaces.

[40] **Not Recommended:** Removing a finished ceiling and leaving the structure exposed in a historic retail space does not meet the Standards for Rehabilitation.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Creating an atrium, light court, or lightwell to provide natural light when required for a new use only when it can be done in a manner that preserves significant interior spaces, features, and finishes or important exterior elevations.	Destroying or damaging character-defining interior spaces, features, or finishes, or damaging the structural system to create an atrium, light court, or lightwell.
Inserting a new floor, mezzanine, or loft when required for a new use if it does not damage or destroy significant interior features and finishes and is not visible from the exterior of the building.	Inserting a new floor, mezzanine, or loft that damages or destroys significant interior features or abuts window glazing and is visible from the exterior of the building, and, thus, negatively impacts its historic character.
Inserting a new floor, when necessary for a new use, only in large assembly spaces that are secondary to another assembly space in the building; in a space that has been greatly altered; or where character-defining features have been lost or are too deteriorated to repair.	Inserting a new floor in significant, large assembly spaces with distinctive features and finishes, which negatively impacts their historic character.
Installing exposed ductwork in a finished space when necessary to protect and preserve decorative or other features (such as column capitals, ornamental plaster or pressed-metal ceilings, coffers, or beams) that is designed, painted, and appropriately located so that it will have minimal impact on the historic character of the space.	Installing exposed ductwork in a finished space when necessary to protect and preserve decorative or other features that is not painted, or is located where it will negatively impact the historic character of the space.
Lowering ceilings, installing a dropped ceiling, or constructing soffits to conceal ductwork in a finished space when they will not result in extensive loss or damage to historic materials or decorative and other features, and will not change the overall character of the space or the exterior appearance of the building (i.e., lowered ceilings or soffits visible through window glazing).	Lowering ceilings, installing a dropped ceiling, or constructing soffits to conceal ductwork in a finished space in a manner that results in extensive loss or damage to historic materials or decorative and other features, and will change the overall character of the space or the exterior appearance of the building.
Installing a split system mechanical unit in a manner that will have minimal impact on the historic character of the interior and will result in minimal loss of historic building material.	Installing a split system mechanical unit without considering its impact on the historic character of the interior or the potential loss of historic building material.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving features of the building site that are important in defining its overall historic character. Site features may include walls, fences, or steps; circulation systems, such as walks, paths or roads; vegetation, such as trees, shrubs, grass, orchards, hedges, windbreaks, or gardens; landforms, such as hills, terracing, or berms; furnishings and fixtures, such as light posts or benches; decorative elements, such as sculpture, statuary, or monuments; water features, including fountains, streams, pools, lakes, or irrigation ditches; and subsurface archeological resources, other cultural or religious features, or burial grounds which are also important to the site.	Removing or substantially changing buildings and their features or site features which are important in defining the overall historic character of the property so that, as a result, the character is diminished.

[42] This garden is an important character-defining landscape feature on this college campus.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Retaining the historic relationship between buildings and the landscape.	Removing or relocating buildings or landscape features, thereby destroying the historic relationship between buildings and the landscape. Removing or relocating buildings on a site or in a complex of related historic structures (such as a mill complex or farm), thereby diminishing the historic character of the site or complex. Moving buildings onto the site, thereby creating an inaccurate historic appearance. Changing the grade level of the site if it diminishes its historic character. For example, lowering the grade adjacent to a building to maximize use of a basement, which would change the historic appearance of the building and its relation to the site.
Protecting and maintaining buildings and site features by providing proper drainage to ensure that water does not erode foundation walls, drain toward the building, or damage or erode the landscape.	Failing to ensure that site drainage is adequate so that buildings and site features are damaged or destroyed; or, alternatively, changing the site grading so that water does not drain properly.
Correcting any existing irrigation that may be wetting the building excessively.	Neglecting to correct any existing irrigation that may be wetting the building excessively.
Minimizing disturbance of the terrain around buildings or elsewhere on the site, thereby reducing the possibility of destroying or damaging important landscape features, archeological resources, other cultural or religious features, or burial grounds.	Using heavy machinery or equipment in areas where it may disturb or damage important landscape features, archeological resources, other cultural or religious features, or burial grounds.
Surveying and documenting areas where the terrain will be altered to determine the potential impact to important landscape features, archeological resources, other cultural or religious features, or burial grounds.	Failing to survey the building site prior to beginning work, which may result in damage or loss of important landscape features, archeological resources, other cultural or religious features, or burial grounds.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Protecting (e.g., preserving in place) important site features, archeological resources, other cultural or religious features, or burial grounds.	Leaving known site features or archeological material unprotected so that it is damaged during rehabilitation work.
Planning and carrying out any necessary investigation before rehabilitation begins, using professional archeologists and methods, when preservation in place is not feasible.	Allowing unqualified personnel to perform data recovery on archeological resources, which can result in damage or loss of important archeological material
Preserving important landscape features through regularly-scheduled maintenance of historic plant material.	Allowing important landscape features or archeological resources to be lost, damaged, or to deteriorate due to inadequate protection or lack of maintenance
Protecting the building site and landscape features against arson and vandalism before rehabilitation work begins by erecting temporary fencing and by installing alarm systems keyed into local protection agencies.	Leaving the property unprotected and subject to vandalism before work begins so that the building site and landscape features, archeological resources, other cultural or religious features, or burial grounds can be damaged or destroyed. Removing or destroying features from the site, such as fencing, paths or walkways, masonry balustrades, or plant material.
Installing protective fencing, bollards, and stanchions on a building site, when necessary for security, that are as unobtrusive as possible.	Installing protective fencing, bollards, and stanchions on a building site, when necessary for security, without taking into consideration their location and visibility so that they negatively impact the historic character of the site.
Providing continued protection and maintenance of buildings and landscape features on the site through appropriate grounds and landscape management.	Failing to protect and maintain materials and features from the restoration period on a cyclical basis so that deterioration of the site results.
Protecting buildings and landscape features when working on the site.	Failing to protect building and landscape features during work on the site or failing to repair damaged or deteriorated site features.

BUILDING SITE

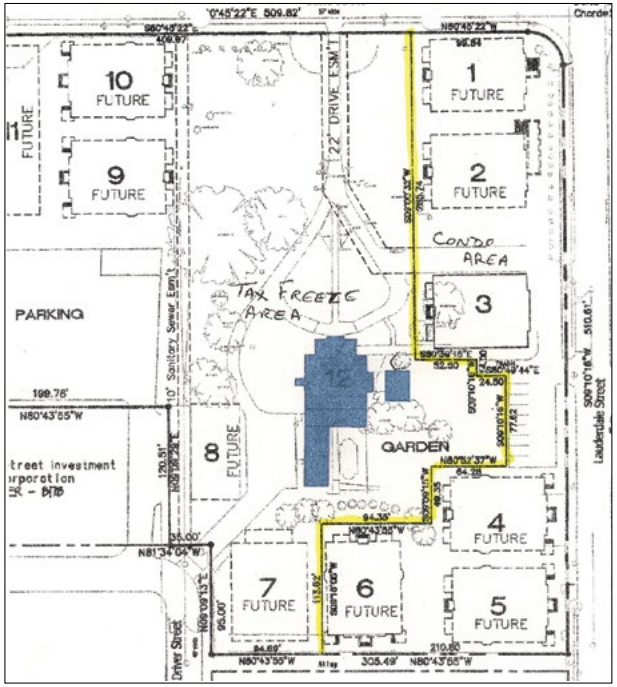
RECOMMENDED	NOT RECOMMENDED
Evaluating the overall condition of materials and features to determine whether more than protection and maintenance, such as repairs to site features, will be necessary.	Failing to undertake adequate measures to ensure the protection of the site.
Repairing historic site features which have been damaged, are deteriorated, or have missing components order reestablish the whole feature and to ensure retention of the integrity of the historic materials. Repairs may include limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing parts of site features when there are surviving prototypes, such as paving, railings, or individual plants within a group (e.g., a hedge). Repairs should be physically and visually compatible.	Removing materials and features that could be repaired or using improper repair techniques. Replacing an entire feature of the site (such as a fence, walkway, or drive) when repair of materials and limited replacement of deteriorated or missing components are feasible.

[43] The industrial character of the site was retained when this brewery complex was rehabilitated for residential use.

[44] **Not Recommended:** (a-b) The historic character of this plantation house (marked in blue on plan on opposite page) and its site was diminished and adversely impacted when multiple new buildings like this (#3 on plan) were constructed on the property (c).

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire feature of the site that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature. Examples could include a walkway or a fountain, a land form, or plant material. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Removing a character-defining feature of the site that is unrepairable and not replacing it, or replacing it with a new feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving site feature or that is physically or ecologically incompatible. Adding conjectural landscape features to the site (such as period reproduction light fixtures, fences, fountains, or vegetation) that are historically inappropriate, thereby creating an inaccurate appearance of the site.



BUILDING SITE

[45] Undertaking a survey to document archeological resources may be considered in some rehabilitation projects when a new exterior addition is planned.

RECOMMENDED	NOT RECOMMENDED
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a new feature on a site when the historic feature is completely missing. This could include missing outbuildings, terraces, drives, foundation plantings, specimen trees, and gardens. The design may be an accurate restoration based on documentary and physical evidence, but only when the feature to be replaced coexisted with the features currently on the site. Or, it may be a new design that is compatible with the historic character of the building and site.	Creating an inaccurate appearance because the replacement for the missing feature is based upon insufficient physical or historic documentation, is not a compatible design, or because the feature did not coexist with the features currently on the site. Introducing a new feature, including plant material, that is visually incompatible with the site or that alters or destroys the historic site patterns or use.
Alterations and Additions for a New Use	
Designing new onsite features (such as parking areas, access ramps, or lighting), when required by a new use, so that they are as unobtrusive as possible, retain the historic relationship between the building or buildings and the landscape, and are compatible with the historic character of the property.	Locating parking areas directly adjacent to historic buildings where vehicles may cause damage to buildings or landscape features or when they negatively impact the historic character of the building site if landscape features and plant materials are removed.
Designing new exterior additions to historic buildings or adjacent new construction that are compatible with the historic character of the site and preserves the historic relationship between the building or buildings and the landscape.	Introducing new construction on the building site which is visually incompatible in terms of size, scale, design, material, or color, which destroys historic relationships on the site, or which damages or destroys important landscape features, such as replacing a lawn with paved parking areas or removing mature trees to widen a driveway.
Removing non-significant buildings, additions, or site features which detract from the historic character of the site.	Removing a historic building in a complex of buildings or removing a building feature or a landscape feature which is important in defining the historic character of the site.
Locating an irrigation system needed for a new or continuing use of the site where it will not cause damage to historic buildings.	Locating an irrigation system needed for a new or continuing use of the site where it will damage historic buildings.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving building and landscape features that are important in defining the overall historic character of the setting. Such features can include circulation systems, such as roads and streets; furnishings and fixtures, such as light posts or benches; vegetation, gardens and yards; adjacent open space, such as fields, parks, commons, or woodlands; and important views or visual relationships.	Removing or substantially changing those building and landscape features in the setting which are important in defining the historic character so that, as a result, the character is diminished.

[46] The varied size, shapes, and architectural styles of these historic buildings are unique to this street in Christiansted, St. Croix, USVI, and should be retained in a rehabilitation project.

[47] Original paving stones contribute to the character of the historic setting and distinguish this block from other streets in the district.

[48] Old police and fire call boxes, which are distinctive features in this historic district, have been retained, and now showcase work by local artists.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Retaining the historic relationship between buildings and landscape features in the setting. For example, preserving the relationship between a town common or urban plaza and the adjacent houses, municipal buildings, roads, and landscape and streetscape features.	Altering the relationship between the buildings and landscape features in the setting by widening existing streets, changing landscape materials, or locating new streets or parking areas where they may negatively impact the historic character of the setting. Removing or relocating buildings or landscape features, thereby destroying the historic relationship between buildings and the landscape in the setting.

[49] Low stone walls are character-defining features in this hilly, early-20th-century residential neighborhood.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Protecting and maintaining historic features in the setting through regularly-scheduled maintenance and grounds and landscape management.	Failing to protect and maintain materials in the setting on a cyclical basis so that deterioration of buildings and landscape features results. Stripping or removing historic features from buildings or the setting, such as a porch, fencing, walkways, or plant material.
Installing protective fencing, bollards, and stanchions in the setting, when necessary for security, that are as unobtrusive as possible.	Installing protective fencing, bollards, and stanchions in the setting, when necessary for security, without taking into consideration their location and visibility so that they negatively impact the historic character of the setting.
Protecting buildings and landscape features when undertaking work in the setting.	Failing to protect buildings and landscape features during work in the setting.
Evaluating the overall condition of materials and features to determine whether more than protection and maintenance, such as repairs to materials and features in the setting, will be necessary.	Failing to undertake adequate measures to ensure the protection of materials and features in the setting.
Repairing features in the setting by reinforcing the historic materials. Repairs may include the replacement in kind or with a compatible substitute material of those extensively deteriorated or missing parts of setting features when there are surviving prototypes, such as fencing, paving materials, trees, and hedgerows. Repairs should be physically and visually compatible.	Failing to repair and reinforce damaged or deteriorated historic materials and features in the setting. Removing material that could be repaired or using improper repair techniques. Replacing an entire feature of the building or landscape in the setting when repair of materials and limited replacement of deteriorated or missing components are feasible.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire building or landscape feature in the setting that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature. If using the same kind of material is not feasible, then a compatible substitute material may be considered.	Removing a character-defining feature of the building or landscape from the setting that is unrepairable and not replacing it or replacing it with a new feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving building or landscape feature in the setting or that is physically or ecologically incompatible.
The following work is highlighted to indicate that it is specific to **Rehabilitation** *projects and should only be considered after the preservation concerns have been addressed.*	
Designing the Replacement for Missing Historic Features	
Designing and installing a new feature of the building or landscape in the setting when the historic feature is completely missing. This could include missing steps, streetlights, terraces, trees, and fences. The design may be an accurate restoration based on documentary and physical evidence, but only when the feature to be replaced coexisted with the features currently in the setting. Or, it may be a new design that is compatible with the historic character of the setting.	Creating an inaccurate appearance because the replacement for the missing feature is based upon insufficient physical or historic documentation; is not a compatible design, or because the feature did not coexist with the features currently in the setting. Introducing a new building or landscape feature that is visually or otherwise incompatible with the setting's historic character (e.g., replacing low metal fencing with a high wood fence).
Alterations and Additions for a New Use	
Designing new features (such as parking areas, access ramps, or lighting), when required by a new use, so that they are as unobtrusive as possible, retain the historic relationships between buildings and the landscape in the setting, and are compatible with the historic character of the setting.	Locating parking areas directly adjacent to historic buildings where vehicles may cause damage to buildings or landscape features or when they negatively impact the historic character of the setting if landscape features and plant materials are removed.
Designing new exterior additions to historic buildings or adjacent new construction that are compatible with the historic character of the setting that preserve the historic relationship between the buildings and the landscape.	Introducing new construction into historic districts which is visually incompatible or that destroys historic relationships within the setting, or which damages or destroys important landscape features.
Removing non-significant buildings, additions, or landscape features which detract from the historic character of the setting.	Removing a historic building, a building feature, or landscape feature which is important in defining the historic character of the setting.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Sensitive solutions to meeting accessibility and life-safety code requirements are an important part of protecting the historic character of the building and site. Thus, work that must be done to meet use-specific code requirements should be considered early in planning a ***Rehabilitation*** *of a historic building for a new use. Because code mandates are directly related to occupancy, some uses require less change than others and, thus, may be more appropriate for a historic building. Early coordination with code enforcement authorities can reduce the impact of alterations necessary to comply with current codes.*	
ACCESSIBILITY	
Identifying the historic building's character-defining exterior features, interior spaces, features, and finishes, and features of the site and setting which may be affected by accessibility code-required work.	Undertaking accessibility code-required alterations before identifying those exterior features, interior spaces, features, and finishes, and features of the site and setting which are character defining and, therefore, must be preserved.
Complying with barrier-free access requirements in such a manner that the historic building's character-defining exterior features, interior spaces, features, and finishes, and features of the site and setting are preserved or impacted as little as possible.	Altering, damaging, or destroying character-defining exterior features, interior spaces, features, and finishes, or features of the site and setting while making modifications to a building, its site, or setting to comply with accessibility requirements.

[50] This kitchen in a historic apartment complex was rehabilitated to meet accessibility requirements.

[51] A new interior access ramp with a simple metal railing is compatible with the character of this mid-century-modern building.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Working with specialists in accessibility and historic preservation to determine the most sensitive solutions to comply with access requirements in a historic building, its site, or setting.	Making changes to historic buildings, their sites, or setting without first consulting with specialists in accessibility and historic preservation to determine the most appropriate solutions to comply with accessibility requirements.
Providing barrier-free access that promotes independence for the user while preserving significant historic features.	Making modifications for accessibility that do not provide independent, safe access while preserving historic features.
Finding solutions to meet accessibility requirements that minimize the impact of any necessary alteration on the historic building, its site, and setting, such as compatible ramps, paths, and lifts.	Making modifications for accessibility without considering the impact on the historic building, its site, and setting.

[52] The access ramp blends in with the stone façade of the First National Bank in Stephenville, TX, and is appropriately located on the side where it is does not impact the historic character of the building. *Photo: Nancy McCoy, QuimbyMcCoy Preservation Architecture, LLP.*

[53] This entrance ramp (right) is compatible with the historic character of this commercial building.

[54] The gently-sloped path in a historic park in Kansas City, MO, which accesses the memorial below, includes a rest area part way up the hill. *Photo: STRATA Architecture + Preservation.*

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Using relevant sections of existing codes regarding accessibility for historic buildings that provide alternative means of code compliance when code-required work would otherwise negatively impact the historic character of the property.	
Minimizing the impact of accessibility ramps by installing them on secondary elevations when it does not compromise accessibility or by screening them with plantings.	Installing elevators, lifts, or incompatible ramps at a primary entrance, or relocating primary entrances to secondary locations to provide access without investigating other options or locations.
Adding a gradual slope or grade to the sidewalk, if appropriate, to access the entrance rather than installing a ramp that would be more intrusive to the historic character of the building and the district.	
Adding an exterior stair or elevator tower that is compatible with the historic character of the building in a minimally-visible location only when it is not possible to accommodate it on the interior without resulting in the loss of significant historic spaces, features, or finishes.	
Installing a lift as inconspicuously as possible when it is necessary to locate it on a primary elevation of the historic building.	
Installing lifts or elevators on the interior in secondary or less significant spaces where feasible.	Installing lifts or elevators on the interior in primary spaces which will negatively impact the historic character of the space.

[55] The lift is compatible with the industrial character of this former warehouse.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
LIFE SAFETY	
Identifying the historic building's character-defining exterior features, interior spaces, features, and finishes, and features of the site and setting which may be affected by life-safety code-required work.	Undertaking life-safety code-required alterations before identifying those exterior features, interior spaces, features, and finishes, and features of the site and setting which are character defining and, therefore, must be preserved.
Complying with life-safety codes (including requirements for impact-resistant glazing, security, and seismic retrofit) in such a manner that the historic building's character-defining exterior features, interior spaces, features, and finishes, and features of the site and setting are preserved or impacted as little as possible.	Altering, damaging, or destroying character-defining exterior features, interior spaces, features, and finishes, or features of the site and setting while making modifications to a building, its site, or setting to comply with life-safety code requirements.
Removing building materials only after testing has been conducted to identify hazardous materials, and using only the least damaging abatement methods.	Removing building materials without testing first to identify the hazardous materials, or using potentially damaging methods of abatement.
Providing workers with appropriate personal equipment for protection from hazards on the worksite.	Removing hazardous or toxic materials without regard for workers' health and safety or environmentally-sensitive disposal of the materials.
Working with code officials and historic preservation specialists to investigate systems, methods, or devices to make the building compliant with life-safety codes to ensure that necessary alterations will be compatible with the historic character of the building.	Making life-safety code-required changes to the building without consulting code officials and historic preservation specialists, with the result that alterations negatively impact the historic character of the building.
Using relevant sections of existing codes regarding life safety for historic buildings that provide alternative means of code compliance when code-required work would otherwise negatively impact the historic character of the building.	

[56 a-b] In order to continue in its historic use, the door openings of this 1916 Colonial Revival-style fire station had to be widened to accommodate the larger size of modern fire trucks. Although this resulted in some change to the arched door surrounds, it is minimal and does not negatively impact the historic character of the building. (a) Above, before; *Photo: Fire and Emergency Medical Services Department (FEMS), Washington, D.C.;* below, after.

[57] Workers wear protective clothing while removing lead paint from metal features.

[59] (a-b) The decorative concrete balcony railings on this 1960s building did not meet life-safety code requirements. They were replaced with new glass railings with a fritted glass pattern matching the original design—a creative solution that satisfies codes, while preserving the historic appearance of the building when viewed from the street (c-d). *Photos: (a, b, d) ERA Architects, Inc.; (c) Nathan Cyprys, photographer*.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Upgrading historic stairways and elevators to meet life-safety codes so that they are not damaged or otherwise negatively impacted.	Damaging or making inappropriate alterations to historic stairways and elevators or to adjacent features, spaces, or finishes in the process of doing work to meet code requirements.
Installing sensitively-designed fire-suppression systems, such as sprinklers, so that historic features and finishes are preserved.	Covering character-defining wood features with fire-retardant sheathing, which results in altering their appearance.
Applying fire-retardant coatings when appropriate, such as intumescent paint, to protect steel structural systems.	Using fire-retardant coatings if they will damage or obscure character-defining features.
Adding a new stairway or elevator to meet life-safety code requirements in a manner that preserves adjacent character-defining features and spaces.	Altering, damaging, or destroying character-defining spaces, features, or finishes when adding a new code-required stairway or elevator.
Using existing openings on secondary or less-visible elevations or, if necessary, creating new openings on secondary or less-visible elevations to accommodate second egress requirements.	Using a primary or other highly-visible elevation to accommodate second egress requirements without investigating other options or locations.
Placing a code-required stairway or elevator that cannot be accommodated within the historic building in a new exterior addition located on a secondary or minimally-visible elevation.	Constructing a new addition to accommodate code-required stairs or an elevator on character-defining elevations or where it will obscure, damage, or destroy character-defining features of the building, its site, or setting.
Designing a new exterior stairway or elevator tower addition that is compatible with the historic character of the building.	

[58] Fire doors that retract into the walls have been installed here (not visible in photo) preserve the historic character of this corridor.

RESILIENCE TO NATURAL HAZARDS

RECOMMENDED	NOT RECOMMENDED
Resilience to natural hazards should be addressed as part of the treatment ***Rehabilitation****. A historic building may have existing characteristics or features that help address or minimize the impacts of natural hazards. These should be used to best advantage and should be taken into consideration early in the planning stages of a rehabilitation project before proposing any new treatments. When new adaptive treatments are needed they should be carried out in a manner that will have the least impact on the historic character of the building, its site, and setting. .*	
Identifying the vulnerabilities of the historic property to the impacts of natural hazards (such as wildfires, hurricanes, or tornadoes) using the most current climate information and data available.	Failing to identify and periodically reevaluate the potential vulnerability of the building, its site, and setting to the impacts of natural hazards.
Assessing the potential impacts of known vulnerabilities on character-defining features of the building, its site, and setting; and reevaluating and reassessing potential impacts on a regular basis.	
Documenting the property and character-defining features as a record and guide for future repair work, should it be necessary, and storing the documentation in a weatherproof location.	Failing to document the historic property and its character-defining features with the result that such information is not available in the future to guide repair or reconstruction work, should it be necessary.
Ensuring that historic resources inventories and maps are accurate, up to date, and accessible in times of emergency.	
Maintaining the building, its site, and setting in good repair, and regularly monitoring character-defining features.	Failing to regularly monitor and maintain the property and the building systems in good repair.
Using and maintaining existing characteristics and features of the historic building, its site, setting, and larger environment (such as shutters for storm protection or a site wall that keeps out flood waters) that may help to avoid or minimize the impacts of natural hazards	Allowing loss, damage, or destruction to occur to the historic building, its site, or setting by failing to evaluate potential future impacts of natural hazards or to plan and implement adaptive measures, if necessary to address possible threats.
Undertaking work to prevent or minimize the loss, damage, or destruction of the historic property while retaining and preserving significant features and the overall historic character of the building, its site, and setting.	Carrying out adaptive measures intended to address the impacts of natural hazards that are unnecessarily invasive or will otherwise adversely impact the historic character of the building, its site, or setting.

[60] In some instances, it may be necessary to elevate a historic building located in a floodplain to protect it. But this treatment is appropriate only if elevating the building will retain its historic character, including its relationship to the site, and its new height will be compatible with surrounding buildings if in a historic district. The house on the right, which has been raised only slightly, has retained its historic character. The house on the left has been raised several feet higher, resulting in a greater impact on the historic character of the house and the district.

RESILIENCE TO NATURAL HAZARDS

RECOMMENDED	NOT RECOMMENDED
Ensuring that, when planning work to adapt for natural hazards, all feasible alternatives are considered, and that the options requiring the least alteration are considered first.	
Implementing local and regional traditions (such as elevating residential buildings at risk of flooding or reducing flammable vegetation around structures in fire-prone areas) for adapting buildings and sites in response to specific natural hazards, when appropriate. Such traditional methods may be appropriate if they are compatible with the historic character of the building, its site, and setting.	Implementing a treatment traditionally used in another region or one typically used for a different property type or architectural style which is not compatible with the historic character of the property.
Using special exemptions and variances when adaptive treatments to protect buildings from known hazards would otherwise negatively impact the historic character of the building, its site, and setting.	
Considering adaptive options, whenever possible, that would protect multiple historic resources, if the treatment can be implemented without negatively impacting the historic character of the district, or archeological resources, other cultural or religious features, or burial grounds.	

Sustainability

Sustainability is usually a very important and integral part of the treatment **Rehabilitation.** Existing energy-efficient features should be taken into consideration early in the planning stages of a rehabilitation project before proposing any energy improvements. There are numerous treatments that may be used to upgrade a historic building to help it operate more efficiently while retaining its character.

The topic of sustainability is addressed in detail in **The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings.**

NEW EXTERIOR ADDITIONS TO HISTORIC BUILDINGS AND RELATED NEW CONSTRUCTION

RECOMMENDED	NOT RECOMMENDED
New Additions	
Placing functions and services required for a new use (including elevators and stairways) in secondary or non-character-defining interior spaces of the historic building rather than constructing a new addition.	Expanding the size of the historic building by constructing a new addition when requirements for the new use could be met by altering non-character-defining interior spaces.
Constructing a new addition on a secondary or non-character-defining elevation and limiting its size and scale in relationship to the historic building.	Constructing a new addition on or adjacent to a primary elevation of the building which negatively impacts the building's historic character.
Constructing a new addition that results in the least possible loss of historic materials so that character-defining features are not obscured, damaged, or destroyed.	Attaching a new addition in a manner that obscures, damages, or destroys character-defining features of the historic building.
Designing a new addition that is compatible with the historic building.	Designing a new addition that is significantly different and, thus, incompatible with the historic building.
Ensuring that the addition is subordinate and secondary to the historic building and is compatible in massing, scale, materials, relationship of solids to voids, and color.	Constructing a new addition that is as large as or larger than the historic building, which visually overwhelms it (i.e., results in the diminution or loss of its historic character).

NEW EXTERIOR ADDITIONS TO HISTORIC BUILDINGS AND RELATED NEW CONSTRUCTION

RECOMMENDED	NOT RECOMMENDED
Using the same forms, materials, and color range of the historic building in a manner that does not duplicate it, but distinguishes the addition from the original building.	Duplicating the exact form, material, style, and detailing of the historic building in a new addition so that the new work appears to be historic.
Basing the alignment, rhythm, and size of the window and door openings of the new addition on those of the historic building.	
Incorporating a simple, recessed, small-scale hyphen, or connection, to physically and visually separate the addition from the historic building.	
Distinguishing the addition from the original building by setting it back from the wall plane of the historic building.	

[61 a-b] The materials, design, and location at the back of the historic house are important factors in making this a compatible new addition. *Photos: © Maxwell MacKenzie.*

NEW EXTERIOR ADDITIONS TO HISTORIC BUILDINGS AND RELATED NEW CONSTRUCTION

RECOMMENDED	NOT RECOMMENDED
Ensuring that the addition is stylistically appropriate for the historic building type (e.g., whether it is residential or institutional).	
Considering the design for a new addition in terms of its relationship to the historic building as well as the historic district, neighborhood, and setting.	

[62] The stair tower at the rear of this commercial building is a compatible new addition.

NEW EXTERIOR ADDITIONS TO HISTORIC BUILDINGS AND RELATED NEW CONSTRUCTION

RECOMMENDED	NOT RECOMMENDED
Rooftop Additions	
Designing a compatible rooftop addition for a multi-story building, when required for a new use, that is set back at least one full bay from the primary and other highly-visible elevations and that is inconspicuous when viewed from surrounding streets.	Constructing a rooftop addition that is highly visible, which negatively impacts the character of the historic building, its site, setting, or district.

[63] (a) A mockup should be erected to demonstrate the visibility of a proposed rooftop addition and its potential impact on the historic building. Based on review of this mockup (orange marker), it was determined that the rooftop addition would meet the Standards (b). The addition is unobtrusive and blends in with the building behind it.

New addition

NEW EXTERIOR ADDITIONS TO HISTORIC BUILDINGS AND RELATED NEW CONSTRUCTION

RECOMMENDED	NOT RECOMMENDED
Limiting a rooftop addition to one story in height to minimize its visibility and its impact on the historic character of the building.	Constructing a highly-visible, multi-story rooftop addition that alters the building's historic character. Constructing a rooftop addition on low-rise, one- to three-story historic buildings that is highly visible, overwhelms the building, and negatively impacts the historic district. Constructing a rooftop addition with amenities (such as a raised pool deck with plantings, HVAC equipment, or screening) that is highly visible and negatively impacts the historic character of the building.

[64] **Not Recommended:** It is generally not appropriate to construct a rooftop addition on a low-rise, two- to three-story building such as this, because it negatively affects its historic character.

NEW EXTERIOR ADDITIONS TO HISTORIC BUILDINGS AND RELATED NEW CONSTRUCTION

RECOMMENDED	NOT RECOMMENDED
Related New Construction	
Adding a new building to a historic site or property only if the requirements for a new or continuing use cannot be accommodated within the existing structure or structures.	Adding a new building to a historic site or property when the project requirements could be accommodated within the existing structure or structures.
Locating new construction far enough away from the historic building, when possible, where it will be minimally visible and will not negatively affect the building's character, the site, or setting.	Placing new construction too close to the historic building so that it negatively impacts the building's character, the site, or setting.

[65] (a) This (far left) is a compatible new outbuilding constructed on the site of a historic plantation house (b). Although traditional in design, it is built of wood to differentiate it from the historic house (which is scored stucco) located at the back of the site so as not to impact the historic house, and minimally visible from the public right-of-way (c).

NEW EXTERIOR ADDITIONS TO HISTORIC BUILDINGS AND RELATED NEW CONSTRUCTION

RECOMMENDED	NOT RECOMMENDED
Designing new construction on a historic site or in a historic setting that it is compatible but differentiated from the historic building or buildings.	Replicating the features of the historic building when designing a new building, with the result that it may be confused as historic or original to the site or setting.
Considering the design for related new construction in terms of its relationship to the historic building as well as the historic district and setting.	
Ensuring that new construction is secondary to the historic building and does not detract from its significance.	Adding new construction that results in the diminution or loss of the historic character of the building, including its design, materials, location, or setting. Constructing a new building on a historic property or on an adjacent site that is much larger than the historic building. Designing new buildings or groups of buildings to meet a new use that are not compatible in scale or design with the character of the historic building and the site, such as apartments on a historic school property that are too residential in appearance.
Using site features or land formations, such as trees or sloping terrain, to help minimize the new construction and its impact on the historic building and property.	
Designing an addition to a historic building in a densely-built location (such as a downtown commercial district) to appear as a separate building or infill, rather than as an addition. In such a setting, the addition or the infill structure must be compatible with the size and scale of the historic building and surrounding buildings—usually the front elevation of the new building should be in the same plane (i.e., not set back from the historic building). This approach may also provide the opportunity for a larger addition or infill when the façade can be broken up into smaller elements that are consistent with the scale of the historic building and surrounding buildings.	

STANDARDS FOR RESTORATION & GUIDELINES FOR RESTORING HISTORIC BUILDINGS

Restoration

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Standards for Restoration

1. A property will be used as it was historically or be given a new use that interprets the property and its restoration period.
2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces and spatial relationships that characterize the period will not be undertaken.
3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Materials, features, spaces and finishes that characterize other historical periods will be documented prior to their alteration or removal.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials.
7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.
8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
10. Designs that were never executed historically will not be constructed.

GUIDELINES FOR RESTORING HISTORIC BUILDINGS

INTRODUCTION

Restoration is the treatment that should be followed when the expressed goal of the project is to make the building appear as it did at a particular—and at its most significant—time in its history. The guidance provided by the **Standards for Restoration and Guidelines for Restoring Historic Buildings** is to first ***identify*** the materials and features from the *restoration period*. After these materials and features have been identified, they should be maintained, protected, repaired, and replaced, when necessary. Unlike the other treatments in which most, if not all, of the historic elements are retained, restoration will likely include the removal of features from other periods. Missing features from the *restoration period* should be *replaced*, based on physical or historic documentation, with either the same or compatible substitute materials. Only those designs that can be documented as having been built should be recreated in a restoration project.

Identify, Retain, and Preserve Materials and Features from the Restoration Period

The guidance for the treatment **Restoration** begins with recommendations to identify the form and detailing of those architectural materials and features that are significant to the *restoration period* as established by historic research and documentation. Therefore, guidance on ***identifying, retaining, and preserving*** features from the *restoration period* is always given first.

Protect and Maintain Materials and Features from the Restoration Period

After identifying those materials and features from the *restoration period* that must be retained in the process of **Restoration** work, then ***protecting and maintaining*** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. Protection includes the maintenance of materials and features from the *restoration period* as well as ensuring that the property is protected before and during restoration work. An overall evaluation of the physical condition of the features from the *restoration period* should always begin at this level.

Repair (Stabilize, Consolidate, and Conserve) Materials and Features from the Restoration Period

Next, when the physical condition of *restoration-period* features requires additional work, repairing by ***stabilizing, consolidating, and conserving*** is recommended. **Restoration** guidance focuses on the preservation of those materials and features that are significant to the period. In **Restoration**, repair may include the limited replacement in kind or with a compatible substitute material of extensively deteriorated or missing components of existing *restoration-period* features when there are surviving prototypes to use as a model.

Replace Extensively Deteriorated Features from the Restoration Period

In **Restoration**, ***replacing*** an entire feature from the *restoration period,* such as a porch, that is too deteriorated to repair may be appropriate. Together with documentary evidence, the form and detailing of the historic feature should be used as a model for the replacement. Using the same kind of material is preferred; however, compatible substitute material may be considered. New work may be unobtrusively dated to guide future research and treatment.

Remove Existing Features from Other Historic Periods

Most buildings change over time, but in **Restoration** the goal is to depict the building as it appeared at the most significant time in its history. Thus, it may involve ***removing*** or altering existing historic features that do not represent the *restoration period*. Materials, features, spaces, and finishes that characterize other historical periods should be documented to guide future research and treatment prior to their alteration or removal.

Recreate Missing Features from the Restoration Period

Most **Restoration** projects involve ***recreating*** features that were significant to the building during the *restoration period*, such as a porch, but are now missing. Missing features to be replaced should be substantiated by documentary and physical evidence to ensure the restoration is accurate. Using the same materials to depict lost features is always the preferred approach; however, using compatible substitute material is an acceptable alternative in **Restoration** because the goal of this treatment is to replicate the *appearance* of the historic building at a particular time.

If documentary and physical evidence are not available to provide an accurate recreation of missing features, the treatment Rehabilitation might be a better overall approach to project work.

Code-Required Work: Accessibility and Life Safety

Sensitive solutions to meeting code requirements in a **Restoration** project are an important part of protecting the historic character of the building. Work that must be done to meet accessibility and life-safety requirements must also be assessed for its potential impact on the historic building as it is restored.

Resilience to Natural Hazards

Resilience to natural hazards should be addressed as part of a **Restoration** project. A historic building may have existing characteristics or features that help to address or minimize the impacts of natural hazards. These should always be used to best advantage when planning new adaptive treatments that have the least impact on the historic character of the building, its site, and setting.

Sustainability

Sustainability should be addressed as part of a **Restoration** project. Good preservation practice is often synonymous with sustainability. Existing energy-efficient features should be retained and repaired. New sustainability treatments should generally be limited to updating existing features and systems to have the least impact on the historic character of the building.

The topic of sustainability is addressed in detail in *The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings*. Although specifically developed for the treatment Rehabilitation, the Sustainability Guidelines can be used to help guide the other treatments.

Restoration as a Treatment. *When the property's design, architectural, or historical significance during a particular period of time outweighs the potential loss of extant materials, features, spaces, and finishes that characterize other historical periods; when there is substantial physical and documentary evidence for the work; and when contemporary alterations and additions are not planned, Restoration may be considered as a treatment. Prior to undertaking work, a particular period of time, i.e., the restoration period, should be selected and justified, and a documentation plan for Restoration developed.*

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving masonry features from the restoration period (such as walls, brackets, railings, cornices, window and door surrounds, steps, and columns) and decorative ornament and other details, such as tooling and bonding patterns, coatings, and color.	Altering masonry features from the restoration period. Failing to document masonry features from the restoration period, which may result in their loss. Applying paint or other coatings (such as stucco) to restoration-period masonry features, or removing them, if such treatments cannot be documented to the restoration period. Changing the type of paint or coating or the color of restoration-period masonry features, unless the work can be substantiated by historical documentation.
Protecting and maintaining masonry features from the restoration period by ensuring that historic drainage features and systems that divert rainwater from masonry surfaces (such as roof overhangs, gutters, and downspouts) are intact and functioning properly.	Failing to identify and treat the causes of masonry deterioration, such as leaking roofs and gutters or rising damp.

[1] (a) When it was acquired by the National Trust for Historic Preservation in the 1980s, Montpelier in Montpelier Station, VA, the home of James and Dolley Madison, had been much altered and enlarged since it was first constructed. Based on historical documentation and research, Montpelier was accurately restored to its 1820s appearance when the president and his wife lived there (b). *Photos: Courtesy of The Montpelier Foundation.*

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Cleaning masonry only when necessary to halt deterioration or remove heavy soiling.	Cleaning masonry surfaces from the restoration period when they are not heavily soiled to create a "like-new" appearance, thereby needlessly introducing chemicals or moisture into historic materials.
Carrying out masonry cleaning tests when it has been determined that cleaning is appropriate. Test areas should be examined to ensure that no damage has resulted and, ideally, monitored over a sufficient period of time to allow long-range effects to be predicted.	Cleaning masonry surfaces without testing or without sufficient time for the testing results to be evaluated.
Cleaning soiled restoration-period masonry surfaces with the gentlest method possible, such as using low-pressure water and detergent and natural bristle or other soft-bristle brushes.	Cleaning or removing paint from masonry surfaces from the restoration period using most abrasive methods (including sandblasting, other media blasting, or high-pressure water) which can damage the surface of the masonry and mortar joints. Using a cleaning or paint-removal method that involves water or liquid chemical solutions when there is any possibility of freezing temperatures. Cleaning with chemical products that will damage some types of masonry (such as using acid on limestone or marble), or failing to neutralize or rinse off chemical cleaners from masonry surfaces.
Using biodegradable or environmentally-safe cleaning or paint-removal products.	
Using paint-removal methods that employ a poultice to which paint adheres, when possible, to neatly and safely remove old lead paint.	
Using coatings that encapsulate lead paint, when possible, where paint is not required to be removed to meet environmental regulations.	
Allowing only trained conservators to use abrasive or laser cleaning methods, when necessary, to clean hard-to-reach, highly-carved, or detailed decorative stone features.	

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Removing damaged or deteriorated paint only to the next sound layer using the gentlest method possible (e.g., hand scraping) prior to repainting.	Removing paint that is firmly adhered to masonry surfaces.
Applying compatible paint coating systems to historically-painted, restoration-period masonry following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting masonry features.
Repainting historically-painted masonry features with colors that are documented to the restoration period of the building (i.e., verifying through paint analysis).	Using paint colors on historically-painted masonry features that are not documented to the restoration period.
Protecting adjacent restoration-period materials when cleaning or removing paint from masonry features from the restoration period.	Failing to protect adjacent restoration-period materials when cleaning or removing paint from masonry features from the restoration period.
Evaluating the overall condition of masonry from the restoration period to determine whether more than protection and maintenance, such as repairs to masonry features will be necessary.	Failing to undertake adequate measures to ensure the protection of masonry features from the restoration period.
Repairing masonry features from the restoration period by patching, splicing, consolidating, or otherwise reinforcing the masonry using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of masonry features from the restoration period when there are surviving prototypes (such as terra-cotta brackets or stone balusters) or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Removing masonry from the restoration period that could be stabilized, repaired, and conserved, or using untested consolidants and unskilled personnel, potentially causing further damage to materials.

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Repairing masonry walls and other masonry features from the restoration period by repointing the mortar joints where there is evidence of deterioration, such as disintegrating mortar, cracks in mortar joints, loose bricks, or damaged plaster.	
Removing deteriorated lime mortar from the restoration period carefully by hand raking the joints to avoid damaging the masonry.	Removing restoration-period mortar that is not deteriorated from sound joints.

[2] (a) Decatur House in Washington, DC, was designed by William Henry Latrobe and constructed in 1816. (b) In the late-19th century, the façade was "modernized" by removing the limestone lintels on the first floor and replacing them with decorative sandstone lintels in the style of the period. (c) In the mid-20th century, the house was brought back to its original appearance based on historic documentation. Photos: The White House Historical Association and Decatur House, a National Trust Site.

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Using power tools only on horizontal joints on restoration-period brick masonry in conjunction with hand chiseling to remove hard mortar that is deteriorated or that is a non-historic material which is causing damage to the masonry units. Mechanical tools should be used only by skilled masons in limited circumstances and generally not on short, vertical joints in brick masonry.	Allowing unskilled workers to use masonry saws or mechanical tools to remove deteriorated mortar from joints prior to repointing.
Duplicating historic mortar joints in strength, composition, color, and texture when repointing is necessary. In some cases, a lime-based mortar may also be considered when repointing Portland cement mortar joints because it is more flexible.	Repointing masonry units with mortar of high Portland cement content (unless it is the content of the mortar from the restoration period).
Duplicating restoration-period mortar joints in width and joint profile when repointing is necessary.	Using "surface grouting" or a "scrub" coating technique, such as a "sack rub" or "mortar washing," to repoint exterior masonry units from the restoration period instead of traditional repointing methods. Changing the width or joint profile when repointing masonry from the restoration period.

[3] **Not Recommended:** Although the Dutchman stone repair has been well executed, the replacement stone is not a good color match.

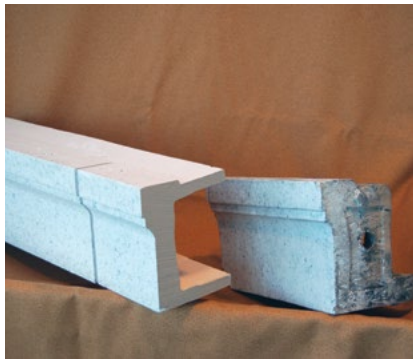
MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Repairing stucco from the restoration period by removing the damaged material and patching with new material that duplicates the historic stucco in strength, composition, color, and texture.	Removing sound stucco from the restoration period or repairing with new stucco that is different in composition from the historic stucco. Patching stucco or concrete from the restoration period without removing the source of deterioration. Replacing deteriorated stucco from the restoration period with synthetic stucco, an exterior finish and insulation system (EFIS), or other non-traditional materials.
Using mud plaster or a compatible lime-plaster adobe render, when appropriate, to repair adobe from the restoration period.	Applying cement stucco, unless it already exists, to adobe from the restoration period.
Sealing joints in concrete from the restoration period with appropriate flexible sealants and backer rods, when necessary.	Repointing masonry units from the restoration period (other than concrete) with a synthetic caulking compound instead of mortar.
Cutting damaged concrete from the restoration period back to remove the source of deterioration, such as corrosion on metal reinforcement bars. The new patch must be applied carefully so that it will bond satisfactorily with and match the historic concrete.	Patching concrete from the restoration period without removing the source of deterioration.
Using a non-corrosive, stainless-steel anchoring system when replacing damaged stone, concrete, or terra-cotta units from the restoration period that have failed.	
Repairing masonry features from the restoration period by patching, splicing, consolidating, or otherwise reinforcing the masonry using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of masonry features from the restoration period when there are surviving prototypes (such as terra-cotta brackets or stone balusters) or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Removing masonry from the restoration period that could be stabilized, repaired, and conserved, or using untested consolidants, improper repair techniques, or unskilled personnel, potentially causing further damage to materials. Replacing an entire masonry feature from the restoration period, such as a cornice or balustrade, when repair of the masonry and limited replacement of deteriorated or missing components are appropriate.

[4] (a) Over the years terra-cotta cladding had been replaced on the lower floors of this early-20th century bank building with a storefront and incompatible windows. (b) A 1936 photograph of the building provided the documentation to restore its historic appearance. (c) Glass fiber reinforced plastic (GRFP) was chosen as a substitute material, and samples were made in a variety of colors and textures to obtain the best match for the missing and damaged terra cotta. (d) This photo taken after restoration shows that the GFRP replacements successfully blend in with the original terra cotta. *Photo (d): Blamonet at English Wikipedia.*

(a)

(b)



(c)

(d)

MASONRY: STONE, BRICK, TERRA COTTA, CONCRETE, ADOBE, STUCCO, AND MORTAR

RECOMMENDED	NOT RECOMMENDED
Applying non-historic surface treatments, such as water-repellent coatings, to masonry from the restoration period only after repointing and only if masonry repairs have failed to arrest water penetration problems.	Applying waterproof, water-repellent, or other coatings that are not from the restoration period (such as stucco) to masonry as a substitute for repointing and masonry repairs.
Applying permeable, anti-graffiti coatings to masonry from the restoration period when appropriate.	Applying water-repellent or anti-graffiti coatings that change the historic appearance of the masonry from the restoration period or that may trap moisture if the coating is not sufficiently permeable.
Replacing in kind an entire masonry feature from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature. Examples can include a large section of a wall, a cornice, balustrade, pier, or parapet. If using the same kind of material is not feasible, then a compatible substitute material may be considered. The new work may be unobtrusively dated to guide future research and treatment.	Removing a masonry feature from the restoration period that is unrepairable and not replacing it, or replacing it with a new feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of the masonry.
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic masonry features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing masonry features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing masonry features from other historic periods, such as a door surround, porch, or steps.	Failing to remove a masonry feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting masonry features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored for future research.	Failing to document masonry features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing masonry feature that existed during the restoration period based on documentary and physical evidence; for example, duplicating a terra-cotta bracket or stone balustrade. The new work may be unobtrusively dated to guide future research and treatment.	Constructing a masonry feature that was part of the original design for the building but was never actually built, or a feature which was thought to have existed during the restoration period but which cannot be documented.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving wood features from the restoration period (such as siding, cornices, brackets, window and door surrounds, and steps) and their paints, finishes, and colors.	Altering wood features from the restoration period. Failing to document wood features from the restoration period, which may result in their loss. Applying paint or other coatings to restoration-period wood features, or removing them, if such treatments cannot be documented to the restoration period. Changing the type of paint or coating or the color of restoration-period wood features, unless the work can be substantiated by historical documentation.
Protecting and maintaining wood features from the restoration period by ensuring that historic drainage features that divert rainwater from wood surfaces (such as roof overhangs, gutters, and downspouts) are intact and functioning properly.	Failing to identify and treat the causes of wood deterioration, such as faulty flashing, leaking gutters, cracks and holes in siding, deteriorated caulking in joints and seams, plant material growing too close to wood surfaces, or insect or fungal infestation.
Applying chemical preservatives or paint to wood features from the restoration period that are subject to weathering, such as exposed beam ends, outriggers, or rafter tails.	Using chemical preservatives that can change the appearance of wood features from the restoration period.
Implementing an integrated pest management plan to identify appropriate preventive measures to guard against insect damage, such as installing termite guards, fumigating, and treating with chemicals.	
Retaining coatings from the restoration period (such as paint) that protect the wood from moisture and ultraviolet light. Paint removal should be considered only when there is paint surface deterioration and as part of an overall maintenance program which involves repainting or applying other appropriate coatings.	Stripping restoration-period paint or other coatings from wood features without recoating them.
Using biodegradable or environmentally-safe cleaning or paint-removal products.	

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Using thermal devices (such as infrared heaters) carefully to remove paint, when it is so deteriorated that total removal is necessary prior to repainting.	Using a thermal device to remove paint from wood features without first checking for and removing any flammable debris behind them. Using thermal devices without limiting the amount of time the wood is exposed to heat.
Using paint-removal methods that employ a poultice to which paint adheres, when possible, to neatly and safely remove old lead paint.	
Using coatings that encapsulate lead paint, when possible, where the paint is not required to be removed to meet environmental regulations.	
Using chemical strippers primarily to supplement other methods such as hand scraping, hand sanding, and thermal devices.	Failing to neutralize the wood thoroughly after using chemical paint removers so that new paint may not adhere. Removing paint from detachable, restoration-period wood features by soaking them in a caustic solution which can roughen the surface, split the wood, or result in staining from residual acid leaching out through the wood.
Removing damaged or deteriorated paint to the next sound layer using the gentlest method possible (e.g., hand scraping and hand sanding) prior to repainting.	Using potentially-damaging paint-removal methods on restoration-period wood surfaces, such as open-flame torches, orbital sanders, abrasive methods (including sandblasting, other media blasting, or high-pressure water), or caustic paint-removers. Removing paint that is firmly adhered to wood surfaces.
Applying compatible paint coating systems to historically-painted wood following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting wood features from the restoration period.
Repainting historically-painted wood features with colors that are documented to the restoration period of the building (i.e., verifying through paint analysis).	Using paint colors on historically-painted wood features that are not documented to the restoration period.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
Protecting adjacent restoration-period materials when cleaning or removing paint from wood features from the restoration period.	Failing to protect adjacent restoration-period materials when cleaning or removing paint from wood features from the restoration period.
Evaluating the overall condition of wood features from the restoration period to determine whether more than protection and maintenance, such as repairs to wood features, will be necessary.	Failing to undertake adequate measures to ensure the protection of wood features from the restoration period.
Repairing wood features from the restoration period by patching, splicing, consolidating, or otherwise reinforcing the wood using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of features from the restoration period when there are surviving prototypes (such as brackets, molding, or sections of siding) or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Removing wood features from the restoration period that could be stabilized, repaired, and conserved, or using untested consolidants or unskilled personnel, potentially causing further damage to historic materials. Replacing an entire wood feature from the restoration period, such as a cornice or porch railing, when repair of the wood and limited replacement of deteriorated or missing components are appropriate.
Replacing in kind an entire wood feature from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples can include a cornice, entablature, or a balustrade. If using the same kind of material is not feasible, then a compatible substitute material may be considered. The new work may be unobtrusively dated to guide future research and treatment.	Removing a wood feature from the restoration period that is unrepairable and not replacing it, or replacing it with a new feature that does not match. Using substitute material for the replacement that does not convey the same appearance of the surviving components of the wood feature from the restoration period or that is physically incompatible.

WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, AND OTHER FUNCTIONAL AND DECORATIVE ELEMENTS

RECOMMENDED	NOT RECOMMENDED
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic masonry features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing wood features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing wood features from other historic periods, such as a door surround, porch, or steps.	Failing to remove a wood feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting wood features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored for future research.	Failing to document wood features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing wood feature that existed during the restoration period based on documentary and physical evidence; for example, duplicating a wood dormer or porch	Constructing a wood feature that was part of the original design for the building but was never actually built, or a feature which was thought to have existed during the restoration period but cannot be documented.

[5] New wood trim pieces were milled to match the few remaining historic features to replace those that were missing.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving metal features from the restoration period (such as columns, capitals, pilasters, spandrel panels, or stairways) and their finishes and colors. The type of metal should be identified prior to work because each metal has its own properties and may require a different treatment.	Altering metal features from the restoration period. Failing to document metal features from the restoration period, which may result in their loss. Applying paint or other coatings to restoration-period metal features, or removing them, if such treatments cannot be documented to the restoration period. Changing the type of paint or coating or the color of restoration-period metal features, unless the work can be substantiated by historical documentation.
Protecting and maintaining metals from the restoration period from corrosion by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved decorative features.	Failing to identify and treat the causes of corrosion of restoration-period metal features such as moisture from leaking roofs or gutters.
Cleaning metals from the restoration period, when necessary, to remove corrosion prior to repainting or applying other appropriate protective coatings.	Failing to reapply coating systems after cleaning metals from the restoration period that require protection from corrosion. Removing the patina from restoration-period metal features. The patina may be a protective layer on some metals (such as bronze or copper) as well as a distinctive finish.
Identifying the particular type of metal from the restoration period prior to any cleaning procedure and then testing to ensure that the gentlest cleaning method possible is selected; or alternatively, determining that cleaning is inappropriate for the particular metal.	Using cleaning methods which alter or damage the restoration-period color, texture, and finish of the metal, or cleaning when it is inappropriate for the metal.
Using non-corrosive chemical methods to clean soft metals from the restoration period (such as lead, tinplate, terneplate, copper, and zinc) whose finishes can be easily damaged by abrasive methods.	Cleaning soft metals from the restoration period (such as lead, tinplate, terneplate, copper, and zinc) with abrasive methods (including sandblasting, other media blasting, or high-pressure water) which will damage the surface of the metal.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Using the least abrasive cleaning method on hard metals from the restoration period (such as cast iron, wrought iron, and steel) to remove paint buildup and corrosion. If hand scraping and wire brushing have Using the least abrasive cleaning method on hard metals from the restoration period (such as cast iron, wrought iron, and steel) to remove paint buildup and corrosion. If hand scraping and wire brushing have proven ineffective, low-pressure abrasive methods may be used as long as they do not damage the surface.	Using high-pressure abrasive techniques without first trying gentler cleaning methods prior to cleaning cast iron, wrought iron, or steel.
Applying appropriate paint or other coating systems to historically-painted, restoration-period metal features after cleaning to protect them from corrosion.	Applying paint or other coatings to metals (such as copper, bronze, or stainless steel) if they were not coated during the restoration period.
Repainting historically-painted metal features with colors that are documented to the restoration period of the building (i.e., verifying through paint analysis).	Using paint colors on historically-painted metal features that are not documented to the restoration period of the building.
Applying an appropriate protective coating (such as lacquer or wax) to an architectural metal feature that was historically unpainted, such as a bronze door, that is subject to heavy use.	
Protecting adjacent restoration-period materials when working on metal features from the restoration period.	Failing to protect adjacent restoration-period materials when working on metal features from the restoration period.
Evaluating the overall condition of metals from the restoration period to determine whether more than protection and maintenance, such as repairs to metal features, will be necessary.	Failing to undertake adequate measures to ensure the protection of metal features from the restoration period.
Repairing metal features from the restoration period by reinforcing the metal by using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing parts of features when there are surviving prototypes (such as porch balusters, column capitals or bases, storefronts, railings, or porch cresting) or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Removing metal features from the restoration period that could be stabilized, repaired, and conserved, or using improper repair techniques, or untrained personnel, potentially causing further damage to historic materials. Replacing an entire metal feature from the restoration period, such as a column or balustrade, when repair of the metal and limited replacement of deteriorated or missing components are appropriate.

[6] Preliminary work before starting restoration revealed that the columns and the decorative shingles ornamenting the top floor of this historic building were fabricated of metal to imitate the red sandstone used elsewhere on the building.

METALS: WROUGHT AND CAST IRON, STEEL, PRESSED METAL, TERNEPLATE, COPPER, ALUMINUM, AND ZINC

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire metal feature from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples of such a feature could include cast-iron porch steps or steel-sash windows. If using the same kind of material is not feasible, then a compatible substitute material may be considered as long as it has the same appearance as the original. The new work may be unobtrusively dated to guide future research and treatment.	Removing a metal feature from the restoration period that is unrepairable and not replacing it, or replacing it with a new feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of the metal feature from the restoration period or that is physically or chemically incompatible.
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic masonry features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing metal features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing metal features from other historic periods, such as a cast-iron porch railing or aluminum windows.	Failing to remove a metal feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting metal features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored for future research.	Failing to document metal features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing metal feature that existed during the restoration period based on documentary and physical evidence; for example, duplicating a cast-iron storefront or porch.	Constructing a metal feature that was part of the original design for the building but was never actually built, or a feature which was thought to have existed during the restoration period but cannot be documented.

ROOFS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving roofs from the restoration period and their functional and decorative features. The form of the roof (gable, hipped, gambrel, flat, or mansard) is significant, as are its decorative and functional features (such as cupolas, cresting, parapets, monitors, chimneys, weather vanes, dormers, ridge tiles, and snow guards), roofing materials (such as slate, wood, clay tile, metal, roll roofing, or asphalt shingles) and size, color, and patterning.	Altering roof and roofing materials from the restoration period. Failing to document roof features from the restoration period, which may result in their loss. Changing the type of paint or coating or the color of restoration-period roof features, unless the work can be substantiated by historical documentation. Stripping the roof of sound historic roofing material (such as slate, clay tile, wood, or metal) from the restoration period.
Protecting and maintaining a roof from the restoration period by cleaning gutters and downspouts and replacing deteriorated flashing. Roof sheathing should also be checked for indications of moisture due to leaks or condensation.	Failing to clean and maintain gutters and downspouts so that water and debris collect and cause damage to roof fasteners, sheathing, and the underlying structure.
Providing adequate anchorage for roofing material from the restoration period to guard against wind damage and moisture penetration.	Allowing flashing, caps, and exposed roof fasteners to corrode, which accelerates deterioration.
Protecting a leaking roof with a temporary waterproof membrane with a synthetic underlayment, roll roofing, plywood, or a tarpaulin until it can be repaired.	Leaving a leaking roof unprotected so that accelerated deterioration of historic building materials from the restoration period (such as masonry, wood, plaster, paint, and structural members) results.
Repainting a roofing material from the restoration period that requires a protective coating and was painted historically (such as a terneplate metal roof or gutters) as part of regularly-scheduled maintenance.	Failing to repaint a roofing material from the restoration period that requires a protective coating and was painted historically as part of regularly-scheduled maintenance.
Protecting a restoration-period roof covering when working on other roof features from the restoration period.	Failing to protect restoration-period roof coverings when working on other roof features from the restoration period.
Evaluating the overall condition of the roofing materials from the restoration period to determine whether more than protection and maintenance, such as repairs to roof features, will be necessary.	Failing to undertake adequate measures to ensure the protection of roof features from the restoration period.

[7 a-b] This crumbling chimney was restored to its historic appearance using matching bricks.

[8] The missing steeple of this historic church was replaced with a new steeple made of a substitute material that, from the street below, closely resembles the original steeple. *Photo: en.Wikipedia.*

ROOFS

RECOMMENDED	NOT RECOMMENDED
Repairing a roof from the restoration period by reinforcing the materials that comprise the roof using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of features when there are surviving prototypes (such as cupola louvers, cresting, dormer roofing, roof monitors, or slate or tile on a main roof) or when replacement can be based on physical or historic documentation. The new work should match the old in materials, design, scale, color, and finish.	Replacing an entire roof feature from the restoration period, such as a dormer, when repair of the roofing materials and limited replacement of deteriorated or missing components are feasible. Failing to reuse intact slate or tile from the restoration period when only the roofing substrate or fasteners need replacement.
Replacing in kind an entire roof covering or feature from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples of such a feature could include a large section of roofing, a dormer, or a chimney. If using the same kind of material is not feasible, then a compatible substitute material may be appropriate.	Removing a roof feature from the restoration period that is unrepairable, such as a chimney or dormer, and not replacing it, or replacing it with a feature that does not match. Using a substitute material for the replacement of a single element of a roof (such as a tile or slate) or an entire feature that does not convey the same appearance of the surviving components of the roof feature from the restoration period or that is physically or chemically incompatible.
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic masonry features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing roof features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing roofs or roof features from other historic periods, such as a dormer or asphalt roofing.	Failing to remove a roof feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting roof features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored for future research.	Failing to document roofing materials and roof features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing roofing material or roof feature that existed during the restoration period based on documentary and physical evidence; for example, duplicating a former dormer or cupola.	Constructing a roof feature that was part of the original design for the building but was never actually built, or a feature which was thought to have existed during the restoration period but cannot be documented.

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving windows from the restoration period and their functional and decorative features. The window material and how the window operates (e.g., double hung, casement, awning, or hopper) are significant, as are its components (including sash, muntins, ogee lugs, glazing, pane configuration, sills, mullions, hardware, casings or brick molds) and related features, such as shutters.	Altering windows or window features from the restoration period. Failing to document window features from the restoration period, which may result in their loss. Applying paint or other coatings to restoration-period window features, or removing them, if such treatments cannot be documented to the restoration period. Changing the type of paint or coating or the color of restoration-period windows, unless the work can be substantiated by historical documentation. Stripping windows of sound historic material (such as wood or metal) from the restoration period.
Conducting an in-depth survey of the condition of existing windows from the restoration period early in the planning process so that repair, upgrading, and, if necessary, possible replacement options can be fully explored.	Replacing windows from the restoration period solely because of peeling paint, broken glass, stuck sash, or high air infiltration. These conditions, in themselves, do not indicate that windows are beyond repair.
Protecting and maintaining the restoration-period wood or metal which comprises the window jamb, sash, and trim through appropriate surface treatments such as cleaning, paint removal, and reapplication of the same protective coatings.	Failing to protect and maintain window materials from the restoration period on a cyclical basis so that deterioration of the window results.
Protecting windows from the restoration period against vandalism before work begins by covering them and by installing alarm systems that are keyed into local protection agencies.	Leaving windows unprotected before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected windows.
Installing impact-resistant glazing, when necessary for security, so that it is compatible with the historic windows from the restoration period and does not damage them or negatively impact their character.	Installing impact-resistant glazing, when necessary, for security that is not compatible with the historic windows from the restoration period and damages them or negatively impacts their character.

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Protecting restoration-period windows when working on other features of the building.	Failing to protect restoration-period windows when working on other features of the building.
Protecting and retaining historic glass from the restoration period when replacing putty or repairing other components of the window.	Failing to protect historic glass from the restoration period when making repairs.
Sustaining the historic operability of windows from the restoration period by lubricating friction points and replacing broken components of the operating system (such as hinges, latches, sash chains or cords) and replacing deteriorated gaskets or insulating units.	Failing to maintain windows and window components from the restoration period so that windows are inoperable, or sealing operable sash permanently. Failing to repair and reuse window hardware from the restoration period, such as sash lifts, latches, and locks.
Evaluating the overall condition of windows from the restoration period to determine whether more than protection and maintenance, such as repairs to windows and window features, will be necessary.	Failing to undertake adequate measures to ensure the protection of window features from the restoration period.
Repairing window frames and sash from the restoration period by patching, splicing, consolidating, or otherwise reinforcing them using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated, broken, or missing components of windows when there are surviving prototypes (such as sash, sills, hardware, or shutters) or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire window from the restoration period when repair of materials and limited replacement in kind are appropriate. Removing a window from the restoration period that is unrepairable and not replacing it, or replacing it with a new window that does not match.

[9] Historic window and shutter hardware such as that shown here should be retained and repaired in a restoration project.

WINDOWS

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire window from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. If using the same kind of material is not feasible, then a compatible substitute material may be considered. The new work may be unobtrusively dated to guide future research and treatment.	Removing a window from the restoration period that is unrepairable and not replacing it, or replacing it with a new window that does not match. Using substitute material for the replacement that does not convey the same appearance of the surviving components of the window from the restoration period or that is physically incompatible.
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic masonry features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing window features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing windows or window features from other historic period, such as the glazing pattern or inappropriate shutters.	Failing to remove a window or window feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting window features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored for future research.	Failing to document window features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing window or window feature that existed during the restoration period based on documentary and physical evidence; for example, duplicating a hoodmold or shutter.	Constructing a window feature that was part of the original design for the building but was never actually built, or constructing a feature which was thought to have existed during the restoration period but cannot be documented.

ENTRANCES AND PORCHES

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving entrances and porches from the restoration period and their functional and decorative features. The materials themselves (including wood, masonry, and metal) are important, as are their features, such as doors, transoms, pilasters, columns, balustrades, stairs, roofs, and projecting canopies.	Altering entrances and porch features from the restoration period. Failing to document entrance and porch features from the restoration period, which may result in their loss. Applying paint or other coatings to restoration-period entrance and porch features, or removing them, if such treatments cannot be documented to the restoration period. Changing the type of paint or coating or the color of restoration-period entrance and porch features, unless the work can be substantiated by historical documentation. Stripping entrances and porches of sound material from the restoration period, such as wood, cast iron, tile, or brick.
Protecting and maintaining the masonry, wood, and metals which comprise entrances and porches from the restoration period through appropriate surface treatments, such as cleaning, rust removal, paint removal, and reapplication of protective coatings.	Failing to protect and maintain materials from the restoration period on a cyclical basis so that deterioration of the entrance or porch results.
Protecting entrances and porches against arson and vandalism before work begins by covering them and by installing alarm systems keyed into local protection agencies.	Leaving entrances and porches unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected entrances.
Protecting entrance and porch features from the restoration period when working on other features of the building.	Failing to protect entrances and porches from the restoration period when working on other features of the building.
Evaluating the overall condition of entrances and porches from the restoration period to determine whether more than protection and maintenance, such as repairs to entrance and porch features, will be necessary.	Failing to undertake adequate measures to ensure the protection of entrance and porch features from the restoration period.

ENTRANCES AND PORCHES

RECOMMENDED	NOT RECOMMENDED
Repairing entrances and porches from the restoration period by reinforcing them or replacing deteriorated materials using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of features when there are surviving prototypes (such as balustrades, columns, and stairs) or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire entrance or porch feature from the restoration period when the repair of materials and limited replacement of deteriorated or missing components are feasible.

[10] (a) The entrance of this house had been altered over the years, including removal of the porch floor and steps. (b) This photograph shows the house after the porch and steps were restored to their historic appearance.

ENTRANCES AND PORCHES

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire entrance or porch from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. If using the same kind of material is not feasible, then a compatible substitute material may be considered. The new work may be unobtrusively dated to guide future research and treatment.	Removing an entrance or porch feature from the restoration period that is unrepairable and not replacing it, or replacing with a new entrance or porch that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of restoration-period entrance or porch features or that is otherwise incompatible.
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic entrances and porches or their features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing entrances and porches or their features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing entrances and porches and their features from other historic periods, such as a porch railing.	Failing to remove an entrance or porch feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting entrance and porch features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored for future research.	Failing to document entrance and porch features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing entrance or porch or its features that existed during the restoration period based on documentary and physical evidence; for example, duplicating a transom or porch column.	Constructing an entrance or porch feature that was part of the original design for the building but was never actually built, or constructing a feature which was thought to have existed during the restoration period but cannot be documented.

STOREFRONTS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving storefronts from the restoration period and their functional and decorative features. The storefront materials (including wood, masonry, metals, ceramic tile, clear glass, and pigmented structural glass) and the configuration of the storefront are significant, as are its features, such as display windows, base panels, bulkheads, signs, doors, transoms, kick plates, corner posts, piers, and entablatures.	Altering storefronts and their features from the restoration period. Failing to document storefront features from the restoration period, which may result in their loss. Applying paint or other coatings to restoration-period storefront features, or removing them, if such treatments cannot be documented to the restoration period. Changing the type of paint or coating or the color of restoration-period storefront features, unless the work can be substantiated by historical documentation. Stripping storefronts of material from the restoration period, such as wood, cast iron, ceramic tile, pigmented structural glass, or masonry.
Protecting and maintaining masonry, wood, glass, ceramic tile, and metals which comprise storefronts from the restoration period through appropriate surface treatments, such as cleaning, paint removal, and reapplication of protective coatings.	Failing to protect and maintain storefront materials from the restoration period on a cyclical basis so that deterioration of storefront features results. Replacing storefront windows from the restoration period rather than maintaining all the components of the window system.
Protecting storefronts against arson and vandalism before work begins by covering windows and doors and by installing alarm systems keyed into local protection agencies.	Leaving the storefront unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected entrances.
Protecting restoration-period storefront features when working on other features of the building.	Failing to protect the restoration-period storefront when working on other features of the building.
Evaluating the overall condition of the storefront from the restoration period to determine whether more than protection and maintenance, such as repairs to storefront features, will be necessary.	Failing to undertake adequate measures to ensure the protection of storefront features from the restoration period.

[11] (a) Some of the materials on the front of this historic building had been previously replaced, but the façade retained its essential distinctive features and design. (b) A vintage postcard of the building (far left) provided sufficient documentation to restore the façade to its historic 1945 appearance, using spandrel glass as a replacement for the original Carrara glass (c). *Photo (b): Courtesy Kelsey & Associates.*

STOREFRONTS

RECOMMENDED	NOT RECOMMENDED
Repairing storefronts from the restoration period by reinforcing them or replacing deteriorated materials using recognized preservation methods. Repair may include the limited replacement in kind or with compatible substitute materials of those extensively deteriorated or missing components of features when there are surviving prototypes (such as transoms, pilasters, or signs) or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire storefront from the restoration period when repair of materials and limited replacement of deteriorated or missing components are feasible.
Replacing in kind an entire storefront from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. If using the same kind of material is not feasible, then a compatible substitute material may be considered. The new work may be unobtrusively dated to guide future research and treatment.	Removing a storefront from the restoration period that is unrepairable and not replacing it, or replacing it with a new storefront that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of the restoration-period storefront or that is physically incompatible.
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic entrances and porches or their features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing storefronts or their features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing storefronts and their features from other historic periods, such as later cladding or signage.	Failing to remove a storefront feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting storefront features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored for future research.	Failing to document storefront features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing storefront or storefront feature that existed during the restoration period based on documentary and physical evidence; for example, duplicating a display window or transom.	Constructing a storefront feature that was part of the original design for the building but was never actually built, or constructing a feature which was thought to have existed during the restoration period but which cannot be documented.

CURTAIN WALLS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving curtain wall systems from the restoration period and their components. The design of the curtain wall is significant, as are its component materials (metal stick framing and panel materials, such as clear or spandrel glass, stone, terra cotta, metal, and fiber-reinforced plastic), appearance (e.g., glazing color or tint, transparency, and reflectivity), and whether the glazing is fixed, operable, or louvered glass panels. How a curtain wall is engineered and fabricated, and the fact that it expands and contracts at a different rate from the building's structural system, are important to understand when undertaking the restoration of a curtain wall system.	Altering curtain wall components from the restoration period. Failing to document curtain wall systems from the restoration period, which may result in their loss. Replacing curtain wall features from the restoration period instead of repairing or replacing only the deteriorated components.
Protecting and maintaining curtain walls and their components from the restoration period through appropriate surface treatments, such as cleaning, paint removal, and reapplication of protective coating system; and by making them watertight and ensuring that sealants and gaskets are in good condition.	Failing to protect and maintain curtain wall components from the restoration period on a cyclical basis so that deterioration of the curtain wall results.
Protecting ground-level curtain walls from the restoration period from vandalism before work begins by covering them, while ensuring adequate ventilation, and by installing alarm systems keyed into local protection agencies.	Leaving ground-level curtain walls from the restoration period unprotected and subject to vandalism before work begins, thereby also allowing the interior to be damaged if it can be accessed through unprotected glazing.
Protecting restoration-period curtain wall components when working on other features of the building.	Failing to protect curtain wall components from the restoration period when working on other features of the building.
Installing impact-resistant glazing, when required by safety codes or necessary for security, with color, transparency, and reflectivity as close as possible to the original in a curtain wall system from the restoration period so that it is compatible with the historic curtain walls and does not damage them or negatively impact their character.	Installing impact-resistant glazing, when required by safety codes or necessary for security, that is not compatible with the historic curtain walls and damages them or negatively impacts their character.
Evaluating the overall condition of the curtain wall system from the restoration period and its individual components to determine whether more than protection and maintenance, such as repairs to curtain wall features, will be necessary.	Failing to undertake adequate measures to ensure the protection of curtain wall features from the restoration period.

CURTAIN WALLS

RECOMMENDED	NOT RECOMMENDED
Repairing curtain walls from the restoration period by reinforcing them or replacing deteriorated materials, including replacing deteriorated or missing sealants or gaskets, when necessary, to seal any gaps between system components. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of curtain walls where there are surviving prototypes or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Replacing an entire curtain wall from the restoration period when repair of materials and limited replacement of deteriorated or missing components are feasible.

[12] This historic curtain wall features a distinctive variety of panel types which must be repaired or replicated in a restoration project if any are damaged or missing.

CURTAIN WALLS

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire curtain wall from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. If using the same kind of material is not feasible, then a compatible substitute material may be considered. The new work may be unobtrusively dated to guide future research and treatment.	Removing a curtain wall feature from the restoration period that is unrepairable and not replacing it, or replacing it with a new curtain wall feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of the restoration-period curtain wall or that is physically incompatible.
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic entrances and porches or their features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing curtain walls or their features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing curtain wall components from other historic periods.	Failing to remove a curtain wall component from another period, thereby confusing the depiction of the building's appearance from the restoration period
Documenting curtain wall components dating from other periods prior to their alteration or removal. If possible, selected examples of these components or materials should be stored for future research.	Failing to document curtain wall components from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing curtain wall component that existed during the restoration period based on documentary and physical evidence.	Constructing a curtain wall component that was part of the original design for the building but was never actually built, or constructing a feature which was thought to have existed during the restoration period but which cannot be documented.

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving structural systems and features from the restoration period. This includes the materials that comprise the structural system (i.e., wood, metal, and masonry), the type of system, and its features, such as posts and beams, trusses, summer beams, vigas, cast-iron or masonry columns, above-grade stone foundation walls, or load-bearing masonry walls.	Altering visible features of structural systems from the restoration period. Failing to document structural systems from the restoration period, which may result in their loss. Overloading the structural system from the restoration period, or installing equipment or mechanical systems which could damage the structure. Replacing a load-bearing masonry wall from the restoration period that could be augmented and retained. Leaving known structural problems untreated, such as deflected beams, cracked and bowed walls, or racked structural members.
Protecting and maintaining the structural system from the restoration period by keeping gutters and downspouts clear and roofing in good repair; and by ensuring that wood structural members are free from insect infestation.	Failing to protect and maintain exterior materials and features from the restoration period on a cyclical basis so that deterioration of the structural system results. Using treatments or products that may retain moisture, which accelerates deterioration of structural members.
Evaluating the overall condition of the structural system from the restoration period to determine whether more than protection and maintenance, such as repairs to structural features, will be necessary.	Failing to undertake adequate measures to ensure the protection of the structural system from the restoration period.

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
Repairing structural systems from the restoration period by reinforcing them by augmenting or upgrading individual components or features in a manner that is consistent with the restoration period. For example, weakened structural members, such as floor framing, can be paired with a new member, braced, or otherwise supplemented and reinforced. The new work should match the old in material, design, scale, color, and finish.	Upgrading the building structurally in a manner that diminishes the restoration-period character of the exterior (such as installing strapping channels or removing a decorative masonry cornice) or that damages interior features or spaces. Replacing a component of the restoration-period structural system when it could be repaired or augmented and retained. Installing a visible or exposed structural replacement feature that does not match the restoration-period feature (e.g., replacing an exposed wood summer beam with a steel beam). Using substitute material that does not equal the load-bearing capabilities of the restoration-period structural component; does not convey the same appearance of the restoration-period component, if it is visible; or is physically incompatible.
Replacing in kind or with a compatible substitute material large portions or entire features of the structural system from the restoration period that are either extensively damaged or deteriorated or that are missing when there are surviving prototypes, such as cast-iron columns, trusses, or sections of load-bearing walls, or when the replacement can be based on historic documentation. Substitute material must be structurally sufficient, physically compatible with the rest of the system, and, where visible, must have the same form, design, and appearance as the restoration-period feature. The new work may be unobtrusively dated to guide future research and treatment.	

STRUCTURAL SYSTEMS

RECOMMENDED	NOT RECOMMENDED
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing visible historic structural features that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing visible structural features from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing visually-intrusive structural features from other historic periods, such as a non-matching column.	Failing to remove or alter a visually-intrusive structural feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting structural features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored to facilitate future research.	Failing to document structural features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing, visible structural feature that existed during the restoration period based on documentary and physical evidence; for example, duplicating a viga or cast-iron column.	Constructing a visible structural feature that was part of the original design for the building but was never actually built, or constructing a feature which was thought to have existed during the restoration period but cannot be documented.

MECHANICAL SYSTEMS:
HEATING, AIR CONDITIONING, ELECTRICAL, AND PLUMBING

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving visible features of mechanical systems from the restoration period, such as radiators, vents, fans, grilles, and plumbing and lighting fixtures.	Altering visible features of mechanical systems from the restoration period. Failing to document visible features of mechanical systems from the restoration period, which may result in their loss.
Protecting and maintaining functioning mechanical, plumbing, and electrical systems and their features from the restoration period through cyclical maintenance.	Failing to protect and maintain functioning mechanical, plumbing, and electrical systems from the restoration period on a cyclical basis so that their deterioration results.
Improving the energy efficiency of functioning mechanical systems to help reduce the need for a new system by installing storm windows and insulating attics and crawl spaces, if appropriate.	
Repairing functioning mechanical systems by augmenting or upgrading system components (such as installing new pipes and ducts), rewiring, or adding new compressors or boilers.	Replacing a functioning mechanical system or its components when it could be upgraded and retained.
Replacing in kind or with a compatible substitute material those extensively deteriorated or missing visible features of restoration-period mechanical systems when there are prototypes, such as ceiling fans, radiators, grilles, or lighting fixtures.	Installing a visible replacement feature that does not convey the same appearance as the restoration-period feature.
Installing a new mechanical system, if required, in a manner that results in the least alteration possible to the building's appearance from the restoration period.	Installing a new mechanical system in a manner that the appearance of visible structural or interior features from the restoration period is significantly changed, or the features are damaged or destroyed.
Providing adequate structural support for new mechanical equipment.	Failing to consider the weight and design of new mechanical equipment so that, as a result, restoration-period structural members or finished surfaces are weakened or cracked.

MECHANICAL SYSTEMS:
HEATING, AIR CONDITIONING, ELECTRICAL, AND PLUMBING

RECOMMENDED	NOT RECOMMENDED
Installing new mechanical and electrical systems and ducts, pipes, and cables in closets, services areas, and wall cavities to preserve the restoration-period character of the interior space.	Installing ducts, pipes, and cables where they will obscure features from the restoration period. Concealing mechanical equipment in walls or ceilings in a manner that results in extensive loss or damage or otherwise obscures restoration-period building materials and features.
Installing air conditioning units, if needed, in such a manner that features from the restoration period are not damaged or obscured, and so that excessive moisture is not generated that will accelerate deterioration of materials from the restoration period.	
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing visible features of the mechanical system that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing visible features of the mechanical system from the restoration period using all new materials..*	
Removing Existing Features from Other Historic Periods	
Removing mechanical systems and their visible features from other periods, such as a later elevator.	Failing to remove or alter a visually-intrusive structural feature from another period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting mechanical systems and features from other periods prior to their alteration or removal. If possible, selected examples of these features should be stored for future research.	Failing to document structural features from other historic periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing feature of the mechanical system that existed during the restoration period based on documentary and physical evidence; for example, duplicating a heating vent or lighting fixture.	Constructing a mechanical system or feature that was part of the original design for the building but was never actually built, or constructing a feature which was thought to have existed during the restoration period but cannot be documented.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving a floor plan and interior spaces, features, and finishes from the restoration period. Significant spatial characteristics include the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves, such as lobbies, lodge halls, entrance halls, parlors, theaters, auditoriums, gymnasiums, and industrial and commercial interiors. Color, texture, and pattern are important characteristics of features and finishes, which can include such elements as columns, plaster walls and ceilings, flooring, trim, fireplaces and mantels, paneling, light fixtures, hardware, decorative radiators, ornamental grilles and registers, windows, doors, and transoms; plaster, paint, wallpaper and wall coverings, and special finishes, such as marbleizing and graining; and utilitarian (painted or unpainted) features, including wood, metal, or concrete exposed columns, beams, and trusses and exposed load-bearing brick, concrete, and wood walls.	Altering a floor plan, interior spaces (including individual rooms), features, or finishes from the restoration period. Failing to document interior spaces, features, and finishes from the restoration period, which may result in their loss. Applying paint, plaster, or other coatings to surfaces that have been unfinished historically, if the work cannot be documented. Changing the type of finish or the color, such as painting a historically-varnished wood feature from the restoration period, or removing paint from a historically-painted feature from the restoration period and staining and varnishing it, unless the work can be substantiated by physical or historic documentation. Stripping paint to bare wood rather than repainting, or not reapplying documented grained or marbled finishes from the restoration period to features, such as doors and paneling. Removing restoration-period interior features (such as mantels, woodwork, doors, windows, light fixtures, or radiators) or other decorative materials from the restoration period.
Protecting and maintaining interior spaces, and materials, features, and finishes from the restoration period through appropriate surface treatments, such as cleaning, paint removal, and reapplication of protective coating systems.	Failing to protect interior features and finishes from the restoration period when working on the interior.
Protecting interior features and finishes from the restoration period against arson and vandalism before project work begins by covering broken windows and boarding open doorways, while ensuring adequate ventilation, and by installing fire alarm systems keyed into local protection agencies.	Leaving the building unprotected with broken windows and open doorways before restoration begins so that the interior features and finishes from the restoration period can be damaged by exposure to weather and vandalism.

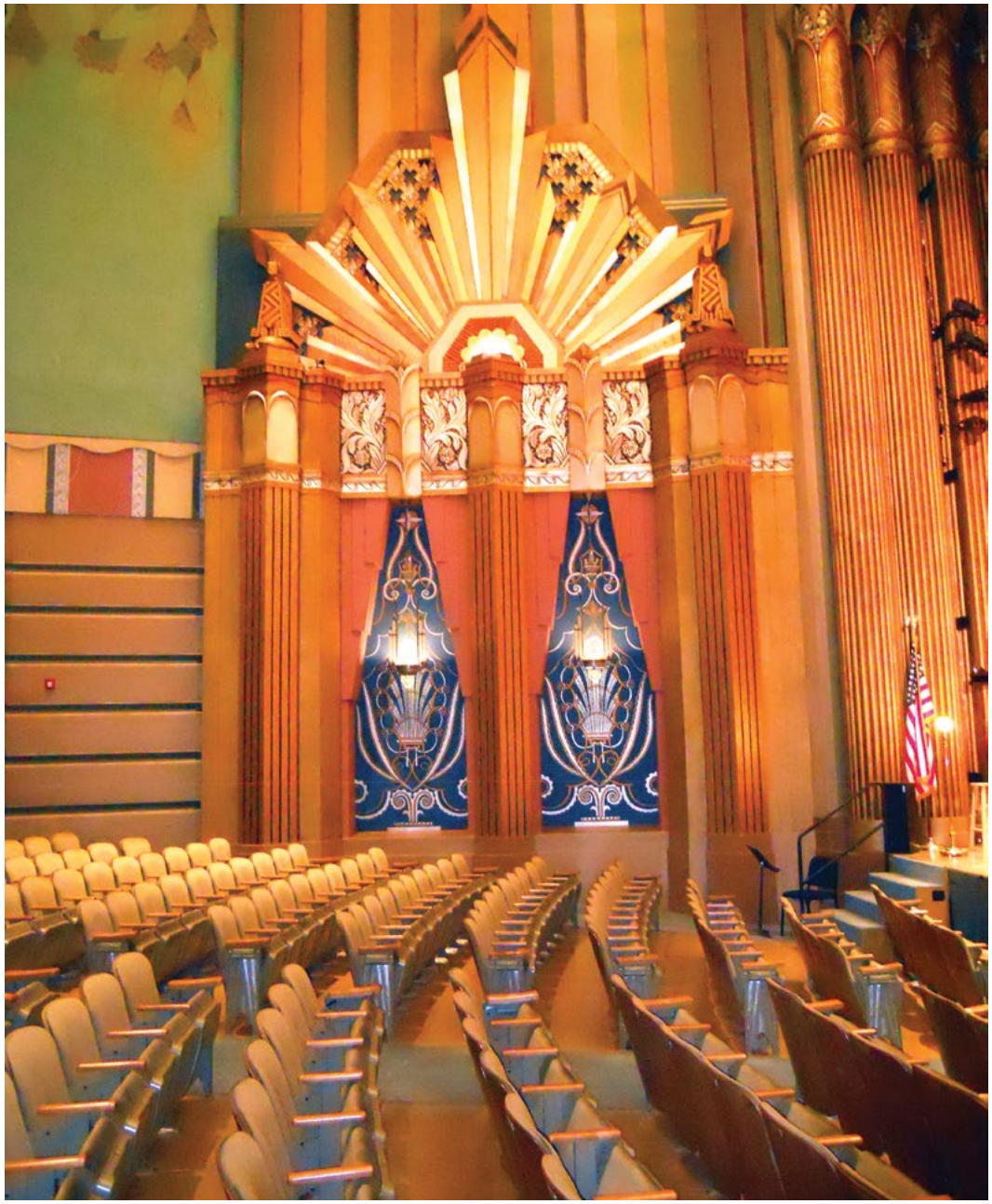
INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Protecting interior features from the restoration period (such as a staircase, mantel, flooring, or decorative finishes) from damage during project work by covering them with plywood, heavy canvas, or plastic sheeting.	Failing to protect interior features and finishes from the restoration period when working on the interior.
Removing damaged or deteriorated paint and finishes from the restoration period only to the next sound layer, using the gentlest method possible, prior to repainting or refinishing using compatible paint or other coating systems based on historical documentation.	Using potentially damaging methods, such as open-flame torches or abrasive techniques, to remove paint or other coatings. Removing paint that is firmly adhered to interior surfaces.
Repainting with colors that are documented to the building's restoration period.	Using paint colors that are inappropriate to the building's restoration period.

[13] (a) In the 1990s the Missing Soldier's Office—established by Clara Barton at the end of the Civil War—was discovered still extant on the third floor of a building in Washington, DC, that was slated for demolition. The office was restored to its historic appearance using physical and documentary evidence. The original numeral '9' is still on the door to the office, and wall paper was reproduced from scraps found on the walls (b-d).

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Using abrasive cleaning methods only on the interior of industrial or warehouse buildings with utilitarian, unplastered masonry walls from the restoration period and where wood features are not finished, molded, beaded, or worked by hand. Low-pressure abrasive cleaning (e.g., sandblasting or other media blasting) should only be considered if test patches show no surface damage and after gentler methods have proven ineffective.	Using abrasive methods anywhere but utilitarian and industrial interior spaces or when there are other methods that are less likely to damage the surface of the material.
Evaluating the overall condition of interior materials, features, and finishes from the restoration period to determine whether more than protection and maintenance, such as repairs to features and finishes, will be necessary.	Failing to undertake adequate measures to ensure the protection of interior materials, features, and finishes from the restoration period.
Repairing Interior features and finishes from the restoration period by patching, splicing, consolidating, or otherwise reinforcing the materials using recognized preservation methods. Repair may include the limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of interior features when there are surviving prototypes (such as stairs, balustrades, wood paneling, columns, decorative wall finishes, or pressed-metal or plaster ceilings) or when the replacement can be based on physical or historic documentation. The new work should match the old in material, design, scale, color, and finish.	Replacing an interior feature from the restoration period or a finish when repair of materials and limited replacement of deteriorated or missing components are feasible.



[14] When the 1931 Fox Theater in Spokane, WA, was rehabilitated as a performing arts center, the auditorium was restored to its original Art Deco splendor.

INTERIOR SPACES, FEATURES, AND FINISHES

RECOMMENDED	NOT RECOMMENDED
Replacing in kind an entire interior feature from the restoration period that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples could include wainscoting, window and door surrounds, or interior stairs. If using the same kind of material is not feasible, then a compatible substitute material may be considered. The new work may be unobtrusively dated to guide future research and treatment.	Removing a feature or finish from the restoration period that is unrepairable and not replacing it, or replacing it with a new feature or finish that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving components of the restoration-period interior feature or finish or that is physically incompatible.
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic interior spaces, features, and finishes that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing interior spaces, features, and finishes from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing or altering interior spaces, features, or finishes from other historic periods, such as a dropped ceiling or wood paneling.	Failing to remove an interior space, feature, or finish from another historic period, thereby confusing the depiction of the building's appearance from the restoration period.
Documenting materials and features dating from other periods prior to their alteration or removal. If possible, selected examples of these features or materials should be stored for future research.	Failing to document interior spaces, features, and finishes from other periods that are removed from the building so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating an interior space or a missing feature or finish from the restoration period based on documentary and physical evidence; for example, duplicating a mantel or a staircase.	Creating an interior space, adding a feature, or applying a finish that was part of the original design for the building but was never actually built, or adding a feature which was thought to have existed during the restoration period but cannot be documented.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving features of the building site from the restoration period. Site features may include walls, fences, or steps; circulation systems, such as walks, paths, or roads; vegetation, such as trees, shrubs, grass, orchards, hedges, windbreaks, or gardens; landforms, such as hills, terracing, or berms; furnishings and fixtures, such as light posts or benches; decorative elements, such as sculpture, statuary, or monuments; water features, such as fountains, streams, pools, lakes, irrigation ditches; and subsurface archeological resources, other cultural or religious features, or burial grounds which are also important to the restoration period of the site.	Altering buildings and their features or site features from the restoration period. Failing to document building and site features from the restoration period, which may result in their loss.
Reestablishing the relationship between buildings and the landscape on the site that existed during the restoration period.	Retaining non-restoration period buildings or landscape features on the site, thereby confusing the depiction of the restoration-period appearance of the site.
Protecting and maintaining buildings and site features from the restoration period by providing proper drainage to ensure that water does not erode foundation walls, drain toward a building, or damage or erode the landscape.	Failing to ensure that site drainage is adequate so that buildings and site features from the restoration period are damaged or destroyed. Or, alternatively, changing the site grading so that water does not drain properly.
Minimizing disturbance of the terrain around buildings or elsewhere on the site, thereby reducing the possibility of destroying or damaging important landscape features from the restoration period or archeological resources, other cultural or religious features, or burial grounds.	Using heavy machinery or equipment in areas where it may disturb or damage important landscape features from the restoration period or archeological resources, other cultural or religious features, or burial grounds.

[15] (a) Cherry Hill House and Farm (c. 1845) in Falls Church, VA, was the site of encampments during the Civil War. Outbuildings on the property, such as the corn crib (b) in the foreground which was the source of provisions for the soldiers, are important in interpreting its role during the war.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Surveying and documenting areas of the site where the terrain will be altered during restoration work to determine the potential impact to important landscape features from the restoration period or archeological resources, other cultural or religious features, or burial grounds from the restoration period.	Failing to survey the building site prior to beginning restoration work, which can result in damaging or destroying landscape features from the restoration period, or archeological resources, other cultural or religious features, or burial grounds.
Protecting (e.g., preserving in place) important site features, archeological resources, other cultural or religious features, or burial grounds.	Failing to protect site features from the restoration period, or archeological resources, other cultural or religious features, or burial grounds when working on the site.
Planning and carrying out any necessary investigation before restoration of the site begins, using professional archeologists and methods, when preservation in place is not feasible.	Allowing unqualified personnel to perform data recovery on archeological resources, which can result in damage or loss of important archeological material.
Preserving important landscape features from the restoration period through regularly-scheduled site maintenance of historic plant material.	Allowing important landscape features from the restoration period to be lost or damaged due to lack of site maintenance.
Protecting the building site and landscape features from the restoration period against arson and vandalism before restoration work begins by erecting temporary fencing and by installing alarm systems keyed into local protection agencies.	Leaving the property unprotected and subject to vandalism before work begins so that the building site and landscape features from the restoration period, or archeological resources, other cultural or religious features, or burial grounds can be damaged or destroyed. Removing site features from the restoration period, such as fencing, paths or walkways, masonry balustrades, or plant material.
Installing protective fencing, bollards, and stanchions on a building site, when necessary for security, that are as unobtrusive as possible.	Installing protective fencing, bollards, and stanchions on a building site, when necessary for security, without taking into consideration their location and visibility so that they negatively impact the restoration-period character of the site.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Providing continued protection and maintenance of buildings and landscape features from the restoration-period of the site through appropriate grounds and landscape management.	Failing to protect and maintain materials and features from the restoration period on a cyclical basis so that deterioration of the site results.
Protecting buildings and site features from the restoration period when working on the site.	Failing to protect buildings and landscape features from the restoration period when working on the site or failing to repair damaged or deteriorated site features.
Evaluating the overall condition of materials and features from the restoration period to determine whether more than protection and maintenance, such as repairs to site features, will be necessary.	Failing to undertake adequate measures to ensure the protection of site features from the restoration period.
Repairing site features from the restoration period which have been damaged, are deteriorated, or have missing components to reestablish the whole feature and to ensure retention of the integrity of the historic materials. Repair may include limited replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of site features when there are surviving prototypes, such as paving, railing, or individual plants within a group (e.g., a hedge), or when the replacement can be based on physical or historic documentation.	Replacing an entire site feature from the restoration period (such as a fence, walkway, or drive) when repair of materials and limited replacement of deteriorated or missing components are feasible.
Replacing in kind an entire restoration-period feature of the site that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. Examples could include a walkway or fountain, a land form or plant materials. If using the same kind of material is not feasible, then a compatible substitute material may be used. The new work may be unobtrusively dated to guide future research and treatment.	Removing a site feature from the restoration period that is unrepairable and not replacing it, or replacing it with a new feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving site feature from the restoration period or that is physically incompatible. Adding conjectural landscape features to the site (such as period reproduction light fixtures, fences, fountains, or vegetation) that cannot be documented, thereby confusing the depiction of the restoration-period appearance of the building site.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing visible features of the building site that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing visible features of the mechanical system from the restoration period using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing site features from other historic periods, such as an outbuilding, paved road, or overgrown trees.	Failing to remove a site feature from another historic period, thereby confusing the depiction of the site's appearance from the restoration period.
Documenting features of the building site dating from other periods prior to their removal.	Failing to document site features from other periods that are removed during restoration so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing site feature from the restoration period based on documentary and physical evidence; for example, duplicating a no-longer extant terrace, gazebo, fencing, or a hedge.	Constructing a feature of the building or site that was part of the original design but was never actually built, or constructing a feature which was thought to have existed during the restoration period but cannot be documented.

[16] Archeological investigation of the property was undertaken to ensure accuracy of the restoration of Montpelier. Photo: Courtesy of The Montpelier Foundation.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining, and preserving building and landscape features from the restoration period in the setting. These features can include circulation systems, such as roads and streets; furnishings and fixtures, such as light posts or benches; vegetation, gardens, and yards; adjacent open space, such as fields, parks, commons, or woodlands; and important views or visual relationships.	Altering restoration-period building and landscape features in the setting. Failing to document restoration-period buildings and landscape features in the setting, which may result in their loss.
Retaining or reestablishing the relationship between buildings and landscape features in the setting that existed during the restoration period.	Retaining non-restoration period buildings or landscape features in the setting, thereby confusing the depiction of the restoration-period appearance of the setting.

(a)

[17 a-b] The cobblestone street, brick sidewalks, and stone stoops of these houses are important restoration-period features of the late 18th- through the 19th-century restoration period of this historic district.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Protecting and maintaining features from the restoration period in the setting through regularly-scheduled maintenance and grounds and landscape management.	Failing to protect and maintain materials in the setting on a cyclical basis so that deterioration of buildings and landscape features results. Removing restoration-period building or landscape features in the setting, such as porches, fencing, walkways, or plant material.
Installing protective fencing, bollards, and stanchions in a setting, when necessary for security, that are as unobtrusive as possible.	Installing protective fencing, bollards, and stanchions in a setting, when necessary for security, without taking into consideration their location and visibility so that they negatively impact the historic character of the setting.

(b)

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
Protecting buildings and landscape features from the restoration period when undertaking work in the setting.	Failing to protect buildings and landscape features from the restoration period when working in the setting.
Evaluating the overall condition of restoration-period materials and features in the setting to determine whether more than protection and maintenance, such as repairs to materials and features, will be necessary.	Failing to undertake adequate measures to ensure the protection of materials and features in the setting from the restoration period.
Repairing restoration-period features in the setting by reinforcing the historic materials. Repair may include the replacement in kind or with a compatible substitute material of those extensively deteriorated or missing components of features from the restoration period when there are surviving prototypes, such as porch balustrades, paving materials, or trees.	Replacing an entire building or landscape feature from the restoration period in the setting when repair of materials and limited replacement of deteriorated or missing components are feasible.
Replacing in kind an entire restoration-period building or landscape feature in the setting that is too deteriorated to repair (if the overall form and detailing are still evident) using the physical evidence as a model to reproduce the feature or when the replacement can be based on historic documentation. If using the same kind of material is not feasible, then a compatible substitute material may be considered. The new work may be dated to guide future research and treatment.	Removing a restoration-period feature of the building or landscape in the setting that is unrepairable and not replacing it, or replacing it with a new feature that does not match. Using a substitute material for the replacement that does not convey the same appearance of the surviving restoration-period building or landscape feature in the setting or that is physically or ecologically incompatible.

SETTING (DISTRICT / NEIGHBORHOOD)

RECOMMENDED	NOT RECOMMENDED
The following **Restoration** *work is highlighted to indicate that it involves the removal or alteration of existing historic features of the setting that would be retained in Preservation and Rehabilitation treatments; and the replacement of missing restoration-period features of the setting using all new materials.*	
Removing Existing Features from Other Historic Periods	
Removing features of the building or landscape in the setting from other historic periods, such as a road, sidewalk, or fence.	Failing to remove a feature of the building or landscape in the setting from another period, thereby confusing the depiction of the setting's appearance from the restoration period.
Documenting features of the building or landscape in the setting dating from other periods prior to their removal.	Failing to document features of the building or landscape features in the setting from other periods that are removed during restoration so that a valuable portion of the historic record is lost.
Recreating Missing Features from the Restoration Period	
Recreating a missing feature of the building or landscape in the setting that existed during the restoration period based on documentary and physical evidence; for example, duplicating a non-longer extant path or park bench.	Constructing a feature of the building or landscape that was part of the original design for the setting but was never actually built, or constructing a feature which was thought to have existed during the restoration period but cannot be documented.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Sensitive solutions to meeting accessibility and life-safety code requirements are an important part of protecting the restoration-period of the building and site. Thus, work that must be done to meet use-specific code requirements in the treatment **Restoration** *must also be assessed for its potential impact on the restoration-period of the historic building and site.*	
Accessibility	
Identifying the restoration-period exterior features, interior spaces, features, and finishes, and features of the site and setting which may be affected by accessibility code-required work.	Undertaking accessibility code-required alterations before identifying the exterior features, interior spaces, features, and finishes, and features of the site and setting from the restoration period and, therefore, must be preserved.
Complying with barrier-free access requirements in such a manner that the restoration-period exterior features, interior spaces, features, and finishes, and features of the site and setting are preserved or impacted as little as possible.	Altering, damaging, or destroying the exterior features, interior spaces, features, and finishes, or features of the site and setting from the restoration period while complying with accessibility requirements.
Working with specialists in accessibility and historic preservation to determine the most sensitive solutions to comply with access requirements in a restoration project.	Making changes to historic buildings and their sites without first consulting with specialists in accessibility and historic preservation to determine the most appropriate solutions to comply with accessibility requirements in a manner that will preserve the character of the restoration period.
Providing barrier-free access that promotes independence for the user while preserving significant features from the restoration period.	Making access modifications that do not provide independent, safe access while preserving restoration-period features.
Finding solutions to meet accessibility requirements that minimize the impact of any necessary alteration on the restoration period of the building, its site, and setting, such as compatible ramps, paths, and lifts.	Making modifications for accessibility without considering the impact on the restoration period of the building, its site, or setting.
Using relevant sections of existing codes regarding accessibility for historic buildings that provide alternative means of code compliance when code-required work would otherwise negatively impact the restoration-period character of the property.	

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Minimizing the visual impact of accessibility ramps by installing them on secondary elevations when it does not compromise accessibility or by screening them with plantings.	
Adding a gradual slope or grade to the sidewalk, if appropriate, to access the entrance rather than installing a ramp that would be more intrusive to the historic character of the restoration period of the building and the district.	

[18 a-b] The historic Chapel of Our Lady in Cold Spring, NY, is situated on a rocky promontory overlooking the Hudson River. Installing an accessible ramp would greatly compromise the character of the building and the site. However, an audio-visual program available in a separate building—located where it would not impact the character of the site, such as this small pavilion at the rear of the property—could provide visitors otherwise unable to access the Chapel an opportunity to experience the site.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Installing a lift as inconspicuously as possible when it is necessary to locate it on a primary elevation of the historic building.	
Considering placing accessible facilities needed for visitors to the restored property (e.g., restrooms) in a separate building, such as a visitor center, that is located away from the historic structure rather than in the historic building if their installation would negatively impact character-defining spaces, features, or finishes from the restoration period.	Installing accessible facilities inside or on the exterior of the historic building that are incompatible with the character of the restoration period or would damage or destroy character-defining spaces, features, or finishes from the restoration period.
Devising non-permanent or temporary adaptive treatments that meet accessibility requirements to preserve the restoration-period character of the building, its site, and setting.	
Developing and providing virtual tours to help interpret the restored property when it is not feasible or it is physically impossible to make the building or its site accessible without damaging or obscuring character-defining building and landscape features in the setting from the restoration period.	
LIFE SAFETY	
Identifying the restoration-period exterior features, interior spaces, features, and finishes, and features of the site and setting which may be affected by life-safety code-required work.	Undertaking life-safety code-required alterations before identifying the exterior features, interior spaces, features, and finishes, and features of the site and setting from the restoration period and, therefore, must be preserved.
Complying with life-safety codes (including requirements for impact-resistant glazing, security, and seismic retrofit) in such a manner that the restoration-period exterior features, interior spaces, features, and finishes, and features of the site and setting are preserved or impacted as little as possible.	Altering, damaging, or destroying the restoration-period exterior features, interior spaces, features, and finishes, or features of the site and setting from the restoration period while making modifications to a building, its site, or setting to comply with life-safety code requirements.
Removing building materials from the restoration period only after testing has been conducted to identify hazardous materials, and using only the least damaging abatement methods.	Removing building materials from the restoration period without testing first to identify any hazardous materials, or using potentially-damaging methods of abatement without considering less-invasive methods of abatement.

CODE-REQUIRED WORK

RECOMMENDED	NOT RECOMMENDED
Providing workers with appropriate personal equipment for protection from hazards on the worksite.	Removing hazardous or toxic materials without regard for workers' health and safety or environmentally-sensitive disposal of the materials.
Working with code officials and historic preservation specialists to investigate systems, methods, or devices to make the building compliant with life-safety codes to ensure that necessary alterations will be compatible with the restoration-period character of the building.	Making life-safety code-required changes to the building without consulting code officials and historic preservation specialists, with the result that alterations negatively impact the restoration-period character of the building.
Using relevant sections of existing codes regarding life safety for historic buildings that provide alternative means of compliance when life-safety code-required work would otherwise negatively impact the restoration-period character of the building.	
Upgrading restoration-period stairways and elevators to meet life-safety codes so that they are not damaged or their historic character is not negatively impacted.	Damaging or making inappropriate alterations to historic stairways or elevators or to adjacent features, spaces, or finishes from the restoration period while complying with life-safety code requirements.
Installing sensitively-designed fire-suppression systems, such as sprinklers, so that historic features and finishes from the restoration period are preserved.	Covering wood features from the restoration period with fire-retardant sheathing, which results in altering their appearance.
Applying fire-retardant coatings when appropriate, such as intumescent paint, to protect steel structural systems from the restoration period.	Using fire-retardant coatings if they will damage or obscure character-defining features from the restoration period.

RESILIENCE TO NATURAL HAZARDS

RECOMMENDED	NOT RECOMMENDED
Resilience to natural hazards should be addressed as part of a **Restoration** *project. A historic building may have existing characteristics or features from the restoration period that help address or minimize the impacts of natural hazards. These should be used to best advantage and should be taken into consideration early in the planning stages of a restoration project before proposing any additional treatments. When new adaptive treatments are needed they should be carried out in a manner that will have the least impact on the restoration-period character of the building, its site, and setting.*	
Identifying the vulnerabilities of the restoration-period property to the impacts of natural hazards (such as wildfires, hurricanes, or tornadoes) using the most current climate information and data available.	Failing to identify and periodically reevaluate the potential vulnerability of the restoration-period building, its site, and setting to the impacts of natural hazards.
Assessing the potential impacts of known vulnerabilities on restoration-period features of the building, its site, and setting; and reevaluating and reassessing potential impacts on a regular basis.	

[19] The 1951 Mies van der Rohe-designed Farnsworth House, Plano, IL, was built close to the Fox River, which is increasingly prone to floods. To preserve the house in its original location, historic preservation architects and engineers continue to explore ways to protect it from the flooding, including a possible system that would lift the house above the flood waters and lower it back to the ground. *Photo: Courtesy Farnsworth, A Site of the National Trust for Historic Preservation.*

RESILIENCE TO NATURAL HAZARDS

RECOMMENDED	NOT RECOMMENDED
Documenting the restoration-period character of the property as a record and guide for future repair work, should it be necessary, and storing the documentation in a weatherproof location.	Failing to document the restoration-period character of the property with the result that such information is not available in the future to guide repair or reconstruction work, should it be necessary.
Ensuring that historic resources inventories and maps are accurate, up to date, and accessible in an emergency.	
Maintaining the restoration-period building, its site, and setting in good repair, and regularly monitoring their condition.	Failing to regularly monitor and maintain the restoration-period property and the building systems in good repair.
Using and maintaining existing characteristics and features of the restoration-period building, its site, setting, and larger environment (such as shutters for storm protection or a site wall that keeps out flood waters) that may help to avoid or minimize the impacts of natural hazards.	Allowing loss, damage, or destruction to occur to the restoration-period building, its site, or setting by failing to evaluate potential future impacts of natural hazards or to plan and implement adaptive measures, when necessary to address possible threats.
Undertaking work to prevent or minimize the loss, damage, or destruction of the historic property while retaining and preserving significant features and the overall restoration-period character of the building, its site, and setting.	Carrying out adaptive measures intended to address the impacts of natural hazards that are unnecessarily invasive or will otherwise adversely impact the restoration-period character of the building, its site, or setting.
Ensuring that, when planning work to adapt for natural hazards, all feasible alternatives are considered, and that the options requiring the least alteration to the restoration-period character of the property are considered first.	Implementing local and regional traditions (such as elevating residential buildings at risk of flooding or reducing flammable vegetation around structures in fire-prone areas) for adapting buildings and sites in response to specific natural hazards which would negatively impact the restoration-period character of the property.
Using special exemptions and variances when adaptive treatments to protect buildings from known hazards would otherwise negatively impact the restoration-period character of the building, its site, or setting.	

Sustainability

Sustainability should be addressed as part of a **Restoration** project. Existing energy-efficient features from the restoration period should be retained and restored while those that are no longer extant but which were important in defining the restoration-period character of the building should be recreated. New sustainability treatments should only be undertaken if they will not impact the restoration-period character of the building.

The topic of sustainability is addressed in detail in *The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings.* Although specifically developed for the treatment Rehabilitation, the Sustainability Guidelines can be used to help guide the other treatments

STANDARDS FOR RECONSTRUCTION & GUIDELINES FOR RECONSTRUCTING HISTORIC BUILDINGS

Reconstruction

Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

Standards for Reconstruction

1. Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture and such reconstruction is essential to the public understanding of the property.
2. Reconstruction of a landscape, building, structure or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.
3. Reconstruction will include measures to preserve any remaining historic materials, features, and spatial relationships.
4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will re-create the appearance of the non-surviving historic property in materials, design, color and texture.
5. A reconstruction will be clearly identified as a contemporary re-creation.
6. Designs that were never executed historically will not be constructed.

INTRODUCTION

Reconstruction is different from the other treatments in that it is undertaken when there are often no visible historic materials extant or only a foundation remains. Whereas the treatment Restoration provides guidance on restoring historic building features, the **Standards for Reconstruction and Guidelines for Reconstructing Historic Buildings** should be followed when it is necessary to recreate a non-surviving building using new material. But, like restoration, reconstruction also involves recreating a historic building which appears as it did at a particular—and at its most significant—time in its history. Because of the potential for historical error in the absence of sound physical evidence, this treatment can be justified only rarely and, thus, is the least frequently undertaken of the four treatments. Reconstructing a historic building should only be considered when there is accurate documentation on which to base it. When only the appearance of the exterior of the building can be documented, it may be appropriate to reconstruct the exterior while designing a very simple, plain interior that does not attempt to appear historic or historically accurate. Signage and interpretative aids should make it clear to visitors that only the exterior of the building is a true reconstruction. Extant historic surface and subsurface materials should also be preserved. Finally, the reconstructed building must be clearly identified as a contemporary recreation.

Research and Document Historical Significance

The guidance for the treatment **Reconstruction** begins with ***researching and documenting*** the building's historical significance to determine whether its recreation is essential to the public understanding of the property. In some instances, reconstruction may not be necessary if there is a historic building still existing on the site or in a setting that can explain the history of the property. Justifying a reconstruction requires detailed physical and documentary evidence to minimize or eliminate conjecture and to ensure that the reconstruction is as accurate as possible. Only one period of significance is generally identified; a building—as it evolved—is rarely recreated. If research does not provide adequate documentation for an accurate reconstruction, other interpretive methods should be considered, such as an explanatory marker.

Investigate Archeological Resources

Investigating archeological resources is the next area of guidance in the treatment **Reconstruction**. The purpose of archeological research is to identify any remaining features of the building, site, and setting that are essential to an accurate recreation and must be reconstructed. Archeological resources that are not essential to the reconstruction should be left in place. The archeological findings, together with archival documentation, should be used to replicate the design, materials, and plan of the historic building.

Identify, Protect, and Preserve Extant Historic Features

Closely aligned with archeological research, recommendations are given for ***identifying, protecting, and preserving*** extant features of the historic building. It is never appropriate to base a **Reconstruction** upon conjectural designs or on features from other buildings. Any remaining historic materials and features should be retained and incorporated into the reconstruction when feasible. Both the historic and new materials should be documented to assist in interpretation.

Reconstruct Non-Surviving Building and Site

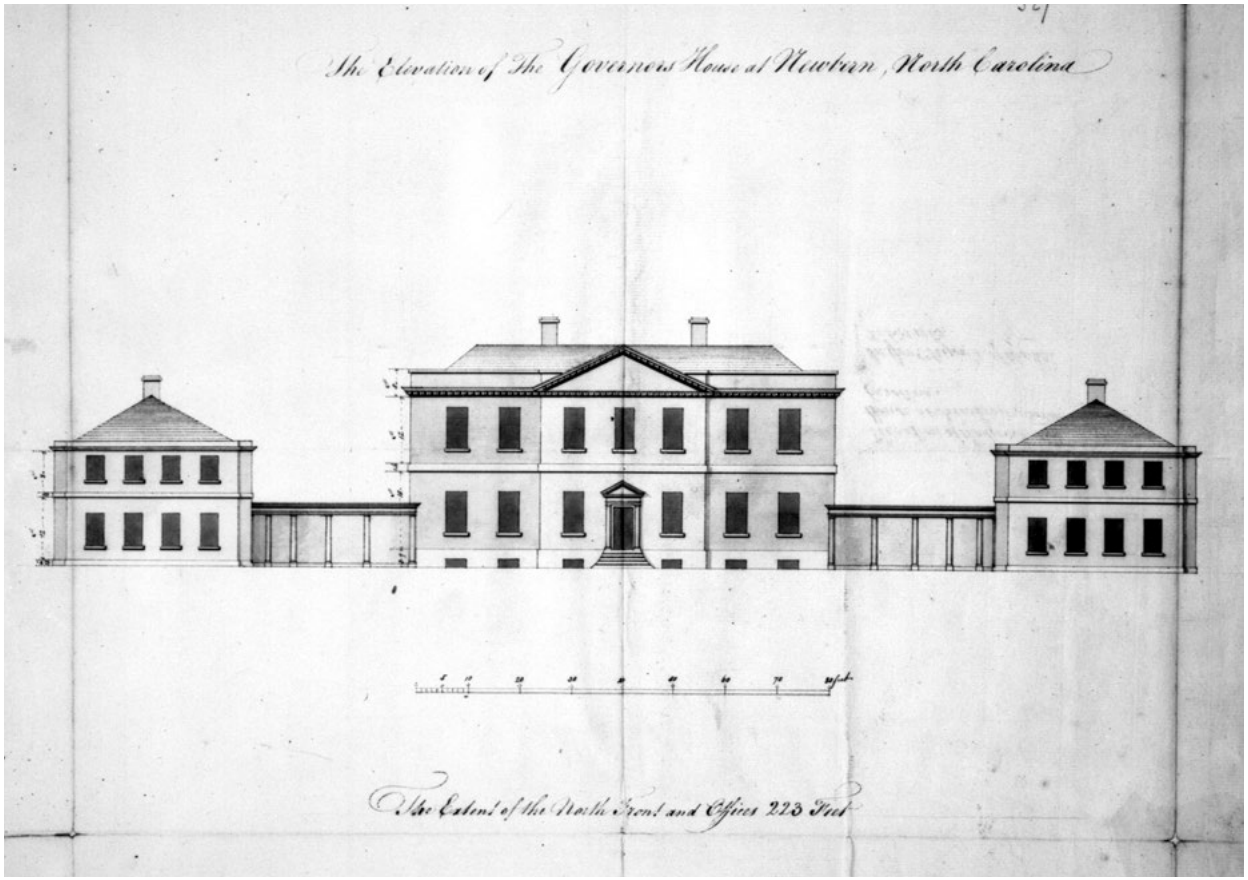
After the research and documentation phases, guidance is given for **Reconstruction** work itself. Exterior and interior features are addressed in general, always emphasizing the need for an accurate depiction (i.e., careful duplication of the appearance of historic materials and features for interpretative purposes). While the use of traditional materials and finishes is always preferred, in some instances substitute materials may be used if they are able to convey the same appearance. Where non-visible features of the building are concerned, such as interior structural systems, contemporary materials and technology may be used. Recreating the features of the building site or setting based on archeological findings should also be an integral part of project work.

Accessibility and Life Safety, Natural Hazards, and Sustainability

Whereas preservation, rehabilitation, and restoration treatments usually necessitate retrofitting to meet code requirements and to address other issues (including natural hazards and sustainability), in this treatment it is assumed that the **Reconstructed** building will be essentially new construction. Thus, code-required work, treatments to reduce the potential impact of natural hazards, and ensuring that the reconstructed building is as sustainable as possible should be considered during the design phase—when appropriate to the particular Reconstruction project—so as not to negatively impact or detract from the reconstructed appearance of the building, its site, and setting. The fact that the non-surviving building was located in a floodplain or another area especially vulnerable to the impact of natural hazards is crucial to consider when determining whether the building should be reconstructed.

The topic of sustainability is addressed in detail in *The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings*. Although specifically developed for the treatment Rehabilitation, the Guidelines can be used to help guide the other treatments.

Reconstruction as a Treatment. *When a contemporary depiction is required to understand and interpret a property's historic value (including the re-creation of missing components in a historic district or site); when no other property with the same associative value has survived; and when sufficient historical documentation exists to ensure an accurate reproduction,* ***Reconstruction*** *may be considered as a treatment. Prior to undertaking work, a documentation plan for Reconstruction should be developed.*



[1 a-b] Tyron Palace, New Bern, NC, was designed by John Hawks in 1767 for Governor William Tyron. It was completed in 1770, but destroyed by fire in 1798. The palace was reconstructed in 1959 based on the original plans, and on its original foundation, which was found 5 feet below the street, with the help of the 1767 drawing. *Photo: Courtesy Tyron Palace, New Bern, NC. Drawing: Courtesy of the State Archives of North Carolina.*

[2] The Saugus Iron Works, Saugus, MA, a National Historic Site, was active from 1646 to about 1670 and was the first integrated iron works in North America. The forge and mill (shown here) are part of the site which was reconstructed based on archeological research and historic documents and opened in 1954. *Photo: Daderot at the English language Wikipedia.*

OVERVIEW

RECOMMENDED	NOT RECOMMENDED
Researching and documenting the property's historical significance, focusing on documentary and physical evidence which is needed to justify reconstruction of the non-surviving building.	Undertaking a reconstruction based on insufficient research so that, as a result, a historically inaccurate building is created. Reconstructing a building unnecessarily when an existing building adequately reflects or explains the history of the property, the historical event, or has the same associative value. Executing a design for a building that was never constructed.
Investigating archeological resources to identify and evaluate those features and artifacts which are essential to the design and plan of the building.	Failing to identify and evaluate archeological material prior to reconstruction, or destroying extant historic material not relevant to the reconstruction but which should be preserved in place.
Minimizing disturbance of the terrain around buildings or elsewhere on the site, thereby reducing the possibility of destroying or damaging important landscape features, archeological resources, other cultural or religious features, or burial grounds.	Using heavy machinery or equipment in areas where it may disturb or damage important landscape features, archeological resources, cultural or religious features, or burial grounds.
Identifying, retaining, and preserving extant historic features of the building, site, and setting, such as remnants of a foundation, chimney, or walkway.	Beginning reconstruction work without first conducting a detailed site investigation to physically substantiate the documentary evidence. Basing a reconstruction on conjectural designs or on features from other historic buildings.

[3] The Cathedral of Saint Michael the Archangel, built in the early 1840s in Sitka, AK, was devastated by fire in 1966. It was reconstructed using measured drawings done in 1961 by the Historic American Buildings Survey (HABS). While the original cathedral was built of logs covered on the exterior with wood siding, its replacement is a fire-resistant structure with concrete and steel walls that replicates the historic building's appearance. *Photo: Barek at Wikimedia Commons.*

BUILDING EXTERIOR

RECOMMENDED	NOT RECOMMENDED
Reconstructing a non-surviving building to depict the documented historic appearance. Although the use of the original building materials (such as masonry, wood, and architectural metals) is preferable, substitute materials may be used as long as they recreate the historic appearance.	Reconstructing features that cannot be documented historically or for which existing documentation is inadequate. Using substitute materials that do not convey the appearance of the historic building.
Recreating the documented design of exterior features, such as the roof form and its coverings, architectural detailing, windows, entrances and porches, steps and doors, and their historic spatial relationships and proportions.	Omitting a documented exterior feature, or rebuilding a feature but altering its historic design. Using inappropriate designs or materials that do not convey the historic appearance.
Reproducing the appearance of historic paint colors and finishes based on documentary and physical evidence.	Using paint colors that cannot be documented through research and investigation or using other undocumented finishes.
Installing exterior electrical and telephone cables underground or in the least obtrusive location possible, unless they can be documented as having been aboveground historically.	Attaching exterior electrical and telephone cables to the principal elevations of the reconstructed building, unless they can be documented as having been there historically.
Using signage to identify the building as a contemporary recreation.	Failing to explain that the building is a reconstruction, thereby confusing the public's understanding of the property.

[4] The McLean House, where Robert E. Lee surrendered to Ulysses S. Grant, is located on the site of the battlefield—now part of Appomattox Courthouse National Historical Monument (VA). Several years after the end of the Civil War, measured drawings were made of the house before it was dismantled to be moved to Washington, DC, where it was to be reconstructed as a tourist attraction. This scheme never came to fruition, and the dismantled pieces gradually disappeared. The house was accurately reconstructed in 1949 on the original site based on the measured drawings.

BUILDING INTERIOR

RECOMMENDED	NOT RECOMMENDED
Recreating the appearance of *visible* features of the historic structural system, such as posts and beams, trusses, summer beams, vigas, cast-iron columns, above-grade masonry foundations, or load-bearing brick or stone walls. Contemporary methods and materials may be used for the actual structural system of the reconstructed building.	Changing the documented appearance of visible features of the structural system.
Recreating the historic floor plan and interior spaces, including the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves.	Altering the documented historic floor plan, or relocating an important interior feature, such as a staircase, so that the historic relationship between the feature and the space is inaccurately depicted. Reconstructing the historic appearance of the interior without accurate documentation.
Duplicating the documented historic appearance of the building's interior features and finishes (including columns, cornices, baseboards, fireplaces and mantels, paneling, light fixtures, hardware, and flooring); plaster, paint, and finishes (such as stenciling or marbleizing); and other decorative or utilitarian materials and features.	Altering the documented appearance of the building's interior features and finishes so that, as a result, an inaccurate depiction of the historic building is created. For example, moving a feature from one area of a room to another, or changing the type or color of the finish.
Installing mechanical systems and their components in the least obtrusive way possible so as not to impact the recreated interior spaces, features, or finishes while meeting user needs.	Altering the historic plan or the recreated appearance unnecessarily when installing mechanical systems.
Installing ducts, pipes, and cables in closets, service areas, and wall cavities.	Installing ducts, pipes, and cables where they will intrude upon the historic appearance of the building.

[5] The parlor of the McLean House was reconstructed to its appearance on the occasion of Robert E. Lee's surrender to Ulysses S. Grant in this room on April 9, 1865.

BUILDING SITE

RECOMMENDED	NOT RECOMMENDED
Reconstructing building site features based on documentary and physical evidence.	Reconstructing building site features without documentary and physical evidence.
Inventorying the building site to determine the existence of aboveground remains and subsurface archeological resources, other cultural or religious features, or burial grounds, and using this evidence as corroborating documentation for the reconstruction of related site features. These may include walls, fences, or steps; circulation systems, such as walks, paths, or roads; vegetation, such as trees, shrubs, grass, orchards, hedges, windbreaks, or gardens; landforms, such as hills, terracing, or berms; furnishings and fixtures, such as light posts or benches; decorative elements, such as sculpture, statuary, or monuments; water features, including fountains, streams, pools, lakes, or irrigation ditches.	Giving the building's site an inaccurate appearance by basing the reconstruction on conjectural designs or on features from other sites.
Recreating the historic spatial relationship between buildings and related site features.	Changing the historic spatial relationship between buildings and related site features, or reconstructing some site features but not others, thereby confusing the depiction of the reconstructed site.

[6] This lighthouse on Lake Ponchartrain in New Orleans was reconstructed after the historic 1890 lighthouse was destroyed by Hurricane Katrina.

SETTING (DISTRICT / NEIGHBORHOOD)

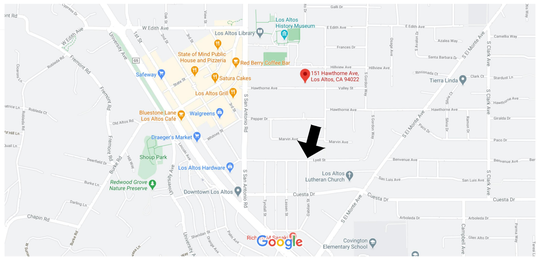
RECOMMENDED	NOT RECOMMENDED
Reconstructing features in the building's historic setting based on documentary and physical evidence.	Reconstructing features in the setting without documentary and physical evidence.
Inventorying the setting to determine the existence of above-ground remains and subsurface archeological resources, other cultural or religious features, or burial grounds, and using this evidence as corroborating documentation for the reconstruction of missing features of the historic setting. These may include circulation systems, such as roads and streets; furnishings and fixtures, such as light posts or benches; vegetation, gardens, and yards; adjacent open space, such as fields, parks, commons, or woodlands; and important views or visual relationships.	Giving the building's setting an inaccurate appearance by basing the reconstruction on conjectural designs or on features from other locations.
Recreating the historic spatial relationship between buildings and landscape features in the setting.	Changing the historic spatial relationship between buildings and landscape features in the setting by reconstructing some features but not others, thereby confusing the depiction of the reconstructed setting.

[7] The Muhlenberg Brigade Huts are reconstructions of nine log huts erected in 1777 at Valley Forge during the Revolutionary War. They have been reconstructed on the historic road with logs cut with modern power tools and finished with cement, unlike the original logs which were hand hewn and finished with traditional chinking. *Photo: Rdsmith4 at Wikimedia Commons.*

[8] The Palace of Fine Arts was designed by Bernard Maybeck and built for the 1915 Panama-Pacific Exposition in San Francisco. The pavilion was intended to be temporary and, although it had a steel structure, the exterior was finished only with staff, an impermanent material composed of plaster and fiber. The building was not torn down after the exposition, and it eventually fell into ruin. In 1964, all but the steel structure was demolished, and the building was reconstructed with lightweight poured-in-place concrete. *Photo: KevinIcole at Wikimedia Commons.*

CONDITIONS OF APPROVAL

VICINITY MAP



GENERAL NOTES

EXAMINATION OF SITE

1. THE CONTRACTOR SHALL EXAMINE THE SITE CONDITIONS AND THE STRUCTURE(S) TO DETERMINE THE EXISTING CONDITIONS.
2. NO EXTRA COMPENSATION WILL BE ALLOWED FOR THE CONTRACTOR'S FAILURE TO DISCOVER CONDITIONS THAT EFFECT THE WORK.

LIMITATION OF THE WORK

1. THE LIMITS OF THE WORK ARE ESTABLISHED BY THE DRAWINGS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TRADESMEN WITHIN THESE LIMITS.

RULES AND REGULATIONS

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND SHALL BE PER INDUSTRY STANDARDS. SEE BUILDING CODE DATA ON THIS SHEET FOR FURTHER INFORMATION.

OWNERSHIP OF DRAWINGS

1. THESE DRAWINGS ARE THE PROPERTY OF BROWNHOUSE DESIGN, INC. THE DRAWINGS SHALL NOT BE USED FOR ANY OTHER PURPOSE EXCEPT AS APPROVED BY THE DESIGNER(S).

DEFERRAL OF SUBMITTAL ITEMS

1. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. (CBC 106.3.4.2).

SHOP DRAWINGS

1. GENERAL CONTRACTOR SHALL SUBMIT ANY AND ALL SHOP FABRICATION DRAWINGS TO THE DESIGNER TO BE REVIEWED FOR DESIGN INTENT ONLY. THE APPROVAL OF SHOP DRAWINGS, OR SECTIONS THERE OF, DETAILING MEANS AND METHODS OF CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
2. DESIGNER SHALL REVIEW SHOP DRAWINGS ONLY AFTER BEING REVIEWED AND APPROVED BY THE GENERAL CONTRACTOR FIRST.

DRAWING NOTES

1. DO NOT SCALE THE DRAWING(S). VERIFY ALL DIMENSIONS IN THE FIELD. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.
2. ALL FLOOR PLAN DIMENSIONS ARE TO FACE OF STUD, POST, OR CMU WALL, UNLESS OTHERWISE NOTED.
3. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK, OR CABINET, UNLESS OTHERWISE NOTED.

SCOPE OF WORK

REMODEL AND ADDITION OF EXISTING SINGLE FLOOR HISTORIC RESIDENCE:

EXISTING FOUNDATION: CONCRETE PERIMETER
FIREPLACE: WOOD BURNING
ROOF: SHINGLE
HVAC: FORCED AIR, GAS
PARKING: DETACHED GARAGE, OFF-STREET PARKING

ADDITIONS:
1. PRIMARY BEDROOM: INCREASED FLOOR AREA W/ ADDITION.
2. LAUNDRY: INCREASED FLOOR AREA W/ ADDITION.
3. KITCHEN AND FAMILY: INCREASED FLOOR AREA W/ ADDITION.
4. BASEMENT:
   - 4.1. INCREASED FLOOR AREA W/ ADDITION
   - 4.2. REVISED ENTRY TO BASEMENT FROM EXTERIOR RIGHT SIDE YARD
5. DETACHED GARAGE: REPLACED (E) GARAGE W/ NEW STRUCTURE. BUILD "IN-KIND, SIMILAR" W/ MAIN HOUSE, NOT EXACT REPLICAS.

REMODEL:
1. PRIMARY SUITE:
   - 1.1. PRIMARY BEDROOM: RELOCATED BEDROOM TO NEW ADDITION.
   - 1.2. PRIMARY BATHROOM: RELOCATED BATHROOM TO NEW ADDITION. REPLACE PLUMBING FIXTURES, FINISHES
2. KITCHEN AND FAMILY ROOM:
   - 2.1. REPLACE PLUMBING, APPLIANCES, CABINETS AND FINISHES.
   - 2.2. INCREASED FLOOR AREA.
3. LAUNDRY/MUD ROOM: RELOCATE WASHER & DRYER FROM KITCHEN TO NEW ADDITION. REPLACE PLUMBING FIXTURES, FINISHES
4. WINDOWS, DOORS: REPLACE W/ NEW AS INDICATED.
5. EXTERIOR:
   - 5.1. WINDOWS, DOORS:
     - 5.1.1. REPLACE W/ NEW AS INDICATED.
     - 5.1.2. ADD NEW AS INDICATED.
   - 5.2. REPLACE/REPAIR STUCCO W/ NEW SHINGLE SIDING. EXISTING BRICK TO REMAIN.
   - 5.3. ROOF:
     - 5.3.1. MAIN HOUSE, SKYLIGHTS: ADD 2 TOTAL
     - 5.3.2. DETACHED GARAGE, SKYLIGHTS: ADD 2 TOTAL
     - 5.3.3. EXTEND ROOF FOR NEW ADDITIONS AT PRIMARY SUITE, LAUNDRY/MUDROOM, KITCHEN, FAMILY AND DETACHED GARAGE.
6. UTILITIES:
   - 6.1. GAS METER: EXISTING TO REMAIN AS IS, NO CHANGE
   - 6.2. ELECTRICAL METER: EXISTING TO REMAIN AS IS, NO CHANGE
   - 6.3. ELECTRICAL SUB-PANEL (BASEMENT): REMOVE EXISTING, REPLACE W/ NEW
   - 6.4. FURNACE: REPLACE EXISTING W/ NEW, RELOCATE
   - 6.5. WATER HEATER (BASEMENT): REPLACE EXISTING W/ NEW, RELOCATE

SHEET INDEX

ABBREVIATIONS

&	AND	F.F.	FINISH FLOOR	P & S	POLE AND SHELF
∠	ANGLE	FND.	FOUNDATION	PDF	POWDER DRIVEN FASTENER
℄	CENTER LINE	FIN.	FINISH	PLF	PER LINEAR FOOT
°	DEGREE	FLR.	FLOOR	PLY. WD.	PLYWOOD
ϕ	DIAMETER OR ROUND	FLOUR.	FLUORESCENT	PR.	PAIR
∥	PARALLEL	FLR.	FLOOR	PT.	PRESSURE TREATED
⊥	PERPENDICULAR	F.O.C.	FACE OF CONCRETE	PTD.	PAINTED
PE	PROPERTY LINE	F.O.F.	FACE OF FINISH		
#	SQUARE FEET	F.O.S.	FACE OF STUD	R	RADIUS
		F.T.	FOOT OR FEET	REF.	REFERENCE
AD	AREA DRAIN	FTG.	FOOTING	REFR.	REFRIGERATOR
ADJ.	ADJUSTABLE	FUR'G.	FURRING	R/F	REFRIGERATOR / FREEZER
A.F.F.	ABOVE FINISH FLOOR			REINF.	REINFORCED
APPROX.	APPROXIMATE	GA.	GAUGE	REQ.	REQUIRED
		GALV.	GALVANIZED	RESIL.	RESILIENT
BLK'G.	BLOCKING	G.B.	GAS BIB	RM.	ROOM
BRG. PL.	BEARING PLATE	GSM.	GALVANIZED SHEET METAL	R.O.	ROUGH OPENING
BOT.	BOTTOM	G.W.B.	GYPSUM WALL BOARD		
BLDG.	BUILDING	GYP.	GYPSUM	S	SOUTH
BUR	BUILT-UP ROOF			SB.	SETBACK
		HB.	HOSE BIB	SC.	SOLID CORE
CAB.	CABINET	H.C.	HOLLOW CORE	SCHED.	SCHEDULE
CB	CATCH BASIN	HORIZ.	HORIZONTAL	SD	STORM DRAIN
C.O.	CLEAN OUT	HGT.	HEIGHT	S.D.L.	SIMULATED DIVIDED LITE
CLG.	CEILING	HRDWD.	HARDWOOD	SDLT.	SIDELIGHT
CLR.	CLEAR	H.S.	HAND-HELD SHOWER HEAD	SECT.	SECTION
COL.	COLUMN			SF.	SUBFLOOR
CONC.	CONCRETE	I.B.	IRONING BOARD	SG.	SINGLE GLAZED
CONT.	CONTINUOUS	INT.	INTERIOR	SIM.	SIMILAR
CSMT.	CASEMENT			SM.	SHEET METAL
CT.	COAT CLOSET	JT	JOINT	SQ.	SQUARE
				SPEC.	SPECIFICATION
DBL.	DOUBLE	LAM.	LAMINATE	S.S.D.	SEE STRUCTURAL DRAWINGS
DEPT.	DEPARTMENT	LAV.	LAVATORY	STD.	STANDARD
DET.	DETAIL	L.B.	LOAD BEARING	STOR.	STORAGE
DIA.	DIAMETER	lbs.	POUNDS	SUSP.	SUSPENDED
DIM.	DIMENSION			SYM.	SYMMETRICAL
DIST.	DISTRICT	MAX.	MAXIMUM		
D.H.	DOUBLE HEADER	MECH.	MECHANICAL	T.B.D.	TO BE DETERMINED
DN.	DOWN	M.C.	MEDICINE CABINET	T.B.	TOWEL BAR
DR	DOOR	MFR.	MANUFACTURER	THK.	THICK
DS.	DOWNSPOUT	MIN.	MINIMUM	T.O.	TOP OF
DW.	DISH WASHER	MISC.	MISCELLANEOUS	T.P.H.	TOILET PAPER HOLDER
DWG.	DRAWING			T/R	TRASH / RECYCLE
		N	NORTH	TYP.	TYPICAL
E	EAST	(N)	NEW		
(E)	EXISTING	NEC.	NECESSARY	U.O.N.	UNLESS OTHERWISE NOTED
EA.	EACH	NO.	NUMBER		
EL.	ELEVATION	NLB	NON - LOAD BEARING	V.I.F.	VERIFY IN FIELD
ELEC.	ELECTRICAL	NOM.	NOMINAL	VERT.	VERTICAL
EMER.	EMERGENCY	N.T.S.	NOT TO SCALE	VEST.	VESTIBULE
ENCL.	ENCLOSURE				
EQ.	EQUAL	O.C.	ON CENTER	W	WEST
EQUIP.	EQUIPMENT	O.D.	OUTSIDE DIAMETER	WD.	WOOD
EXT.	EXTERIOR	(OH.)	OVER HEAD	W.H.	WINDOW HEAD
		O.H.	OVER HANG	WH	WATER HEATER
		OPP.	OPPOSITE	W/O	WITH OUT
		OPNG.	OPENING	WP	WATER PROOF
				WT.	WEIGHT

FIRE DEPARTMENT NOTES

1. POTABLE WATER SUPPLIES SHALL BE PROTECTED FROM CONTAMINATION CAUSED BY FIRE PROTECTION WATER SUPPLIES. SUCH REQUIREMENTS SHALL BE INCORPORATED INTO THE DESIGN OF THE FIRE SPRINKLER SYSTEM.
2. THE CONSTRUCTION SITE SHALL COMPLY WITH ALL CONSTRUCTION SITE FIRE SAFETY PROVISIONS AS PUT FORTH IN CFC CHAPTER 33 AND THE SANTA CLARA COUNTY FIRE DEPARTMENT'S SPECIFICATION SI-7.
3. RESIDENCE SHALL HAVE AN APPROVED ADDRESS NUMBER IN A LOCATION APPROVED BY THE HOME OWNER AND ALSO CLEARLY VISIBLE FROM THE STREET OR ROAD FACING THE PROPERTY. REFER TO FLOOR PLAN NOTE #3 ON SHEET A2.1 FOR FURTHER DETAILS.

ZONING COMPLIANCE

	Existing	Proposed	Allowed/Required
LOT COVERAGE: *Land area covered by all structures that are over 6 feet in height.*	1,625 sq. ft. (11.8%)	2,785.2 sq. ft. (20.2%)	4,130 sq. ft. (35.0%) ⚠
FLOOR AREA: *Measured to the outside surfaces of exterior walls*	1,681.7 sq. ft. (12.2%)	2,544.7 sq. ft. (18.4%)	4,130 sq. ft. (35.0%)
SETBACKS: Front Rear Right Side (1st/2nd) Left Side (1st/2nd)	47'-6 3/4" feet 62'-3" feet 20'-1" feet / n.a. feet 36'-7" feet / n.a. feet	47'-6 3/4" feet 51'-8 5/8" feet 14'-6" feet / n.a. feet 30'-1" feet / n.a. feet	25'-0" feet 25'-0" feet 10'-0" feet / n.a. feet 10'-0" feet / n.a. feet
HEIGHT:	+/-14'-7" feet	+/-15'-8" feet	20'-0" feet

SQUARE FOOTAGE BREAKDOWN

	Existing	Change in	Total Proposed
HABITABLE LIVING AREA:	1,128 sq. ft.	+608.9 sq. ft.	1,736.9 sq. ft.
NON-HABITABLE AREA: *Does not include covered porches or open structures*	305 sq. ft. (Garage/Shed) ⚠	+212 sq. ft. (Garage, 517) ⚠	517 sq. ft. ⚠

LOT CALCULATIONS

NET LOT AREA:		13,800 sq. ft.
FRONT YARD HARDSCAPE AREA: *Hardscape area in the front yard shall not exceed 50% (Front yard area: 4,115.4 sq. ft.)*	1,191.6 square ft	1,191.6 SQ. FT *(less than 50%)* (4115.4/ 2 = 2,057.7)
LANDSCAPING BREAKDOWN:	Total hard-scape area (existing and proposed): Existing soft-scape (undisturbed) area: New soft-scape area: *Sum of all three should equal the site's net lot area*	2,220.6 sq. ft. 7,617.1 sq. ft. Existing, no change

BUILDING CODE DATA

OCCUPANCY:	R-3: SINGLE FAMILY RESIDENCE U: DETACHED GARAGE.
CONSTRUCTION TYPE:	V-B
FIRE SPRINKLER:	NONE
HISTORIC LISTED:	YES
YEAR BUILT:	1922
BUILDING CODES:	ALL APPLICABLE ADOPTED ORDINANCES FOR THE TOWN OF LOS ALTOS, COUNTY OF SANTA CLARA, AND THE STATE OF CALIFORNIA BUILDING STANDARDS CODE (TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS). 2019 CALIFORNIA BUILDING CODE (T-24 PART 2) 2019 CALIFORNIA RESIDENTIAL BUILDING CODE (T-24 PART 2.5) 2019 CALIFORNIA ELECTRICAL CODE (T-24 PART 3) 2019 CALIFORNIA MECHANICAL CODE (T-24 PART 4) 2019 CALIFORNIA PLUMBING CODE (T-24 PART 5) 2019 CALIFORNIA ENERGY CODE (T-24 PART 6) 2019 CALIFORNIA FIRE CODE (T-24 PART 9) 2019 CALIFORNIA GREEN BUILDING CODE (T-24 PART 11) 2019 CALIFORNIA HISTORICAL BUILDING CODE

PLANNING DATA

PROJECT ADDRESS:	151 HAWTHORNE AVENUE LOS ALTOS, CALIFORNIA 94022
APN:	170-41-030
ZONING DISTRICT:	R1-10, RESIDENTIAL
LOT AREA:	13,800 SQ. FT. (0.317 ACRES)
MAX LOT COVERAGE AREA:	4,130 SQ.FT. (3,850 + 10%(LOT AREA - 11,000)) ⚠
MAX FLOOR AREA:	4,130 SQ.FT. (3,850 + 10%(LOT AREA - 11,000))
MAX HEIGHT:	ONE-STORY 20'-0" MAX. HT.

EXISTING RESIDENCE FLOOR AREA:

- RESIDENCE AREA:	1,128.0	SQ. FT.
- GARAGE/SHED AREA, DETTACHED (REPLACED W/ NEW):	305.0	SQ. FT.
- BASEMENT NON-HABITABLE AREA (NOT INCLUDED IN AREA): ⚠	248.7	SQ. FT.
- TOTAL (E) RESIDENCE AREA:	**1,433.0**	**SQ. FT.**

EXISTING RESIDENCE SITE COVERAGE:

- HOUSE & GARAGE:	1,433.0	SQ. FT.
- FRONT COVERED PORCH:	192.0	SQ. FT.
- ACCESSORY BUILDING (ARBOR):	0.0	SQ. FT.
- TOTAL (E) RESIDENCE SITE COVERAGE:	**1,625.0**	**SQ. FT.**

PROPOSED NEW RESIDENCE FLOOR AREA:

- RESIDENCE ADDITION, KITCHEN, PRIMARY SUITE, LAUNDRY:	608.9	SQ. FT.
- GARAGE AREA (ACCESSORY STRUCTURE), DEATTACHED:	517.0	SQ. FT.
- BASEMENT NON-HABITABLE (NOT INCLUDED IN AREA): ⚠	26.3	SQ. FT.
- TOTAL (N) RESIDENCE AREA, ADDITION: ⚠	1,125.9	SQ. FT.
- TOTAL (N) SITE COVERAGE, ADDITION:	1,125.9	SQ. FT.
- TOTAL (N) RESIDENCE AREA (1,128+1,125.9 = 2,253.9) ⚠	**2,253.9**	**SQ. FT.**

TOTAL PROPOSED RESIDENCE SITE COVERAGE: ⚠

- HOUSE & GARAGE (1,128 + 608.9 + 517.0 = 2,253.9):	2,253.9	SQ. FT.
- FRONT COVERED PORCH:	192	SQ. FT.
- GARAGE COVERED PARKING, ADDITION:	299.8	SQ. FT.
- ACCESSORY BUILDING (ARBOR):	25	SQ. FT.
- TOTAL (N) SITE COVERAGE AREA: ⚠	**2,770.7**	**SQ. FT.**

DEFERRED SUBMITTAL ITEMS

1. LANDSCAPE DESIGN
2. POOL INFILL
3. SOLAR PANEL W/ BATTERY STORAGE

PROJECT CONTACT LIST

OWNER: KAREN SCUSSEL & CURT RIFFLE
151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022
⚠ KLSCUSSEL@GMAIL.COM / CURTRIFFLE@GMAIL.COM

DESIGNER: BROWNHOUSE DESIGN, INC. (JULIE BROWN/LYNETTE MARCOTT)
164 MAIN STREET, SUITE A
LOS ALTOS, CA 94022
(650)533-5528 / (650) 276-866
JB@BROWNHOUSEDESIGN.COM/LM@BROWNHOUSEDESIGN.COM

STRUCTURAL ENGINEER: SUNG ENGINEERING, INC. (PETER SUNG)
2930 KOHOUTEK WAY, SUITE 190
UNION CITY, CA 94587
(650)475-7800
SMARIYAMA@SUNGENGR.COM/JRIVAS@SUNGENGR.COM/
PSUNG@SUNGENGR.COM

TITLE 24: BUILDERS ENERGY SERVICES
460 W. EDMUNDSON AVENUE
MORGAN HILL, CA 95037
(408) 282-9075
HEATHER@BUILDERS-ENERGY.NET

SURVEY/CIVIL ENGINEER: LEA & BRAZE ENGINEERING, INC. (GREGORY BRAZE)
2495 INDUSTRIAL PARKWAY WEST
HAYWARD, CA 94545
(510) 887-4086
GBRAZE@LEABRAZE.COM

LANDSCAPE ARCHITECT: GARDEN SENSE, INC. (JANET BELL)
P.O. Box 83
MENLO PARK, CA 94026
(650) 369-3400
JBELL@GARDENSENSEINC.COM

ARBORIST: ⚠ MAGUIRE TREE CARE, INC. (PAUL MAGUIRE)
P.O. BOX 608
MOSS BEACH, CA 94038-0608
650-574-0215 (OFFICE) / 650-245-2620 (CELL)
INFO@MAGUIRETREECARE.COM

GENERAL CONTRACTOR: CHRIS BLACKWELL CONSTRUCTION INC. (CHRIS BLACKWELL)
2959 S. WINCHESTER BLVD., NO. 202
CAMPBELL, CA 95008
(408) 376-3999 (OFFICE) / (408) 892-2937 (CELL)
CHRIS@CHRISBLACKWELLINC.COM

ARCHITECTURAL HISTORIAN: ⚠ EVANS & DE SHAZO, INC (STACEY DE SHAZO)
1141 GRAVENSTEIN HIGHWAY SOUTH
SEBASTOPOL, CA 95472
(707)823-7400 (OFFICE) /(971) 344-2826 (CELL)
STACEY@EVANS-DESHAZO.COM

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT — DAVID ANDREW BARNA — C-36482 — 09/31/23 — STATE OF CALIFORNIA

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠1 REPONSE TO PLANNING 05/27/2022	LM
⚠1 REPONSE TO MILLS ACT 07/06/2022	LM

CITY SUBMITTAL

BID SET

FINISH PLANS

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

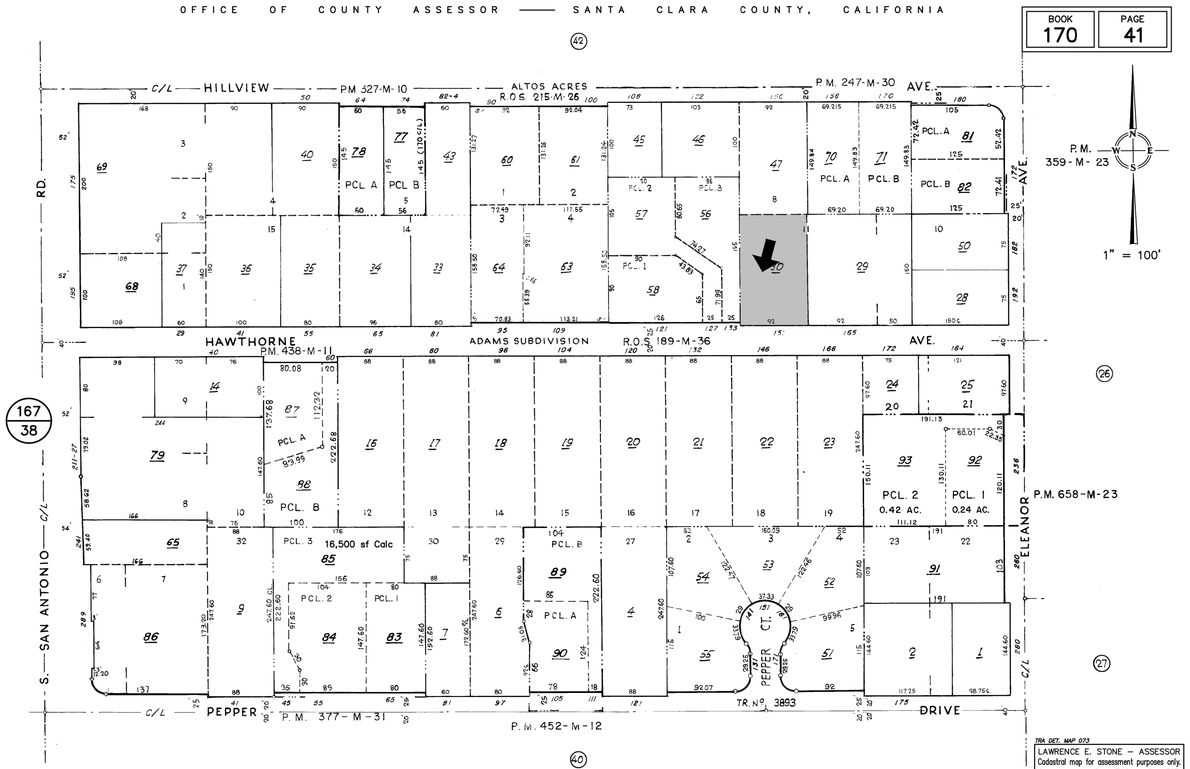
DRAWN BY: LM/DB
CHECKED BY: DB/LM
SCALE: 1/8" = 1'-0"
DATE: 07/11/2022

T.1

ZONING MAP

OFFICE OF COUNTY ASSESSOR — SANTA CLARA COUNTY, CALIFORNIA

BOOK 170 PAGE 41



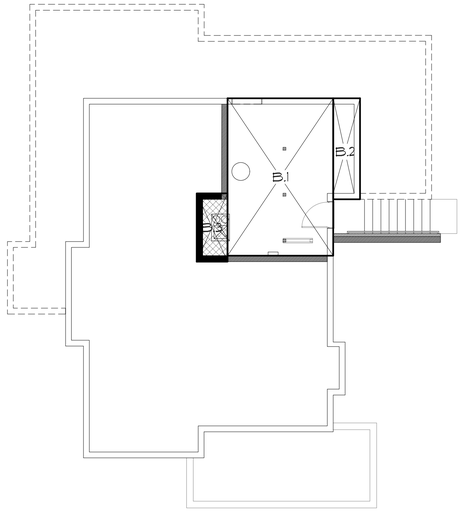
TRA SET MAP 073

LAWRENCE E. STONE — ASSESSOR
Cadastral map for assessment purposes only.
Compiled under R. & T. Code, Sec. 327.
Effective Roll Year 2020–2021

FLOOR CALCULATIONS

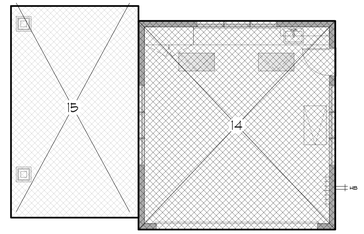
SECTION	DIMENSIONS			AREA
		HABITABLE AREAS		
1	13'5.75"	x	28'11"	389.77 Sq.ft.
2	14'5.25"	x	26'0"	375.38 Sq.ft.
3	1'4"	x	5'11"	7.89 Sq.ft.
4	2'0"	x	11'5.5"	22.92 Sq.ft.
EXISTING HABITABLE AREA (NO CHANGE):				**795.94 Sq.ft.**
4	2'0"	x	11'5.5"	22.92 Sq.ft.
5	30'10.75	x	11'3.5"	348.82 Sq.ft.
EXISTING HABITABLE AREA TO BE REMODELED:				**371.73 Sq.ft.**
6	8'0"	x	11'3.75"	90.50 Sq.ft.
7	25'6.5"	x	7'0.25"	179.32 Sq.ft.
8	19'4.75"	x	10'6"	203.66 Sq.ft.
9	6'0.25"	x	16'0.25"	96.46 Sq.ft.
10	6'6"	x	8'1.25"	52.68 Sq.ft.
NEW HABITABLE AREA, ADDITION:				**622.61 Sq.ft.**
TOTAL EXISTING, REMODELED HABITABLE AREA:				**1167.67 Sq.ft.**
TOTAL EXISTING, REMODELED AND NEW HABITABLE AREA:				**1790.27 Sq.ft.**
		NON-HABITABLE AREAS (COVERED PORCH & GARAGE)		
11	21'3"	x	5'5.75"	116.43 Sq.ft.
12	19'3.5"	x	2'11.5"	57.07 Sq.ft.
13	4'10.25"	x	0'11.5"	4.65 Sq.ft.
EXISTING REMODELED NON-HABITABLE AREA:				**178.15 Sq.ft.**
14	23'4"	x	23'4"	544.44 Sq.ft.
15	12'8"	x	23'4" ⚠	295.56 Sq.ft.
NEW NON-HABITABLE AREA, ADDITION:				**839.99 Sq.ft.**
TOTAL EXISTING AND NEW NON-HABITABLE AREA:				**1018.14 Sq.ft.**
		BASEMENT NON-HABITABLE AREAS		
B1	11'9.75"	x	18'3.25"	215.82 Sq.ft.
B2	3'0"	x	10'11.5"	32.88 Sq.ft.
EXISTING BASEMENT, NON-HABITABLE AREA:				**248.70 Sq.ft.**
B3	3'5.25"	x	7'7.75"	26.28 Sq.ft.
NEW BASEMENT, NON-HABITABLE AREA:				**26.28 Sq.ft.**
TOTAL EXISTING AND NEW NON-HABITABLE BASEMENT AREA:				**59.16 Sq.ft.**
		TOTALS		
TOTAL EXISTING RESIDENCE AREA:				**1345.81 Sq.ft.**
TOTAL NEW RESIDENCE AREA:				**2808.41 Sq.ft.**

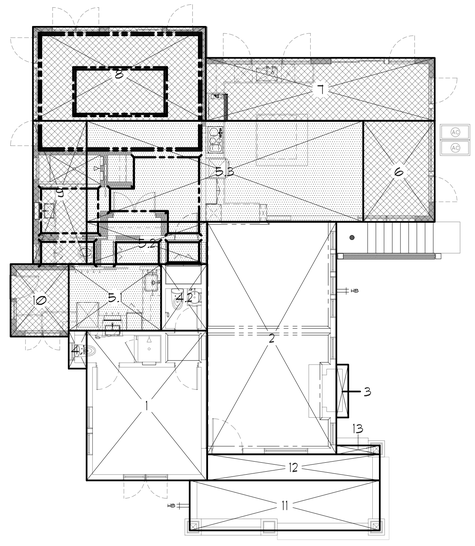
FLOOR AREA CALCULATIONS



BASEMENT FLOOR AREA DIAGRAM

SCALE: 1/8" = 1'-0"





FLOOR AREA LEGEND

⚠ AREA OF ADDITION

AREA OF REMODEL

FLOOR AREA DIAGRAM AND COVERAGE CALCULATIONS

SCALE: 1/8" = 1'-0"

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
REGISTERED PROFESSIONAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠ REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/8" = 1'-0"
DATE: 07/11/2022

T.2

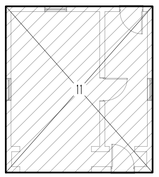
EXISTING FLOOR SPACE UNDER ROOF CALCULATIONS

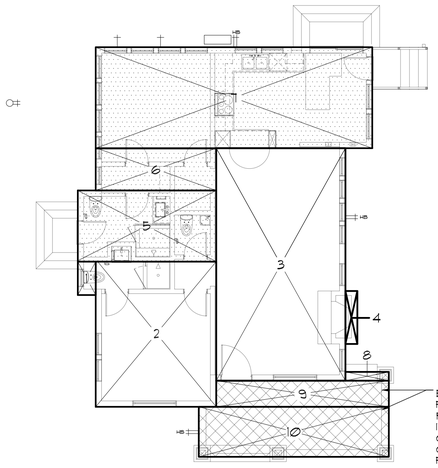
HABITABLE AREA:

SECTION	DIMENSIONS			AREA
1	1'11.75"	x	3'8.875"	7.40 Sq.ft.
2	13'5.75"	x	16'2.875"	218.90 Sq.ft.
3	14'5.25"	x	26'0"	375.38 Sq.ft.
4	1'4"	x	5'11"	7.89 Sq.ft.
EXISTING HABITABLE AREA:				**609.56 Sq.ft.**
5	13'5.75"	x	7'11.375"	107.13 Sq.ft.
6	13'5.75"	x	4'9.125"	64.17 Sq.ft.
7	30'11"	x	11'3.5"	349.10 Sq.ft.
EXISTING HABITABLE AREA TO BE REMODELED:				**520.40 Sq.ft.**

NON-HABITABLE AREAS (COVERED PORCH & GARAGE)

8	4'10.25"	x	0'11.5"	4.65 Sq.ft.
9	19'3.5"	x	2'11.5"	57.07 Sq.ft.
10	21'3"	x	5'5.75"	116.43 Sq.ft.
EXISTING NON-HABITABLE AREA TO BE REMODELED:				**178.16 Sq.ft.**
11	16'5"	x	18'7"	305.08 Sq.ft.
EXISTING NON-HABITABLE AREA TO BE REMOVED, REPLACED w/ NEW:				**305.08 Sq.ft.**
TOTAL EXISTING RESIDENCE AREA:				**1129.96 Sq.ft.**
EXISTING NON-HABITABLE AREA TO BE REMODELED:				**178.16 Sq.ft.**
EXISTING HABITABLE AREA:				**1129.96 Sq.ft.**

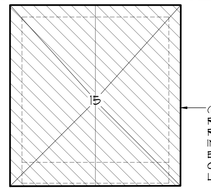




EXISTING ROOF FRAMING THIS AREA TO REMAIN. CROSS HATCH INDICATES WHERE NEW CEILING FRAMING AT COVERED PORCH AND FINISH WILL BE VAULTED. CALCULATIONS PROVIDED TO THE RIGHT.

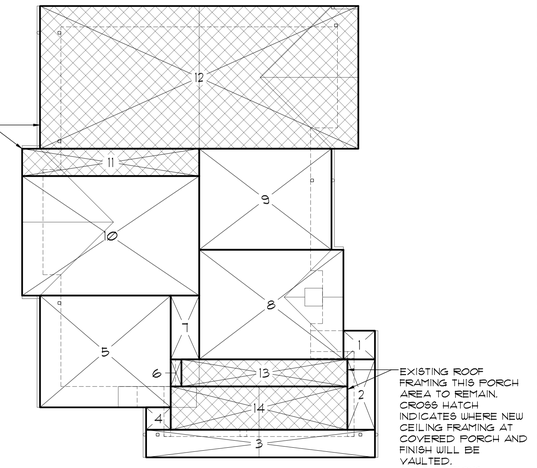
EXISTING ROOF AREA DIAGRAM CALCULATIONS

SECTION	DIMENSIONS			AREA
1	3'6.25"	x	3'0.5"	10.71 Sq.ft.
2	3'1"	x	7'10.5"	24.28 Sq.ft.
3	25'7"	x	3'1"	78.88 Sq.ft.
4	2'9"	x	2'6.25"	6.93 Sq.ft.
5	12'6"	x	15'2.75"	190.36 Sq.ft.
6	1'2.5"	x	3'0.5"	3.68 Sq.ft.
7	3'1.75"	x	7'1.75"	22.48 Sq.ft.
8	16'2"	x	12'3"	198.04 Sq.ft.
9	14'9.5"	x	11'3.75"	167.33 Sq.ft.
10	19'9.5"	x	13'4.5"	264.71 Sq.ft.
EXISTING ROOF AREA (NO CHANGE):				**967.41 Sq.ft.**
11	19'9.5"	x	3'0.75"	60.61 Sq.ft.
12	35'7"	x	15'11.5"	567.85 Sq.ft.
13	18'6.5"	x	3'0.5"	56.40 Sq.ft.
14	19'9"	x	4'10.25"	95.87 Sq.ft.
EXISTING ROOF AREA (ALTERATION):				**780.73 Sq.ft.**
15	19'1"	x	20'3"	386.44 Sq.ft.
EXISTING ROOF AREA (REMOVED, REPLACED)				**386.44 Sq.ft.**
TOTAL EXISTING ROOF AREA:				**2134.58 Sq.ft.**
EXISTING ROOF AREA OF WORK:				**1167.17 Sq.ft.**
PERCENTAGE OF ROOF REMODEL AREA:				**54.68%**
PERCENTAGE OF TOTAL ROOF AREA OF WORK:				**36.58%**



(E.)SHED OVER 6 REMOVED AND REPLACED W/ NEW. STRUCTURE, ROOF, DIAGONAL HATCH INDICATES WHERE STRUCTURE WILL BE AFFECTED, REMOVED. CALCULATIONS PROVIDED TO THE LEFT.

EXISTING ROOF FRAMING THIS AREA TO BE REVISED PER NEW ROOF PLAN. DIAGONAL HATCH INDICATES WHERE ROOF FRAMING STRUCTURE WILL BE AFFECTED. CALCULATIONS PROVIDED TO THE LEFT.



EXISTING ROOF FRAMING THIS PORCH AREA TO REMAIN. CROSS HATCH INDICATES WHERE NEW CEILING FRAMING AT COVERED PORCH AND FINISH WILL BE VAULTED. CALCULATIONS PROVIDED TO THE LEFT.

FLOOR AREA LEGEND

- AREA OF REMODEL
- AREA OF CEILING REMODEL/ ALTERATION
- AREA OF REMOVED, GARAGE TO BE REPLACED

ROOF AREA LEGEND

- AREA OF REMOVED ROOF STRUCTURE
- AREA OF ALTERATIONS TO CEILING

EXISTING FLOOR SPACE UNDER ROOF CALCULATIONS

SCALE: 1/8" = 1'-0"

EXISTING ROOF AREA DIAGRAM CALCULATIONS

SCALE: 1/8" = 1'-0"

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST., LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

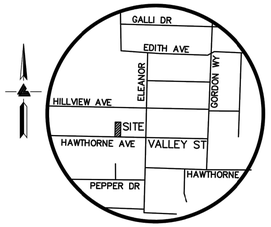
SCUSSEL-RIFFLE RESIDENCE REMODEL

APN: 170-41-030

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/8" = 1'-0"
DATE: 07/11/2022

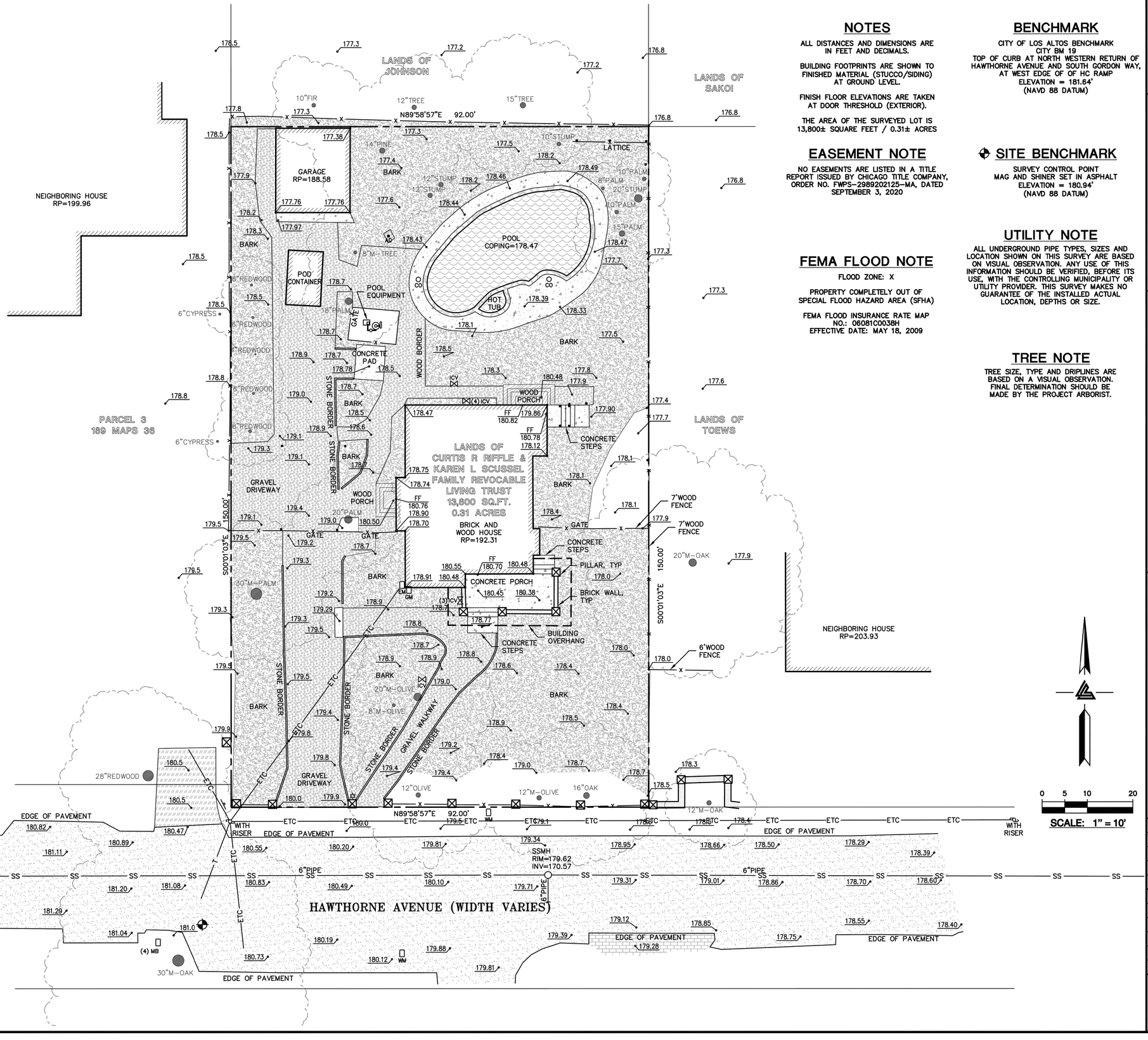
T.2



VICINITY MAP
NO SCALE

LEGEND AND NOTES

- BOUNDARY LINE
- BUILDING OVERHANG LINE
- ETC — ELECTRICAL/TELEPHONE/CABLE TV OVERHEAD LINE
- T — TELEPHONE OVERHEAD LINE
- x — FENCE LINE
- SS — SANITARY SEWER LINE
- AD — AREA DRAIN
- BENCHMARK
- CO — CLEAN-OUT BOX
- EM — ELECTRICAL METER
- FF — FINISH FLOOR
- FIRE HYDRANT
- GV — GAS VALVE
- INV — INVERT
- ICV — IRRIGATION CONTROL VALVE
- JOINT POLE
- LIGHT POST
- M — MULTI-TRUNK TREE
- PILLAR, OR SIMILAR
- RP — ROOF PEAK
- SSMH — SANITARY SEWER MAINTENANCE HOLE
- STREET SIGN
- TOS — TOP OF SLAB
- WM — WATER METER
- WV — WATER VALVE
- XXX.XX — SPOTGRADE
- ASPHALT
- BRICK
- CONCRETE
- DECOMPOSED GRANITE
- DECORATIVE BARK
- GRAVEL
- POOL
- WOOD



NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS.

BUILDING FOOTPRINTS ARE SHOWN TO FINISHED MATERIAL (STUCCO/SIDING) AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR).

THE AREA OF THE SURVEYED LOT IS 13,800± SQUARE FEET / 0.31± ACRES

EASEMENT NOTE

NO EASEMENTS ARE LISTED IN A TITLE REPORT ISSUED BY CHICAGO TITLE COMPANY, ORDER NO. FWPS-2989202125-MA, DATED SEPTEMBER 3, 2020

FEMA FLOOD NOTE

FLOOD ZONE: X

PROPERTY COMPLETELY OUT OF SPECIAL FLOOD HAZARD AREA (SFHA)

FEMA FLOOD INSURANCE RATE MAP NO.: 06081C0038H
EFFECTIVE DATE: MAY 18, 2009

BENCHMARK

CITY OF LOS ALTOS BENCHMARK
CITY BM 19
TOP OF CURB AT NORTH WESTERN RETURN OF HAWTHORNE AVENUE AND SOUTH GORDON WAY, AT WEST EDGE OF OF HC RAMP
ELEVATION = 181.64'
(NAVD 88 DATUM)

SITE BENCHMARK

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 180.94'
(NAVD 88 DATUM)

UTILITY NOTE

ALL UNDERGROUND PIPE TYPES, SIZES AND LOCATION SHOWN ON THIS SURVEY ARE BASED ON VISUAL OBSERVATION. ANY USE OF THIS INFORMATION SHOULD BE VERIFIED, BEFORE ITS USE, WITH THE CONTROLLING MUNICIPALITY OR UTILITY PROVIDER. THIS SURVEY MAKES NO GUARANTEE OF THE INSTALLED ACTUAL LOCATION, DEPTHS OR SIZE.

TREE NOTE

TREE SIZE, TYPE AND DRIPLINES ARE BASED ON A VISUAL OBSERVATION. FINAL DETERMINATION SHOULD BE MADE BY THE PROJECT ARBORIST.

LICENSED LAND SURVEYOR
GREGORY BRAZE
No. 7623
STATE OF CALIFORNIA

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
ROSEVILLE
DUBLIN
SAN JOSE
WWW.LEABRAZE.COM

151 HAWTHORNE AVENUE
LOS ALTOS
CALIFORNIA

APN: 170-41-030
SANTA CLARA COUNTY

TOPOGRAPHIC SURVEY

REVISIONS	BY
–	–
–	–
–	–
–	–

JOB NO:	2211411
DATE:	9-27-21
SCALE:	1"=10'
BNDY BY:	DN
FIELD BY:	BW
DRAWN BY:	ZB

SHEET NO:
SU1
1 OF 1 SHEETS

TREE INVENTORY

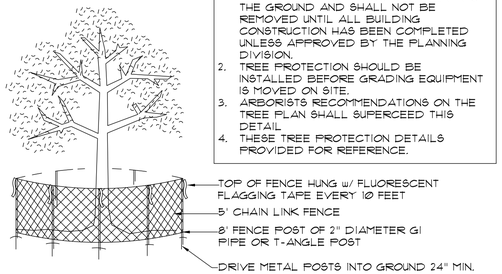
⚠1 NOTE: TREE INVENTORY PROVIDED FOR REFERENCE. SEE SEPARATE TREE INVENTORY REPORT BY MCGUIRE TREE CARE, INC.

#	TREE	NOTES
1	(E) ±1" ø SHRUB	REMOVE
2	(E) ±12.5" ø DBH OLIVE	REMOVE
3	(E) ±16.5" ø DBH OAK	DO NOT REMOVE, PROTECT TREE PER TREE PROTECTION DETAIL(S) THIS SHEET
4	(E) ±1" ø SHRUB	REMOVE
5	(E) ±7.5" ø DBH OLIVE ⚠2	REMOVE
6	(E) ±8.5" ø DBH OLIVE ⚠2	REMOVE
7	(E) ±6.5" ø DBH OLIVE ⚠2	REMOVE
8	(E) ±18.75" ø DBH PALM	REMOVE
9	(E) ±19.5" ø DBH PALM	REMOVE
10	(E) ±2" ø SHRUB	REMOVE
11	(E) ±2" ø SHRUB	REMOVE
12	(E) ±2" ø SHRUB	REMOVE
13	(E) ±18" ø REDWOOD	SEE SEPARATE LANDSCAPE DESIGN DRAWINGS
14	(E) ±18" ø REDWOOD ⚠2	REMOVE
15	(E) ±18" ø REDWOOD	SEE SEPARATE LANDSCAPE DESIGN DRAWINGS
16	(E) ±18" ø REDWOOD ⚠2	REMOVE
17	(E) ±18" ø REDWOOD	SEE SEPARATE LANDSCAPE DESIGN DRAWINGS
18	(E) ±19" ø SMALL PALM	REMOVE
19	(E) ±4.5" ø SHRUB	REMOVE
20	(E) ±15.5" ø DBH EVERGREEN	REMOVE (DEODARA CEDAR)
21	(E) ±7.5" ø SMALL PALM	REMOVE
22	(E) ±4" ø SMALL PALM	REMOVE
23	(E) ±30.5" ø SMALL PALM	REMOVE
24	(E) ±10" ø SMALL PALM	REMOVE

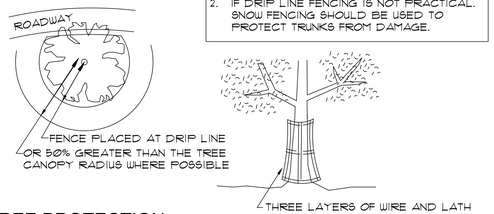
*ALL TREE PROTECTION FENCING SHALL BE CHAIN LINK AND A MINIMUM OF FIVE FEET IN HEIGHT WITH POSTS DRIVEN INTO THE GROUND AND SHALL NOT BE REMOVED UNTIL ALL BUILDING CONSTRUCTION HAS BEEN COMPLETED UNLESS APPROVED BY THE PLANNING DIVISION.

⚠2 *SEE SEPARATE LANDSCAPE DESIGN DRAWINGS AND SURVEY FOR ADDITIONAL INFORMATION.

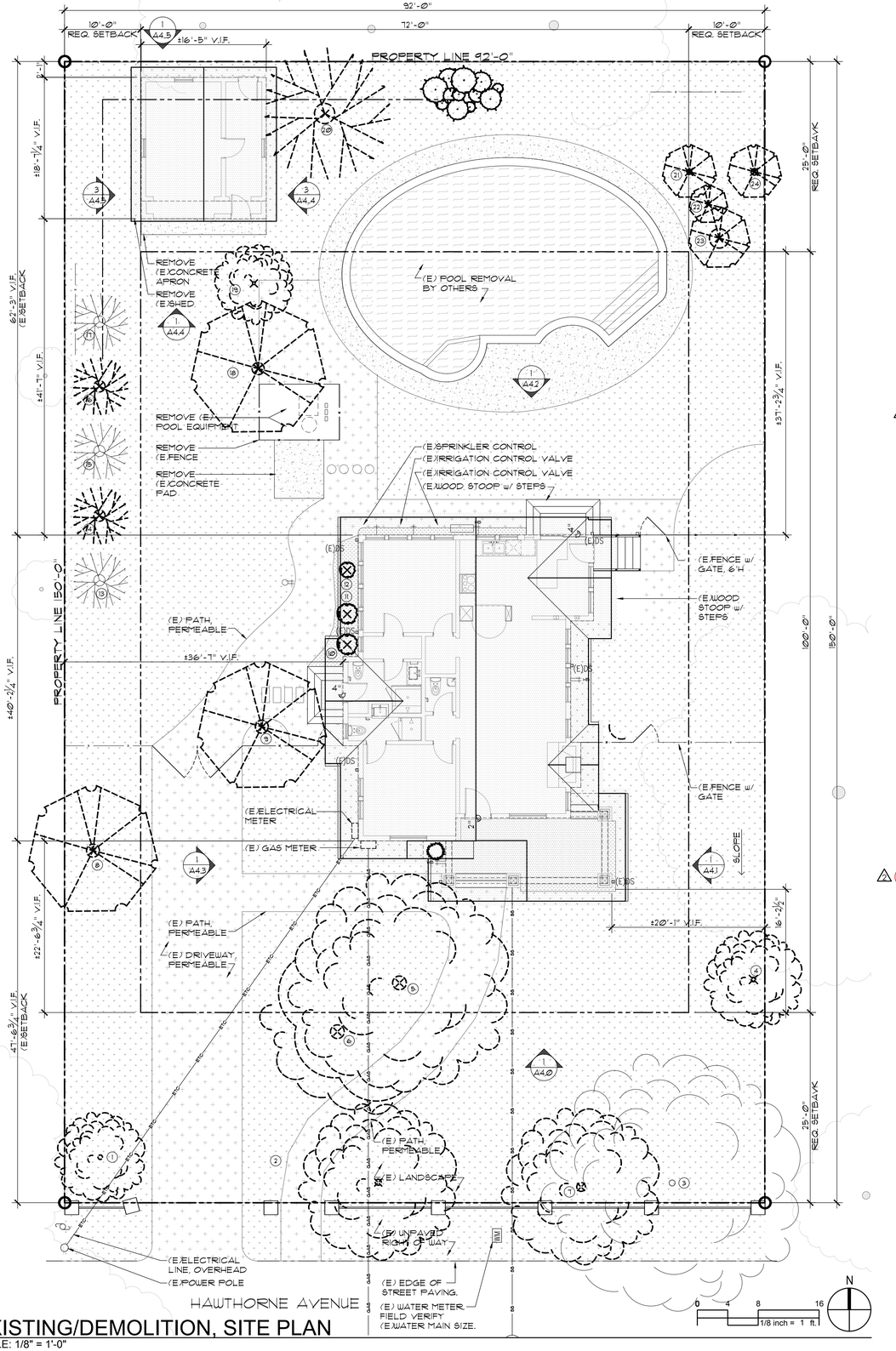
NOTE:
1. ALL TREE PROTECTION FENCING SHALL BE CHAIN LINK AND A MINIMUM OF FIVE FEET IN HEIGHT WITH POSTS DRIVEN INTO THE GROUND AND SHALL NOT BE REMOVED UNTIL ALL BUILDING CONSTRUCTION HAS BEEN COMPLETED UNLESS APPROVED BY THE PLANNING DIVISION.
2. TREE PROTECTION SHOULD BE INSTALLED BEFORE GRADING EQUIPMENT IS MOVED ON SITE.
3. ARBORISTS RECOMMENDATIONS ON THE TREE PLAN SHALL SUPERCEED THIS DETAIL.
4. THESE TREE PROTECTION DETAILS PROVIDED FOR REFERENCE.



NOTE:
1. WHERE CONSTRUCTION IS TO TAKE PLACE UNDER THE CANOPY, THE FENCE SHOULD BE CONSTRUCTED 2 TO 3 FEET FROM THE LIMIT OF WORK BUT IN FRONT OF THE TRUNK.
2. IF DRIP LINE FENCING IS NOT PRACTICAL, SNOW FENCING SHOULD BE USED TO PROTECT TRUNKS FROM DAMAGE.



2 TREE PROTECTION
NO SCALE



1 EXISTING/DEMOLITION, SITE PLAN
SCALE: 1/8" = 1'-0"

SITE PLAN LEGEND

- PROPERTY LINE
- SETBACK LINE OR LINE OF EASEMENT
- OUTLINE OF RESIDENCE FOOTPRINT
- UTILITY LINE - UNDER GROUND
- UTILITY LINE - OVERHEAD
- P.U.E. & DRAINAGE EASEMENT.
- FENCE / GATE
- AREA OF (E) RESIDENCE
- AREA OF RESIDENCE TO BE REMODELED.
- AREA OF ADDITION
- DS. DOWNSPOUT CONNECTED TO UNDERGROUND DRAINAGE PIPING
- TREE INVENTORY SYMBOL (NUMBER)

⚠2
- EVERGREEN TREE
- DECIDUOUS TREE
- SMALL PALM TREE
- BUSH(ES)
- TREE TO BE REMOVED

SITE DEMOLITION NOTES

*ALL TREE PROTECTION FENCING SHALL BE CHAIN LINK AND A MINIMUM OF FIVE FEET IN HEIGHT WITH POSTS RIVEN INTO THE GROUND.

1. VERIFY WITH OWNER ALL ITEMS TO BE SALVAGED.
2. REMOVE ALL EXISTING STRUCTURES, PATIOS, WALKWAYS, ETC, AS REQUIRED FOR REMODEL AND ADDITIONS.
3. EXISTING ELECTRICAL AND GAS SERVICE METERS TO REMAIN. CONTRACTOR TO COORDINATE WITH PG&E AS NECESSARY.
4. CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND APPROVALS, INCLUDING ASBESTOS ABATEMENT (IF NEC.) AS PART OF THE BASE BID.
5. TREE PROTECTION SHOWN ON SITE DEMOLITION PLAN IS FOR DEMOLITION OF EXISTING STRUCTURES ONLY. FURTHER TREE PROTECTION IS REQUIRED DURING CONSTRUCTION OF NEW RESIDENCE. REFER TO NEW SITE PLAN ON SHEET A1.1 AND ARBORIST REPORT FOR FURTHER INFORMATION.

⚠2 6. SEE SURVEY SHEET SU1 FOR ADDITIONAL INFORMATION.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠1 REPONSE TO PLANNING 05/27/2022	LM
⚠1 REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

APN: 170-41-030

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: AS NOTED
DATE: 07/11/2022

A1.0

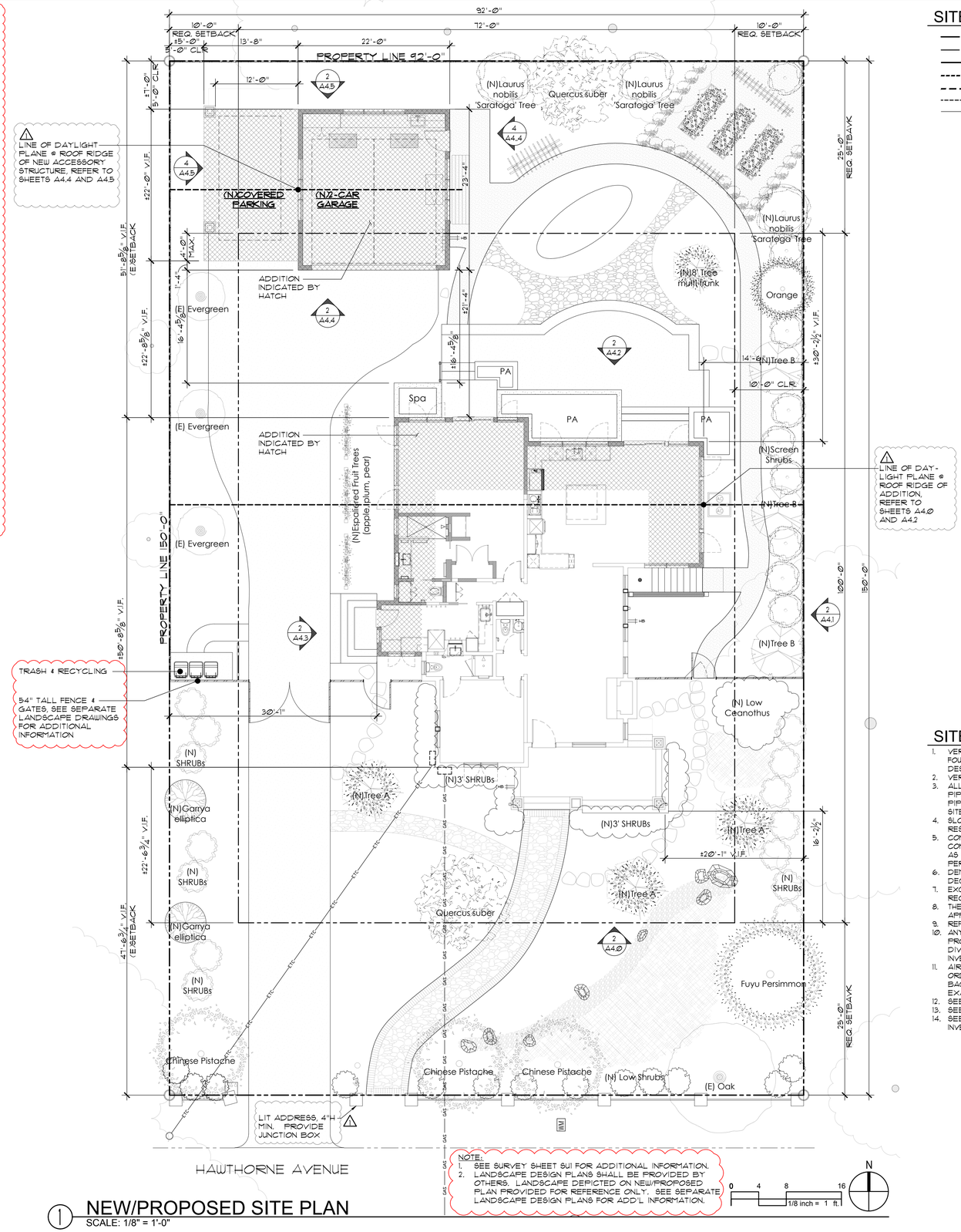
TREE PLANTING SCHEDULE ⚠

*NOTE: TREE PLANTING SCHEDULE PROVIDED FOR REFERENCE. SEE SEPARATE LANDSCAPE DESIGN DRAWINGS AND TREE PLANTING SCHEDULE BY GARDEN SENSE, INC (ATTN: JANET BELL).

Tree Planting Schedule
Scussel-Riffle Residence, 151 Hawthorne Ave., Los Altos
Garden Sense, Inc. Landscape Plan v1.2-2022

Common Name	Number of Trees	Size (Gallons/Boxes)	Comment
Cork Oak	2	24" or 36"	Quercus suber – the branching structure is typically better on the larger trees
Chinese Pistache	3	36"	These grow relatively slowly so preferable to get a larger tree
Fuyu Persimmon	1	24" if available	Difficult to find larger than a 15-gallon and these are typically small
Laurus nobilis 'Saratoga' Tree	3	15-gallon or 24" box	Standard Tree; (2) at Rear yard and (1) at side yard
Orange	1	24" if available	
Fuji Apple	1	15-gallon	Espaliered
Santa Rosa Plum	1	15-gallon	Espaliered
Asian Pear	1	15-gallon	Espaliered
Tree A	3	15-gallon	Species TBD; front yard; height 10' to 12'.
Tree B	3	15-gallon or 24" box	Species TBD; side yard; height: 10'to 16'
Henry Lauder's Walking Stick	1	15-gallon	Multi-trunk; height 8'
Redwood	3		Existing; (remove 2 of 5 for spacing)
Live Oak	1		Existing

Notes:
- 14 trees will be removed (4 olive, 7 palm, 1 deodara cedar, 2 redwood)
- 4 trees will be retained (1 live oak, 3 redwood) – see above
- 20 new trees will be planted - see above



NEW/PROPOSED SITE PLAN
SCALE: 1/8" = 1'-0"

SITE PLAN LEGEND

- PROPERTY LINE
- SETBACK LINE OR LINE OF EASEMENT
- OUTLINE OF RESIDENCE FOOTPRINT
- UTILITY LINE - UNDER GROUND
- UTILITY LINE - OVERHEAD
- P,U,E & DRAINAGE EASEMENT.
- FENCE / GATE
- AREA OF (E) RESIDENCE
- AREA OF RESIDENCE TO BE REMODELED.
- AREA OF ADDITION
- DS. DOWNSPOUT CONNECTED TO UNDERGROUND DRAINAGE PIPING
- TREE INVENTORY SYMBOL (NUMBER)

SITE PLAN NOTES

1. VERIFY ALL SETBACK DIMENSIONS NOTED ON THE SITE PLAN, FLOOR PLANS, AND FOUNDATION PLAN IN THE FIELD PRIOR TO COMMENCING THE WORK. NOTIFY THE DESIGNER IMMEDIATELY OF ANY AND ALL DISCREPANCIES.
2. VERIFY IN THE FIELD ALL GRADES AND STEP DIMENSIONS.
3. ALL DOWNSPOUTS SHALL BE CONNECTED TO THE EXISTING UNDERGROUND DRAINAGE PIPING. COORDINATE SITE AND FOUNDATION UNDERGROUND RAINWATER DRAINAGE PIPING FROM THE DOWNSPOUTS TO THE EXISTING BUBBLERS W/ WHAT IS SHOWN ON THE SITE PLAN.
4. SLOPE FINISH GRADE 6" PER 10'-0" (5%) A MINIMUM DISTANCE OF 5'-0" AWAY FROM THE RESIDENCE FOUNDATION AT AREAS OF NEW CONSTRUCTION.
5. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL UTILITY CONNECTIONS. CONTRACTOR TO PROVIDE ALL NEW UTILITY CONNECTIONS AND/OR UPGRADE EXISTING AS REQUIRED TO ACCOMPLISH WORK. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS AS REQUIRED BY THE JURISDICTION WITH AUTHORITY.
6. DEMOLISH AND REMOVE EXISTING RESIDENCE, WALKWAYS, CONCRETE SLABS, WOOD DECKS, FENCES, ETC. AS REQUIRED TO FOR NEW CONSTRUCTION.
7. EXCAVATE OR FILL SITE AS REQUIRED PER PLANS, SOILS REPORTS (IF ANY), AND CBC REQUIREMENTS.
8. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND APPROVALS INCLUDING ASBESTOS ABATEMENT, (IF NEC), AS PART OF THE BID.
9. REFER TO THE DEMOLITION PLAN ON SHEET A2.0 FOR FURTHER NOTES AND INFORMATION.
10. ANY UNDERGROUND UTILITY TRENCH WORK SHALL AVOID THE DRIP-LINES OF ALL PROTECTED TREES UNLESS APPROVED BY PROJECT ARBORIST AND THE PLANNING DIVISIONS. PROTECTED TREES LISTED ON THIS SHEET TREE INVENTORY LISTED ON TREE INVENTORY.
11. AIR CONDITIONER SHALL MEET THE REQUIREMENTS OF THE LOS ALTOS NOISE CONTROL ORDINANCE CHAPTER 6.16 AND BE IN COMPLIANCE WITH PLANNING DEPARTMENTS SET BACK REQUIREMENTS. (N)AIR CONDITIONER ON (N)CONCRETE CURB, FIELD VERIFY EXACT LOCATION WITH OWNER AND BROWNHOUSE DESIGN
12. SEE SEPARATE LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.
13. SEE SEPARATE SURVEY DRAWINGS FOR ADDITIONAL INFORMATION.
14. SEE SEPARATE TREE INVENTORY PROVIDED FOR REFERENCE. SEE SEPARATE TREE INVENTORY REPORT BY MCGUIRE TREE CARE, INC.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT DAVID ANDREW BARNA C-36482 REGISTERED 09/31/23 STATE OF CALIFORNIA

CITY SUBMITTAL
BID SET
FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠ REPONSE TO PLANNING 05/27/2022	LM
⚠ REPONSE TO MILLS ACT 07/06/2022	LM

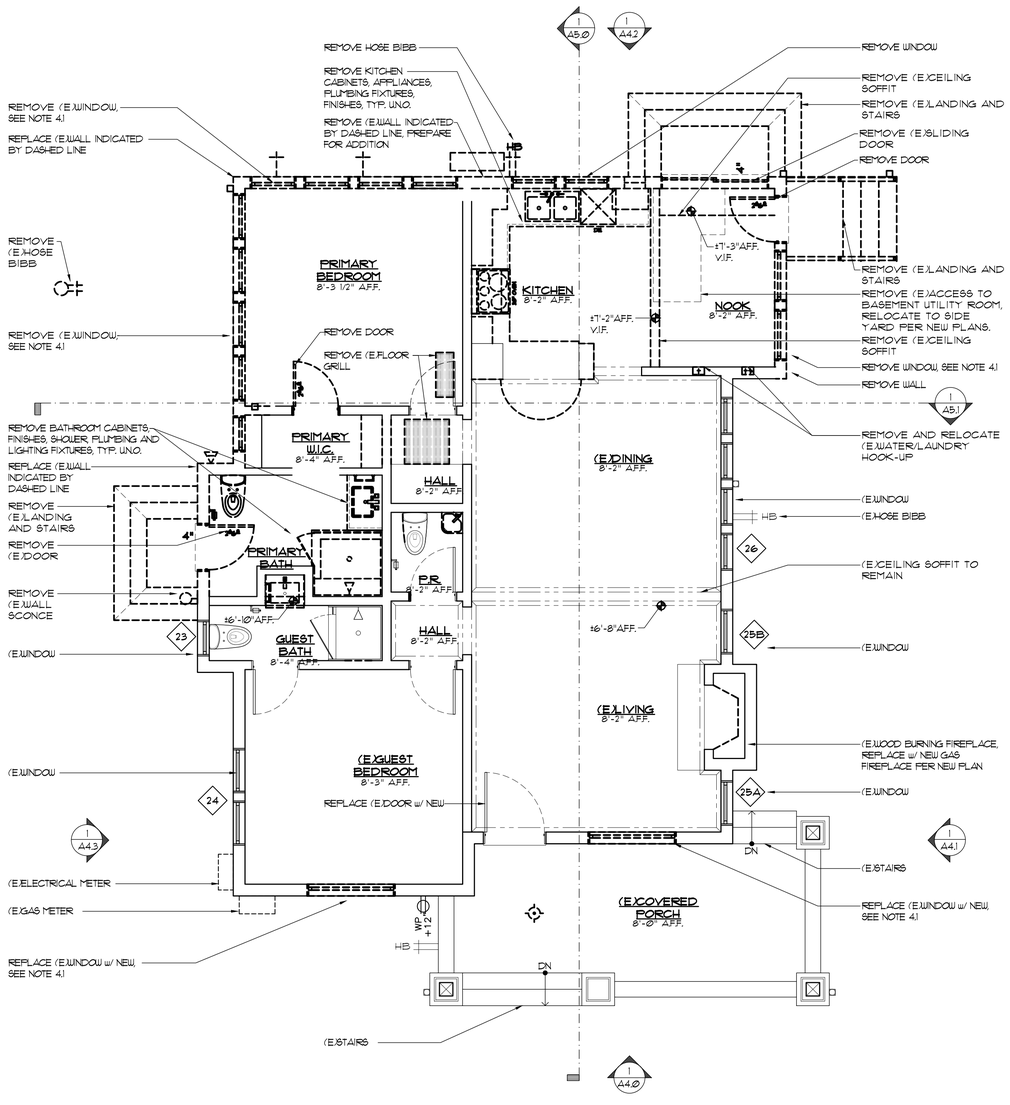
DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL
151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022
APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: AS NOTED
DATE: 07/11/2022

A1.1



MAIN HOUSE
EXISTING/DEMOLITION FLOOR PLAN

1 SCALE: 1/4" = 1'-0"

0 2 4 8
1/4 inch = 1 ft.

N

WALL / SYMBOL LEGEND

- EXISTING WALL / CONSTRUCTION (DOORS, WINDOWS, BUILT-INS, ETC., TO BE REMOVED.
- EXISTING WALL / CONSTRUCTION (DOORS, WINDOWS, BUILT-INS, ETC., TO REMAIN.
- NEW OPENING IN EXISTING WALL
- NEW 2x FRAMED WALL CONSTRUCTION. PROVIDE ½" SHEET ROCK @ INTERIOR FINISH, OR MATCH EXISTING. SEE FINISH SCHEDULE. SEE STRUCTURAL PLANS FOR SHEAR WALL LOCATIONS.
- 2x WALL w/ SOUND ISOLATION BATTS.
- BRICK VENEER
- INTERIOR ELEVATION MARKER (NUMBER / SHEET)
- DETAIL MARKER (NUMBER / SHEET)
- EXTERIOR ELEVATION MARKER
- SECTION LINE (LETTER / SHEET)
- ELEVATION MARKER — T.O. SUBFLR.
- TEMPERED SAFETY GLASS
- EGRESS WINDOW
- WINDOW TYPE - LETTER
- WINDOW TYPE W/ TEMPERED GLASS
- WINDOW / DOOR - SIZE & FUNCTION
- DOOR TYPE - NUMBER
- ROOM NAME — CEILING HEIGHT, FLOOR MATERIAL, ROOM SIZE
- REVISION MARK - NUMBER

FLOOR PLAN DEMOLITION NOTES

1. VERIFY WITH OWNER ALL ITEMS TO BE SALVAGED.
2. REMOVE DEMOLITION ITEMS COMPLETELY TO BASE MATERIALS. DEMOLITION INCLUDING CUTTING BACK OF CEILINGS, WALLS, FLOORS AND FINISHES (AS REQUIRED) TO THE EXTENT INSTALLATION OF NEW WORK CAN BE ACCOMPLISHED. COORDINATE WITH DRAWINGS FOR EXTENT OF NEW WORK. SURFACES REMAINING EXPOSED AFTER DEMOLITION WORK SHALL BE CLEANED TO MATCH EXISTING ADJACENT SURFACES OR PREPARED FOR NEW CONSTRUCTION.
3. WHERE REQUIRED TO ACCOMPLISH NEW WORK, DISCONNECT, RELOCATE OR REMOVE EXISTING CIRCUIT WIRING OR EQUIPMENT. REMOVE WIRES, CABLES AND CONDUITS BACK TO POWER SOURCE. CONCEALED CONDUITS MAY BE ABANDONED IN PLACE. CAP OR PLUG DISCONNECTED CONDUITS. RE-ROUTE CIRCUITING WHERE NECESSARY TO MAINTAIN CONTINUITY OF SERVICE OR EXISTING OUTLETS TO REMAIN.
4. REMOVE WALLS, WINDOWS, CABINETS, APPLIANCES AND FIXTURES AS SHOWN IN DEMOLITION PLAN.EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED.
   - 4.1. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
5. COORDINATE WITH ELECTRICAL, LIGHTING, MECHANICAL AND PLUMBING PLANS FOR THE REMOVAL AND/OR RELOCATION OF WALL SWITCHES / FLOOR OUTLETS, AND MECHANICAL REGISTERS AS REQUIRED. (BUT NOT LIMITED TO THOSE ITEMS).
6. REFER TO STRUCTURAL DRAWINGS FOR FURTHER INFORMATION REGARDING DEMOLITION OF WALLS, ROOF FRAMING, AND SLAB FLOOR CUTTING AS REQUIRED FOR NEW CONSTRUCTION.
7. REMOVE EXISTING BASEBOARD, CROWN, AND TRIM IN ROOMS WHERE NEW IS CALLED FOR IN THE FINISH SCHEDULE.
8. CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND APPROVALS, INCLUDING ASBESTOS ABATEMENT (IF NEC.) AS PART OF THE BASE BID.
9. CONTRACTOR SHALL SUPPORT EXISTING ROOF STRUCTURE TEMPORARILY SUCH THAT WILL FACILITATE CONSTRUCTION OF NEW WORK AND ADEQUATELY SUPPORT EXISTING ROOF.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

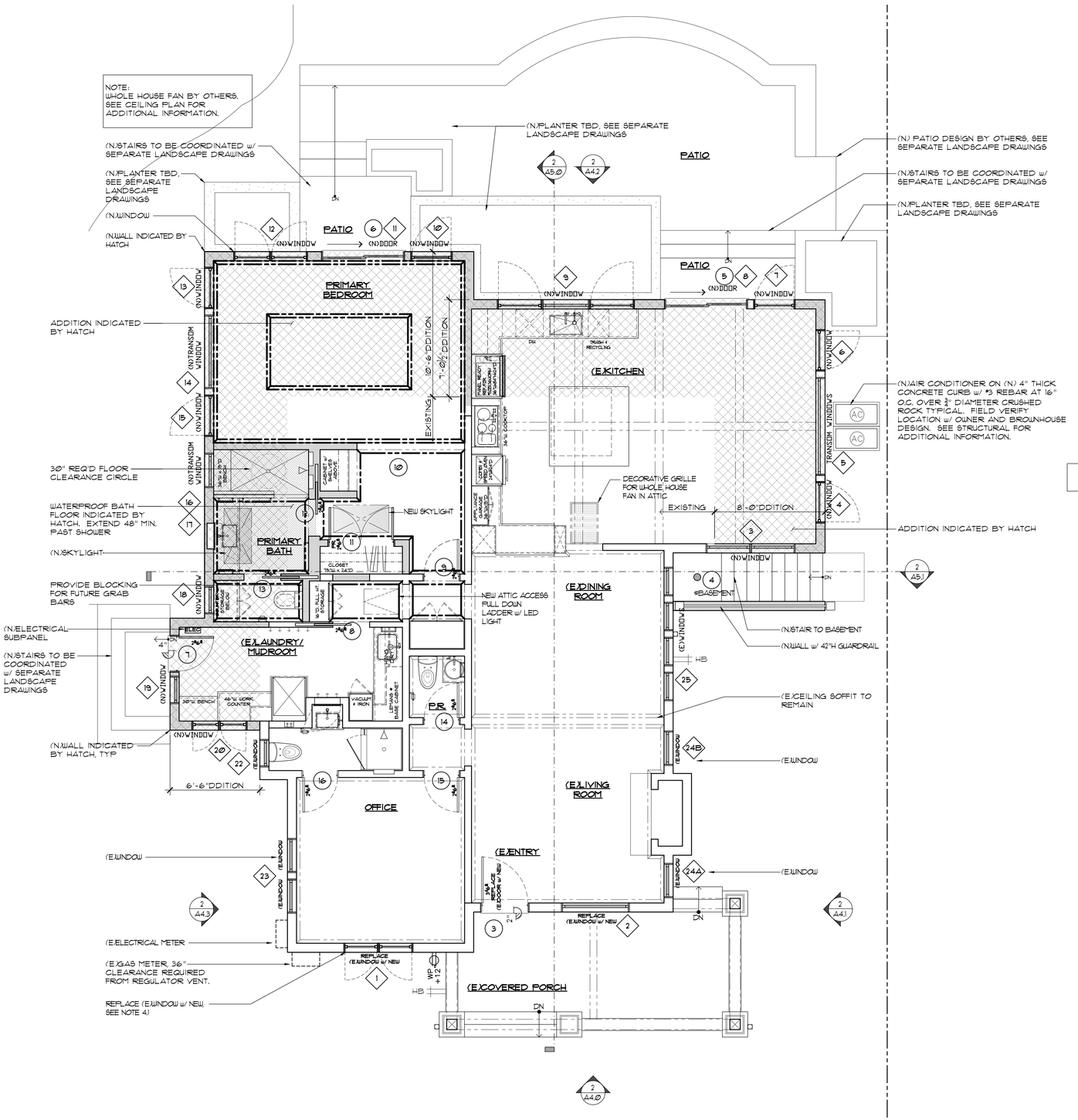
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A2.0



MAIN HOUSE
NEW/PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"

0 2 4 8
1/4 inch = 1 ft.

WALL / SYMBOL LEGEND

- EXISTING WALL / CONSTRUCTION (DOORS, WINDOWS, BUILT-INS, ETC., TO BE REMOVED.
- EXISTING WALL / CONSTRUCTION (DOORS, WINDOWS, BUILT-INS, ETC., TO REMAIN.
- NEW OPENING IN EXISTING WALL
- NEW 2x FRAMED WALL CONSTRUCTION. PROVIDE ½" SHEET ROCK @ INTERIOR FINISH, OR MATCH EXISTING. SEE FINISH SCHEDULE. SEE STRUCTURAL PLANS FOR SHEAR WALL LOCATIONS.
- 2x WALL w/ SOUND ISOLATION BATTS.
- BRICK VENEER
- INTERIOR ELEVATION MARKER (NUMBER / SHEET)
- DETAIL MARKER (NUMBER / SHEET)
- EXTERIOR ELEVATION MARKER
- SECTION LINE (LETTER / SHEET)
- ELEVATION MARKER (100.00 T.O. SUBFLR.)
- TEMPERED SAFETY GLASS
- EGRESS WINDOW
- WINDOW TYPE - LETTER
- WINDOW TYPE W/ TEMPERED GLASS
- WINDOW / DOOR - SIZE & FUNCTION
- DOOR TYPE - NUMBER
- ROOM NAME / CEILING HEIGHT / FLOOR MATERIAL / ROOM SIZE
- REVISION MARK - NUMBER

FLOOR PLAN NOTES

1. DO NOT SCALE THE DRAWINGS! VERIFY ALL DIMENSIONS IN THE FIELD. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.
2. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK OR CABINET, UNLESS OTHERWISE NOTED.
3. ALIGN NEW WALLS WITH EXISTING WALLS, TYPICAL U.N.O
4. CENTER ALL WINDOWS AND/OR DOORS ON OPENINGS ON INSIDE WALLS, UNLESS OTHERWISE DIMENSIONED OR NOTED.ONE WINDOW/DOOR FROM EACH SLEEPING ROOM MUST HAVE A NET CLEAR OPENING OF 5.7 SQFT (5.0 SQFT. WHEN WINDOW IS AT FLOOR / GRADE LEVEL) WITH A NET CLEAR HEIGHT OF 24", A NET CLEAR WIDTH OF 20" AND THE SILL MUST BE WITHIN 44" OFF THE FLOOR.
5. LOCATE ALL WATER CLOSETS AT 15-INCHES MINIMUM FROM CENTER TO ADJACENT WALL AND 30-INCHES MINIMUM CLEAR. PROVIDE 20-INCHES MINIMUM CLEAR IN FRONT OF THE FIXTURE.
6. PROVIDE SOLID BLOCKING IN WALL AT ALL AREAS OF TOWEL BARS, GRAB BARS, TOILET PAPER DISPENSERS AND/OR OTHER WALL MOUNTED ITEMS. REFER TO INTERIOR ELEVATIONS FOR LOCATIONS.
7. ALL FIRE BLOCKING TO BE INSTALLED IN LOCATIONS PER CRC SECTION R219.
8. GYPSUM BOARD FINISH TO MATCH EXISTING. V.I.F. w/ OWNER.
9. AN APPROVED NUMBER OR ADDRESS SHALL BE PROVIDED IN SUCH A POSITION AS TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY. NUMBERS SHALL CONTRAST w/ THEIR BACKGROUND, SHALL BE ARABIC NUMERALS OR ALPHABETICAL LETTERS. NUMERALS SHALL BE A MIN. OF 4" HIGH WITH A MIN. STROKE WIDTH OF ½ INCH. REFER TO CBC 5Ø1.2.
10. PROVIDE A MINIMUM INSULATION OF R-13 AT ALL EXTERIOR WALLS, R-3Ø INSULATION AT CEILING JOISTS LOCATED UNDER THE SLOPED ROOF ATTIC AND R-19 INSULATION AT CEILING JOISTS LOCATED AT THE FLAT ROOF.
11. GYPSUM BOARD FINISH TBD. V.I.F. w/ DESIGNER AND OWNER.
12. SEE INTERIOR ELEVATIONS FOR EXTENT OF CABINETRY, PANEL CASINGS & TRIM.
13. TYPICAL AT ALL WET (SHOWER-BATH) LOCATIONS. WATER RESISTANT DRYWALL MUST BE INSTALLED AT ALL WET LOCATIONS (NOT RECOMMENDED FOR DIRECT TILE APPLICATION IN A SHOWER STALL). WATER RESISTANT DRYWALL MUST BE INSTALLED TO A POINT A MIN. OF 72" ABOVE THE SHOWER DRAIN. CRC R3Ø7.2. DO NOT INSTALL A VAPOR BARRIER BEHIND WATER RESISTANT DRYWALL. DO NOT INSTALL THE WATER RESISTANT DRYWALL ON THE CEILING UNLESS THE CEILING JOIST ARE NO GREATER THAT 12" APART FOR ½" THICK WATER RESISTANT DRYWALL AND 16" APART FOR 5/8" WATER RESISTANT DRYWALL. CONCRETE BOARD REQUIRES A VAPOR BARRIER TO INSTALLED BETWEEN IT AND THE DRYWALL AND OR FRAMING. LISTED FASTENERS MUST BE USED.
14. ALL PLUMBING LOCATIONS TO BE FIELD APPROVED BY DESIGNER BEFORE ANY DRILLING OR INSTALLATION.
15. 22"x3Ø" ATTIC ACCESS w/ 3Ø" CLR FROM TOP OF FRAMING TO UNDERSIDE OF FRAMING. ATTIC ACCESS TO MEET REQUIREMENTS FOR 2Ø16 CRC R8Ø7.1
16. CRAWLSPACE ACCESS OPENINGS THROUGH THE FLOOR SHALL BE A MINIMUM OF 18 INCHES BY 24 INCHES PER 2Ø16 CRC R4Ø8.4
17. ALL FIRE BLOCKING TO BE INSTALLED IN LOCATIONS PER CRC SECTION R219.
18. STAIR:
    - 18.1. STAIR RISER HEIGHT SHALL BE 7 3/4" MAX. PER 311.7.5.1 CRC. THE RISER HEIGHT SHALL BE MEASURED VERTICALLY BETWEEN THE LEADING EDGES OF ADJACENT TREADS.
    - 18.2. STAIR TREAD DEPTH SHALL BE 1Ø" MIN. PER 311.7.5.2 CRC. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 11" MEASURED AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE AT A POINT 12" FROM THE SIDE WHERE THE TREADS ARE NARROWER AND A MINIMUM TREAD DEPTH OF 1Ø" PER 311.7.5.2.1 CRC.
19. PROVIDE RODENT PROOFING TYPICAL PER 2Ø16 CBC APPENDIX F. WALL VENTILATION OPENINGS SHALL BE COVERED FOR THEIR HEIGHT AND WIDTH WITH PERFORATED SHEET METAL PLATES NO LESS THAN Ø.Ø712 INCH (1.8 MM) THICK, EXPANDED SHEET METAL PLATES NOT LESS THAN Ø.Ø47 INCH (1.2 MM) THICK, CAST-IRON GRILLS OR GRATING, EXTRUDED ALUMINUM LOAD- BEARING VENTS OR WITH HARDWARE CLOTH OF Ø.Ø35 INCH (Ø.89 MM) WIRE OR HEAVIER. THE OPENINGS THEREIN SHALL NOT EXCEED ¼ INCH (6.4 MM). FOUNDATION AND EXTERIOR WALL SEALING: ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN THE WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR NON-CORROSIVE METAL.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
Exp. 08/31/23
STATE OF CALIFORNIA

CITY SUBMITTAL
BID SET
FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A2.1

FLOOR PLAN DEMOLITION NOTES

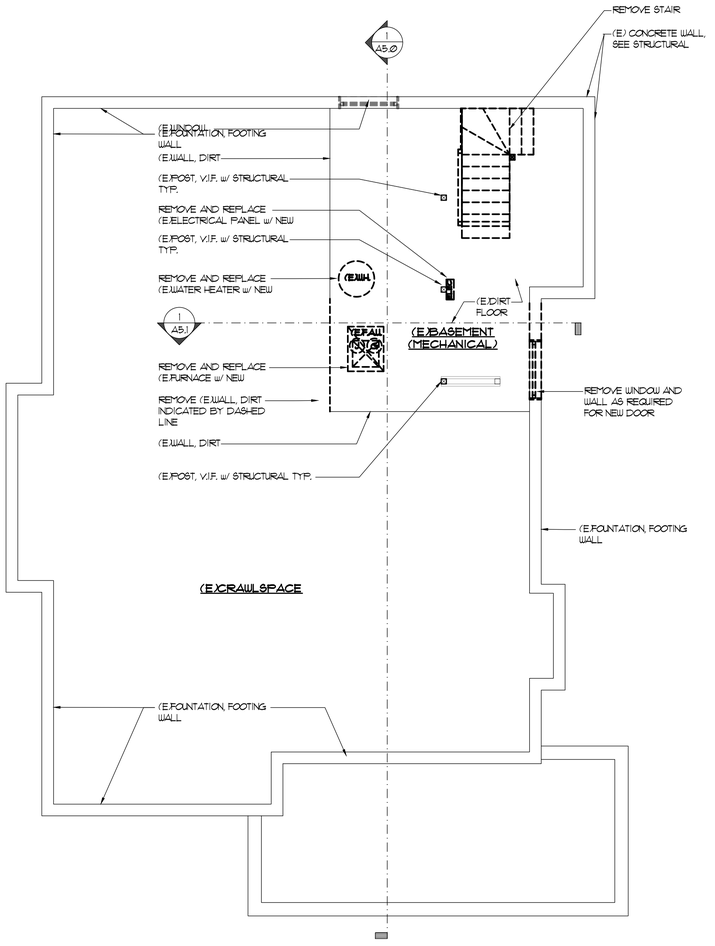
1. VERIFY WITH OWNER ALL ITEMS TO BE SALVAGED.
2. REMOVE DEMOLITION ITEMS COMPLETELY TO BASE MATERIALS. DEMOLITION INCLUDING CUTTING BACK OF CEILINGS, WALLS, FLOORS AND FINISHES (AS REQUIRED) TO THE EXTENT INSTALLATION OF NEW WORK CAN BE ACCOMPLISHED. COORDINATE WITH DRAWINGS FOR EXTENT OF NEW WORK. SURFACES REMAINING EXPOSED AFTER DEMOLITION WORK SHALL BE CLEANED TO MATCH EXISTING ADJACENT SURFACES OR PREPARED FOR NEW CONSTRUCTION.
3. WHERE REQUIRED TO ACCOMPLISH NEW WORK, DISCONNECT, RELOCATE OR REMOVE EXISTING CIRCUIT WIRING OR EQUIPMENT. REMOVE WIRES, CABLES AND CONDUITS BACK TO POWER SOURCE. CONCEALED CONDUITS MAY BE ABANDONED IN PLACE. CAP OR PLUG DISCONNECTED CONDUITS. RE-ROUTE CIRCUITING WHERE NECESSARY TO MAINTAIN CONTINUITY OF SERVICE OR EXISTING OUTLETS TO REMAIN.
4. REMOVE WALLS, WINDOWS, CABINETS, APPLIANCES AND FIXTURES AS SHOWN IN DEMOLITION PLAN.EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED.
   4.1. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
5. COORDINATE WITH ELECTRICAL, LIGHTING, MECHANICAL AND PLUMBING PLANS FOR THE REMOVAL AND/OR RELOCATION OF WALL SWITCHES / FLOOR OUTLETS, AND MECHANICAL REGISTERS AS REQUIRED. (BUT NOT LIMITED TO THOSE ITEMS).
6. REFER TO STRUCTURAL DRAWINGS FOR FURTHER INFORMATION REGARDING DEMOLITION OF WALLS, ROOF FRAMING, AND SLAB FLOOR CUTTING AS REQUIRED FOR NEW CONSTRUCTION.
7. REMOVE EXISTING BASEBOARD, CROWN, AND TRIM IN ROOMS WHERE NEW IS CALLED FOR IN THE FINISH SCHEDULE.
8. CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND APPROVALS, INCLUDING ASBESTOS ABATEMENT (IF NEC.) AS PART OF THE BASE BID.
9. CONTRACTOR SHALL SUPPORT EXISTING ROOF STRUCTURE TEMPORARILY SUCH THAT WILL FACILITATE CONSTRUCTION OF NEW WORK AND ADEQUATELY SUPPORT EXISTING ROOF.

WALL / SYMBOL LEGEND

- EXISTING WALL / CONSTRUCTION (DOORS, WINDOWS, BUILT-INS, ETC., TO BE REMOVED.
- EXISTING WALL / CONSTRUCTION (DOORS, WINDOWS, BUILT-INS, ETC., TO REMAIN.
- NEW OPENING IN EXISTING WALL
- NEW 2x FRAMED WALL CONSTRUCTION. PROVIDE ½" SHEET ROCK @ INTERIOR FINISH, OR MATCH EXISTING. SEE FINISH SCHEDULE. SEE STRUCTURAL PLANS FOR SHEAR WALL LOCATIONS.
- 2x WALL W/ SOUND ISOLATION BATTS.
- BRICK VENEER
- INTERIOR ELEVATION MARKER (NUMBER / SHEET)
- DETAIL MARKER (NUMBER / SHEET)
- EXTERIOR ELEVATION MARKER
- SECTION LINE (LETTER / SHEET)
- 100.00 T.O. SUBFLR — ELEVATION MARKER
- TEMPERED SAFETY GLASS
- EGRESS WINDOW
- WINDOW TYPE - LETTER
- WINDOW TYPE W/ TEMPERED GLASS
- 2'8"x5' — WINDOW / DOOR - SIZE & FUNCTION
- DOOR TYPE - NUMBER
- ROOM NAME / CEILING HEIGHT / FLOOR MATERIAL / ROOM SIZE
- REVISION MARK - NUMBER

FLOOR PLAN NOTES

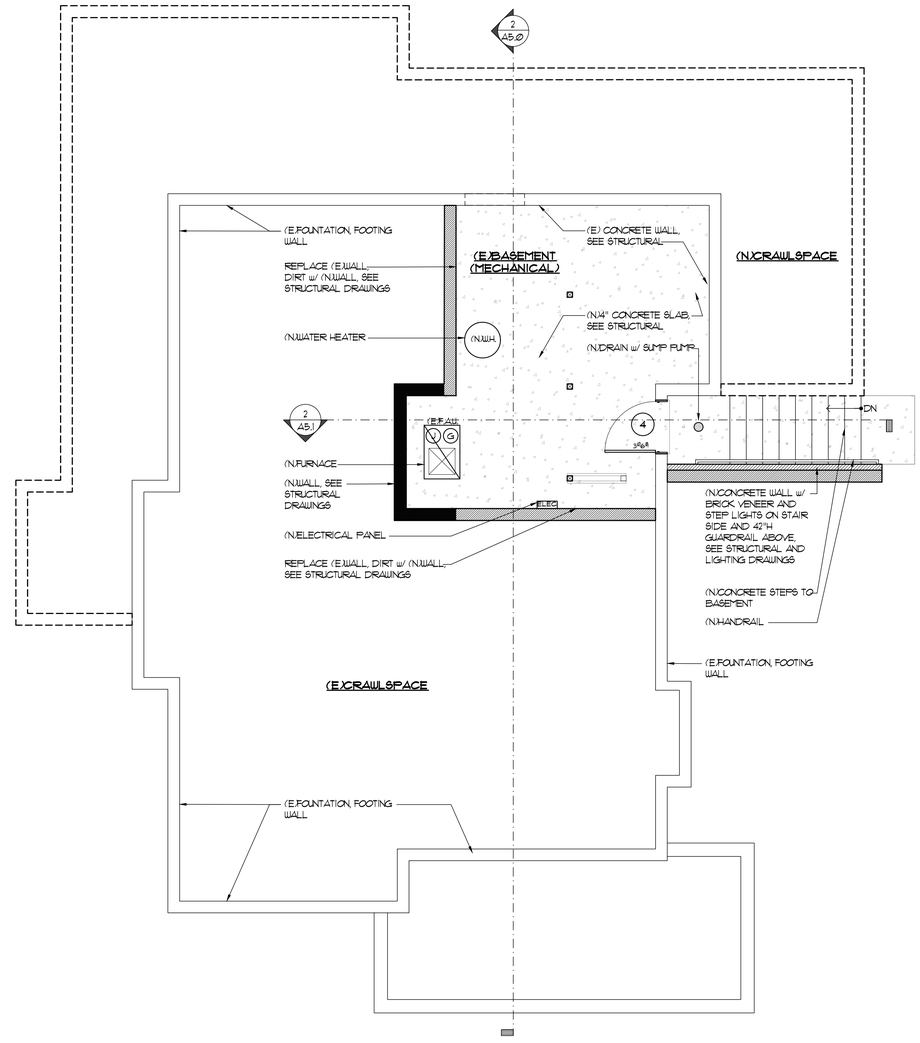
1. DO NOT SCALE THE DRAWINGS! VERIFY ALL DIMENSIONS IN THE FIELD. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.
2. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK OR CABINET, UNLESS OTHERWISE NOTED.
3. ALIGN NEW WALLS WITH EXISTING WALLS, TYPICAL U.N.O
4. CENTER ALL WINDOWS AND/OR DOORS ON OPENINGS ON INSIDE WALLS, UNLESS OTHERWISE DIMENSIONED OR NOTED.ONE WINDOW/DOOR FROM EACH SLEEPING ROOM MUST HAVE A NET CLEAR OPENING OF 5.7 SQFT (5.0 SQFT. WHEN WINDOW IS AT FLOOR / GRADE LEVEL) WITH A NET CLEAR HEIGHT OF 24", A NET CLEAR WIDTH OF 20" AND THE SILL MUST BE WITHIN 44" OFF THE FLOOR.
5. LOCATE ALL WATER CLOSETS AT 15-INCHES MINIMUM FROM CENTER TO ADJACENT WALL AND 30-INCHES MINIMUM CLEAR. PROVIDE 20-INCHES MINIMUM CLEAR IN FRONT OF THE FIXTURE.
6. PROVIDE SOLID BLOCKING IN WALL AT ALL AREAS OF TOWEL BARS, GRAB BARS, TOILET PAPER DISPENSERS AND/OR OTHER WALL MOUNTED ITEMS. REFER TO INTERIOR ELEVATIONS FOR LOCATIONS.
7. ALL FIRE BLOCKING TO BE INSTALLED IN LOCATIONS PER CRC SECTION R219.
8. GYPSUM BOARD FINISH TO MATCH EXISTING. V.I.F. W/ OWNER.
9. AN APPROVED NUMBER OR ADDRESS SHALL BE PROVIDED IN SUCH A POSITION AS TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY. NUMBERS SHALL CONTRAST W/ THEIR BACKGROUND. SHALL BE ARABIC NUMERALS OR ALPHABETICAL LETTERS. NUMERALS SHALL BE A MIN. OF 4" HIGH, WITH A MIN. STROKE WIDTH OF ½ INCH. REFER TO CBC 5Ø12.
10. PROVIDE A MINIMUM INSULATION OF R-13 AT ALL EXTERIOR WALLS, R-3Ø INSULATION AT CEILING JOISTS LOCATED UNDER THE SLOPED ROOF ATTIC AND R-19 INSULATION AT CEILING JOISTS LOCATED AT THE FLAT ROOF.
11. GYPSUM BOARD FINISH TBD. V.I.F. W/ DESIGNER AND OWNER.
12. SEE INTERIOR ELEVATIONS FOR EXTENT OF CABINETRY, PANEL, CASINGS & TRIM.
13. TYPICAL AT ALL WET (SHOWER-BATH) LOCATIONS. WATER RESISTANT DRYWALL MUST BE INSTALLED AT ALL WET LOCATIONS (NOT RECOMMENDED FOR DIRECT TILE APPLICATION IN A SHOWER STALL). WATER RESISTANT DRYWALL MUST BE INSTALLED TO A POINT A MIN. OF 72" ABOVE THE SHOWER DRAIN. CRC R3Ø7.2. DO NOT INSTALL A VAPOR BARRIER BEHIND WATER RESISTANT DRYWALL. DO NOT INSTALL THE WATER RESISTANT DRYWALL ON THE CEILING UNLESS THE CEILING JOIST ARE NO GREATER THAT 12" APART FOR ½" THICK WATER RESISTANT DRYWALL AND 16" APART FOR 5/8" WATER RESISTANT DRYWALL. CONCRETE BOARD REQUIRES A VAPOR BARRIER TO INSTALLED BETWEEN IT AND THE DRYWALL AND OR FRAMING. LISTED FASTENERS MUST BE USED.
14. ALL PLUMBING LOCATIONS TO BE FIELD APPROVED BY DESIGNER BEFORE ANY DRILLING OR INSTALLATION.
15. 22"x3Ø" ATTIC ACCESS W/ 3Ø" CLR FROM TOP OF FRAMING TO UNDERSIDE OF FRAMING. ATTIC ACCESS TO MEET REQUIREMENTS FOR 2Ø16 CRC R3Ø7.1
16. CRAWLSPACE ACCESS OPENINGS THROUGH THE FLOOR SHALL BE A MINIMUM OF 18 INCHES BY 24 INCHES PER 2Ø16 CRC R4Ø8.4
17. ALL FIRE BLOCKING TO BE INSTALLED IN LOCATIONS PER CRC SECTION R219.
18. STAIR:
    18.1. STAIR RISER HEIGHT SHALL BE 7 3/4" MAX. PER 311.7.5.1 CRC. THE RISER HEIGHT SHALL BE MEASURED VERTICALLY BETWEEN THE LEADING EDGES OF ADJACENT TREADS.
    18.2. STAIR TREAD DEPTH SHALL BE 1Ø" MIN. PER 311.7.5.2 CRC. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 11" MEASURED AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE AT A POINT 12" FROM THE SIDE WHERE THE TREADS ARE NARROWER AND A MINIMUM TREAD DEPTH OF 1Ø" PER 311.7.5.2.1 CRC.
19. PROVIDE RODENT PROOFING TYPICAL PER 2Ø16 CBC APPENDIX F. WALL VENTILATION OPENINGS SHALL BE COVERED FOR THEIR HEIGHT AND WIDTH WITH PERFORATED SHEET METAL PLATES NO LESS THAN Ø.Ø7Ø INCH (1.8 MM) THICK, EXPANDED SHEET METAL PLATES NOT LESS THAN Ø.Ø47 INCH (1.2 MM) THICK, CAST-IRON GRILLS OR GRATING, EXTRUDED ALUMINUM LOUVER BEARING VENTS OR WITH HARDWARE CLOTH OF Ø.Ø35 INCH (Ø.89 MM) WIRE OR HEAVIER. THE OPENINGS THEREIN SHALL NOT EXCEED ¼ INCH (6.4 MM). FOUNDATION AND EXTERIOR WALL SEALING: ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN THE WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR NON-CORROSIVE METAL.



BASEMENT
EXISTING/DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'-0"

0 2 4 8 1/4 inch = 1 ft. N



BASEMENT
NEW/PROPOSED FLOOR PLAN

SCALE: 1/4" = 1'-0"

0 2 4 8 1/4 inch = 1 ft. N

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
REGISTERED PROFESSIONAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

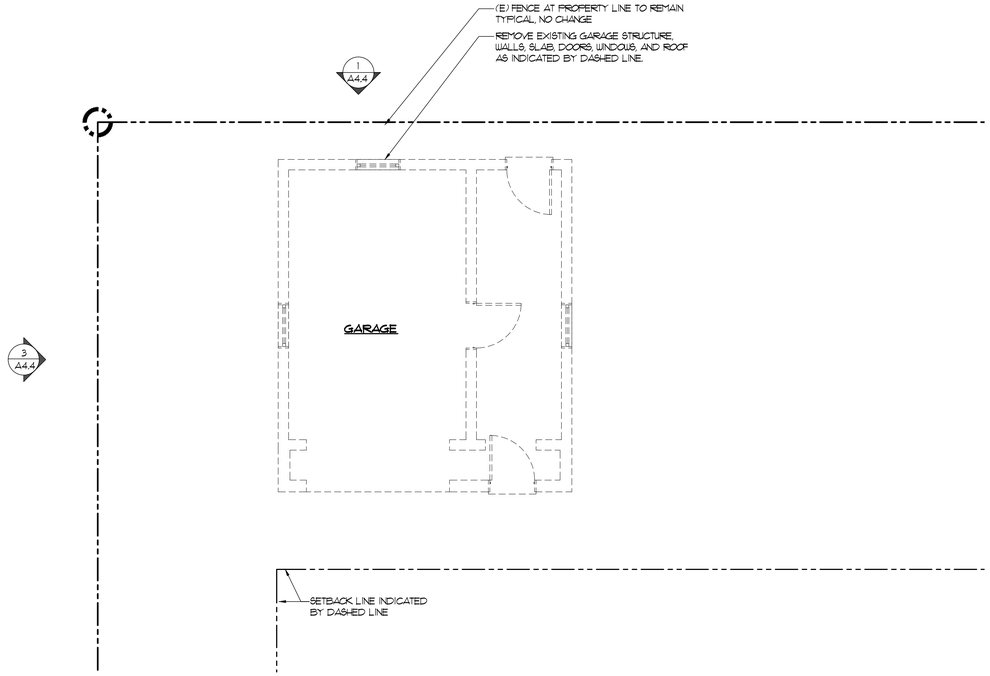
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

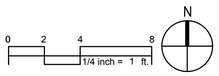
DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A2.2



DETACHED GARAGE EXISTING/DEMOLITION FLOOR PLAN

1 SCALE: 1/4" = 1'-0"



WALL / SYMBOL LEGEND

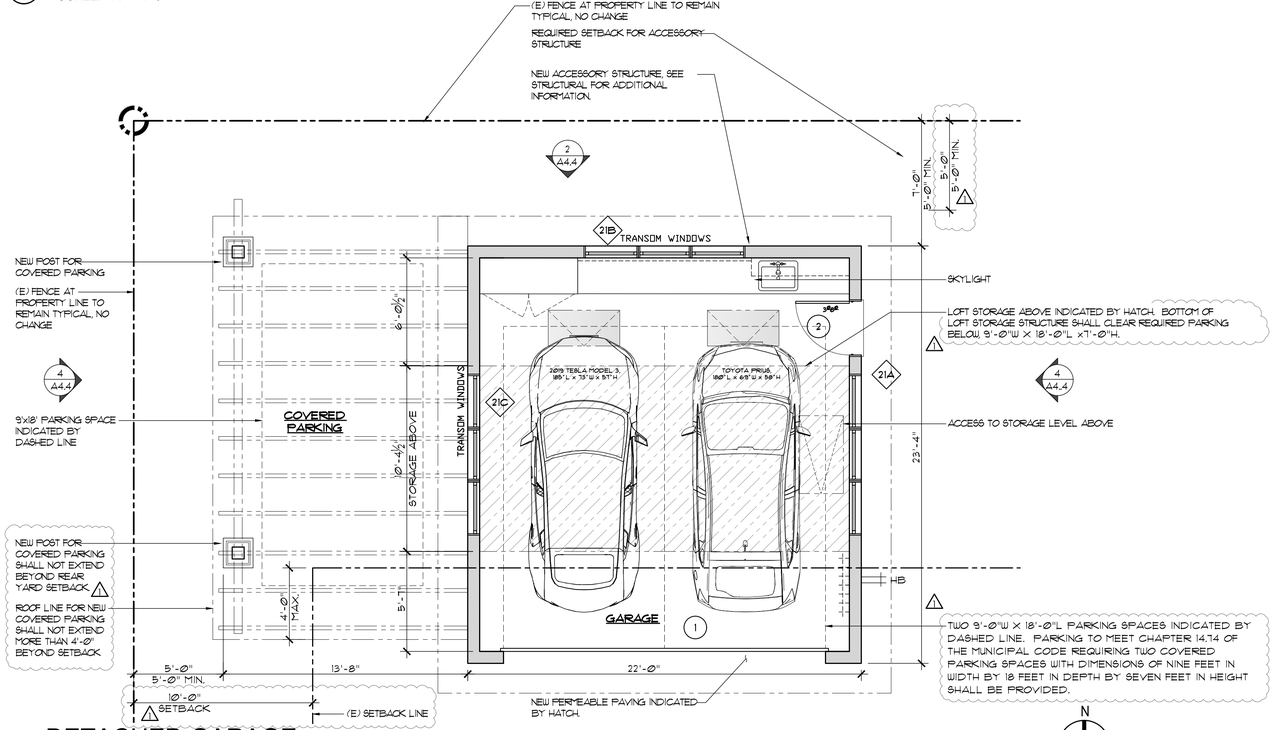
- EXISTING WALL / CONSTRUCTION (DOORS, WINDOWS, BUILT-INS, ETC., TO BE REMOVED.
- EXISTING WALL / CONSTRUCTION (DOORS, WINDOWS, BUILT-INS, ETC., TO REMAIN.
- NEW OPENING IN EXISTING WALL
- NEW 2x FRAMED WALL CONSTRUCTION. PROVIDE ½" SHEET ROCK @ INTERIOR FINISH, OR MATCH EXISTING. SEE FINISH SCHEDULE. SEE STRUCTURAL PLANS FOR SHEAR WALL LOCATIONS.
- 2x WALL W/ SOUND ISOLATION BATTS.
- BRICK VENEER
- 1 / 4 A* 2 / 3 — INTERIOR ELEVATION MARKER (NUMBER / SHEET)
- # / A* — DETAIL MARKER (NUMBER / SHEET)
- # / A* — EXTERIOR ELEVATION MARKER
- △ / A* — SECTION LINE (LETTER / SHEET)
- 10000 T.O. SUBFLR. — ELEVATION MARKER
- T — TEMPERED SAFETY GLASS
- E — EGRESS WINDOW
- A — WINDOW TYPE - LETTER
- A / T — WINDOW TYPE W/ TEMPERED GLASS
- 2868 — WINDOW / DOOR - SIZE & FUNCTION
- * — DOOR TYPE - NUMBER
- ROOM NAME / CEILING HEIGHT / FLOOR MATERIAL / ROOM SIZE — ROOM LABEL / INFORMATION
- # — REVISION MARK - NUMBER

FLOOR PLAN DEMOLITION NOTES

1. VERIFY WITH OWNER ALL ITEMS TO BE SALVAGED.
2. REMOVE DEMOLITION ITEMS COMPLETELY TO BASE MATERIALS. DEMOLITION INCLUDING CUTTING BACK OF CEILINGS, WALLS, FLOORS AND FINISHES (AS REQUIRED) TO THE EXTENT INSTALLATION OF NEW WORK CAN BE ACCOMPLISHED. COORDINATE WITH DRAWINGS FOR EXTENT OF NEW WORK. SURFACES REMAINING EXPOSED AFTER DEMOLITION WORK SHALL BE CLEANED TO MATCH EXISTING ADJACENT SURFACES OR PREPARED FOR NEW CONSTRUCTION.
3. WHERE REQUIRED TO ACCOMPLISH NEW WORK, DISCONNECT, RELOCATE OR REMOVE EXISTING CIRCUIT WIRING OR EQUIPMENT, REMOVE WIRES, CABLES AND CONDUITS BACK TO POWER SOURCE. CONCEALED CONDUITS MAY BE ABANDONED IN PLACE. CAP OR PLUG DISCONNECTED CONDUITS. RE-ROUTE CIRCUITING WHERE NECESSARY TO MAINTAIN CONTINUITY OF SERVICE OR EXISTING OUTLETS TO REMAIN.
4. REMOVE WALLS, WINDOWS, CABINETS, APPLIANCES AND FIXTURES AS SHOWN IN DEMOLITION PLAN.EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED.
   4.1. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
5. COORDINATE WITH ELECTRICAL, LIGHTING, MECHANICAL AND PLUMBING PLANS FOR THE REMOVAL AND/OR RELOCATION OF WALL SWITCHES / FLOOR OUTLETS, AND MECHANICAL REGISTERS AS REQUIRED. (BUT NOT LIMITED TO THOSE ITEMS).
6. REFER TO STRUCTURAL DRAWINGS FOR FURTHER INFORMATION REGARDING DEMOLITION OF WALLS, ROOF FRAMING, AND SLAB FLOOR CUTTING AS REQUIRED FOR NEW CONSTRUCTION.
7. REMOVE EXISTING BASEBOARD, CROWN, AND TRIM IN ROOMS WHERE NEW IS CALLED FOR IN THE FINISH SCHEDULE.
8. CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND APPROVALS, INCLUDING ASBESTOS ABATEMENT (IF NEC.) AS PART OF THE BASE BID.
9. CONTRACTOR SHALL SUPPORT EXISTING ROOF STRUCTURE TEMPORARILY SUCH THAT WILL FACILITATE CONSTRUCTION OF NEW WORK AND ADEQUATELY SUPPORT EXISTING ROOF.

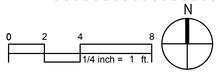
FLOOR PLAN NOTES

1. DO NOT SCALE THE DRAWINGS! VERIFY ALL DIMENSIONS IN THE FIELD. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.
2. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK OR CABINET, UNLESS OTHERWISE NOTED.
3. ALIGN NEW WALLS WITH EXISTING WALLS, TYPICAL U.N.O
4. CENTER ALL WINDOWS AND/OR DOORS ON OPENINGS ON INSIDE WALLS, UNLESS OTHERWISE DIMENSIONED OR NOTED.ONE WINDOW/DOOR FROM EACH SLEEPING ROOM MUST HAVE A NET CLEAR OPENING OF 5.7 SQFT (5.0 SQFT. WHEN WINDOW IS AT FLOOR / GRADE LEVEL) WITH A NET CLEAR HEIGHT OF 24", A NET CLEAR WIDTH OF 20" AND THE SILL MUST BE WITHIN 44" OFF THE FLOOR.
5. LOCATE ALL WATER CLOSETS AT 15-INCHES MINIMUM FROM CENTER TO ADJACENT WALL AND 30-INCHES MINIMUM CLEAR. PROVIDE 20-INCHES MINIMUM CLEAR IN FRONT OF THE FIXTURE.
6. PROVIDE SOLID BLOCKING IN WALL AT ALL AREAS OF TOWEL BARS, GRAB BARS, TOILET PAPER DISPENSERS AND/OR OTHER WALL MOUNTED ITEMS. REFER TO INTERIOR ELEVATIONS FOR LOCATIONS.
7. ALL FIRE BLOCKING TO BE INSTALLED IN LOCATIONS PER CRC SECTION R219.
8. GYPSUM BOARD FINISH TO MATCH EXISTING. V.I.F. W/ OWNER.
9. AN APPROVED NUMBER OR ADDRESS SHALL BE PROVIDED IN SUCH A POSITION AS TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY. NUMBERS SHALL CONTRAST W/ THEIR BACKGROUND, SHALL BE ARABIC NUMERALS OR ALPHABETICAL LETTERS. NUMERALS SHALL BE A MIN. OF 4" HIGH, WITH A MIN. STROKE WIDTH OF ½ INCH. REFER TO CBC 5Ø1.2.
10. PROVIDE A MINIMUM INSULATION OF R-13 AT ALL EXTERIOR WALLS, R-30 INSULATION AT CEILING JOISTS LOCATED UNDER THE SLOPED ROOF ATTIC AND R-19 INSULATION AT CEILING JOISTS LOCATED AT THE FLAT ROOF.
11. GYPSUM BOARD FINISH TBD. V.I.F. W/ DESIGNER AND OWNER.
12. SEE INTERIOR ELEVATIONS FOR EXTENT OF CABINETRY, PANEL, CASINGS & TRIM.
13. TYPICAL AT ALL WET (SHOWER-BATH) LOCATIONS. WATER RESISTANT DRYWALL MUST BE INSTALLED AT ALL WET LOCATIONS (NOT RECOMMENDED FOR DIRECT TILE APPLICATION IN A SHOWER STALL.) WATER RESISTANT DRYWALL MUST BE INSTALLED TO A POINT A MIN. OF 72" ABOVE THE SHOWER DRAIN. CRC R3Ø7.2. DO NOT INSTALL A VAPOR BARRIER BEHIND WATER RESISTANT DRYWALL. DO NOT INSTALL THE WATER RESISTANT DRYWALL ON THE CEILING UNLESS THE CEILING JOIST ARE NO GREATER THAT 12" APART FOR ½" THICK WATER RESISTANT DRYWALL AND 16" APART FOR 5/8" WATER RESISTANT DRYWALL. CONCRETE BOARD REQUIRES A VAPOR BARRIER TO INSTALLED BETWEEN IT AND THE DRYWALL AND OR FRAMING. LISTED FASTENERS MUST BE USED.
14. ALL PLUMBING LOCATIONS TO BE FIELD APPROVED BY DESIGNER BEFORE ANY DRILLING OR INSTALLATION.
15. 22"X30" ATTIC ACCESS W/ 30" CLR FROM TOP OF FRAMING TO UNDERSIDE OF FRAMING. ATTIC ACCESS TO MEET REQUIREMENTS FOR 2Ø16 CRC R8Ø7.1
16. CRAWLSPACE ACCESS OPENINGS THROUGH THE FLOOR SHALL BE A MINIMUM OF 18 INCHES BY 24 INCHES PER 2Ø16 CRC R4Ø8.4
17. ALL FIRE BLOCKING TO BE INSTALLED IN LOCATIONS PER CRC SECTION R219.
18. STAIR.
    18.1. STAIR RISER HEIGHT SHALL BE 7 3/4" MAX. PER 311.7.5.1 CRC. THE RISER HEIGHT SHALL BE MEASURED VERTICALLY BETWEEN THE LEADING EDGES OF ADJACENT TREADS.
    18.2. STAIR TREAD DEPTH SHALL BE 10" MIN. PER 311.7.5.2 CRC. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 11" MEASURED AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE AT A POINT 12" FROM THE SIDE WHERE THE TREADS ARE NARROWER AND A MINIMUM TREAD DEPTH OF 10" PER 311.7.5.2.1 CRC.
19. PROVIDE RODENT PROOFING TYPICAL PER 2Ø16 CBC APPENDIX F. WALL VENTILATION OPENINGS SHALL BE COVERED FOR THEIR HEIGHT AND WIDTH WITH PERFORATED SHEET METAL PLATES NO LESS THAN Ø.Ø7Ø INCH (1.8 MM) THICK, EXPANDED SHEET METAL PLATES NOT LESS THAN Ø.Ø47 INCH (1.2 MM) THICK, CAST-IRON GRILLS OR GRATING, EXTRUDED ALUMINUM LOUVER BEARING VENTS OR WITH HARDWARE CLOTH OF Ø.Ø35 INCH (Ø.89 MM) WIRE OR HEAVIER. THE OPENINGS THEREIN SHALL NOT EXCEED ¼ INCH (6.4 MM). FOUNDATION AND EXTERIOR WALL SEALING: ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN THE WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR NON-CORROSIVE METAL.



DETACHED GARAGE NEW/PROPOSED FLOOR PLAN

2 SCALE: 1/4" = 1'-0"



BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
REGISTERED PROFESSIONAL
STATE OF CALIFORNIA

CITY SUBMITTAL
BID SET
FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
1 REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

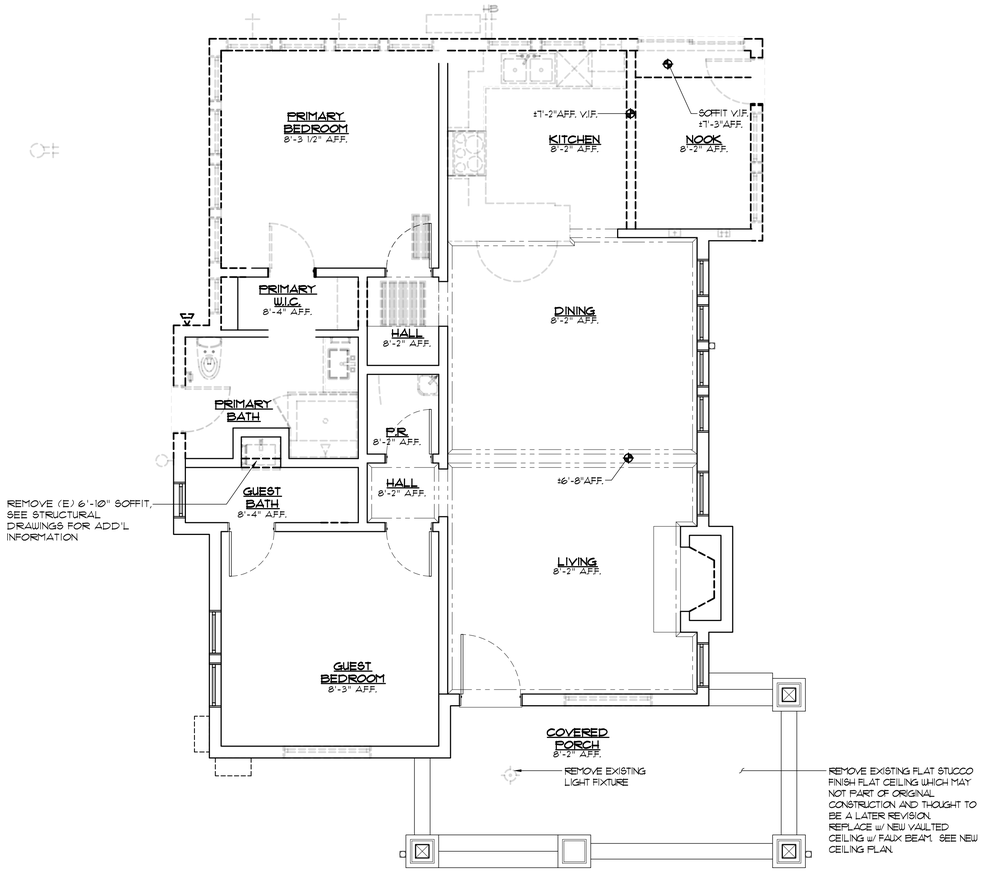
DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A2.3

CEILING / SYMBOL LEGEND

SHEETROCK, PLASTER CEILING. SEE SEPARATE PAINT SCHEDULE FOR COLOR.

V-GROOVE. SEE SEPARATE PAINT SCHEDULE FOR PAINT COLOR, STAIN.



CEILING DEMOLITION NOTES

1. XXX

1 MAIN HOUSE
EXISTING/DEMOLITION CEILING PLAN
SCALE: 1/4" = 1'-0"

0 2 4 8
1/4 inch = 1 ft.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST., LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/01/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

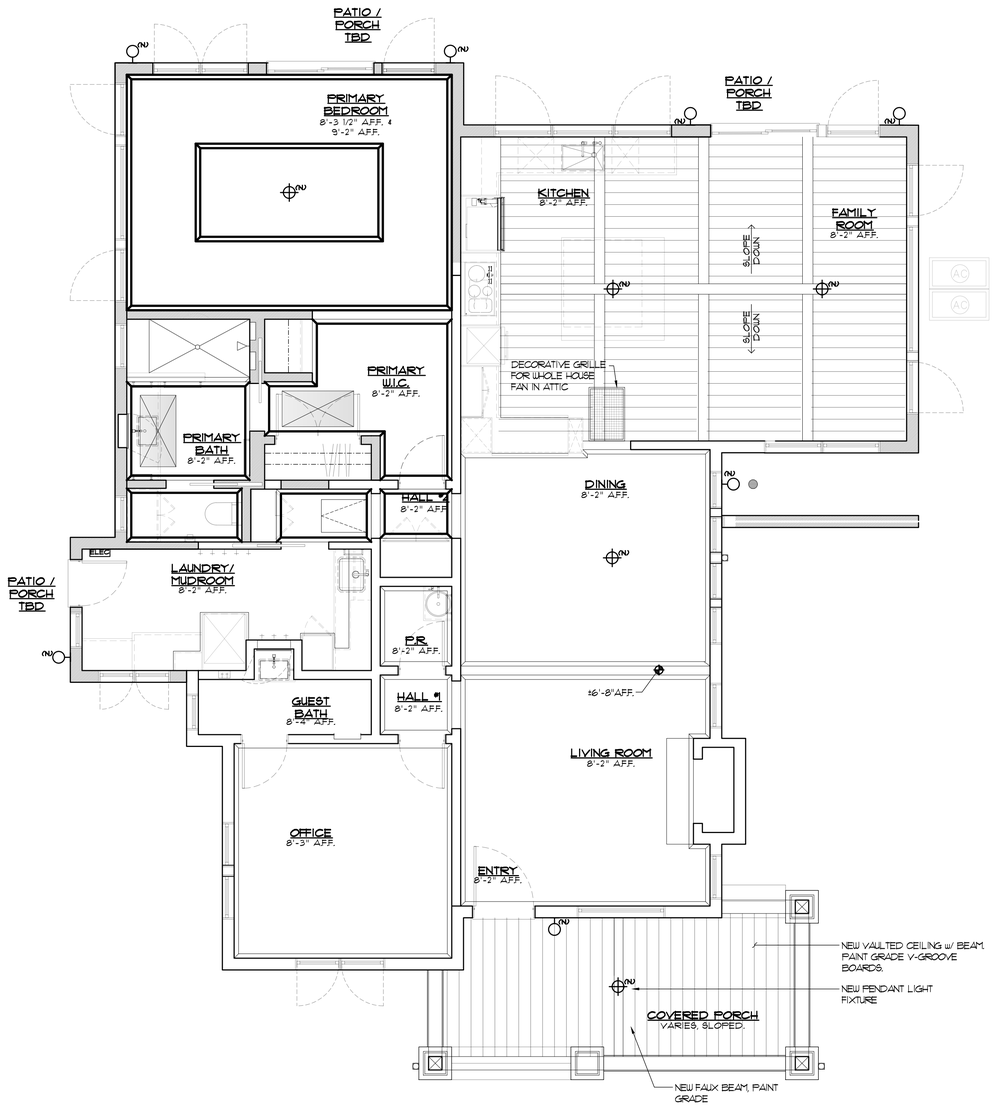
DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A2.4

CEILING / SYMBOL LEGEND

SHEETROCK, PLASTER CEILING. SEE SEPARATE PAINT SCHEDULE FOR COLOR.

V-GROOVE. SEE SEPARATE PAINT SCHEDULE FOR PAINT COLOR, STAIN.



NOTE:
1. LIGHTING SHOWN ON THIS PLAN FOR REFERENCE. SEE SHEET LE2.1 LIGHTING PLAN FOR LIGHTING INFORMATION.
2. C.O. (CARBON MONOXIDE) AND SMOKE DETECTORS SHOWN ON SHEET LE2.3 POWER PLAN.

CEILING PLAN NOTES

1. XXX

MAIN HOUSE NEW/PROPOSED CEILING PLAN

1 SCALE: 1/4" = 1'-0"

0 2 4 8
1/4 inch = 1 ft.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST., LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A2.5

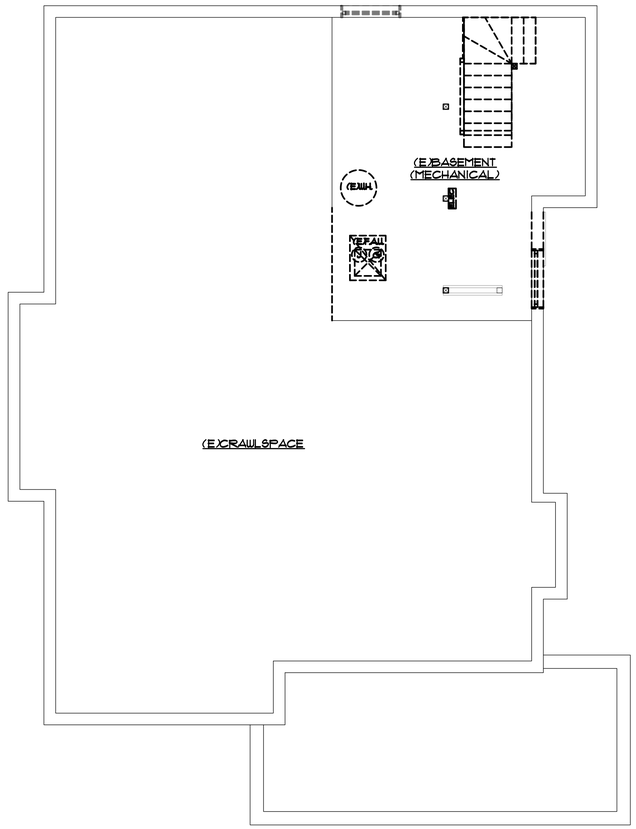
CEILING / SYMBOL LEGEND

SHEETROCK, PLASTER CEILING. SEE SEPARATE PAINT SCHEDULE FOR COLOR.

V-GROOVE. SEE SEPARATE PAINT SCHEDULE FOR PAINT COLOR, STAIN.

CEILING DEMOLITION NOTES

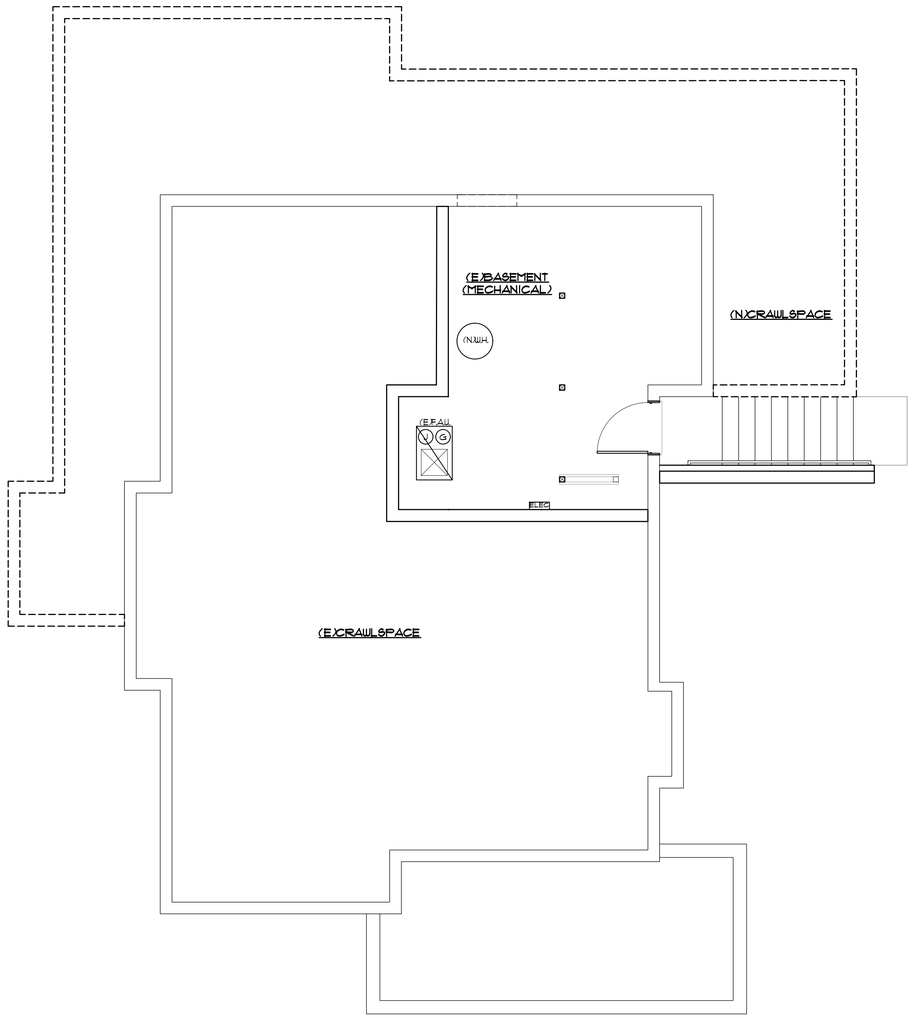
1. XXX



BASEMENT
EXISTING/DEMOLITION CEILING PLAN
SCALE: 1/4" = 1'-0"

0 2 4 8
1/4 inch = 1 ft.

N



BASEMENT
NEW/PROPOSED CEILING PLAN
SCALE: 1/4" = 1'-0"

0 2 4 8
1/4 inch = 1 ft.

N

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST., LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/21/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

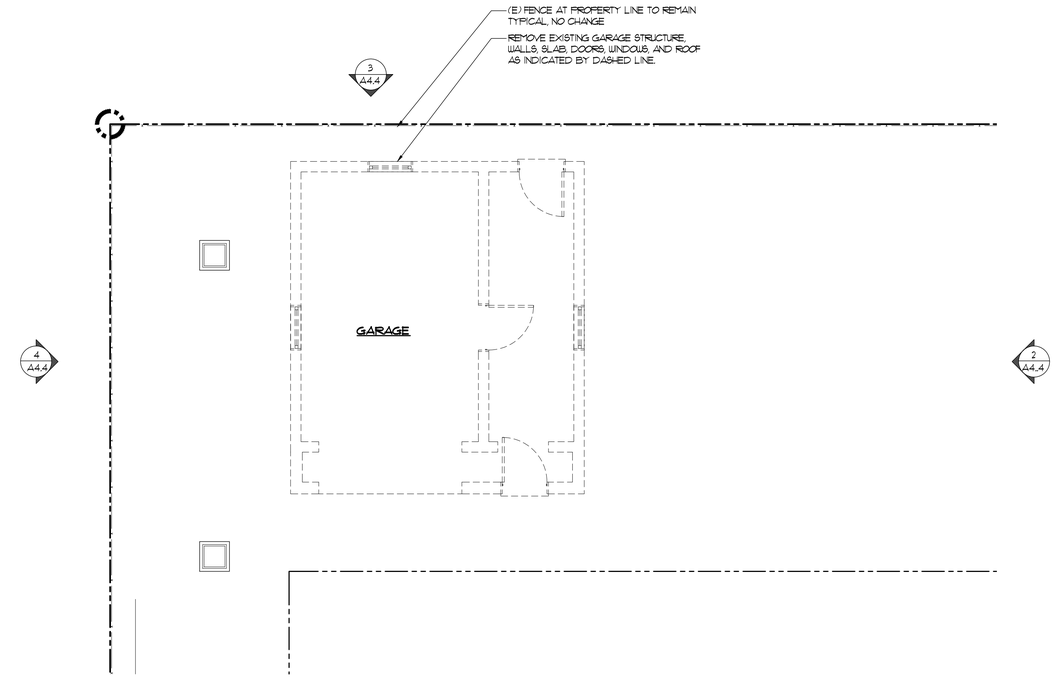
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

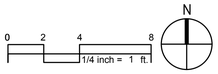
APN: 170-41-030

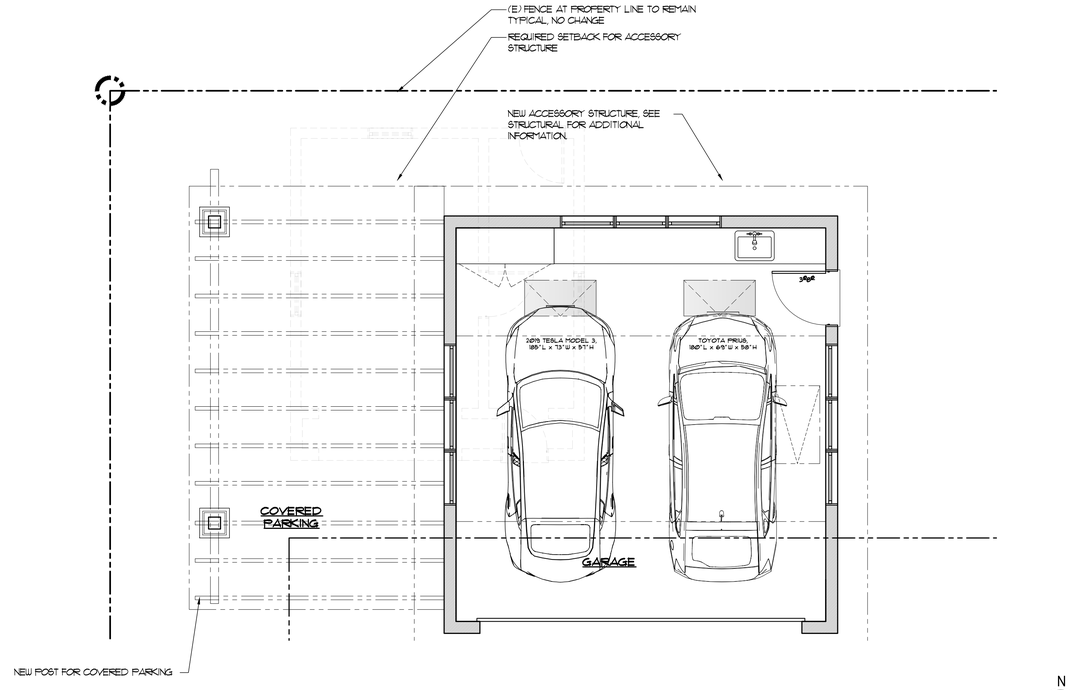
DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A2.6

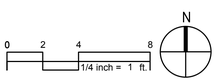


DETACHED GARAGE
EXISTING/DEMOLITION CEILING PLAN
SCALE: 1/4" = 1'-0"





DETACHED GARAGE
NEW/PROPOSED CEILING PLAN
SCALE: 1/4" = 1'-0"



CEILING / SYMBOL LEGEND

SHEETROCK, PLASTER CEILING. SEE SEPARATE PAINT SCHEDULE FOR COLOR.

V-GROOVE. SEE SEPARATE PAINT SCHEDULE FOR PAINT COLOR, STAIN.

CEILING DEMOLITION NOTES

1. XXX

FLOOR PLAN NOTES

1. DO NOT SCALE THE DRAWINGS! VERIFY ALL DIMENSIONS IN THE FIELD. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.
2. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK OR CABINET, UNLESS OTHERWISE NOTED.
3. ALIGN NEW WALLS WITH EXISTING WALLS, TYPICAL U.N.O
4. CENTER ALL WINDOWS AND/OR DOORS ON OPENINGS ON INSIDE WALLS, UNLESS OTHERWISE DIMENSIONED OR NOTED.ONE WINDOW/DOOR FROM EACH SLEEPING ROOM MUST HAVE A NET CLEAR OPENING OF 5.7 SQFT (5.0 SQFT. WHEN WINDOW IS AT FLOOR / GRADE LEVEL) WITH A NET CLEAR HEIGHT OF 24", A NET CLEAR WIDTH OF 20" AND THE SILL MUST BE WITHIN 44" OFF THE FLOOR.
5. LOCATE ALL WATER CLOSETS AT 15-INCHES MINIMUM FROM CENTER TO ADJACENT WALL AND 30-INCHES MINIMUM CLEAR. PROVIDE 20-INCHES MINIMUM CLEAR IN FRONT OF THE FIXTURE.
6. PROVIDE SOLID BLOCKING IN WALL AT ALL AREAS OF TOWEL BARS, GRAB BARS, TOILET PAPER DISPENSERS AND/OR OTHER WALL MOUNTED ITEMS. REFER TO INTERIOR ELEVATIONS FOR LOCATIONS.
7. ALL FIRE BLOCKING TO BE INSTALLED IN LOCATIONS PER CRC SECTION R219.
8. GYPSUM BOARD FINISH TO MATCH EXISTING. V.I.F. w/ OWNER.
9. AN APPROVED NUMBER OR ADDRESS SHALL BE PROVIDED IN SUCH A POSITION AS TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY. NUMBERS SHALL CONTRAST w/ THEIR BACKGROUND, SHALL BE ARABIC NUMERALS OR ALPHABETICAL LETTERS. NUMERALS SHALL BE A MIN. OF 4" HIGH, WITH A MIN. STROKE WIDTH OF ½ INCH. REFER TO CBC 501.2.
10. PROVIDE A MINIMUM INSULATION OF R-13 AT ALL EXTERIOR WALLS, R-30 INSULATION AT CEILING JOISTS LOCATED UNDER THE SLOPED ROOF ATTIC AND R-19 INSULATION AT CEILING JOISTS LOCATED AT THE FLAT ROOF.
11. GYPSUM BOARD FINISH TBD. V.I.F. w/ DESIGNER AND OWNER.
12. SEE INTERIOR ELEVATIONS FOR EXTENT OF CABINETRY, PANEL, CASINGS & TRIM.
13. TYPICAL AT ALL WET (SHOWER-BATH) LOCATIONS, WATER RESISTANT DRYWALL MUST BE INSTALLED AT ALL WET LOCATIONS (NOT RECOMMENDED FOR DIRECT TILE APPLICATION IN A SHOWER STALL). WATER RESISTANT DRYWALL MUST BE INSTALLED TO A POINT A MIN. OF 72" ABOVE THE SHOWER DRAIN. CRC R307.2. DO NOT INSTALL A VAPOR BARRIER BEHIND WATER RESISTANT DRYWALL. DO NOT INSTALL THE WATER RESISTANT DRYWALL ON THE CEILING UNLESS THE CEILING JOIST ARE NO GREATER THAT 12" APART FOR ½" THICK WATER RESISTANT DRYWALL AND 16" APART FOR 5/8" WATER RESISTANT DRYWALL. CONCRETE BOARD REQUIRES A VAPOR BARRIER TO INSTALLED BETWEEN IT AND THE DRYWALL AND OR FRAMING. LISTED FASTENERS MUST BE USED.
14. ALL PLUMBING LOCATIONS TO BE FIELD APPROVED BY DESIGNER BEFORE ANY DRILLING OR INSTALLATION.
15. 22"x30" ATTIC ACCESS w/ 30" CLR FROM TOP OF FRAMING TO UNDERSIDE OF FRAMING. ATTIC ACCESS TO MEET REQUIREMENTS FOR 2016 CRC R807.1
16. CRAWLSPACE ACCESS OPENINGS THROUGH THE FLOOR SHALL BE A MINIMUM OF 18 INCHES BY 24 INCHES PER 2016 CRC R408.4
17. ALL FIRE BLOCKING TO BE INSTALLED IN LOCATIONS PER CRC SECTION R219.
18. STAIR:
    - 18.1. STAIR RISER HEIGHT SHALL BE 7 3/4" MAX. PER 311.7.5.1 CRC. THE RISER HEIGHT SHALL BE MEASURED VERTICALLY BETWEEN THE LEADING EDGES OF ADJACENT TREADS.
    - 18.2. STAIR TREAD DEPTH SHALL BE 10" MIN. PER 311.7.5.2 CRC. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 11" MEASURED AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE AT A POINT 12" FROM THE SIDE WHERE THE TREADS ARE NARROWER AND A MINIMUM TREAD DEPTH OF 10" PER 311.7.5.2.1 CRC.
19. PROVIDE RODENT PROOFING TYPICAL PER 2016 CBC APPENDIX F. WALL VENTILATION OPENINGS SHALL BE COVERED FOR THEIR HEIGHT AND WIDTH WITH PERFORATED SHEET METAL PLATES NO LESS THAN Ø.070 INCH (1.8 MM) THICK, EXPANDED SHEET METAL PLATES NOT LESS THAN Ø.047 INCH (1.2 MM) THICK, CAST-IRON GRILLS OR GRATING, EXTRUDED ALUMINUM LOUVER BARS OR WITH HARDWARE CLOTH OF Ø.035 INCH (Ø.89 MM) WIRE OR HEAVIER. THE OPENINGS THEREIN SHALL NOT EXCEED ¼ INCH (6.4 MM). FOUNDATION AND EXTERIOR WALL SEALING: ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN THE WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR NON-CORROSIVE METAL.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

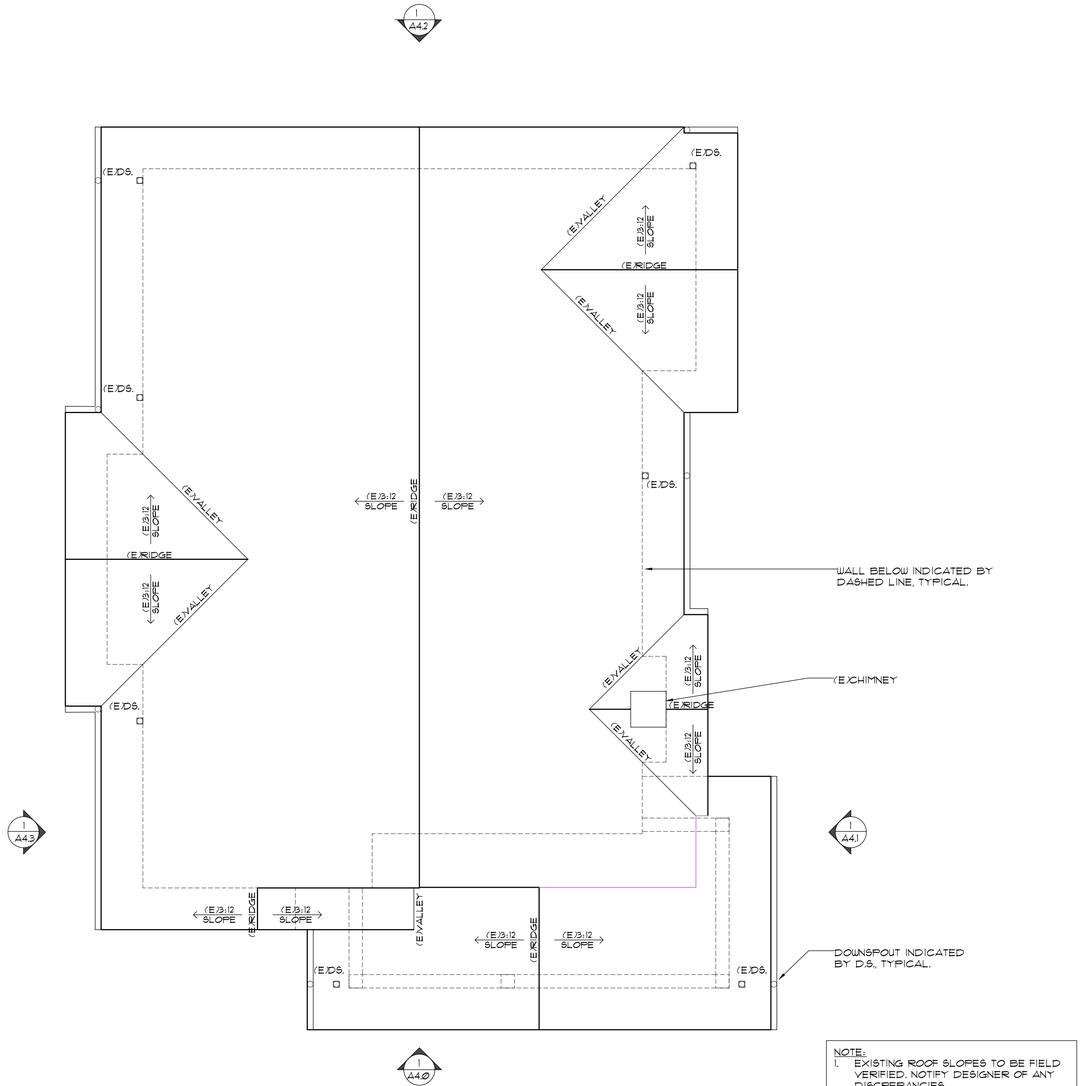
A2.7

ROOF SYMBOL LEGEND

- 2x FRAMED CHIMNEY WALL.
- ROOF LINE
- LINE OF WALL BELOW
- AREA OF ROOF TO BE REMOVED
- AREA OF NEW ROOF FRAMING.
- AREA OF ROOF TO BE REFRAMED ON TOP OF EXISTING ROOF STRUCTURE. (CALIFORNIA FRAMED).
- AREA OF CRICKET
- SKYLIGHT, FIXED. SIZE MAY VARY, SEE PLAN FOR ADDITIONAL INFORMATION.
- SKYLIGHT, OPERABLE. SIZE AND OPERABILITY VARIES, SEE PLAN.
- EXTERIOR ELEVATION MARKER (# / A#)
- SECTION LINE (LETTER / SHEET) (A / A#)
- SKYLIGHT TYPE (LETTER & NUMBER), REFER TO SCHEDULE. (S1)

ROOF DEMOLITION NOTES

1. EXISTING ROOF TO REMAIN UNLESS NOTED OTHERWISE. SEE NEW ROOF PLAN AND NEW ROOF PLAN NOTES.
2. PATCH / REPAIR EXISTING ROOF AT AREAS OF NEW CONSTRUCTION TO MATCH
3. EXISTING FASCIA, GUTTER SYSTEM w/ DOWNSPOUTS TO REMAIN UNLESS OTHERWISE NOTED. FIELD VERIFY EXISTING GUTTER GUARD, PROVIDE GUTTER GUARD IF NOT EXISTING.
4. EXISTING VENTILATION, RIDGE VENTS AND SOFFIT EAVE VENTS TO REMAIN, NO CHANGE UNLESS OTHERWISE NOTED.



NOTE:
1. EXISTING ROOF SLOPES TO BE FIELD VERIFIED. NOTIFY DESIGNER OF ANY DISCREPANCIES.

0 2 4 8
1/4 inch = 1 ft.

MAIN HOUSE
EXISTING/DEMOLITION ROOF PLAN
SCALE: 1/4" = 1'-0"

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT DAVID ANDREW BARNA C-36482 REGISTERED 09/31/23 STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
1 REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

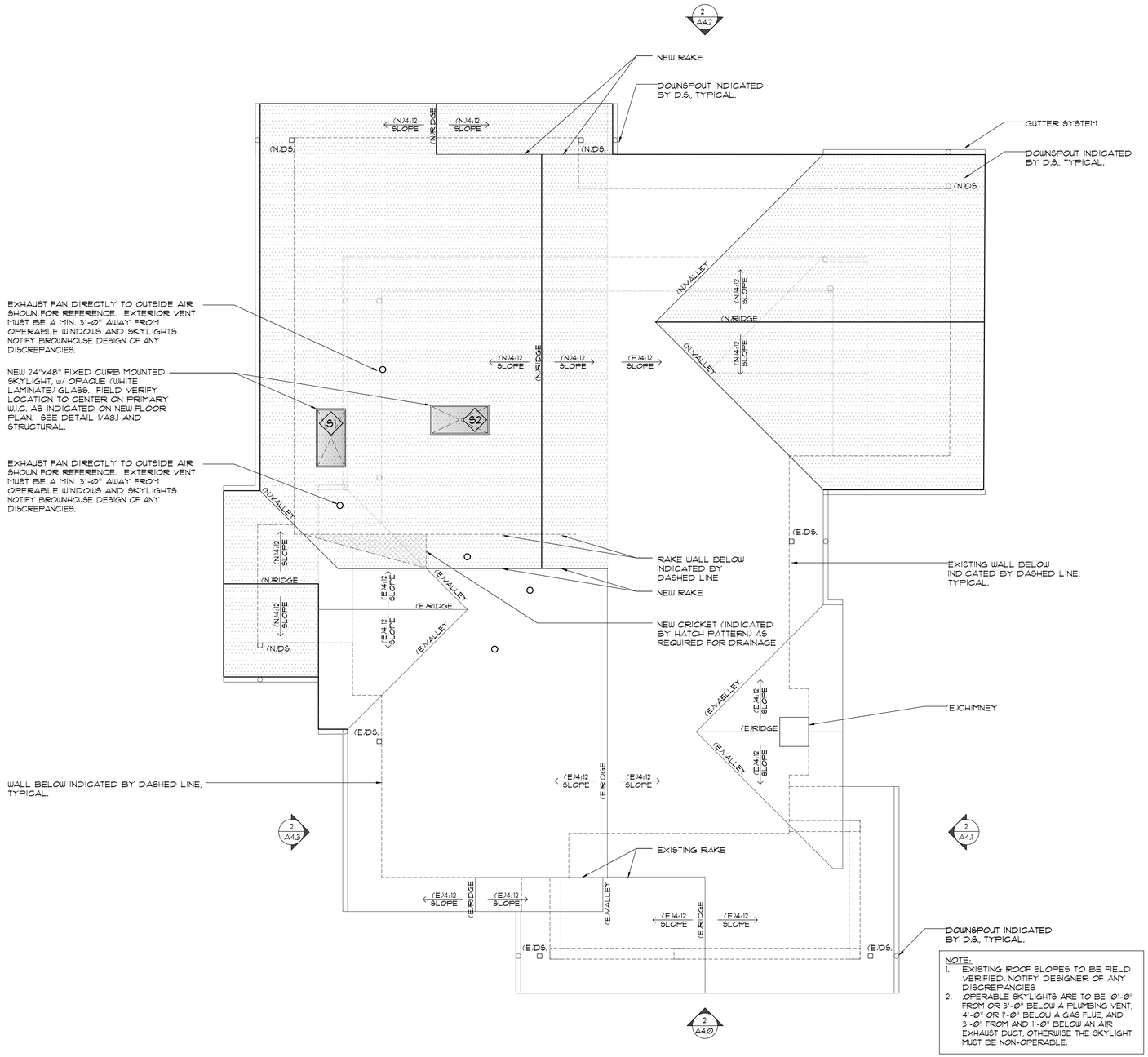
SCUSSEL-RIFFLE RESIDENCE REMODEL

APN: 170-41-030

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE:
DATE: 07/11/2022

A3.0



NOTE:
1. EXISTING ROOF SLOPES TO BE FIELD VERIFIED. NOTIFY DESIGNER OF ANY DISCREPANCIES
2. OPERABLE SKYLIGHTS ARE TO BE 10'-0" FROM OR 3'-0" BELOW A PLUMBING VENT, 4'-0" OR 1'-0" BELOW A GAS FLUE, AND 3'-0" FROM AND 1'-0" BELOW AN AIR EXHAUST DUCT, OTHERWISE THE SKYLIGHT MUST BE NON-OPERABLE.

0 2 4 8
1/4 inch = 1 ft.

MAIN HOUSE
EXISTING/DEMOLITION ROOF PLAN
SCALE: 1/4" = 1'-0"

ROOF SYMBOL LEGEND

- 2x FRAMED CHIMNEY WALL.
- ROOF LINE
- LINE OF WALL BELOW
- AREA OF ROOF TO BE REMOVED
- AREA OF NEW ROOF FRAMING.
- AREA OF ROOF TO BE REFRAMED ON TOP OF EXISTING ROOF STRUCTURE. (CALIFORNIA FRAMED).
- AREA OF CRICKET
- SKYLIGHT, FIXED. SIZE MAY VARY, SEE PLAN FOR ADDITIONAL INFORMATION.
- SKYLIGHT, OPERABLE. SIZE AND OPERABILITY VARIES, SEE PLAN.
- # / A# EXTERIOR ELEVATION MARKER
- A / A# SECTION LINE (LETTER / SHEET)
- S1 SKYLIGHT TYPE (LETTER & NUMBER), REFER TO SCHEDULE.

ROOF PLAN NOTES

1. STATE LAW REQUIRES A FIRE RATING OF CLASS C OR BETTER.
2. NEW ROOFING:
3. REPLACE EXISTING ROOFING WITH NEW COMPOSITE ROOFING SHINGLES OVER 30# FELT, CLASS A.4.
4. STATE LAW REQUIRES A FIRE RATING OF CLASS C OR BETTER.
5. NEW ROOF SLOPE TO MATCH EXISTING ROOF SLOPES.
6. EXISTING FASCIA STYLE TBD, SEAMLESS GUTTER IN 5 1/2" & 6" STANDARD GUTTER SYSTEM WITH GUTTER GUARD.
   - 6.1. EXISTING FASCIA, GUTTER SYSTEM w/ DOWNSPOUTS TO REMAIN, FIELD VERIFY EXISTING GUTTER GUARD, PROVIDE GUTTER GUARD IF NOT EXISTING
7. DOWNSPOUTS TO BE PAINTED TO MATCH ADJACENT SHINGLE SIDING COLOR. ALL DOWNSPOUTS SHALL BE CONNECTED TO THE EXISTING UNDERGROUND DRAINAGE PIPING.
8. SEE PAINT SCHEDULE AND/OR MATERIALS LEGEND ON SHEETS A4.1-A4.3.
9. OPERABLE SKYLIGHTS ARE TO BE 10'-0" FROM OR 3'-0" BELOW A PLUMBING VENT, 4'-0" OR 1'-0" BELOW A GAS FLUE, AND 3'-0" FROM AND 1'-0" BELOW AN AIR EXHAUST DUCT, OTHERWISE THE SKYLIGHT MUST BE NON-OPERABLE.
10. ALL FLASHING TO BE MINIMUM 26 ga GALVANIZED SHEET METAL.
11. EXISTING VENTILATION, RIDGE VENTS AND SOFFIT EAVE VENTS TO REMAIN, NO CHANGE.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
1 REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

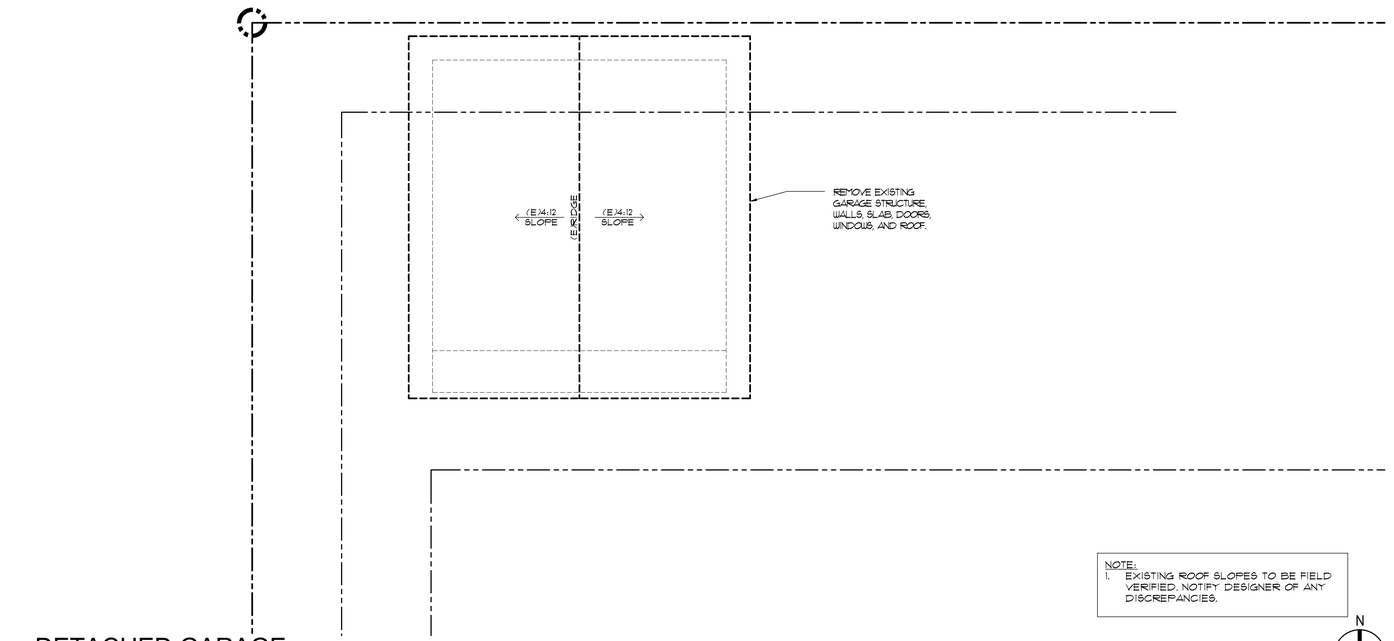
SCUSSEL-RIFFLE RESIDENCE REMODEL

APN: 170-41-030

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE:
DATE: 07/11/2022

A3.1



DETACHED GARAGE
EXISTING/DEMOLITION ROOF PLAN
SCALE: 1/4" = 1'-0"

ROOF SYMBOL LEGEND

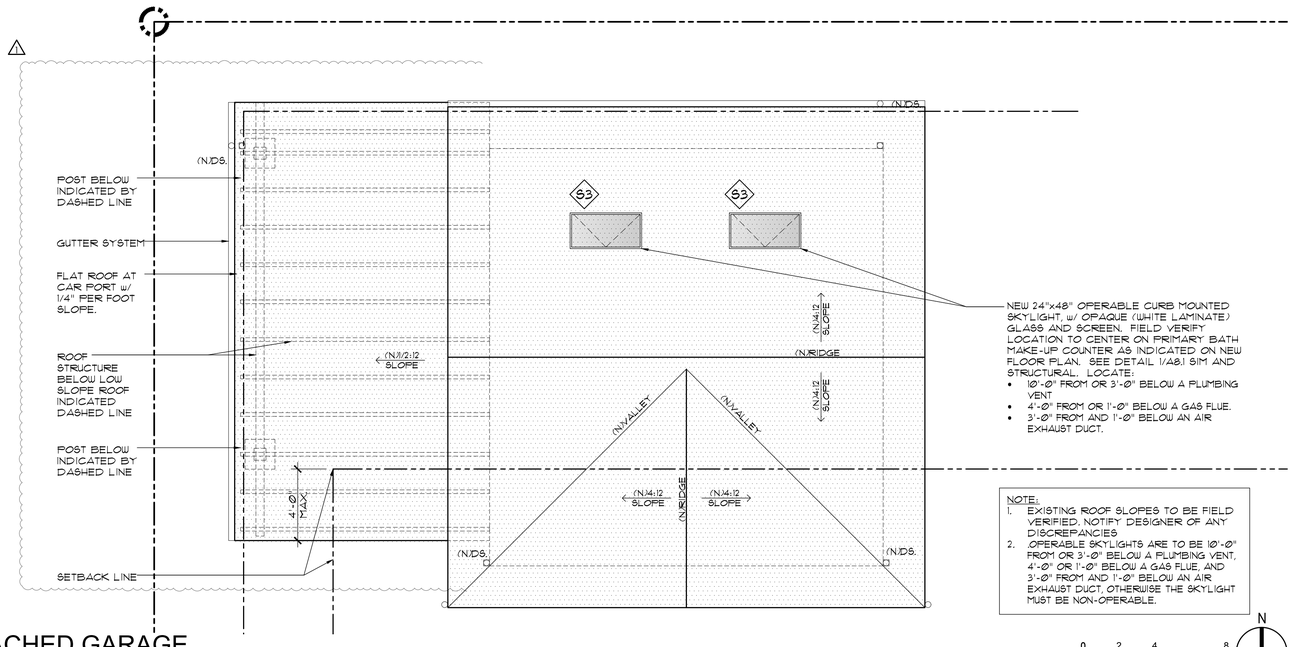
- 2x FRAMED CHIMNEY WALL.
- ROOF LINE
- LINE OF WALL BELOW
- AREA OF ROOF TO BE REMOVED
- AREA OF NEW ROOF FRAMING.
- AREA OF ROOF TO BE REFRAMED ON TOP OF EXISTING ROOF STRUCTURE. (CALIFORNIA FRAMED).
- AREA OF CRICKET
- SKYLIGHT, FIXED. SIZE MAY VARY, SEE PLAN FOR ADDITIONAL INFORMATION.
- SKYLIGHT, OPERABLE. SIZE AND OPERABILITY VARIES, SEE PLAN.
- EXTERIOR ELEVATION MARKER
- SECTION LINE (LETTER / SHEET)
- SKYLIGHT TYPE (LETTER & NUMBER), REFER TO SCHEDULE.

ROOF DEMOLITION NOTES

1. EXISTING ROOF TO REMAIN UNLESS NOTED OTHERWISE. SEE NEW ROOF PLAN AND NEW ROOF PLAN NOTES.
2. PATCH / REPAIR EXISTING ROOF AT AREAS OF NEW CONSTRUCTION TO MATCH
3. EXISTING FASCIA, GUTTER SYSTEM w/ DOWNSPOUTS TO REMAIN UNLESS OTHERWISE NOTED. FIELD VERIFY EXISTING GUTTER GUARD, PROVIDE GUTTER GUARD IF NOT EXISTING.
4. EXISTING VENTILATION, RIDGE VENTS AND SOFFIT EAVE VENTS TO REMAIN, NO CHANGE UNLESS OTHERWISE NOTED.

ROOF PLAN NOTES

1. STATE LAW REQUIRES A FIRE RATING OF CLASS C OR BETTER.
2. NEW ROOFING:
3. REPLACE EXISTING ROOFING WITH NEW COMPOSITE ROOFING SHINGLES OVER 30# FELT, CLASS A.4.
4. STATE LAW REQUIRES A FIRE RATING OF CLASS C OR BETTER.
5. NEW ROOF SLOPE TO MATCH EXISTING ROOF SLOPES.
6. EXISTING FASCIA STYLE TBD, SEAMLESS GUTTER IN 5 1/2" & 6" STANDARD GUTTER SYSTEM WITH GUTTER GUARD.
   - 6.1. EXISTING FASCIA, GUTTER SYSTEM w/ DOWNSPOUTS TO REMAIN, FIELD VERIFY EXISTING GUTTER GUARD, PROVIDE GUTTER GUARD IF NOT EXISTING
7. DOWNSPOUTS TO BE PAINTED TO MATCH ADJACENT SHINGLE SIDING COLOR. ALL DOWNSPOUTS SHALL BE CONNECTED TO THE EXISTING UNDERGROUND DRAINAGE PIPING.
8. SEE PAINT SCHEDULE AND/OR MATERIALS LEGEND ON SHEETS A4.1- A4.3.
9. OPERABLE SKYLIGHTS ARE TO BE 10'-0" FROM OR 3'-0" BELOW A PLUMBING VENT, 4'-0" OR 1'-0" BELOW A GAS FLUE, AND 3'-0" FROM AND 1'-0" BELOW AN AIR EXHAUST DUCT. OTHERWISE THE SKYLIGHT MUST BE NON-OPERABLE.
10. ALL FLASHING TO BE MINIMUM 26 ga GALVANIZED SHEET METAL.
11. EXISTING VENTILATION, RIDGE VENTS AND SOFFIT EAVE VENTS TO REMAIN, NO CHANGE.



DETACHED GARAGE
NEW/PROPOSED ROOF PLAN
SCALE: 1/4" = 1'-0"

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
1 REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

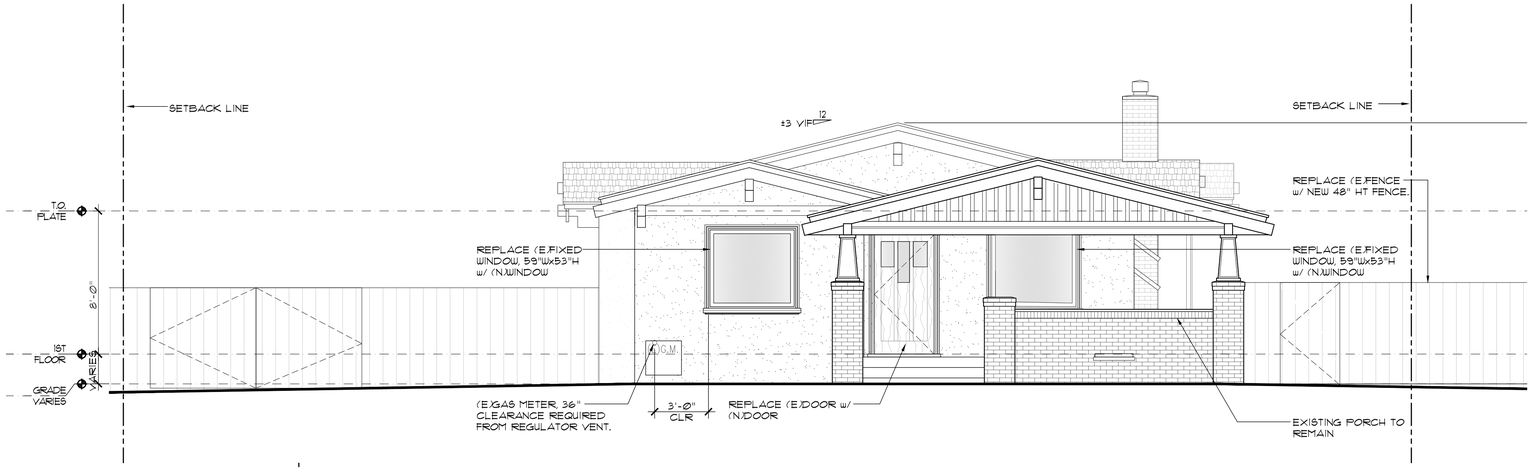
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A3.2



MAIN HOUSE
FRONT ELEVATION, SOUTH -EXISTING/DEMOLITION

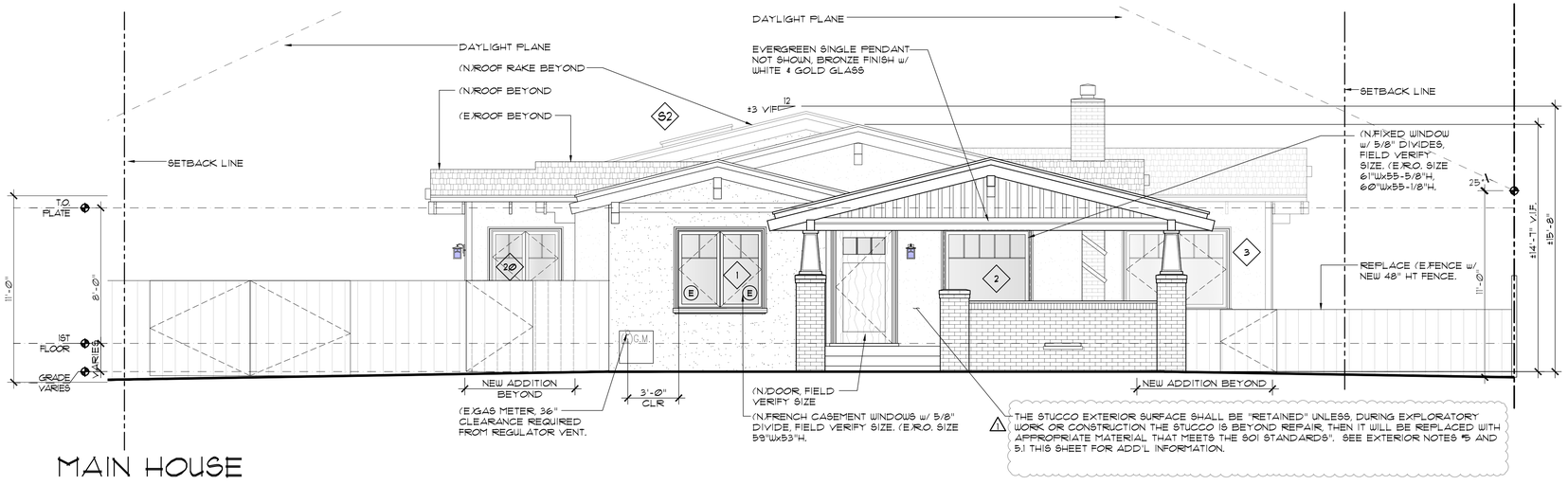
1 SCALE : 1/4" = 1'-0"

MATERIAL LEGEND

- GLASS, GLAZING. WINDOW & PATIO DOOR FRAME FINISH COLOR "BRONZE" BY MARVIN
- OVERHEAD GARAGE AND FRONT ENTRY DOOR FINISH: STAIN-GRADE, WALNUT CLEAR COAT
- BRICK, 2-1/4" X 8-1/2", 2" X 8", EXISTING
- ~~NOT USED. SHINGLE WOOD SIDING, CEDAR SHINGLE VALLEY SIDING, 5:3 EVEN, KEY WAY. PAINT COLOR "AVON GREEN" #HCG-126-1 BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET.~~ ⚠1
- STUCCO. PAINT COLOR "AVON GREEN" #HCG-126" BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET FOR ADDITIONAL INFORMATION
- BOARD AND BATTEN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- 8" V-GROOVE: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- TRIM, CASING: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOF EAVE, RAFTER TAIL, RAKE, & FASCIA: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- POST, COLUMN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOFING: TIMBERLINE® UHD LIFETIME ULTRA HIGH DEFINITION® SHINGLES BY GAF, COLOR "SHAKEWOOD"
- WOOD FENCE
- FLOORING AT PATIO: TBD

EXTERIOR NOTES

1. THERE IS TO BE NO EXTERIOR WORK UNLESS NOTED OTHERWISE FOR DOOR AND/OR WINDOW REPLACEMENT.
2. EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
3. EXISTING BRICK TO REMAIN. NEW BRICK TO MATCH EXISTING "IN-KIND".
4. REPLACE EXISTING STUCCO w/ NEW SHINGLE SIDING AS INDICATED ON DRAWINGS. EXISTING GUTTER AND DOWNSPOUT SYSTEM TO REMAIN. NEW GUTTER AND DOWNSPOUTS TO MATCH EXISTING.
5. MAIN HOUSE BUILDING, SECRETARY OF INTERIOR STANDARDS FOR ⚠1 REHABILITATION REVIEW STANDARDS COMMENT:
   - 5.1. THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS, DURING EXPLORATORY WORK OR CONSTRUCTION THE STUCCO IS BEYOND REPAIR, THEN IT WILL BE REPLACED WITH APPROPRIATE MATERIAL THAT MEETS THE SOI STANDARDS" - OR THE FULL DEAL "THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS DURING CONSTRUCTION THE PROJECT HISTORIAN FINDS THE STUCCO IS BEYOND REPAIR, BASED ON PROFESSIONAL JUDGMENT AND PHOTOGRAPHIC EVIDENCE OF THE PROJECT HISTORIAN, AND THE AGREEMENT OF THE COMMUNITY DEVELOPMENT DIRECTOR.



MAIN HOUSE
FRONT ELEVATION, SOUTH -NEW/PROPOSED

2 SCALE : 1/4" = 1'-0"

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠1 REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

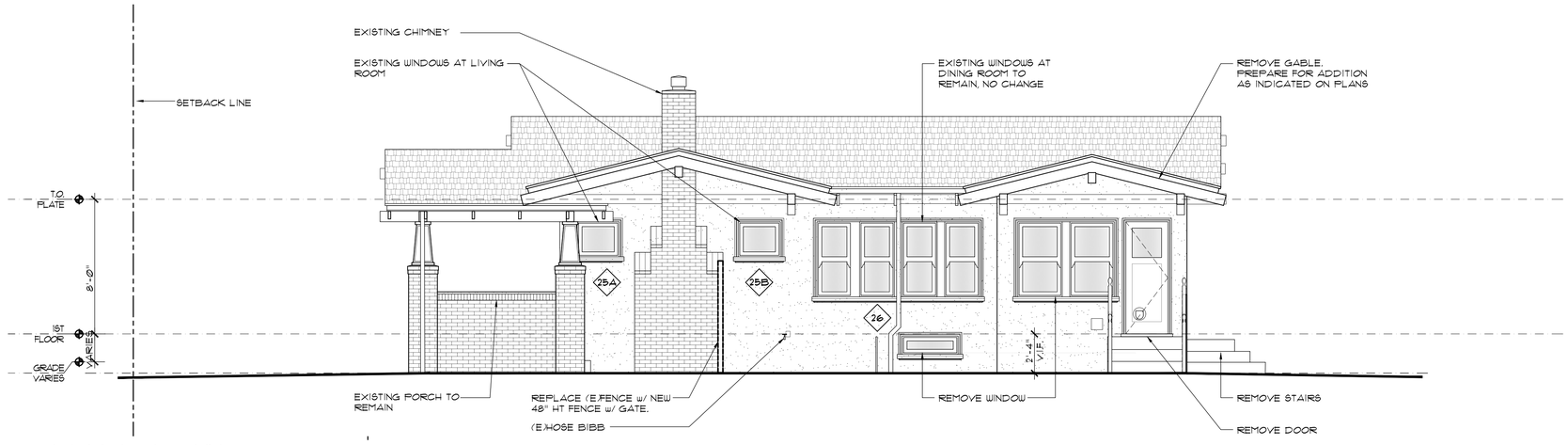
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

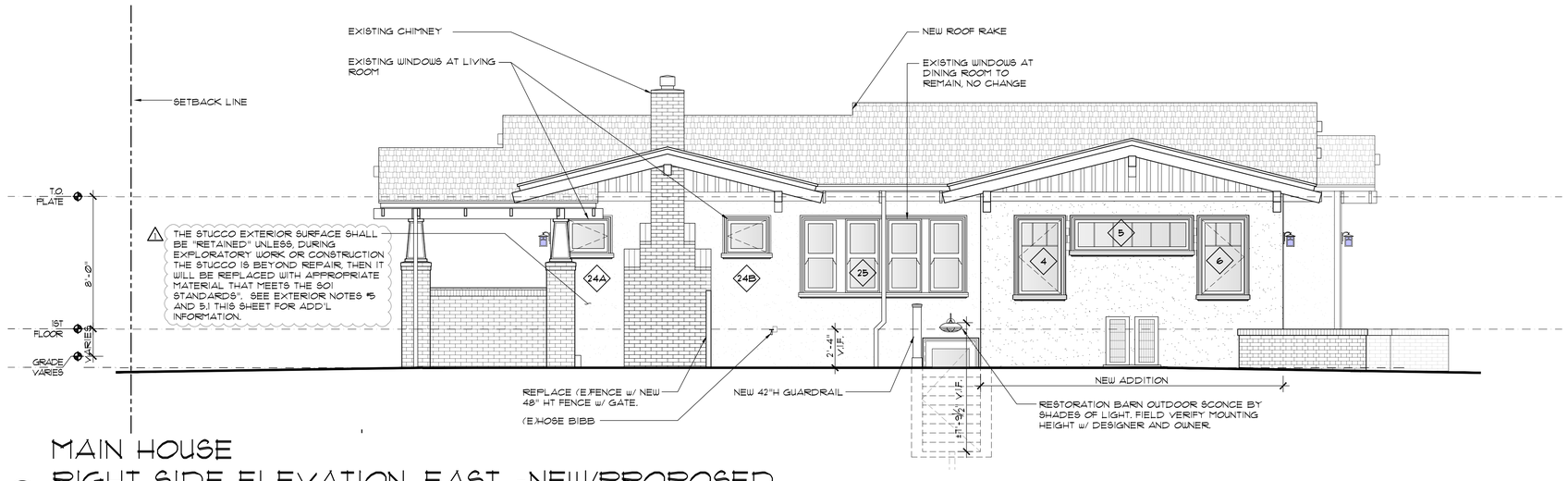
DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: AS NOTED
DATE: 07/11/2022

A4.0



MAIN HOUSE
RIGHT SIDE ELEVATION, EAST -EXISTING/DEMOLITION

1 SCALE : 1/4" = 1'-0"



MAIN HOUSE
RIGHT SIDE ELEVATION, EAST -NEW/PROPOSED

2 SCALE : 1/4" = 1'-0"

MATERIAL LEGEND

- GLASS, GLAZING. WINDOW & PATIO DOOR FRAME FINISH COLOR "BRONZE" BY MARVIN
- OVERHEAD GARAGE AND FRONT ENTRY DOOR FINISH: STAIN-GRADE, WALNUT CLEAR COAT
- BRICK, 2-1/4" X 8-1/2", 2" X 8", EXISTING
- ~~NOT USED. SHINGLE WOOD SIDING, CEDAR SHINGLE VALLEY SIDING, 5:3 EVEN, KEY WAY. PAINT COLOR "AVON GREEN" #HCG-126-1 BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET.~~
- STUCCO. PAINT COLOR "AVON GREEN" #HCG-126" BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET FOR ADDITIONAL INFORMATION
- BOARD AND BATTEN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- 8" V-GROOVE: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- TRIM, CASING: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOF EAVE, RAFTER TAIL, RAKE, & FASCIA: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- POST, COLUMN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOFING: TIMBERLINE® UHD LIFETIME ULTRA HIGH DEFINITION® SHINGLES BY GAF, COLOR "SHAKEWOOD"
- WOOD FENCE
- FLOORING AT PATIO: TBD

EXTERIOR NOTES

1. THERE IS TO BE NO EXTERIOR WORK UNLESS NOTED OTHERWISE FOR DOOR AND/OR WINDOW REPLACEMENT.
2. EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
3. EXISTING BRICK TO REMAIN. NEW BRICK TO MATCH EXISTING "IN-KIND".
4. REPLACE EXISTING STUCCO w/ NEW SHINGLE SIDING AS INDICATED ON DRAWINGS. EXISTING GUTTER AND DOWNSPOUT SYSTEM TO REMAIN. NEW GUTTER AND DOWNSPOUTS TO MATCH EXISTING.
5. MAIN HOUSE BUILDING, SECRETARY OF INTERIOR STANDARDS FOR REHABILITATION REVIEW STANDARDS COMMENT:
   - 5.1. THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS, DURING EXPLORATORY WORK OR CONSTRUCTION THE STUCCO IS BEYOND REPAIR, THEN IT WILL BE REPLACED WITH APPROPRIATE MATERIAL THAT MEETS THE SOI STANDARDS" - OR THE FULL DEAL "THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS DURING CONSTRUCTION THE PROJECT HISTORIAN FINDS THE STUCCO IS BEYOND REPAIR, BASED ON PROFESSIONAL JUDGMENT AND PHOTOGRAPHIC EVIDENCE OF THE PROJECT HISTORIAN, AND THE AGREEMENT OF THE COMMUNITY DEVELOPMENT DIRECTOR.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
1 REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

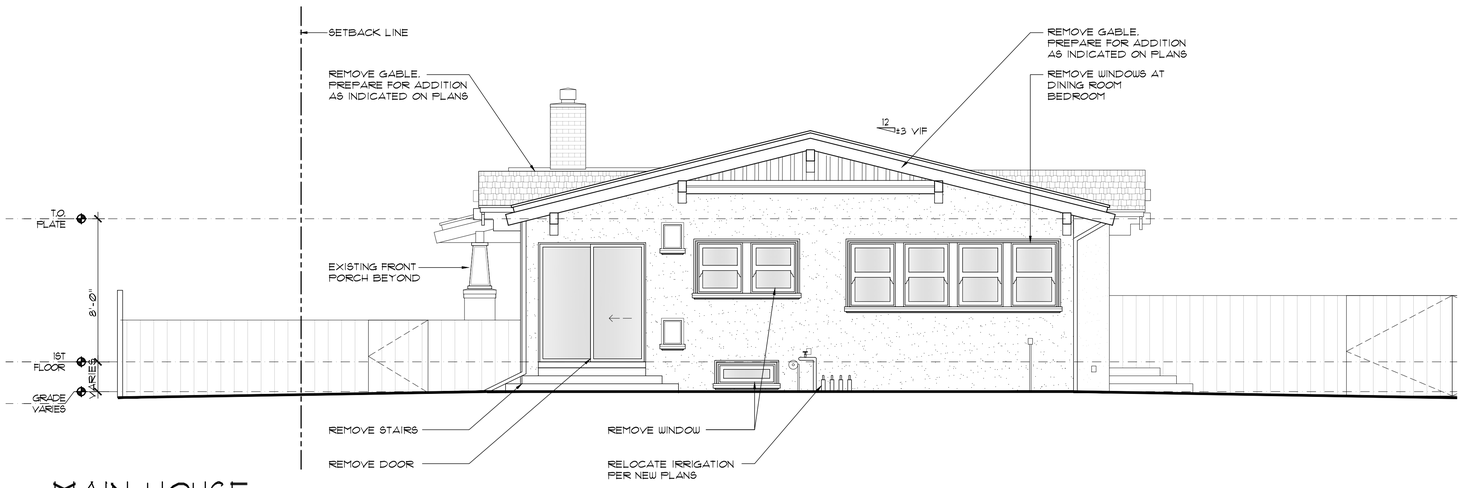
SCUSSEL-RIFFLE RESIDENCE REMODEL

APN: 170-41-030

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: AS NOTED
DATE: 07/11/2022

A4.1



MAIN HOUSE
REAR ELEVATION, NORTH -EXISTING/DEMOLITION

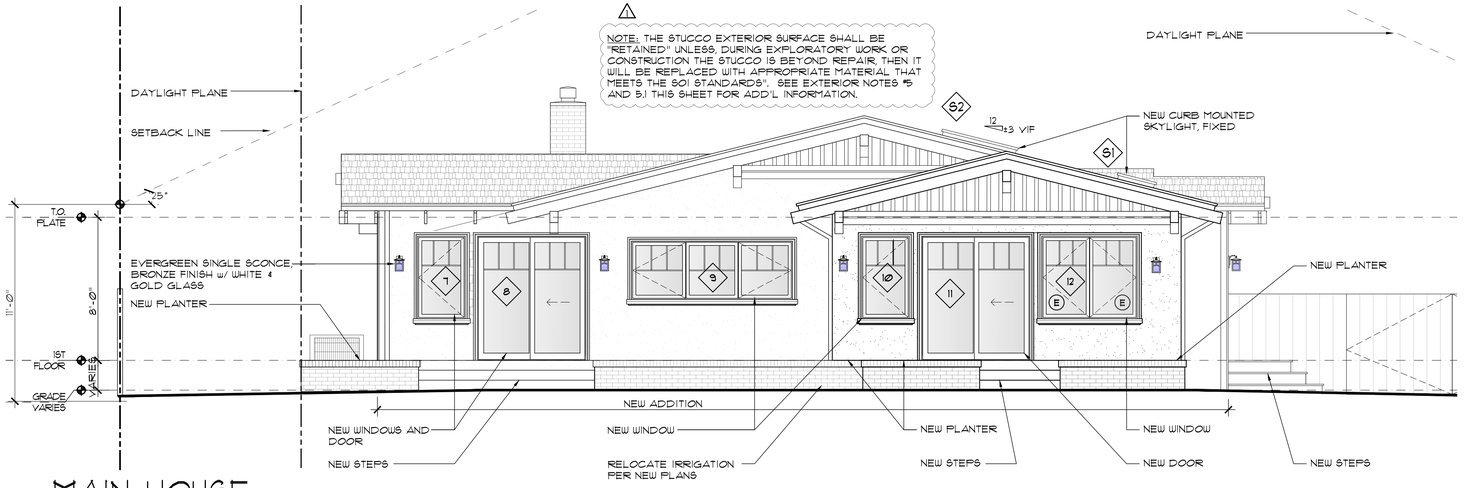
1 SCALE: 1/4" = 1'-0"

MATERIAL LEGEND

- GLASS, GLAZING. WINDOW & PATIO DOOR FRAME FINISH COLOR "BRONZE" BY MARVIN
- OVERHEAD GARAGE AND FRONT ENTRY DOOR FINISH: STAIN-GRADE, WALNUT CLEAR COAT
- BRICK, 2-1/4" X 8-1/2", 2" X 8", EXISTING
- ~~NOT USED. SHINGLE WOOD SIDING, CEDAR SHINGLE VALLEY SIDING, 5:3 EVEN, KEY WAY. PAINT COLOR "AVON GREEN" #HCG-126-1 BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET.~~ ⚠
- STUCCO. PAINT COLOR "AVON GREEN" #HCG-126" BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET FOR ADDITIONAL INFORMATION
- BOARD AND BATTEN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- 8" V-GROOVE: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- TRIM, CASING: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOF EAVE, RAFTER TAIL, RAKE, & FASCIA: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- POST, COLUMN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOFING: TIMBERLINE® UHD LIFETIME ULTRA HIGH DEFINITION® SHINGLES BY GAF, COLOR "SHAKEWOOD"
- WOOD FENCE
- FLOORING AT PATIO: TBD

EXTERIOR NOTES

1. THERE IS TO BE NO EXTERIOR WORK UNLESS NOTED OTHERWISE FOR DOOR AND/OR WINDOW REPLACEMENT.
2. EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
3. EXISTING BRICK TO REMAIN. NEW BRICK TO MATCH EXISTING "IN-KIND".
4. REPLACE EXISTING STUCCO W/ NEW SHINGLE SIDING AS INDICATED ON DRAWINGS. EXISTING GUTTER AND DOWNSPOUT SYSTEM TO REMAIN. NEW GUTTER AND DOWNSPOUTS TO MATCH EXISTING.
5. ⚠ MAIN HOUSE BUILDING, SECRETARY OF INTERIOR STANDARDS FOR REHABILITATION REVIEW STANDARDS COMMENT:
   - 5.1. THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS, DURING EXPLORATORY WORK OR CONSTRUCTION THE STUCCO IS BEYOND REPAIR, THEN IT WILL BE REPLACED WITH APPROPRIATE MATERIAL THAT MEETS THE SOI STANDARDS" - OR THE FULL DEAL "THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS DURING CONSTRUCTION THE PROJECT HISTORIAN FINDS THE STUCCO IS BEYOND REPAIR, BASED ON PROFESSIONAL JUDGMENT AND PHOTOGRAPHIC EVIDENCE OF THE PROJECT HISTORIAN, AND THE AGREEMENT OF THE COMMUNITY DEVELOPMENT DIRECTOR.



MAIN HOUSE
REAR ELEVATION, NORTH -NEW/PROPOSED

2 SCALE: 1/4" = 1'-0"

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT DAVID ANDREW BARNA C-36482 RENEWAL 08/31/23 STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠ REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

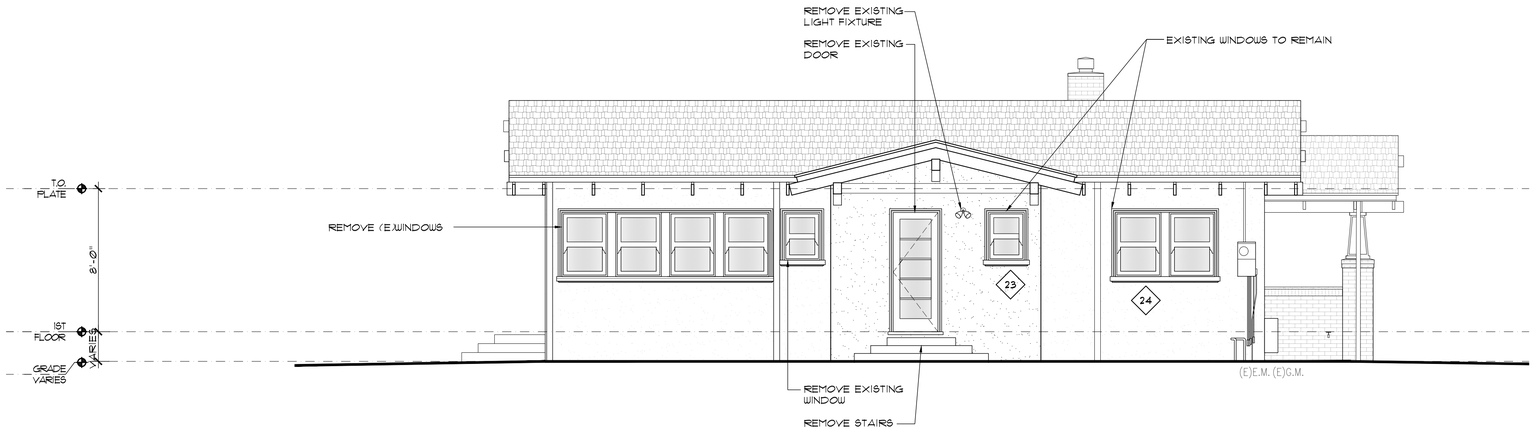
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: AS NOTED
DATE: 07/11/2022

A4.2



MAIN HOUSE
LEFT SIDE ELEVATION, WEST -EXISTING/DEMOLITION

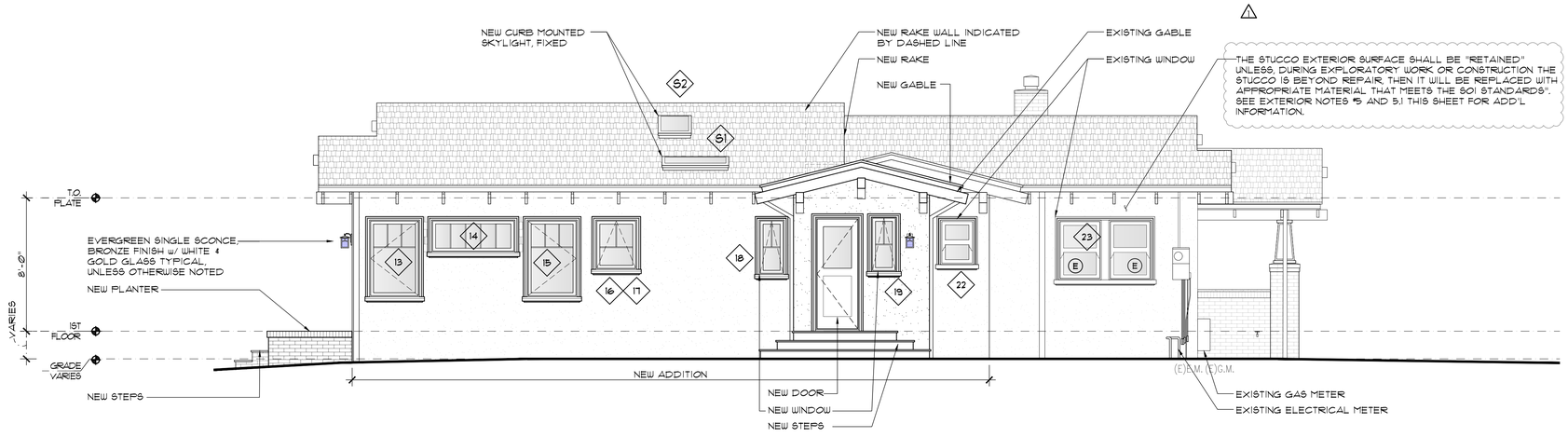
1 SCALE : 1/4" = 1'-0"

MATERIAL LEGEND

- GLASS, GLAZING. WINDOW & PATIO DOOR FRAME FINISH COLOR "BRONZE" BY MARVIN
- OVERHEAD GARAGE AND FRONT ENTRY DOOR FINISH: STAIN-GRADE, WALNUT CLEAR COAT
- BRICK, 2-1/4" X 8-1/2", 2" X 8", EXISTING
- ~~NOT USED. SHINGLE WOOD SIDING, CEDAR SHINGLE VALLEY SIDING, 5:3 EVEN, KEY WAY. PAINT COLOR "AVON GREEN" #HCG-126 BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET.~~ ⚠
- STUCCO. PAINT COLOR "AVON GREEN" #HCG-126 BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET FOR ADDITIONAL INFORMATION
- BOARD AND BATTEN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- 8" V-GROOVE: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- TRIM, CASING: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOF EAVE, RAFTER TAIL, RAKE, & FASCIA: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- POST, COLUMN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 = PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOFING: TIMBERLINE® UHD LIFETIME ULTRA HIGH DEFINITION® SHINGLES BY GAF, COLOR "SHAKEWOOD"
- WOOD FENCE
- FLOORING AT PATIO: TBD

EXTERIOR NOTES

1. THERE IS TO BE NO EXTERIOR WORK UNLESS NOTED OTHERWISE FOR DOOR AND/OR WINDOW REPLACEMENT.
2. EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
3. EXISTING BRICK TO REMAIN. NEW BRICK TO MATCH EXISTING "IN-KIND".
4. REPLACE EXISTING STUCCO w/ NEW SHINGLE SIDING AS INDICATED ON DRAWINGS. EXISTING GUTTER AND DOWNSPOUT SYSTEM TO REMAIN. NEW GUTTER AND DOWNSPOUTS TO MATCH EXISTING.
5. MAIN HOUSE BUILDING, SECRETARY OF INTERIOR STANDARDS FOR REHABILITATION REVIEW STANDARDS COMMENT: ⚠
   - 5.1. THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS, DURING EXPLORATORY WORK OR CONSTRUCTION THE STUCCO IS BEYOND REPAIR, THEN IT WILL BE REPLACED WITH APPROPRIATE MATERIAL THAT MEETS THE SOI STANDARDS" - OR THE FULL DEAL "THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS DURING CONSTRUCTION THE PROJECT HISTORIAN FINDS THE STUCCO IS BEYOND REPAIR, BASED ON PROFESSIONAL JUDGMENT AND PHOTOGRAPHIC EVIDENCE OF THE PROJECT HISTORIAN, AND THE AGREEMENT OF THE COMMUNITY DEVELOPMENT DIRECTOR.



MAIN HOUSE
LEFT SIDE ELEVATION, WEST -NEW/PROPOSED

2 SCALE : 1/4" = 1'-0"

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/11/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠ REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

APN: 170-41-030

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: AS NOTED
DATE: 07/11/2022

A4.3

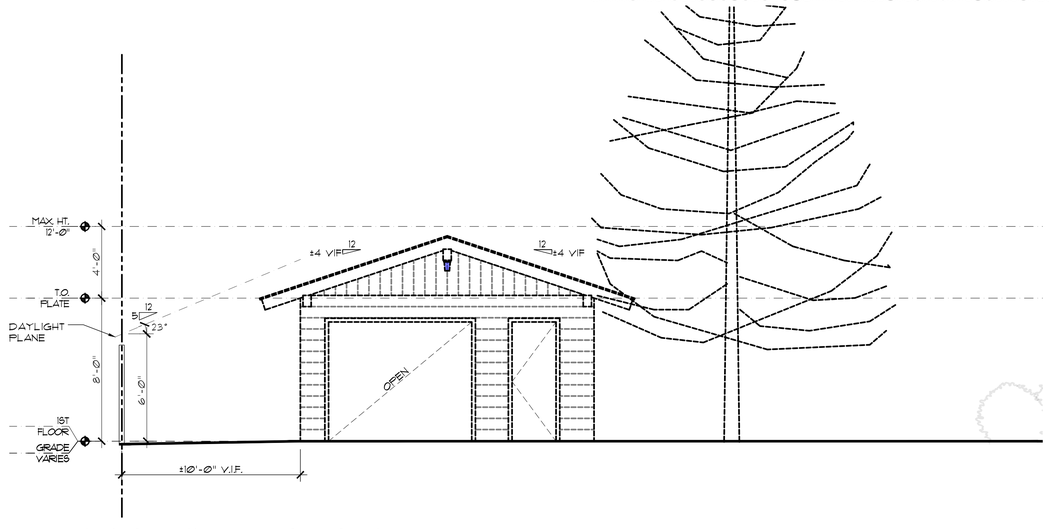
EXTERIOR NOTES

1. THERE IS TO BE NO EXTERIOR WORK UNLESS NOTED OTHERWISE FOR DOOR AND/OR WINDOW REPLACEMENT.
2. EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
3. EXISTING BRICK TO REMAIN. NEW BRICK TO MATCH EXISTING "IN-KIND".
4. REPLACE EXISTING STUCCO w/ NEW SHINGLE SIDING AS INDICATED ON DRAWINGS. EXISTING GUTTER AND DOWNSPOUT SYSTEM TO REMAIN. NEW GUTTER AND DOWNSPOUTS TO MATCH EXISTING.
5. MAIN HOUSE BUILDING, SECRETARY OF INTERIOR STANDARDS FOR ⚠ REHABILITATION REVIEW STANDARDS COMMENT:

   5.1. THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS, DURING EXPLORATORY WORK OR CONSTRUCTION THE STUCCO IS BEYOND REPAIR, THEN IT WILL BE REPLACED WITH APPROPRIATE MATERIAL THAT MEETS THE SOI STANDARDS" - OR THE FULL DEAL "THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS DURING CONSTRUCTION THE PROJECT HISTORIAN FINDS THE STUCCO IS BEYOND REPAIR, BASED ON PROFESSIONAL JUDGMENT AND PHOTOGRAPHIC EVIDENCE OF THE PROJECT HISTORIAN, AND THE AGREEMENT OF THE COMMUNITY DEVELOPMENT DIRECTOR.

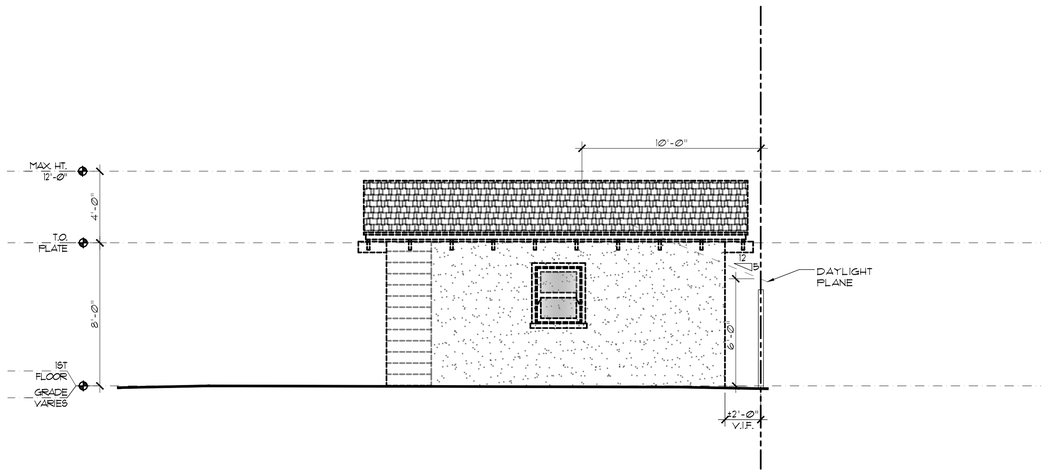
MATERIAL LEGEND

- GLASS, GLAZING. WINDOW & PATIO DOOR FRAME FINISH COLOR "BRONZE" BY MARVIN
- OVERHEAD GARAGE AND FRONT ENTRY DOOR FINISH: STAIN-GRADE, WALNUT CLEAR COAT
- BRICK, 2-1/4" X 8-1/2", 2" X 8", EXISTING
- ~~NOT USED. SHINGLE WOOD SIDING, CEDAR SHINGLE VALLEY SIDING, 5.5 EVEN EXPOSURE. PAINT COLOR "AVON GREEN" #HCG-126" BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET.~~ ⚠
- STUCCO. PAINT COLOR "AVON GREEN" #HCG-126" BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET FOR ADDITIONAL INFORMATION
- BOARD AND BATTEN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- 8" V-GROOVE: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- TRIM, CASING: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOF EAVE, RAFTER TAIL, RAKE, & FASCIA: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- POST, COLUMN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOFING: TIMBERLINE® UHD LIFETIME ULTRA HIGH DEFINITION® SHINGLES BY GAF, COLOR "SHAKEWOOD"
- WOOD FENCE



1 DETACHED GARAGE FRONT ELEVATION, SOUTH -EXISTING/DEMOLITION

SCALE : 1/4" = 1'-Ø"

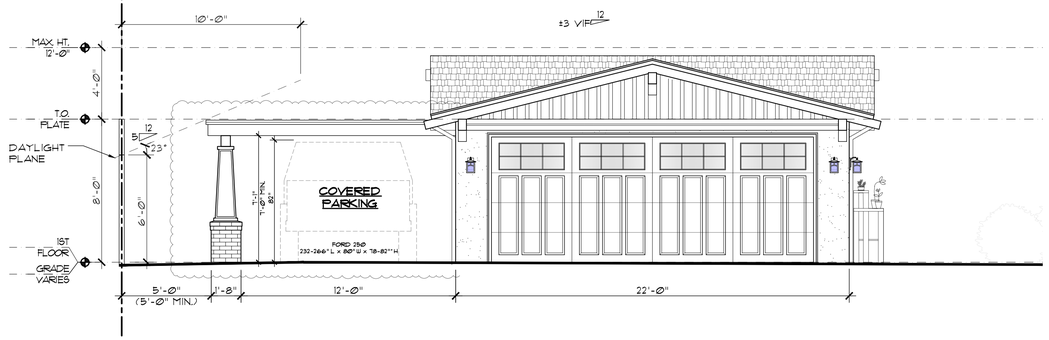


2 DETACHED GARAGE RIGHT SIDE ELEVATION, EAST -EXISTING/DEMOLITION

SCALE : 1/4" = 1'-Ø"

⚠

NOTE:
1. PER SECTION 14.15.Ø40, NO PORTION OF AN ACCESSORY STRUCTURE SHALL EXTEND ABOVE OR BEYOND A DAYLIGHT PLANE THAT STARTS AT A HEIGHT OF SIX FEET AT THE PROPERTY LINE AND PROCEEDS INWARD AT A 5:12 SLOPE TO A DISTANCE OF TEN (10) FEET FROM THE SIDE AND REAR PROPERTY LINES.

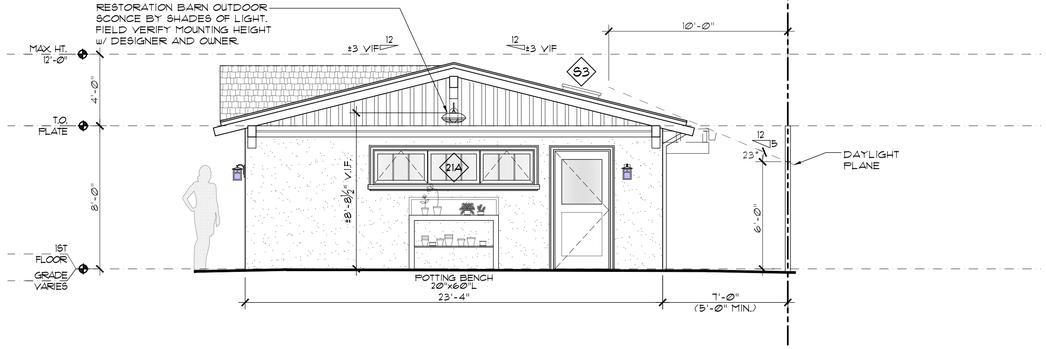


3 DETACHED GARAGE FRONT ELEVATION, SOUTH -NEW/PROPOSED

SCALE : 1/4" = 1'-Ø"

⚠

NOTE:
1. PER SECTION 14.15.Ø40, NO PORTION OF AN ACCESSORY STRUCTURE SHALL EXTEND ABOVE OR BEYOND A DAYLIGHT PLANE THAT STARTS AT A HEIGHT OF SIX FEET AT THE PROPERTY LINE AND PROCEEDS INWARD AT A 5:12 SLOPE TO A DISTANCE OF TEN (10) FEET FROM THE SIDE AND REAR PROPERTY LINES.



4 DETACHED GARAGE RIGHT SIDE ELEVATION, EAST -NEW/PROPOSED

SCALE : 1/4" = 1'-Ø"

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠ REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: AS NOTED
DATE: 07/11/2022

A4.4

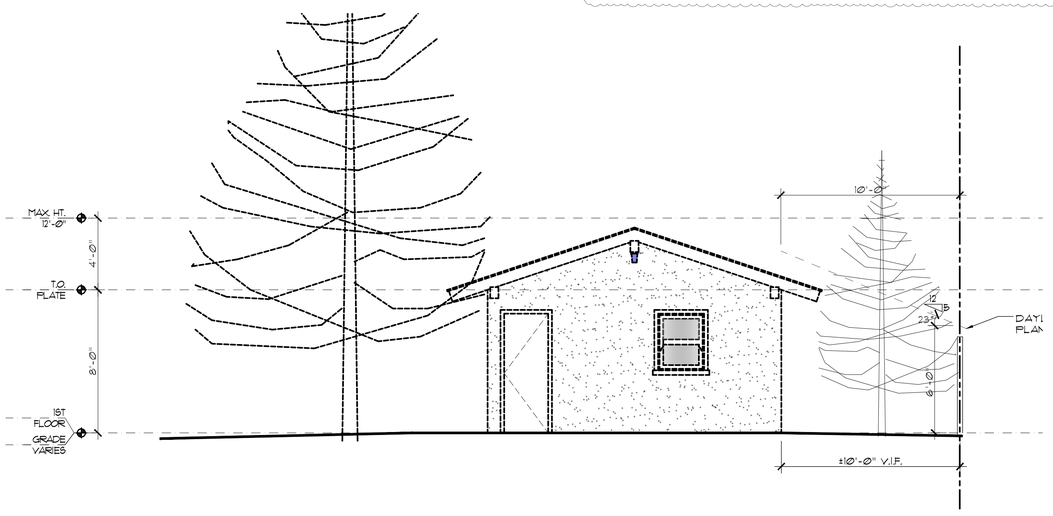
EXTERIOR NOTES

1. THERE IS TO BE NO EXTERIOR WORK UNLESS NOTED OTHERWISE FOR DOOR AND/OR WINDOW REPLACEMENT.
2. EXISTING WINDOWS AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.
3. EXISTING BRICK TO REMAIN. NEW BRICK TO MATCH EXISTING "IN-KIND".
4. REPLACE EXISTING STUCCO w/ NEW SHINGLE SIDING AS INDICATED ON DRAWINGS. EXISTING GUTTER AND DOWNSPOUT SYSTEM TO REMAIN. NEW GUTTER AND DOWNSPOUTS TO MATCH EXISTING.
5. MAIN HOUSE BUILDING, SECRETARY OF INTERIOR STANDARDS FOR REHABILITATION REVIEW STANDARDS COMMENT:

   5.1. THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS, DURING EXPLORATORY WORK OR CONSTRUCTION THE STUCCO IS BEYOND REPAIR, THEN IT WILL BE REPLACED WITH APPROPRIATE MATERIAL THAT MEETS THE SOI STANDARDS" - OR THE FULL DEAL "THE STUCCO EXTERIOR SURFACE SHALL BE "RETAINED" UNLESS DURING CONSTRUCTION THE PROJECT HISTORIAN FINDS THE STUCCO IS BEYOND REPAIR, BASED ON PROFESSIONAL JUDGMENT AND PHOTOGRAPHIC EVIDENCE OF THE PROJECT HISTORIAN, AND THE AGREEMENT OF THE COMMUNITY DEVELOPMENT DIRECTOR.

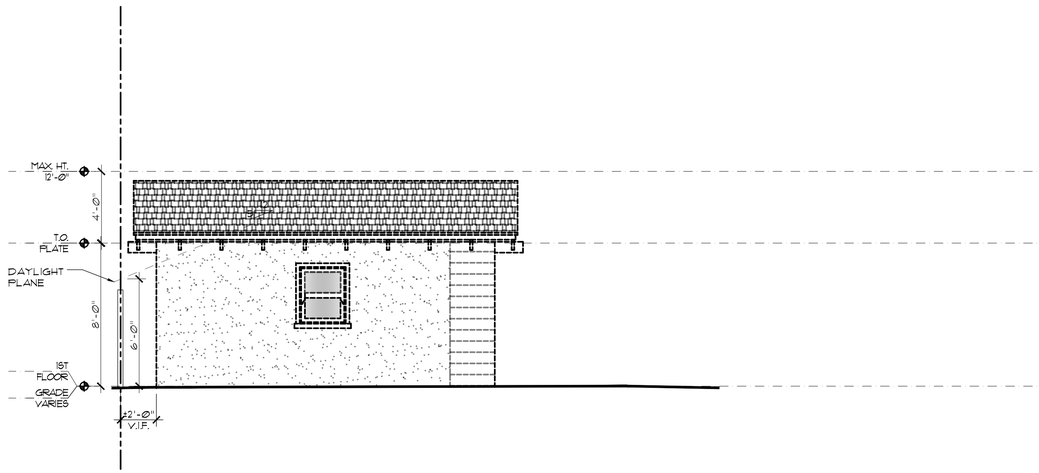
MATERIAL LEGEND

- GLASS, GLAZING. WINDOW & PATIO DOOR FRAME FINISH COLOR "BRONZE" BY MARVIN
- OVERHEAD GARAGE AND FRONT ENTRY DOOR FINISH: STAIN-GRADE, WALNUT CLEAR COAT
- BRICK, 2-1/4" X 8-1/2", 2" X 8", EXISTING
- ~~NOT USED. SHINGLE WOOD SIDING, CEDAR SHINGLE VALLEY SIDING, 5.5 EVEN REY WAY. PAINT COLOR "AVON GREEN" #HCG-126-1 BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET.~~ ⚠
- STUCCO. PAINT COLOR "AVON GREEN" #HCG-126-1 BY BENJAMIN MOORE (LRV:19.68). SEE EXTERIOR NOTE #5 AND 5.1 THIS SHEET FOR ADDITIONAL INFORMATION
- BOARD AND BATTEN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- 8" V-GROOVE: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- TRIM, CASING: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOF EAVE, RAFTER TAIL, RAKE, & FASCIA: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- POST, COLUMN: PAINT COLOR "DECORATOR'S WHITE" #OC-149 • PM-3 BY BENJAMIN MOORE (LRV:84.61)
- ROOFING: TIMBERLINE® UHD LIFETIME ULTRA HIGH DEFINITION® SHINGLES BY GAF, COLOR "SHAKEWOOD"
- WOOD FENCE



DETACHED GARAGE
REAR ELEVATION, NORTH -EXISTING/DEMOLITION

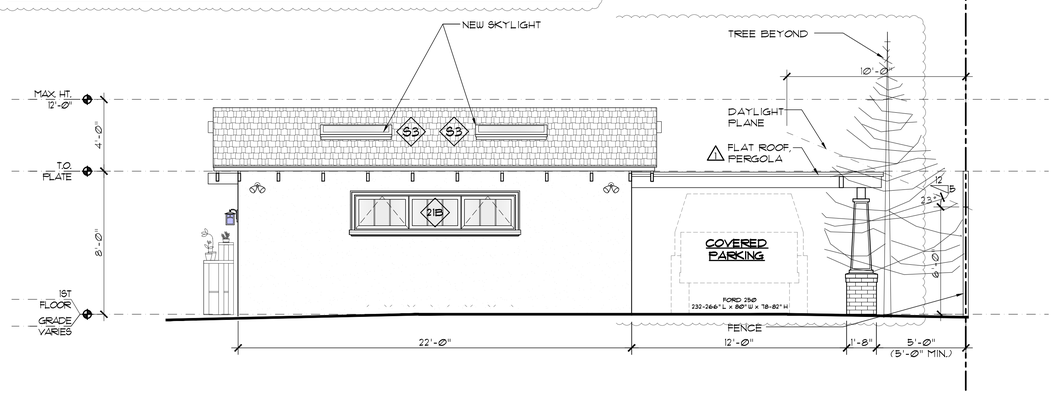
1 SCALE : 1/4" = 1'-0"



DETACHED GARAGE
LEFT SIDE ELEVATION, WEST -EXISTING

2 SCALE : 1/4" = 1'-0"

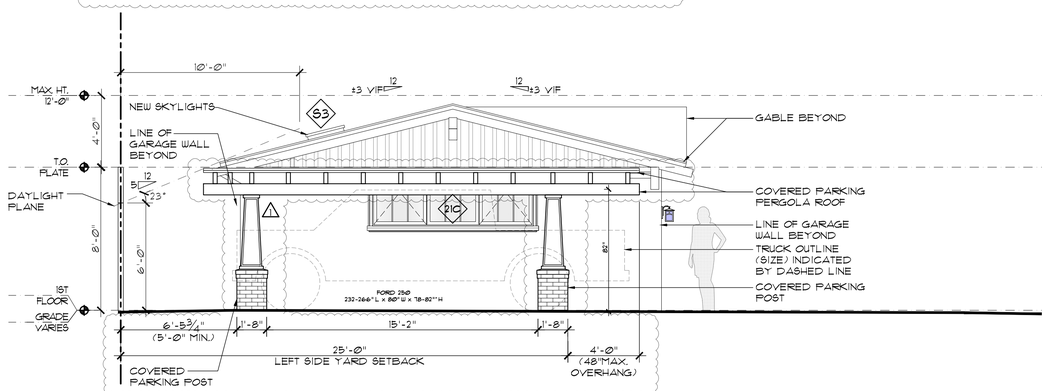
⚠ NOTE:
1. PER SECTION 14.15.040, NO PORTION OF AN ACCESSORY STRUCTURE SHALL EXTEND ABOVE OR BEYOND A DAYLIGHT PLANE THAT STARTS AT A HEIGHT OF SIX FEET AT THE PROPERTY LINE AND PROCEEDS INWARD AT A 5:12 SLOPE TO A DISTANCE OF TEN (10) FEET FROM THE SIDE AND REAR PROPERTY LINES.



DETACHED GARAGE
REAR ELEVATION, NORTH -NEW/PROPOSED

3 SCALE : 1/4" = 1'-0"

⚠ NOTE:
1. PER SECTION 14.15.040, NO PORTION OF AN ACCESSORY STRUCTURE SHALL EXTEND ABOVE OR BEYOND A DAYLIGHT PLANE THAT STARTS AT A HEIGHT OF SIX FEET AT THE PROPERTY LINE AND PROCEEDS INWARD AT A 5:12 SLOPE TO A DISTANCE OF TEN (10) FEET FROM THE SIDE AND REAR PROPERTY LINES.



DETACHED GARAGE
LEFT SIDE ELEVATION, WEST -NEW/PROPOSED

4 SCALE : 1/4" = 1'-0"

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠ REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

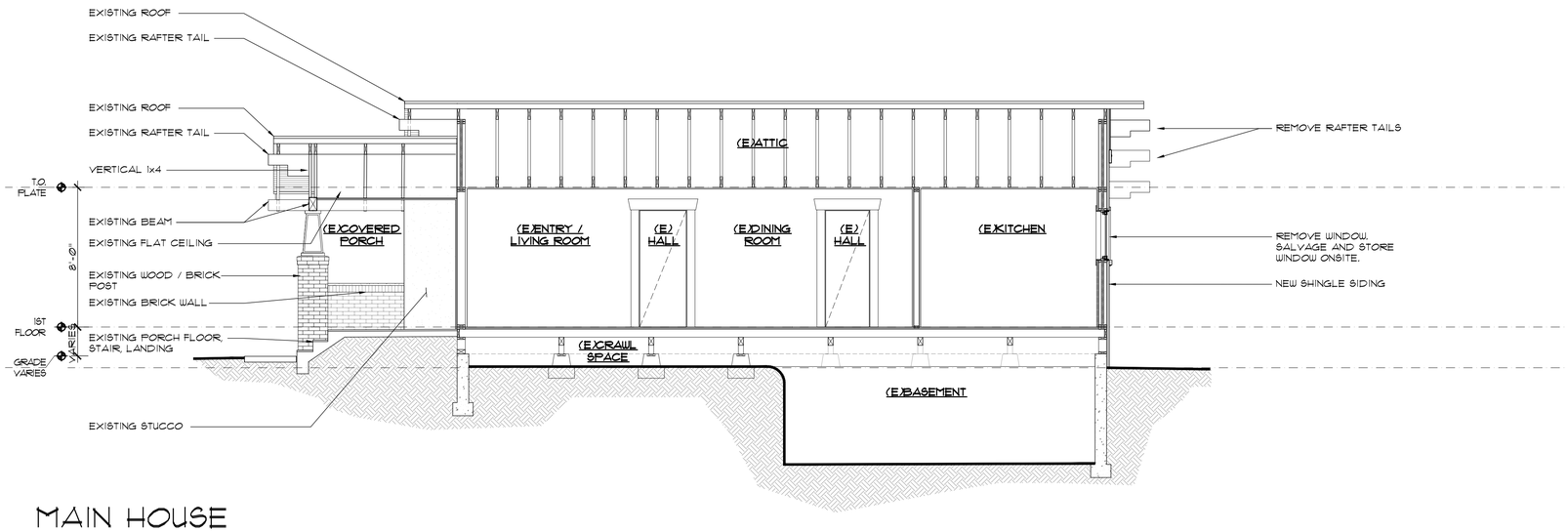
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

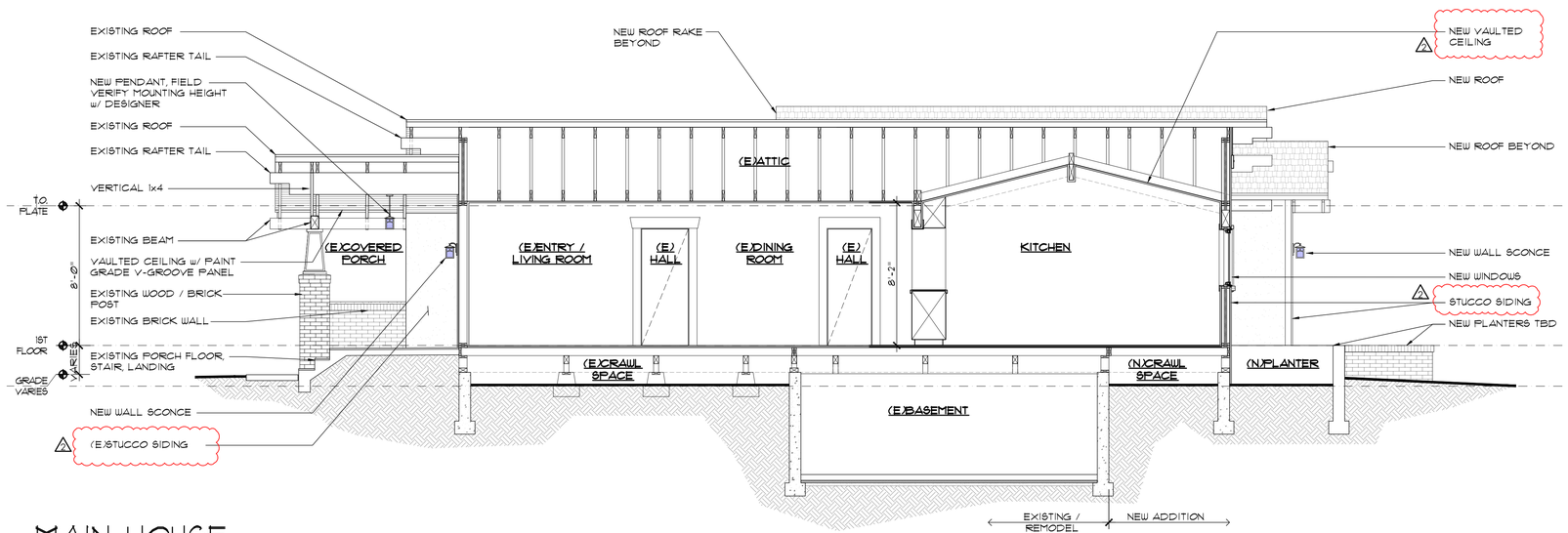
DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: AS NOTED
DATE: 07/11/2022

A4.5



MAIN HOUSE
BUILDING SECTION -EXISTING/DEMOLITION

1 SCALE : 1/4" = 1'-0"



MAIN HOUSE
BUILDING SECTION -NEW/PROPOSED

2 SCALE : 1/4" = 1'-0"

GREEN CODE NOTES

A SEPARATE SHEET SHALL BE SUBMITTED WITH ALL THE REQUIREMENTS OF 2019 GREEN CODE FOR CONSTRUCTION.

SITE
1. RECYCLE AND/OR SAVAGE FOR REUSE A MINIMUM OF 65% OF THE NON-HAZARDOUS CONSTRUCTION OR DEMOLITION DEBRIS. CGBSC 4.408.1
2. SUBMIT A CONSTRUCTION WASTE MANAGEMENT PLAN IN CONFORMANCE WITH ITEMS 1 THROUGH 5. THE CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE UPDATED AS NECESSARY AND SHALL BE AVAILABLE DURING CONSTRUCTION FOR EXAMINATION BY THE ENFORCING AGENCY. CGBSC 4.408.2.
   2.1. IDENTIFY THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS TO E DIVERTED FROM DISPOSAL BY RECYCLING, REUSE ON THE PROJECT OR SALVAGE FOR FUTURE USE OR SALE.
   2.2. SPECIFY IF CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE SORTED ON-SITE (SOURCE-SEPARATED) OR BULK MIXED (SINGLE STREAM).
   2.3. IDENTIFY DIVERSION FACILITIES WHERE THE CONSTRUCTION AND DEMOLITION WASTE MATERIAL WILL BE TAKEN
   2.4. IDENTIFY CONSTRUCTION METHODS EMPLOYED TO REDUCE THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE GENERATED.
   2.5. SPECIFY THAT THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE MATERIALS DIVERTED SHALL BE CALCULATED BY WEIGHT OR VOLUME, BUT NOT BY BOTH.
3. SUBMIT DRAINAGE PLAN SHOWING HOW TO KEEP SURFACE WATER FROM ENTERING THE BUILDING. CGBSC 4.106.3.
4. SUBMIT STORM WATER MANAGEMENT PLAN FOR LOTS LESS THAN 1 ACRE. CGBSC 4.106.2.

FOUNDATION
1. CONCRETE SLAB FOUNDATION SHALL HAVE A VAPOR RETARDER AND A CAPILLARY BREAK (E.G. 4-INCH THICK BASE OF ½INCH OF CLEAN AGGREGATE WITH A VAPOR BARRIER). CGBSC 4.505.2.1.

OUTDOOR WATER USE
1. NEW CONSTRUCTION PROJECTS WITH AN AGGREGATE LANDSCAPE AREA EQUAL TO OR GREATER THAN 500 SQUARE FEET OR REHABILITATED LANDSCAPE PROJECTS WITH AN AGGREGATE LANDSCAPE AREA EQUAL TO OR GREATER THAN 1000 SQUARE FEET SHALL COMPLY WITH THE CITY OF MOUNTAIN VIEW MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MUELO). CGBSC 4.304.1.

INDOOR WATER USE
1. SHOW ON PLAN COMPLIANCE WITH WATER EFFICIENCY AND CONSERVATION THAT REQUIRES 20% SAVING IN POTABLE WATER USING AS A BASE LINE TABLE 4.303.1.
2. UNDER THE PRESCRIPTIVE USE A MAXIMUM FLOW RATE AS FOLLOWS PER CALGREEN SECTION 4.303.1.3.1, 4.303.1.3.2

2.1.	SHOWERHEADS	≤1.8 GALLON PER MINUTE (GPM) @ 80PSI
2.2.	LAVATORY FAUCET	≤1.2 GPM @ 60PSI
2.3.	KITCHEN FAUCETS	≤1.8 GPM @ 60PSI
2.4.	WATER CLOSET	≤1.28 GALLONS PER FLUSH

   2.5. AS AN ALTERNATIVE TO PRESCRIPTIVE COMPLIANCE, PROVIDE CALCULATIONS TO DEMONSTRATE 20% SAVING. (CGBSC, SECTION 4.303.1).
3. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. 4.303.1.3.2
4. SEE NOTE #14 ON SHEET M2.1 & M2.2 FOR ADD'L NEW PLUMBING INFORMATION.

HEATING, VENTILATION AND AIR CONDITIONING
1. INSTALL ENERGY STAR BATHROOM FANS ON TIMER OR HUMIDISTAT (CGBSC 4.507.2)
2. HEATING AND AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS:
   2.1. THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J-2011 (RESIDENTIAL LOAD CALCULATION), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
   2.2. DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D-2014 (RESIDENTIAL DUCT SYSTEMS), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
   2.3. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S-2014 (RESIDENTIAL EQUIPMENT SELECTION) OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
   EXCEPTION: USE OF ALTERNATE DESIGN TEMPERATURES NECESSARY TO ENSURE THE SYSTEMS FUNCTION ARE ACCEPTABLE.

ENVIRONMENTAL QUALITY. CGBSC DIV 4.5
PROVIDE PRODUCT CERTIFICATION AND SPECIFICATION TO SHOW COMPLIANCE WITH GREEN CODE.
1. GAS FIREPLACE SHALL HAVE A DIRECT-VENT SEALED COMBUSTION TYPE. ANY INSTALLED WOODSTOVE OR PELLET STOVE SHALL COMPLY WITH US EPA NEW SOURCE PERFORMANCE STANDARDS (NSPS) EMISSION LIMITS AS APPLICABLE, AND SHALL HAVE A PERMANENT LABEL INDICATING THEY ARE CERTIFIED TO MEET THE EMISSIONS LIMITS. WOODSTOVES, PELLET STOVES AND FIREPLACES SHALL ALSO COMPLY WITH APPLICABLE LOCAL ORDINANCES (CGBSC 4.503.1).
2. AT THE TIME OF ROUGH INSTALLATION OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET-METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM (CGBSC 4.504.1).
3. NOTE ON PLAN LIST OF ADHESIVES, SEALANT, CAULKING, PAINT, COATING WILL BE USED AND THE VOC CONTENT, VOC LIMITS SHALL BE ACCORDING TO CGBSC SECTIONS 4.504.2.1.

FINISHES
1. USE LOW-VOC INTERIOR WALL/CEILING PAINTS (150 GRAMS PER LETTER (GPL) VOCS REGARDLESS OF SHEEN) CGBSC 4.504.2.2
2. USE LOW-VOC COATINGS THAT MEET SCAQMD RULE 1113 (CGBSC 4.504.2.3)
3. ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE TESTING AND PRODUCT REQUIREMENTS OF ONE OF THE FOLLOWING: CGBSC 4.504.3.
   3.1. CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM.
   3.2. CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350.)
   3.3. NSF/ANSI 140 AT THE GOLD LEVEL.
   3.4. SCIENTIFIC CERTIFICATIONS SYSTEMS INDOOR ADVANTAGE™ GOLD.
4. WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH ONE OR MORE OF THE FOLLOWING: CGBSC 4.504.4.
   4.1. COC EMISSION LIMITS DEFINES IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE.
   4.2. PRODUCTS COMPLAINT WITH CHPS CRITERIA CERTIFIED UNDER THE GREEN GUARD CHILDREN & SCHOOLS PROGRAM.
   4.3. CERTIFICATION UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOOR SCORE FROGRAM.
   4.4. MEET THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL
   4.5. CHAMBERS,"VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350).
5. HARDWOOD PLYWOOD, PARTICLE-BOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDING SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED ON ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.), BY OR BEFORE THE DATES SPECIFIED IN THOSE SECTIONS, AS SHOWN IN TABLE 4.504.5.
6. ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 4.504.1

OTHER
1. AT THE TIME OF FINAL INSPECTION AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER (CGBSC SECTION 4.410).

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
1 REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

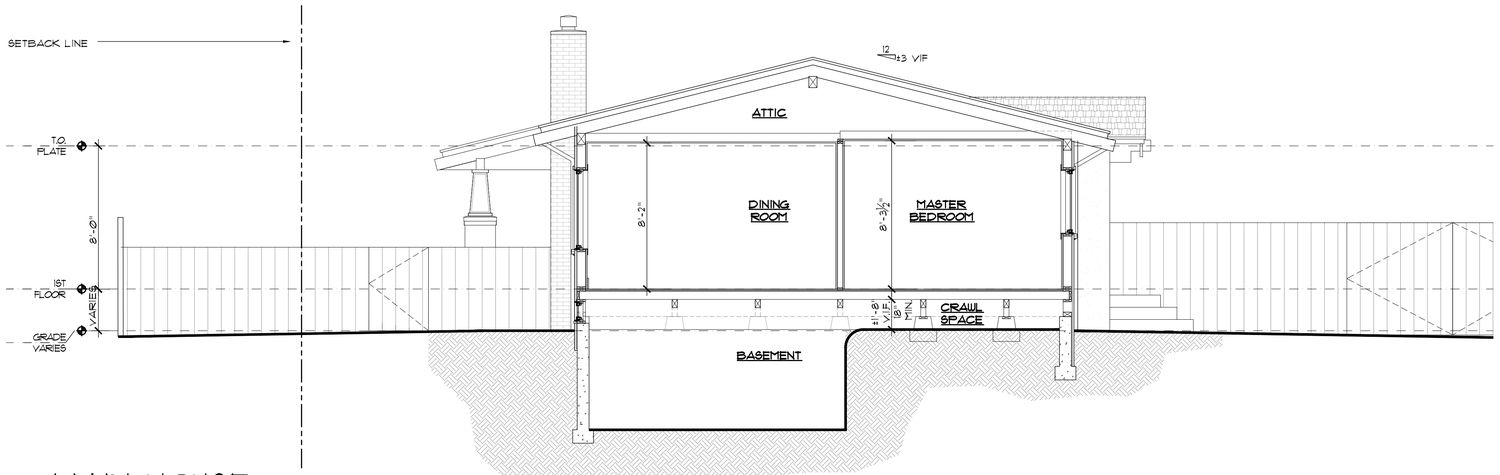
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

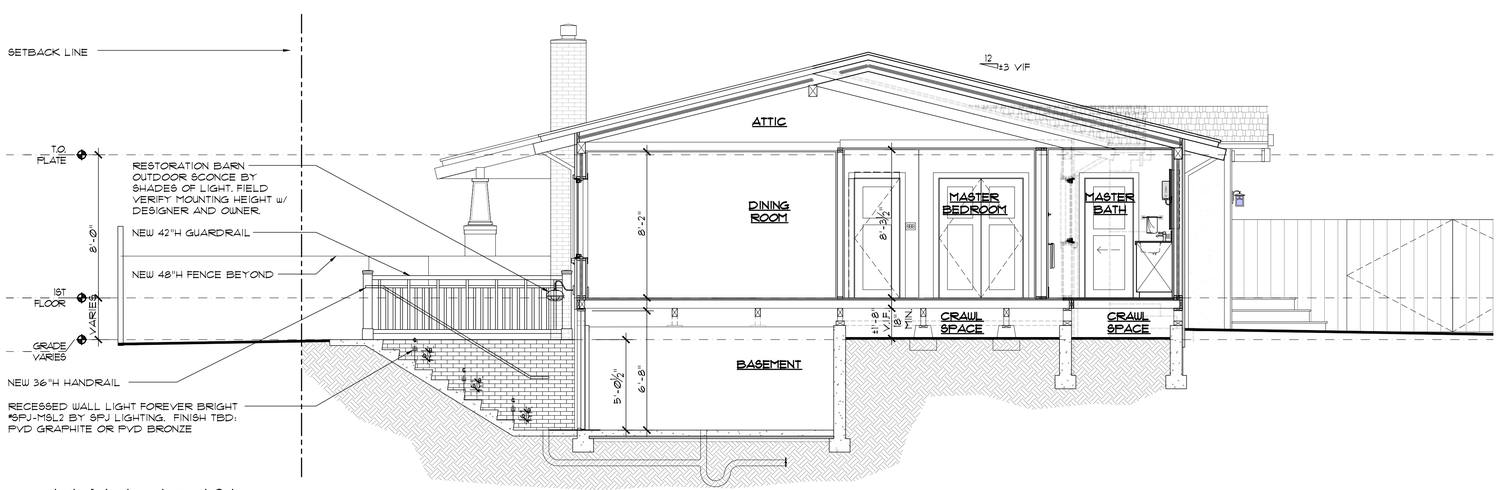
DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A5.0



MAIN HOUSE
BUILDING SECTION -EXISTING/DEMOLITION

1 SCALE : 1/4" = 1'-0"



MAIN HOUSE
BUILDING SECTION -NEW/PROPOSED

1 SCALE : 1/4" = 1'-0"

GREEN CODE NOTES

A SEPARATE SHEET SHALL BE SUBMITTED WITH ALL THE REQUIREMENTS OF 2019 GREEN CODE FOR CONSTRUCTION.

SITE
1. RECYCLE AND/OR SAVAGE FOR REUSE A MINIMUM OF 65% OF THE NON-HAZARDOUS CONSTRUCTION OR DEMOLITION DEBRIS. CGBSC 4.408.1
2. SUBMIT A CONSTRUCTION WASTE MANAGEMENT PLAN IN CONFORMANCE WITH ITEMS 1 THROUGH 5. THE CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE UPDATED AS NECESSARY AND SHALL BE AVAILABLE DURING CONSTRUCTION FOR EXAMINATION BY THE ENFORCING AGENCY. CGBSC 4.408.2.
   2.1. IDENTIFY THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS TO E DIVERTED FROM DISPOSAL BY RECYCLING, REUSE ON THE PROJECT OR SALVAGE FOR FUTURE USE OR SALE.
   2.2. SPECIFY IF CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE SORTED ON-SITE (SOURCE-SEPARATED) OR BULK MIXED (SINGLE STREAM).
   2.3. IDENTIFY DIVERSION FACILITIES WHERE THE CONSTRUCTION AND DEMOLITION WASTE MATERIAL WILL BE TAKEN
   2.4. IDENTIFY CONSTRUCTION METHODS EMPLOYED TO REDUCE THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE GENERATED.
   2.5. SPECIFY THAT THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE MATERIALS DIVERTED SHALL BE CALCULATED BY WEIGHT OR VOLUME, BUT NOT BY BOTH.
3. SUBMIT DRAINAGE PLAN SHOWING HOW TO KEEP SURFACE WATER FROM ENTERING THE BUILDING. CGBSC 4.106.3.
4. SUBMIT STORM WATER MANAGEMENT PLAN FOR LOTS LESS THAN 1 ACRE. CGBSC 4.106.2.

FOUNDATION
1. CONCRETE SLAB FOUNDATION SHALL HAVE A VAPOR RETARDER AND A CAPILLARY BREAK (E.G. 4-INCH THICK BASE OF ½ INCH OF CLEAN AGGREGATE WITH A VAPOR BARRIER). CGBSC 4.505.2.1.

OUTDOOR WATER USE
1. NEW CONSTRUCTION PROJECTS WITH AN AGGREGATE LANDSCAPE AREA EQUAL TO OR GREATER THAN 500 SQUARE FEET OR REHABILITATED LANDSCAPE PROJECTS WITH AN AGGREGATE LANDSCAPE AREA EQUAL TO OR GREATER THAN 1000 SQUARE FEET SHALL COMPLY WITH THE CITY OF MOUNTAIN VIEW MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). CGBSC 4.304.1.

INDOOR WATER USE
1. SHOW ON PLAN COMPLIANCE WITH WATER EFFICIENCY AND CONSERVATION THAT REQUIRES 20% SAVING IN POTABLE WATER USING AS A BASE LINE TABLE 4.303.1.
2. UNDER THE PRESCRIPTIVE USE A MAXIMUM FLOW RATE AS FOLLOWS PER CALGREEN SECTION 4.303.1.3.1, 4.303.1.3.2

2.1.	SHOWERHEADS	≤1.8 GALLON PER MINUTE (GPM) @ 80PSI
2.2.	LAVATORY FAUCET	≤1.2 GPM @ 60PSI
2.3.	KITCHEN FAUCETS	≤1.8 GPM @ 60PSI
2.4.	WATER CLOSET	≤1.28 GALLONS PER FLUSH

   2.5. AS AN ALTERNATIVE TO PRESCRIPTIVE COMPLIANCE, PROVIDE CALCULATIONS TO DEMONSTRATE 20% SAVING. (CGBSC, SECTION 4.303.1).
3. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. 4.303.1.3.2
4. SEE NOTE #14 ON SHEET M2.1 & M2.2 FOR ADD'L NEW PLUMBING INFORMATION.

HEATING, VENTILATION AND AIR CONDITIONING
1. INSTALL ENERGY STAR BATHROOM FANS ON TIMER OR HUMIDISTAT (CGBSC 4.507.2)
2. HEATING AND AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS:
   2.1. THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J-2011 (RESIDENTIAL LOAD CALCULATION), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
   2.2. DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D-2014 (RESIDENTIAL DUCT SYSTEMS), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
   2.3. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S-2014 (RESIDENTIAL EQUIPMENT SELECTION) OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
   EXCEPTION: USE OF ALTERNATE DESIGN TEMPERATURES NECESSARY TO ENSURE THE SYSTEMS FUNCTION ARE ACCEPTABLE.

ENVIRONMENTAL QUALITY, CGBSC DIV 4.5
PROVIDE PRODUCT CERTIFICATION AND SPECIFICATION TO SHOW COMPLIANCE WITH GREEN CODE.
1. GAS FIREPLACE SHALL HAVE A DIRECT-VENT SEALED COMBUSTION TYPE. ANY INSTALLED WOODSTOVE OR PELLET STOVE SHALL COMPLY WITH US EPA NEW SOURCE PERFORMANCE STANDARDS (NSPS) EMISSION LIMITS AS APPLICABLE, AND SHALL HAVE A PERMANENT LABEL INDICATING THEY ARE CERTIFIED TO MEET THE EMISSIONS LIMITS. WOODSTOVES, PELLET STOVES AND FIREPLACES SHALL ALSO COMPLY WITH APPLICABLE LOCAL ORDINANCES (CGBSC 4.503.1).
2. AT THE TIME OF ROUGH INSTALLATION OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET-METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM (CGBSC 4.504.1).
3. NOTE ON PLAN LIST OF ADHESIVES, SEALANT, CAULKING, PAINT, COATING WILL BE USED AND THE VOC CONTENT, VOC LIMITS SHALL BE ACCORDING TO CGBSC SECTIONS 4.504.2.1.

FINISHES
1. USE LOW-VOC INTERIOR WALL/CEILING PAINTS (≤50 GRAMS PER LETTER (GPL) VOCS REGARDLESS OF SHEEN) CGBSC 4.504.2.2
2. USE LOW-VOC COATINGS THAT MEET SCAQMD RULE 1113 (CGBSC 4.504.2.3)
3. ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE TESTING AND PRODUCT REQUIREMENTS OF ONE OF THE FOLLOWING: CGBSC 4.504.3.
   3.1. CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM.
   3.2. CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350.)
   3.3. NSF/ANSI 140 AT THE GOLD LEVEL.
   3.4. SCIENTIFIC CERTIFICATIONS SYSTEMS INDOOR ADVANTAGE™ GOLD.
4. WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH ONE OR MORE OF THE FOLLOWING: CGBSC 4.504.4.
   4.1. VOC EMISSION LIMITS DEFINED IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE.
   4.2. PRODUCTS COMPLAINT WITH CHPS CRITERIA CERTIFIED UNDER THE GREEN GUARD CHILDREN & SCHOOLS PROGRAM.
   4.3. CERTIFICATION UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOOR SCORE PROGRAM.
   4.4. MEET THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL
   4.5. CHAMBERS,"VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350).
5. HARDWOOD PLYWOOD, PARTICLE-BOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDING SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED ON ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.), BY OR BEFORE THE DATES SPECIFIED IN THOSE SECTIONS, AS SHOWN IN TABLE 4.504.5.
6. ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 4.504.1

OTHER
1. AT THE TIME OF FINAL INSPECTION AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER (CGBSC SECTION 4.410).

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL
BID SET
FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

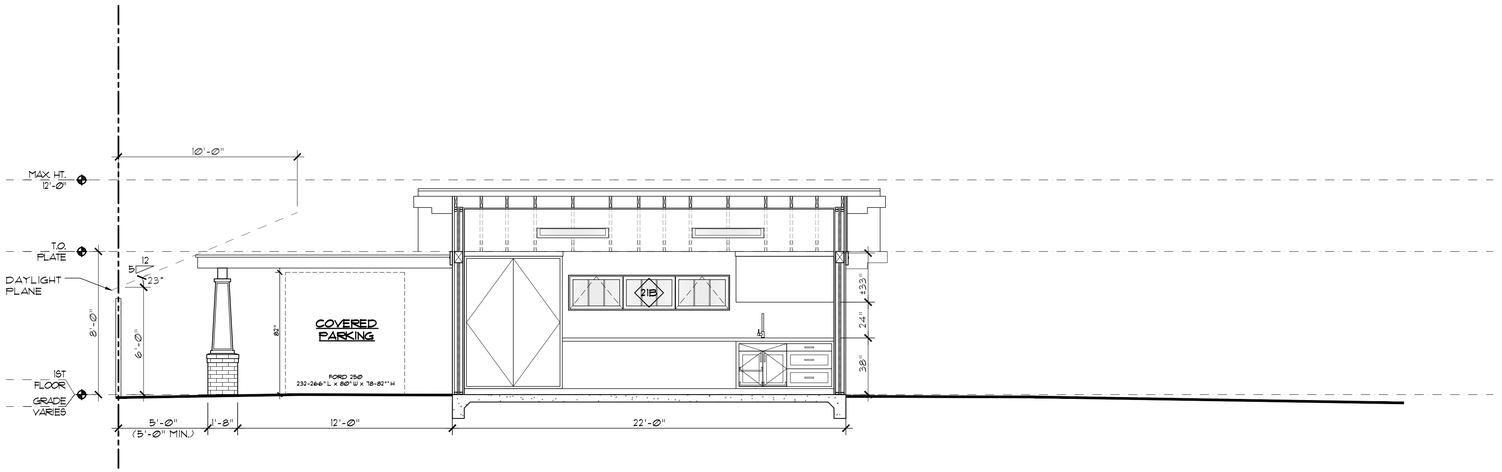
SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A5.1



DETACHED GARAGE SECTION -NEW/PROPOSED

1 SCALE : 1/4" = 1'-0"

GREEN CODE NOTES

A SEPARATE SHEET SHALL BE SUBMITTED WITH ALL THE REQUIREMENTS OF 2019 GREEN CODE FOR CONSTRUCTION.

SITE
1. RECYCLE AND/OR SAVAGE FOR REUSE A MINIMUM OF 65% OF THE NON-HAZARDOUS CONSTRUCTION OR DEMOLITION DEBRIS. CGBSC 4.408.1
2. SUBMIT A CONSTRUCTION WASTE MANAGEMENT PLAN IN CONFORMANCE WITH ITEMS 1 THROUGH 5. THE CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE UPDATED AS NECESSARY AND SHALL BE AVAILABLE DURING CONSTRUCTION FOR EXAMINATION BY THE ENFORCING AGENCY. CGBSC 4.408.2.
   - 2.1. IDENTIFY THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS TO E DIVERTED FROM DISPOSAL BY RECYCLING, REUSE ON THE PROJECT OR SALVAGE FOR FUTURE USE OR SALE.
   - 2.2. SPECIFY IF CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE SORTED ON-SITE (SOURCE-SEPARATED) OR BULK MIXED (SINGLE STREAM).
   - 2.3. IDENTIFY DIVERSION FACILITIES WHERE THE CONSTRUCTION AND DEMOLITION WASTE MATERIAL WILL BE TAKEN
   - 2.4. IDENTIFY CONSTRUCTION METHODS EMPLOYED TO REDUCE THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE GENERATED.
   - 2.5. SPECIFY THAT THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE MATERIALS DIVERTED SHALL BE CALCULATED BY WEIGHT OR VOLUME, BUT NOT BY BOTH.
3. SUBMIT DRAINAGE PLAN SHOWING HOW TO KEEP SURFACE WATER FROM ENTERING THE BUILDING. CGBSC 4.106.3.
4. SUBMIT STORM WATER MANAGEMENT PLAN FOR LOTS LESS THAN 1 ACRE. CGBSC 4.106.2.

FOUNDATION
1. CONCRETE SLAB FOUNDATION SHALL HAVE A VAPOR RETARDER AND A CAPILLARY BREAK (E.G. 4-INCH THICK BASE OF ½ INCH OF CLEAN AGGREGATE WITH A VAPOR BARRIER). CGBSC 4.505.2.1.

OUTDOOR WATER USE
1. NEW CONSTRUCTION PROJECTS WITH AN AGGREGATE LANDSCAPE AREA EQUAL TO OR GREATER THAN 500 SQUARE FEET OR REHABILITATED LANDSCAPE PROJECTS WITH AN AGGREGATE LANDSCAPE AREA EQUAL TO OR GREATER THAN 1000 SQUARE FEET SHALL COMPLY WITH THE CITY OF MOUNTAIN VIEW MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). CGBSC 4.304.1.

INDOOR WATER USE
1. SHOW ON PLAN COMPLIANCE WITH WATER EFFICIENCY AND CONSERVATION THAT REQUIRES 20% SAVING IN POTABLE WATER USING AS A BASE LINE TABLE 4.303.1.
2. UNDER THE PRESCRIPTIVE USE A MAXIMUM FLOW RATE AS FOLLOWS PER CALGREEN SECTION 4.303.1.3.1, 4.303.1.3.2

2.1.	SHOWERHEADS	≤1.8 GALLON PER MINUTE (GPM) @ 80PSI
2.2.	LAVATORY FAUCET	≤1.2 GPM @ 60PSI
2.3.	KITCHEN FAUCETS	≤1.8 GPM @ 60PSI
2.4.	WATER CLOSET	≤1.28 GALLONS PER FLUSH

   - 2.5. AS AN ALTERNATIVE TO PRESCRIPTIVE COMPLIANCE, PROVIDE CALCULATIONS TO DEMONSTRATE 20% SAVING. (CGBSC, SECTION 4.303.1).
3. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. 4.303.1.3.2
4. SEE NOTE #14 ON SHEET M2.1 & M2.2 FOR ADD'L NEW PLUMBING INFORMATION.

HEATING, VENTILATION AND AIR CONDITIONING
1. INSTALL ENERGY STAR BATHROOM FANS ON TIMER OR HUMIDISTAT (CGBSC 4.507.2)
2. HEATING AND AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS:
   - 2.1. THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J-2011 (RESIDENTIAL LOAD CALCULATION), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
   - 2.2. DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D-2014 (RESIDENTIAL DUCT SYSTEMS), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
   - 2.3. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S-2014 (RESIDENTIAL EQUIPMENT SELECTION) OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
     EXCEPTION: USE OF ALTERNATE DESIGN TEMPERATURES NECESSARY TO ENSURE THE SYSTEMS FUNCTION ARE ACCEPTABLE.

ENVIRONMENTAL QUALITY, CGBSC DIV 4.5
PROVIDE PRODUCT CERTIFICATION AND SPECIFICATION TO SHOW COMPLIANCE WITH GREEN CODE.
1. GAS FIREPLACE SHALL HAVE A DIRECT-VENT SEALED COMBUSTION TYPE. ANY INSTALLED WOODSTOVE OR PELLET STOVE SHALL COMPLY WITH US EPA NEW SOURCE PERFORMANCE STANDARDS (NSPS) EMISSION LIMITS AS APPLICABLE, AND SHALL HAVE A PERMANENT LABEL INDICATING THEY ARE CERTIFIED TO MEET THE EMISSIONS LIMITS. WOODSTOVES, PELLET STOVES AND FIREPLACES SHALL ALSO COMPLY WITH APPLICABLE LOCAL ORDINANCES (CGBSC 4.503.1).
2. AT THE TIME OF ROUGH INSTALLATION OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET-METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM (CGBSC 4.504.1).
3. NOTE ON PLAN LIST OF ADHESIVES, SEALANT, CAULKING, PAINT, COATING WILL BE USED AND THE VOC CONTENT, VOC LIMITS SHALL BE ACCORDING TO CGBSC SECTIONS 4.504.2.1.

FINISHES
1. USE LOW-VOC INTERIOR WALL/CEILING PAINTS (150 GRAMS PER LETTER (GPL) VOCS REGARDLESS OF SHEEN) CGBSC 4.504.2.2
2. USE LOW-VOC COATINGS THAT MEET SCAQMD RULE 1113 (CGBSC 4.504.2.3)
3. ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE TESTING AND PRODUCT REQUIREMENTS OF ONE OF THE FOLLOWING: CGBSC 4.504.3.
   - 3.1. CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM.
   - 3.2. CALIFORNIA DEPARTMENT OF PUBLIC HEATH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350.)
   - 3.3. NSF/ANSI 140 AT THE GOLD LEVEL.
   - 3.4. SCIENTIFIC CERTIFICATIONS SYSTEMS INDOOR ADVANTAGE™ GOLD.
4. WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH ONE OR MORE OF THE FOLLOWING: CGBSC 4.504.4.
   - 4.1. VOC EMISSION LIMITS DEFINES IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE.
   - 4.2. PRODUCTS COMPLAINT WITH CHPS CRITERIA CERTIFIED UNDER THE GREEN GUARD CHILDREN & SCHOOLS PROGRAM.
   - 4.3. CERTIFICATION UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOOR SCORE PROGRAM.
   - 4.4. MEET THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL
   - 4.5. CHAMBERS,"VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350).
5. HARDWOOD PLYWOOD, PARTICLE-BOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDING SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED ON ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.), BY OR BEFORE THE DATES SPECIFIED IN THOSE SECTIONS, AS SHOWN IN TABLE 4.504.5.
6. ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 4.504.1

OTHER
1. AT THE TIME OF FINAL INSPECTION AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER (CGBSC SECTION 4.410).

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
05/31/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

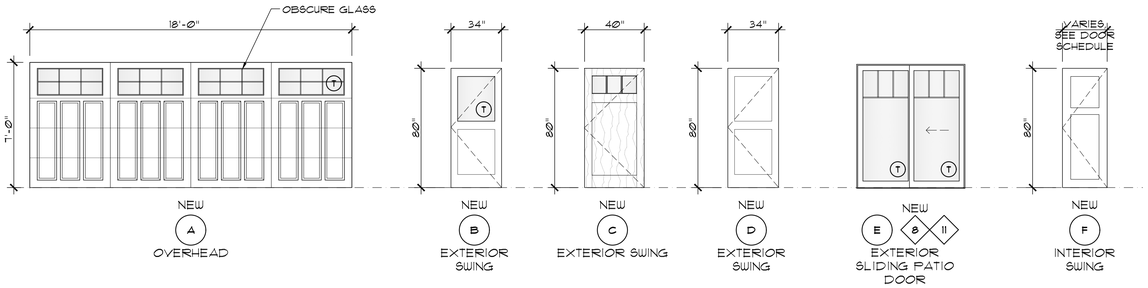
151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

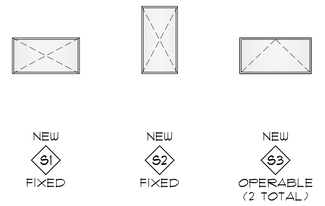
DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A5.2

DOOR TYPES



SKYLIGHT TYPES



DOOR NOTES

- (C) 20 MINUTE FIRE RATED, SELF-CLOSING GARAGE DOOR
- (W) FULL PERIMETER WEATHER STRIPPING
- (TH) THRESHOLD
- (T) TEMPERED GLASS. PROVIDE AT ALL HAZARDOUS LOCATIONS. SEE PLANS.

1. REFER TO SHEET A7.1 FOR DOOR, WINDOW AND SKYLIGHT SCHEDULES.
2. REFER TO SHEET A7.2 FOR DOOR, WINDOW AND SKYLIGHT TYPES.
3. REFER TO PLANS FOR DOOR SWING AND OPERATION TYPE.
4. ALL DOOR SIZES ARE NOMINAL, VERIFY DOOR ROUGH OPENING WITH DOOR MFR.
5. REPLACE ALL INTERIOR DOORS WITH NEW. INTERIOR DOORS TO BE PAINT GRADE WOOD OR MASONITE. SEE DOOR SCHEDULE AND DOOR SPECS.
6. HC: HOLLOW CORE DOOR.
7. SC: SOLID CORE DOOR
8. DOOR MANUFACTURER T.B.D.
9. ALL DOOR HARDWARE TO BE SELECTED BY OWNER, SEE DOOR HARDWARE SCHEDULE AND SPECS.
10. PROVIDE DOOR STOPS AS REQUIRED. LOCATED AT FLOOR, WALL, DOOR OR ETC.

WINDOW AND GLASS NOTES

- (W) FULL PERIMETER WEATHER STRIPPING
- (TH) THRESHOLD
- (T) TEMPERED GLASS. PROVIDE AT ALL HAZARDOUS LOCATIONS. SEE PLANS.
- (M) MULLED WINDOW SET
- (E) EGRESS WINDOW

1. ALL WINDOWS, SKYLIGHTS AND TRANSOMS TO HAVE DUAL GLAZED GLASS AND INSULATED FRAMES.
2. ALL GLASS DOORS TO HAVE DUAL GLAZED GLASS AND INSULATED FRAMES.
3. ALL BEDROOMS SHALL HAVE AT LEAST ONE OPERABLE WINDOW/DOOR WHICH MEETS THE CBC SECTION 1026.2 EXITING REQUIREMENTS. 5.7 S.F. NET CLEAR OPERABLE AREA, 24" MIN. NET CLEAR HEIGHT AND 20" MIN. NET CLEAR WIDTH. THE SILL OF SAID WINDOW SHALL NOT EXCEED 44" ABOVE THE FINISH FLOOR. DOORS TO EXTERIOR MAY SATISFY EXITING REQUIREMENTS. SEE PLANS FOR LOCATIONS.
4. ALL INTERIOR WINDOW FRAMES AND SASHES SHALL BE PRIMED WOOD, UNLESS OTHERWISE NOTED.
5. WINDOW MANUFACTURER: MARVIN ULTIMATE, TYPICAL U.N.O. REFER TO WINDOW ORDER FROM BRUCE BAUER.
6. REFER TO FLOOR PLAN AND ELEVATIONS FOR WINDOW AND DOOR SWINGS AND OPERATION.
7. ALL SKYLIGHTS TO BE ROYALITE OR VELUX. SINGLE LITE GLASS. EXTRUDED BRONZE FINISHED ALUMINUM EXTERIOR FRAME W/ LAMINATED SAFETY GLASS AT INNER PANE, AND TEMPERED GLASS AT EXTERIOR PANE. ALL UNITS TO CONFORM TO APPLICABLE CBC SECTIONS. THE NEW SKYLIGHT(S) SHALL BE TESTED AND LABELED IN COMPLIANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440 PER CRC SECTION R308.6.9.
8. ALL WINDOW AND DOOR HARDWARE TO BE SELECTED BY OWNER, SEE SPECS.
9. EXISTING WINDOW AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.

NEW DOOR SCHEDULE @ MAIN HOUSE & GARAGE

	DOOR TYPE	DOOR # (SYM)	QTY	ROOM	SIZE	THICK	HC. / SC.	MATERIAL	FINISH	NOTES	REMARKS
NEW	A	1	1	GARAGE OVERHEAD DOOR	(N)18'-0"W. x 7'-0"H. V.I.F.	-	SC.	WOOD, OBSCURE GLASS	STAIN, WALNUT CLEAR	W TH T	NEW EXTERIOR OVERHEAD GARAGE DOOR W/ OBSCURE GLASS, INSULATED
	B	2	1	GARAGE SWING DOOR	(N) SWING 2'-10"W x 6'-8"H	1-3/4"	SC.	WOOD/ GLASS	PAINT, DECORATOR'S WHITE	W TH T	NEW EXTERIOR DOOR W/ HALF LITE
	C	3	1	ENTRY, FRONT DOOR	(N) SWING 3'-4" x 6'-8"H.	1-3/4"	SC.	CLAD, GLASS	STAIN, WALNUT CLEAR	W TH T	NEW EXTERIOR CUSTOM FRONT DOOR. SEE TYPE AND ELEVATION FOR ADDITIONAL INFORMATION.
	B	4	1	ENTRY, BASEMENT DOOR	(N) SWING 3'-4" x 6'-8"H.	1-3/4"	SC.	WOOD	PAINT, DECORATOR'S WHITE	W TH T	NEW EXTERIOR DOOR
	E	5 6	2	FAMILY & PRIMARY BEDROOM	(N) SLIDING PATIO DOOR F.S. 73 1/8"W x 82"H R.O. 73 5/8"W x 82 1/2"H	-	-	CLAD, GLASS	WHITE INTERIOR, BRONZE EXTERIOR	W TH T	NEW EXTERIOR SLIDING PATIO DOOR W/ SCREEN, SEE WINDOW TYPES 8 AND 11
	B	7	1	LAUNDRY / MUDROOM	(N)INSWING DOOR F.S. 31 7/16"W x 82"H R.O. 32 7/16" x 82 1/2"	1-3/4"	SC.	WOOD, GLASS	PAINT, DECORATOR'S WHITE	W TH T	NEW EXTERIOR SWING DOOR
	F	8	1	LAUNDRY / PRIMARY BEDROOM	(N) SWING 2'-6" x 6'-8"H	1-3/8"	SC.	WOOD	PAINT, CHATILLY LACE		NEW INTERIOR SWING DOOR, SOLID CORE AT LAUNDRY, BEDROOMS
	F	10	1	PRIMARY BEDROOM	(N) SWING 2'-6" x 6'-8"H	1-3/8"	HC.	WOOD	PAINT, CHATILLY LACE		NEW INTERIOR SWING DOOR, HOLLOW CORE AT CLOSETS, PANTRYS
	G	11	1	PRIMARY BEDROOM, CLOSET	PAIR OF SWING 2'-6"W x 6'-8"H	1-3/8"	HC.	WOOD	PAINT, CHATILLY LACE		NEW INTERIOR PAIR OF SWING DOOR W/ BALL CATCH, HOLLOW CORE AT CLOSETS
	H	12 13	2	PRIMARY BATH	(N) POCKET 2'-8"W x 6'-8"H	1-3/8"	SC.	WOOD	PAINT, CHATILLY LACE		NEW INTERIOR POCKET DOOR, SOLID CORE AT BATH

EXISTING DOOR SCHEDULE @ MAIN HOUSE & GARAGE

	DOOR TYPE	DOOR # (SYM)	QTY	ROOM	SIZE	THICK	HC. / SC.	MATERIAL	FINISH	NOTES	REMARKS
EXISTING	I	9	4	PRIMARY BEDROOM, P.R. OFFICE, OFFICE BATH	(E.) SWING 2'-6" x 6'-8"H	-	-	WOOD	PAINT, CHATILLY LACE		EXISTING INTERIOR SWING DOORS TO REMAIN

SKYLIGHT SCHEDULE, NEW

	SYM.	QTY	ROOM	FUNCTION	SIZE	FRAME / MATERIAL	FINISH	NOTES	MFR	MODEL #	GLASS	U-FACTOR	SHADE	REMARKS
NEW	S1	1	PRIMARY BATH.	FIXED	(NEW) 22" x 46" V.I.F.	METAL	FACTORY PAINT	T	VELUX	FCM2246 V.I.F.	FLAT, OPAQUE (WHITE LAMINATE) GLASS	.53	LIGHT FILTERING SHADE	CURB MOUNT, FIELD VERIFY SIZE & COUNT PRIOR TO FRAMING OR ORDERING SKYLIGHTS.
	S2	1	PRIMARY SUITE	FIXED	(NEW) 22" x 46" V.I.F.	METAL	FACTORY PAINT	T	VELUX	FCM2246 V.I.F.	FLAT, OPAQUE (WHITE LAMINATE) GLASS	.53	NONE	CURB MOUNT, FIELD VERIFY SIZE PRIOR TO FRAMING OR ORDERING SKYLIGHTS. SOLAR VENTING W/ INTEGRATED RAIN SENSOR.
	S3	2	GARAGE	OPERABLE, SOLAR VENTING W/ INTEGRAL RAIN SENSOR	(NEW) 22" x 46" V.I.F.	METAL	FACTORY PAINT	T	VELUX	VCS-2246	FLAT, OPAQUE (WHITE LAMINATE) GLASS	.53	NONE	CURB MOUNT, FIELD VERIFY SIZE PRIOR TO FRAMING OR ORDERING SKYLIGHTS. SOLAR VENTING W/ INTEGRATED RAIN SENSOR.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

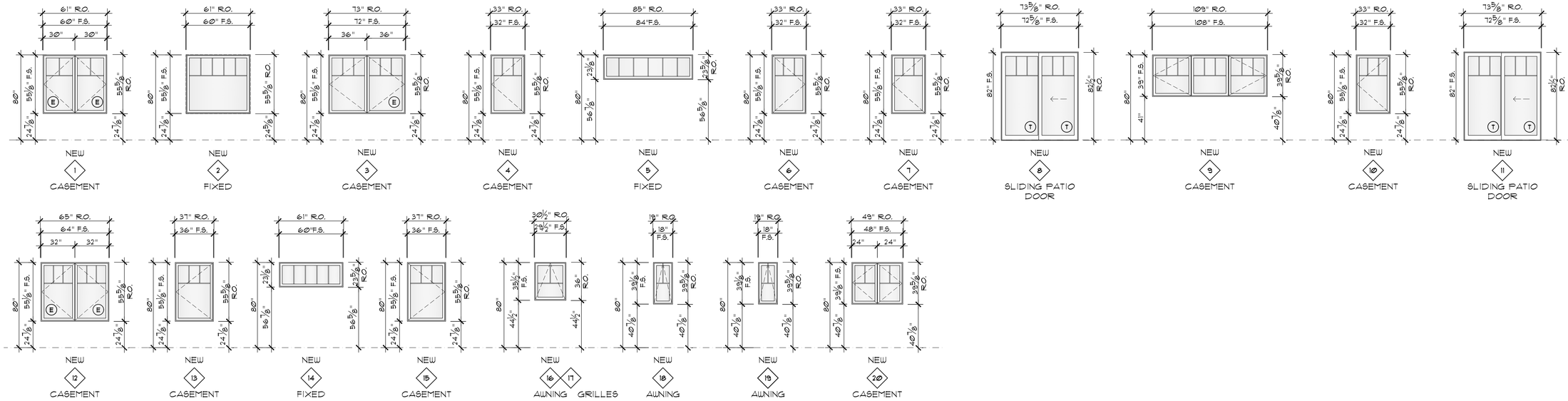
151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A7.0

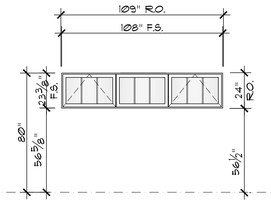
NEW WINDOW TYPES @ MAIN HOUSE



NEW WINDOW SCHEDULE @ MAIN HOUSE & GARAGE

	WINDOW TYPE	WINDOW # (SYM.)	QTY	ROOM	FUNCTION	SIZE	FRAME / MATERIAL	FINISH	NOTES	MFR	MODEL #	GLASS	GRILLE	U-FACTOR	SHGC	SCREEN	REMARKS
NEW	1	1	1	OFFICE	FRENCH CASEMENT, PUSH-OUT	F.S. 60"W X 55 1/8"H R.O. 61"W X 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (E) (M)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø.3	.18	YES	-
	2	2	1	LIVING	FIXED	F.S. 60" X 55 1/8" R.O. 61"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø28	.12	NO	-
	3	3	1	FAMILY	FRENCH CASEMENT	F.S. 72"W x 55 1/8"H R.O. 73"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	4	4	1	FAMILY	CASEMENT	F.S. 32"W x 55 1/8"H R.O. 33"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (M)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	5	5	1	FAMILY	AWNING, CLERESTORY	F.S. 84"W x 23 1/8"H R.O. 85"W x 23 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø27	.2	NO	-
	6	6	1	FAMILY	CASEMENT	F.S. 32"W x 55 1/8"H R.O. 33"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	7	7	1	FAMILY	PUSH-OUT CASEMENT	F.S. 32"W x 55 1/8"H R.O. 33"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (T)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	8	8	1	FAMILY	SLIDING PATIO DOOR	F.S. 72 5/8"W x 82"H R.O. 73 5/8"W x 82 1/2"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (E) (T) (M)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.19	YES	-
	9	9	1	KITCHEN	CASEMENT, FIXED, CASEMENT	F.S. 108"W x 39 1/8"H R.O. 109"W x 39 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	10	10	1	PRIMARY BEDROOM	PUSH-OUT CASEMENT	F.S. 32"W x 55 1/8"H R.O. 33"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (T)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	11	11	1	PRIMARY BEDROOM	SLIDING PATIO DOOR	F.S. 73 1/8"W x 82"H R.O. 73 5/8"W x 82 1/2"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (E) (T)	MARVIN	ULTIMATE, CLAD	OPAQUE, LOW-E GLASS	YES	Ø29	.19	YES	-
	12	12	1	PRIMARY BEDROOM	PUSH-OUT CASEMENT	F.S. 64"W x 55 1/8"H R.O. 65"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	13	13	1	PRIMARY BEDROOM	PUSH-OUT CASEMENT	F.S. 36"W x 55 1/8"H R.O. 37"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (M)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	14	14	1	PRIMARY BEDROOM	AWNING, CLERESTORY	F.S. 60"W x 23 1/8"H R.O. 61"W x 23 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (M)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø27	.2	NO	-
	15	15	1	PRIMARY BEDROOM	PUSH-OUT CASEMENT	F.S. 36"W x 55 1/8"H R.O. 37"W x 55 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.18	YES	-
	16	16	1	PRIMARY BATH SHOWER	AWNING	F.S. 29"W x 35"H R.O. 30"W x 36"H	⚠ FIBERGLASS	WHITE INTERIOR, BRONZE EXTERIOR	(W) (T)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø28	.18	YES	-
	17	17	1	PRIMARY BATH SHOWER GRILLES	MATERIALS BLS TO APPLY INTERIOR - EXTERIOR GRILLES		WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR		MARVIN	ULTIMATE, CLAD	-	YES	-	-	-	-
	18	18	1	PRIMARY BATH TOILET	AWNING	F.S. 18"W x 39 1/8"H R.O. 19"W x 39 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	19	19	1	LAUNDRY / MUDROOM	AWNING	F.S. 18"W x 39 1/8"H R.O. 19"W x 39 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W) (T)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	20	20	1	LAUNDRY / MUDROOM	PUSH-OUT CASEMENT	F.S. 48"W x 39 1/8"H R.O. 49"W x 39 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	-
	21	21A, 21B, 21C	3	GARAGE	AWNING, FIXED, AWNING	F.S. 108"W x 23 1/8"H R.O. 109"W x 23 5/8"H	WOOD INTERIOR & CLAD EXTERIOR	WHITE INTERIOR, BRONZE EXTERIOR	(W)	MARVIN	ULTIMATE, CLAD	CLEAR, LOW-E GLASS	YES	Ø29	.17	YES	

NEW WINDOW TYPES @ GARAGE



NEW @ GARAGE

21A 21B 21C

AWNING, FIXED, AWNING

WINDOW AND GLASS NOTES

- (W) FULL PERIMETER WEATHER STRIPPING
- (TH) THRESHOLD
- (T) TEMPERED GLASS. PROVIDE AT ALL HAZARDOUS LOCATIONS. SEE PLANS.
- (M) MULLED WINDOW SET
- (E) EGRESS WINDOW

1. ALL WINDOWS, SKYLIGHTS AND TRANSOMS TO HAVE DUAL GLAZED GLASS AND INSULATED FRAMES.
2. ALL GLASS DOORS TO HAVE DUAL GLAZED GLASS AND INSULATED FRAMES.
3. ALL BEDROOMS SHALL HAVE AT LEAST ONE OPERABLE WINDOW/DOOR WHICH MEETS THE CBC SECTION 1026.2 EXITING REQUIREMENTS. 5.7 SF. NET CLEAR OPERABLE AREA, 24" MIN. NET CLEAR HEIGHT AND 20" MIN. NET CLEAR WIDTH. THE SILL OF SAID WINDOW SHALL NOT EXCEED 44" ABOVE THE FINISH FLOOR. DOORS TO EXTERIOR MAY SATISFY EXITING REQUIREMENTS. SEE PLANS FOR LOCATIONS.
4. ALL INTERIOR WINDOW FRAMES AND SASHES SHALL BE PRIMED WOOD, UNLESS OTHERWISE NOTED.
5. WINDOW MANUFACTURER: MARVIN ULTIMATE, TYPICAL U.N.O. REFER TO WINDOW ORDER FROM BRUCE BAUER.
6. REFER TO FLOOR PLAN AND ELEVATIONS FOR WINDOW AND DOOR SWINGS AND OPERATION.
7. ALL SKYLIGHTS TO BE ROYALITE OR VELUX. SINGLE LITE GLASS. EXTRUDED BRONZE FINISHED ALUMINUM EXTERIOR FRAME w/ LAMINATED SAFETY GLASS AT INNER PANE, AND TEMPERED GLASS AT EXTERIOR PANE. ALL UNITS TO CONFORM TO APPLICABLE CBC SECTIONS. THE NEW SKYLIGHT(S) SHALL BE TESTED AND LABELED IN COMPLIANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440 PER CRC SECTION R308.6.9.
8. ALL WINDOW AND DOOR HARDWARE TO BE SELECTED BY OWNER. SEE SPECS.
9. EXISTING WINDOW AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT DAVID ANDREW BARNA C-36482 REGISTERED PROFESSIONAL ARCHITECT STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

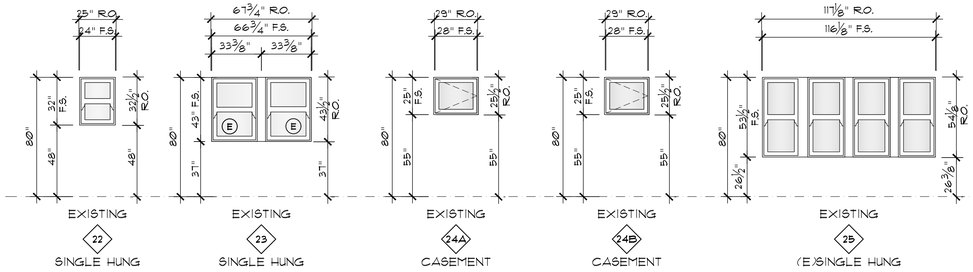
APN: 170-41-030

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A7.1

EXISTING WINDOW TYPES @ MAIN HOUSE



EXISTING WINDOW SCHEDULE @ MAIN HOUSE

EXISTING TO REMAIN

WINDOW TYPE	WINDOW # (SYM)	QTY	ROOM	FUNCTION	SIZE	FRAME / MATERIAL	FINISH	NOTES	MFR	MODEL #	GLASS	GRILLE	U-FACTOR	SHGC	SCREEN	REMARKS
22	22	1	EXISTING BATH	(E)SINGLE HUNG	(E) 24"W x 32"H V.I.F.	WOOD INTERIOR & EXTERIOR	WHITE INTERIOR & EXTERIOR	W E M	EXISTING	(E)WOOD	(E)SINGLE PANE GLASS	NO	-	-	-	EXISTING WINDOW TO REMAIN (HISTORIC)
23	23	1	OFFICE	(E)SINGLE HUNG	(E) 66 3/4"W x 43"H V.I.F.	WOOD INTERIOR & EXTERIOR	WHITE INTERIOR & EXTERIOR	W M	EXISTING	(E)WOOD	(E)SINGLE PANE GLASS	NO	-	-	-	EXISTING WINDOW TO REMAIN (HISTORIC)
24A	24A	1	LIVING	(E)CASEMENT	(E) 28"W x 25"H V.I.F.	WOOD INTERIOR & EXTERIOR	WHITE INTERIOR & EXTERIOR	W	EXISTING	(E)WOOD	(E)SINGLE PANE GLASS	NO	-	-	-	EXISTING WINDOW TO REMAIN (HISTORIC)
24B	24B	1	LIVING	(E)CASEMENT	(E) 28"W x 25"H V.I.F.	WOOD INTERIOR & EXTERIOR	WHITE INTERIOR & EXTERIOR	W	EXISTING	(E)WOOD	(E)SINGLE PANE GLASS	NO	-	-	-	EXISTING WINDOW TO REMAIN (HISTORIC)
25	25	1	DINING	(E)SINGLE HUNG	(E) 116 1/8"W x 53 1/2"H V.I.F.	WOOD INTERIOR & EXTERIOR	WHITE INTERIOR & EXTERIOR	W M	EXISTING	(E)WOOD	(E)SINGLE PANE GLASS	NO	-	-	-	EXISTING WINDOW TO REMAIN (HISTORIC)

WINDOW AND GLASS NOTES

- (W) FULL PERIMETER WEATHER STRIPPING
- (TH) THRESHOLD
- (T) TEMPERED GLASS. PROVIDE AT ALL HAZARDOUS LOCATIONS. SEE PLANS.
- (M) MULLED WINDOW SET
- (E) EGRESS WINDOW

1. ALL WINDOWS, SKYLIGHTS AND TRANSOMS TO HAVE DUAL GLAZED GLASS AND INSULATED FRAMES.
2. ALL GLASS DOORS TO HAVE DUAL GLAZED GLASS AND INSULATED FRAMES.
3. ALL BEDROOMS SHALL HAVE AT LEAST ONE OPERABLE WINDOW/DOOR WHICH MEETS THE CBC SECTION 1026.2 EXITING REQUIREMENTS. 5.7 SF. NET CLEAR OPERABLE AREA, 24" MIN. NET CLEAR HEIGHT AND 20" MIN. NET CLEAR WIDTH. THE SILL OF SAID WINDOW SHALL NOT EXCEED 44" ABOVE THE FINISH FLOOR. DOORS TO EXTERIOR MAY SATISFY EXITING REQUIREMENTS. SEE PLANS FOR LOCATIONS.
4. ALL INTERIOR WINDOW FRAMES AND SASHES SHALL BE PRIMED WOOD, UNLESS OTHERWISE NOTED.
5. WINDOW MANUFACTURER: MARVIN ULTIMATE, TYPICAL U.N.O.. REFER TO WINDOW ORDER FROM BRUCE BAUER.
6. REFER TO FLOOR PLAN AND ELEVATIONS FOR WINDOW AND DOOR SWINGS AND OPERATION.
7. ALL SKYLIGHTS TO BE ROYALITE OR VELUX. SINGLE LITE GLASS. EXTRUDED BRONZE FINISHED ALUMINUM EXTERIOR FRAME w/ LAMINATED SAFETY GLASS AT INNER PANE AND TEMPERED GLASS AT EXTERIOR PANE. ALL UNITS TO CONFORM TO APPLICABLE CBC SECTIONS. THE NEW SKYLIGHT(S) SHALL BE TESTED AND LABELED IN COMPLIANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440 PER CRC SECTION R308.6.9.
8. ALL WINDOW AND DOOR HARDWARE TO BE SELECTED BY OWNER. SEE SPECS.
9. EXISTING WINDOW AND DOORS TO REMAIN AS NOTED. THE RE-USE OF EXISTING WINDOWS ARE ENCOURAGED (INCLUDING WINDOWS NOT FACING STREET). IT IS ALSO ENCOURAGED THAT ALL WINDOWS NOT BEING RE-USED SHALL BE STORED ON SITE AS A PART OF THE MILLS ACT TO BE USED AS REPLACEMENT LATER IF A WINDOW IS DAMAGED IN FUTURE.

BROWNHOUSE DESIGN

DESIGNER:
BROWNHOUSE DESIGN, INC.
101 MAIN ST. LOS ALTOS, CA 94022

ARCHITECT OF RECORD:
DAVID BARNA, ARCHITECT
270 PROMISE WAY
HOLLISTER, CA 95023

LICENSED ARCHITECT
DAVID ANDREW BARNA
C-36482
09/30/23
RENEWAL
STATE OF CALIFORNIA

CITY SUBMITTAL

BID SET

FINISH PLANS

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
REPONSE TO PLANNING 05/27/2022	LM
REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022

APN: 170-41-030

DRAWN BY: LM/DB
CHECKED BY: DB
SCALE: 1/4" = 1'-0"
DATE: 07/11/2022

A7.2

DATE: August 8, 2022

AGENDA ITEM #5

AGENDA REPORT

TO: Historical Commission

FROM: Jia Liu, Associate Planner

SUBJECT: HPA22-0001 – 151 Hawthorne Avenue

RECOMMENDATION:

Recommend approval to the City Council to authorize the City Manager to execute a Mills Act agreement with the property owners for 151 Hawthorne Avenue

---

BACKGROUND

The historic property, which is identified as a Historic Resource on the City's Historic Resources Inventory (HRI) is located on Hawthorne Avenue between South San Antonio Road and Eleanor Avenue. The main house on the property was designed with the Craftsman bungalow architectural style and originally constructed in 1922.

At the time of construction, the house was located within Fremont Township in Santa Clara County surrounded by orchards. The ownership before 1965 is unknown, but at least a rear addition occurred in 1950s. In the 1970s, during the ownership of Bruce Wales Palmer, an inground swimming pool was constructed along with other changes occurred including the addition of a door on the west elevation, new fencing, a new roof, furnace, and at least two kitchen and two bath remodels.

On July 25, 2022, the Historical Commission will review an advisory review application under the Historic Alteration Permit H22-0001 for a 609 square-foot addition to the existing single-family residence, 26 square-foot addition to the existing basement, and a 544 square-foot, detached two-car garage and 296 square-foot, one-car carport attached to the proposed garage.

DISCUSSION

Historic Assessment
As outlined in the Historic Evaluation and Secretary of the Interior Standards for the Treatment of Historic Properties Review and the Mills Act Application Recommendation Letter prepared by Stacey De Shazo with Evans & De Shazo, Inc. (Attachment B and C, respectively), the Historic Evaluation Report assessed the existing historic resource and the proposed rehabilitation project and made the following determinations:

- It is confirmed that the existing historic resource with its Craftsman bungalow architectural style retains all seven aspects of integrity; and therefore, the existing house is a qualified historic property and eligible for the Mills Act.
- It is found that the proposed rehabilitation project meets the Secretary of Interior Standards for Rehabilitation that is analyzed below. Therefore, the proposed rehabilitation will not impact the integrity of the historic resource and still make the house eligible for the Mills Act.

The character defining features of the structure are associated with Craftsman bungalow design, including the one-story structure form, multi-front-gabled form, low-pitched roof with wide overhanging eaves, exposed rafters and beams, recessed porch set under an extending porch roof, battered porch columns, wood casement windows, and double-hung wood windows.

The rehabilitation application includes a 609 square-foot addition to the existing single-family residence, 26 square-foot addition to the existing basement, and a 544 square-foot, detached two-car garage and 296 square-foot, one-car carport attached to the proposed garage. The addition will occur to the rear of the house that will result in 13 original double-hung windows with lugs located on non-visible elevations to be removed which is found consistent with the Secretary of the Interior's Standards for the for the Treatment of Historic Properties. In addition to the modifications caused by the addition, non-original features including two picture windows and one entry door will also be replaced. New windows and doors are designed compatible with the Craftsman bungalow style but not be duplicated to the original windows which will not create the false sense of historic development.

The project also consists of the removal of the existing shed, infilling an inground swimming pool, and refining the associated landscaping. As evaluated by the subject historian, they are not associated with any known architectural style, form, or architectural landscape design or landscape planning; therefore, they are not historic characters. The proposed new garage is in the approximate location of the shed, and it is new construction and is designed to be compatible with the ca. 1922 house in design, form, scale, and materials. In addition, the new garage will be situated behind a wooden fence and not visible from Hawthorne Avenue.

Overall, the new addition and exterior modifications would not impair the original design or form of the existing historic resource and will meet the Secretary of Interior Standards for Rehabilitation, which continues to make the house eligible for Mills Act after rehabilitation.

Analysis

The City of Los Altos currently has 14 Mills Act agreements for properties located in Los Altos. The Mills Act provides for a reduction in property taxes for qualified historic properties. The Act represents a current use assessment for qualified properties, also known as a contract assessment. The property owner must enter into a preservation agreement, which allows the owner to enjoy a reduced property tax rate from the County Assessor in exchange for the preservation, and in some cases, restoration and rehabilitation, of the historic structure. The County Assessor sets the property tax rate based on an appraisal of the market value of the land and improvements related to the historic structure. A property under an agreement will receive a property tax reduction based on an appraisal of the rental value of the land and improvements related to the historic structure. In

accordance with Municipal Code Chapter 12.44.170, the City Council may approve Mills Act agreements as an incentive for preserving historic properties.

The standard term of a Mills Act agreement is for ten years with an automatic renewal clause each year. It is important to note that, both parties have the option to exercise their right to revoke the agreement should they desire to do so at a future date. The agreement also includes a requirement that all money saved on property taxes must be invested into the preservation, restoration and/or enhancement of the historic structure. A schedule of improvements to the structure and property has been included as Exhibit B in the draft agreement (Attachment D).

Based on the recommendations from the historian (Attachment D), the historic resource at 151 Hawthrone Avenue continue to be architecturally significant, according to state and local criteria, and remains a significant historic resource and would be appropriate for consideration of a Mills Act contract.

Environmental Review
this designation is classified as an historic resource restoration/rehabilitation/ preservation project and is categorically exempt from environmental review under Section 15331 of the California Environmental Quality Act

RECOMMENDATION
Staff recommends that the Historical Commission recommend that the City Council request the City Manager execute a Mills Agreement with the property owners of 151 Hawthorne Avenue

Cc: Brown House Design, Applicant and Designer
Karen Scussel & Curt Riffle, Owners

Attachments
A. Site Map
B. Resolution No. 2022-__
C. Historic Evaluation and Secretary of the Interior Standards for the Treatment of Historic Properties Review, Stacey De Shazo
D. Mills Act Application Recommendation Letter, Stacey De Shazo
E. Historic Preservation Agreement

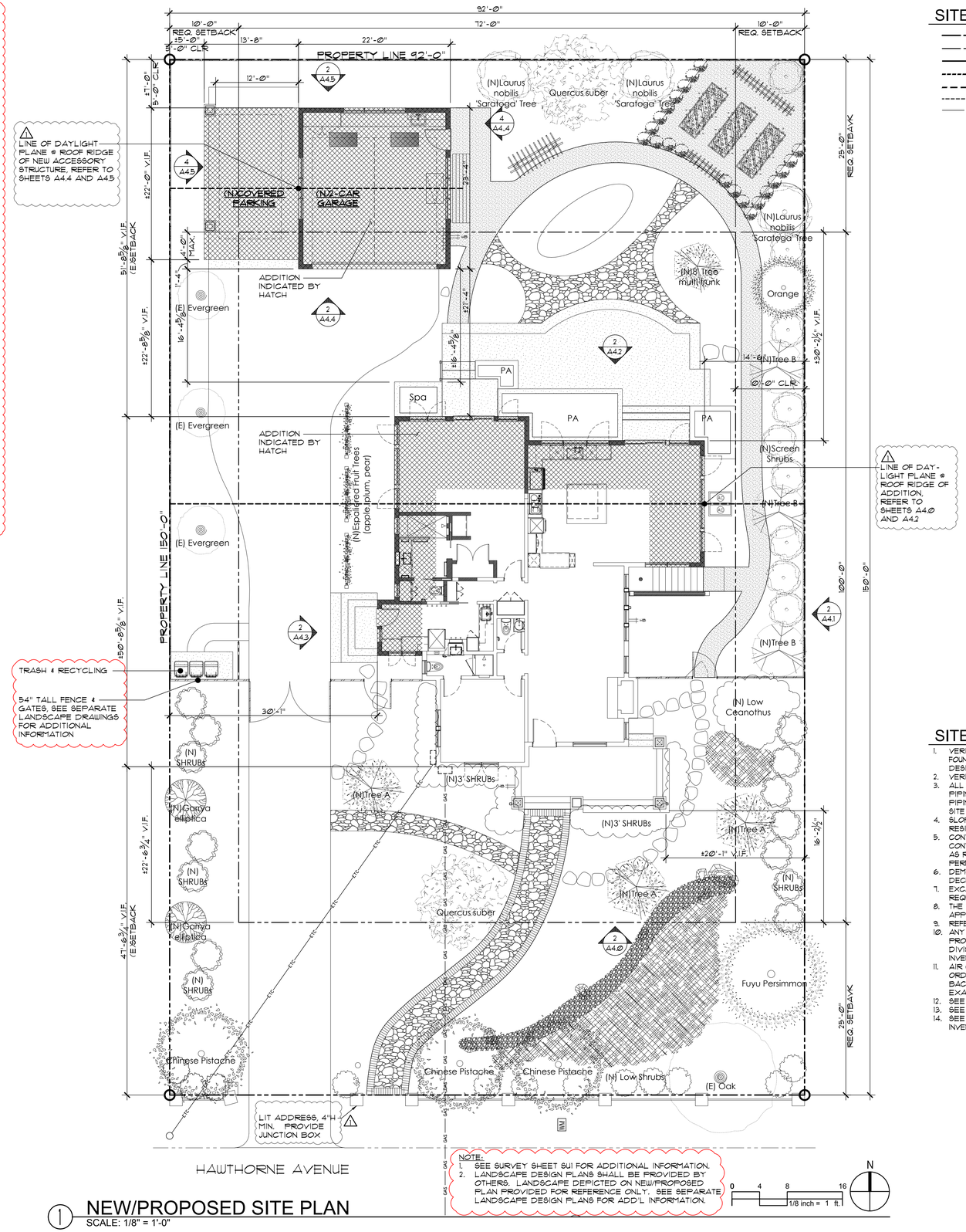
TREE PLANTING SCHEDULE ⚠

*NOTE: TREE PLANTING SCHEDULE PROVIDED FOR REFERENCE. SEE SEPARATE LANDSCAPE DESIGN DRAWINGS AND TREE PLANTING SCHEDULE BY GARDEN SENSE, INC (ATTN: JANET BELL).

Tree Planting Schedule
Scussel-Riffle Residence, 151 Hawthorne Ave., Los Altos
Garden Sense, Inc. Landscape Plan v1.2-2022

Common Name	Number of Trees	Size (Gallons/Boxes)	Comment
Cork Oak	2	24" or 36"	Quercus suber – the branching structure is typically better on the larger trees
Chinese Pistache	3	36"	These grow relatively slowly so preferable to get a larger tree
Fuyu Persimmon	1	24" if available	Difficult to find larger than a 15-gallon and these are typically small
Laurus nobilis 'Saratoga' Tree	3	15-gallon or 24" box	Standard Tree; (2) at Rear yard and (1) at side yard
Orange	1	24" if available	
Fuji Apple	1	15-gallon	Espaliered
Santa Rosa Plum	1	15-gallon	Espaliered
Asian Pear	1	15-gallon	Espaliered
Tree A	3	15-gallon	Species TBD; front yard; height 10' to 12'.
Tree B	3	15-gallon or 24" box	Species TBD; side yard; height: 10'to 16'
Henry Lauder's Walking Stick	1	15-gallon	Multi-trunk; height 8'
Redwood	3		Existing; (remove 2 of 5 for spacing)
Live Oak	1		Existing

Notes:
- 11 trees will be removed (4 olive, 4 palm, 1 deodara cedar, 2 redwood)
- 4 trees will be retained (1 live oak, 3 redwood) – see above
- 20 new trees will be planted - see above



1 NEW/PROPOSED SITE PLAN
SCALE: 1/8" = 1'-0"

SITE PLAN LEGEND

- PROPERTY LINE
- SETBACK LINE OR LINE OF EASEMENT
- OUTLINE OF RESIDENCE FOOTPRINT
- UTILITY LINE - UNDER GROUND
- UTILITY LINE - OVERHEAD
- P.U.E & DRAINAGE EASEMENT.
- FENCE / GATE
- AREA OF (E) RESIDENCE
- AREA OF RESIDENCE TO BE REMODELED.
- AREA OF ADDITION
- DS. DOWNSPOUT CONNECTED TO UNDERGROUND DRAINAGE PIPING
- TREE INVENTORY SYMBOL (NUMBER)

SITE PLAN NOTES

1. VERIFY ALL SETBACK DIMENSIONS NOTED ON THE SITE PLAN, FLOOR PLANS, AND FOUNDATION PLAN IN THE FIELD PRIOR TO COMMENCING THE WORK. NOTIFY THE DESIGNER IMMEDIATELY OF ANY AND ALL DISCREPANCIES.
2. VERIFY IN THE FIELD ALL GRADES AND STEP DIMENSIONS.
3. ALL DOWNSPOUTS SHALL BE CONNECTED TO THE EXISTING UNDERGROUND DRAINAGE PIPING. COORDINATE SITE AND FOUNDATION UNDERGROUND RAINWATER DRAINAGE PIPING FROM THE DOWNSPOUTS TO THE EXISTING BUBBLERS W/ WHAT IS SHOWN ON THE SITE PLAN.
4. SLOPE FINISH GRADE 6" PER 10'-0" (5%) A MINIMUM DISTANCE OF 5'-0" AWAY FROM THE RESIDENCE FOUNDATION AT AREAS OF NEW CONSTRUCTION.
5. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL UTILITY CONNECTIONS. CONTRACTOR TO PROVIDE ALL NEW UTILITY CONNECTIONS AND/OR UPGRADE EXISTING AS REQUIRED TO ACCOMPLISH WORK. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS AS REQUIRED BY THE JURISDICTION WITH AUTHORITY.
6. DEMOLISH AND REMOVE EXISTING RESIDENCE, WALKWAYS, CONCRETE SLABS, WOOD DECKS, FENCES, ETC. AS REQUIRED TO FOR NEW CONSTRUCTION.
7. EXCAVATE OR FILL SITE AS REQUIRED PER PLANS, SOILS REPORTS (IF ANY), AND CBC REQUIREMENTS.
8. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND APPROVALS INCLUDING ASBESTOS ABATEMENT, (IF NEC), AS PART OF THE BID.
9. REFER TO THE DEMOLITION PLAN ON SHEET A2.0 FOR FURTHER NOTES AND INFORMATION.
10. ANY UNDERGROUND UTILITY TRENCH WORK SHALL AVOID THE DRIP-LINES OF ALL PROTECTED TREES UNLESS APPROVED BY PROJECT ARBORIST AND THE PLANNING DIVISIONS. PROTECTED TREES LISTED ON THIS SHEET TREE INVENTORY LISTED ON TREE INVENTORY.
11. AIR CONDITIONER SHALL MEET THE REQUIREMENTS OF THE LOS ALTOS NOISE CONTROL ORDINANCE CHAPTER 6.16 AND BE IN COMPLIANCE WITH PLANNING DEPARTMENTS SET BACK REQUIREMENTS. (N)AIR CONDITIONER ON (N)CONCRETE CURB, FIELD VERIFY EXACT LOCATION WITH OWNER AND BROWNHOUSE DESIGN
12. SEE SEPARATE LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.
13. SEE SEPARATE SURVEY DRAWINGS FOR ADDITIONAL INFORMATION.
14. SEE SEPARATE TREE INVENTORY PROVIDED FOR REFERENCE. SEE SEPARATE TREE INVENTORY REPORT BY MCGUIRE TREE CARE, INC.

BROWNHOUSE DESIGN
DESIGNER:
BROWNHOUSE DESIGN, INC.
164 MAIN ST. LOS ALTOS, CA 94022

REVISIONS	BY
90% SET 12/16/2021	LM
PLANNING 01/10/2022	LM
⚠1 REPONSE TO PLANNING 05/27/2022	LM
⚠2 REPONSE TO MILLS ACT 07/06/2022	LM

DO NOT SCALE THE DRAWINGS! DIMENSIONS TAKE PRECEDENCE. REPORT ANY AND ALL DISCREPANCIES TO THE DESIGNER.

WHEN PRINTING PDF: SET SCALE TO "NONE" OTHERWISE DRAWING WILL NOT PRINT TO SCALE.

SCUSSEL-RIFFLE RESIDENCE REMODEL

151 HAWTHORNE AVENUE
LOS ALTOS, CA 94022
APN: 170-41-030

DRAWN BY: LM
SCALE: AS NOTED
DATE: 07/06/2022

A1.1

RESOLUTION NO. 2022-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALTOS AUTHORIZING THE CITY MANAGER TO ENTER INTO A MILLS ACT AGREEMENT WITH THE PROPERTY OWNERS OF 151 HAWTHORNE AVENUE

WHEREAS, Government Code Sections 50280 et seq. authorizes a city to enter into a historical property contract with the owner of any qualified historical property to restrict the use of such property so that it retains its historically significant characteristics in return for which the property owner obtains property tax relief; and

WHEREAS, the City of Los Altos is a community that celebrates its history, the rich past that is incorporated into the fabric of the City and provides a link to the community's heritage and the remaining sites and structures of architectural and/or historic significance that enhance the community's unique character and contribute to a sense of place; and

WHEREAS, in accordance with that Historic Preservation Ordinance (LAMC Chapter 12.44), the Historical Commission held a public hearing on September 7, 1997 and made positive findings pursuant to Section 12.44.060(c.), that the proposed historic resource structure at 151 Hawthorne Ave is more than 50 years in age, retains sufficient historic integrity, and is historically significant; and

WHEREAS, by virtue of its adoption of the Historic Preservation Ordinance (LAMC Chapter 12.44), the City Council of the City of Los Altos provides that designated historic resources and landmark structures of merit, and structures located in historic districts that are privately owned shall be considered qualified historical properties eligible to enter into historic preservation (Mills Act) agreements with the City; and

WHEREAS, the Historical Commission held a public meeting on August 8, 2022 to consider the request to execute a historic preservation agreement on the subject property and directed City staff to forward a recommendation to the City Council in support of the application; and

WHEREAS, in accordance with the historic preservation agreement, the property owner shall every five years commencing on the fifth anniversary of the effective date of the historic preservation agreement submit to the City an updated ten (10) year schedule of potential home repair, maintenance and improvement, and submit documentation for all repairs, maintenance, and improvements which have been completed since the Effective Date.

WHEREAS, this designation is classified as an historic resource restoration/rehabilitation/ preservation project and is categorically exempt from environmental review under Section 15331 of the California Environmental Quality Act; and

WHEREAS, the City Council of the City of Los Altos concurs with the recommendation of the Historical Commission to execute a historic preservation agreement on the subject property.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Los Altos hereby authorizes the City Manager to enter into a Mills Act Agreement with the owners of 151 Hawthorne Avenue subject to the terms and conditions outlined the Historic Preservation 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 _____ day of _____2022 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Anita Enander, MAYOR

Attest:

_____
Angel Rodriguez, CITY CLERK

EVANS & DE SHAZO
ARCHAEOLOGY HISTORIC PRESERVATION

HISTORIC RESOURCE EVALUATION AND SECRETARY OF INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES REVIEW OF THE PROPERTY LOCATED AT 151 HAWTHORNE AVENUE, LOS ALTOS, SANTA CLARA COUNTY, CALIFORNIA

SUBMITTED TO:
Karen Scussel and Curt Riffle
klscussel@gmail.com

SUBMITTED BY:
Stacey De Shazo, M.A.
Principal Architectural Historian
stacey@evans-deshazo.com

Updated July 8, 2022

Evans & De Shazo, Inc
1141 Gravenstein Highway South,
Sebastopol, CA 95472
707-823-7400
www.evans-deshazo.com

TABLE OF CONTENTS

INTRODUCTION

Evans & De Shazo, Inc. (EDS) completed a Historic Resource Evaluation (HRE) and a Secretary of Interior's Standards for the Treatment of Historic Properties (Standards) review for the proposed project at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California within a 0.3-acres Assessor's Parcel Number (APN) 170-41-030 (Property). The Property includes a ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape. The proposed project consists of alterations to the ca. 1922 house, including changes to the exterior primary façade, an addition along the rear of the house, demolition of the ca. 1922 shed, infilling of the 1972 inground swimming pool, and the construction of a new garage. The ca. 1922 house within the Property is currently listed on the Office of Historic Preservation's (OHP) Built Environment Resources Directory (BERD) (P-43-002072) and within the City of Los Altos Historic Inventory (2013). Therefore, the ca. 1922 house is considered a Historical Resource as defined in Section 15064.5 of the California Environmental Quality Act (CEQA); however, it does not appear that the built environment resources have been evaluated for listing on the California Register of Historical Resources (CRHR). Therefore, in compliance with the CEQA, the City of Los Altos recommended the completion of an HRE to determine if the Property is eligible for listing on the CRHR. Due to its listing as a historical resource, EDS also completed a Standards review to provide additional guidance and recommendations related to the proposed rehabilitation Project and assess potential impacts to historical resources.

The HRE follows specific guidelines and evaluation criteria of the CRHR (Code of California Regulations (CCR), Title 14, Section (§) 15064.5 and Public Resources Code (PRC) § 21084.1) and the Standards review follows the Department of Interior Standards for the Treatment of Historic Properties (36 CFR Part 67). The HRE and Standards review report was completed by EDS Principal Architectural Historian Stacey De Shazo, M.A., who exceeds the Secretary of Interior's qualification standards in Architectural History and History. The results of the report are presented herein.

PROPERTY LOCATION

The Property is located within the 0.3-acre APN 170-41-030 at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California (Figure 1). The Property is situated on the north side of Hawthorne Avenue, approximately 322 feet west of Eleanor Avenue, and about 0.2 miles east of South San Antonio Road in Los Altos.

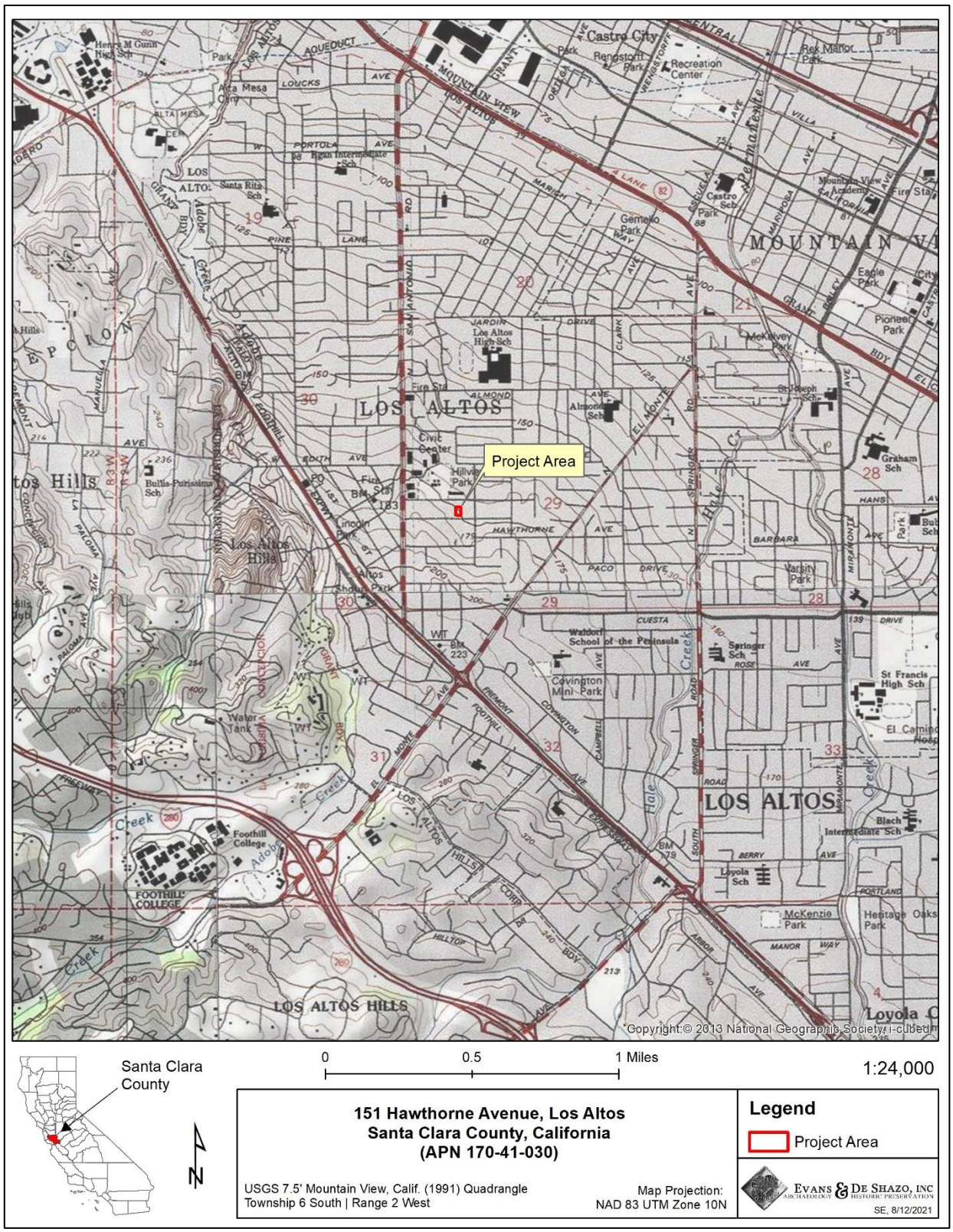


Figure 1. Location Map

REGULATORY SETTING

The CEQA regulations, as they pertain to cultural resources, and the Standards guidelines are outlined below.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA and the Guidelines for Implementing CEQA (State CEQA Guidelines § 15064.5) give direction and guidance for evaluating properties, and the preparation of Initial Studies, Categorical Exemptions, Negative Declarations, and Environmental Impact Reports. Under California State law, the City of Los Altos is legally responsible and accountable for determining the environmental impact of any land use proposal it approves. Cultural resources are aspects of the environment that require identification and assessment for potential significance under CEQA (14 CCR § 15064.5 and PRC § 21084.1).

There are five classes of cultural resources defined by the State OHP. These are:

- **Building**: A structure created principally to shelter or assist in carrying out any form of human activity. A "building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
- **Structure**: A construction made for a functional purpose rather than creating human shelter. Examples include mines, bridges, and tunnels.
- **Object**: Construction is primarily artistic in nature or relatively small in scale and simply constructed. It may be movable by nature or design or made for a specific setting or environment. Objects should be in a setting appropriate to their significant historic use or character. Examples include fountains, monuments, maritime resources, sculptures, and boundary markers.
- **Site**: The location of a significant event. A prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event and if no buildings, structures, or objects marked it at that time. Examples include trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.
- **Historic District**: Unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.

According to CCR § 15064.5, cultural resources are historically significant if they are:

(1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (PRC §5024.1, 14 CCR § 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in PRC § 5020.1(k) or identified as significant in a historical resource survey meeting the requirements PRC § 5024.1(g), shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of the evidence demonstrates that it is not

historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC § 5024.1, 14 CCR § 4852), including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources pursuant to PRC § 5020.1(k), or identified in a historical resources survey meeting the criteria in PRC § 5024.1(g) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC § 5020.1(j) or § 5024.1.

STANDARDS REVIEW

The Secretary of Interior Standards for Rehabilitation

The Standards (codified as 36 CFR 67) defines "Rehabilitation" as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values." The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation of historic materials and features.

The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy, and encompass the exterior and the interior, related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction. The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

METHODS

The **methods used to complete the HRE** included a database search conducted by the Northwest Information Center (NWIC) of the California Historical Information Systems (CHRIS) (NWIC File #20-2471) to determine if the Property has been previously documented. Based on the record search, the ca. 1922 house within the Property is currently listed on the OHP BERD (43-002072) and within the City of Los Altos Historic Inventory (2013). EDS also conducted extensive online and in-person research, including the Santa Clara County Assessor/Recorder Office records and the San Jose Public Library California Room. EDS and the current owner also requested assistance from the Los Altos History Museum, who completed a records search on behalf of EDS and the Property owners. In addition, EDS, and the current owners, requested records from the City of Los Altos (detailed in the section below) and to obtain the permit history and ownership history of the Property. EDS also conducted extensive online resources (see list below) and reviewed digital documents on file with EDS, such as historical maps, Sanborn Fire Insurance maps, historical aerial photographs, and other primary source documents. The purpose of the research was to understand the Property history and the history of the surrounding area to assist in the develop a historical context in which to evaluate the historical significance of the built environment within the Property. EDS Principal Architectural Historian Stacey De Shazo, M.A. also completed a historic architectural survey to identify the age, any known architectural style or form, character-defining features, materials, and alterations of built environment resources, at least 45 years in age, within the Property. Department of Parks and Recreation (DPR) 523 forms were also completed

for the Property (Appendix A).

The **methods used to complete the Standards review** included a review of the architectural plans and renderings submitted to EDS by Brownhouse Design (dated 5/27/2022). The Standards review was completed by EDS Principal Architectural Historian, who worked directly with Brownhouse Design to identify and address potential adverse impacts on the ca. 1922 house and ensure the current scope of work complies with the Standards for Rehabilitation.

CULTURAL RESOURCE INVENTORIES

As part of the record search, the following inventories were reviewed:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CRHR)
- California Historical Landmarks (CHL)
- California Points of Historical Interest (CPHI)
- California Inventory of Historic Resources
- California Office of Historic Preservation (OHP) Built Environment Resources Directory (BERD) for Santa Clara County, California (2020)

ONLINE RESEARCH

Online research was conducted utilizing the following sources:

- www.newspapers.com
- www.ancestry.com
- www.calisphere.org (University of California)
- http://www.library.ca.gov/ (California State Library)
- https://cdnc.ucr.edu/ (California Digital Newspaper Collection)
- http://pcad.lib.washington.edu (Pacific Coast Architecture Database [PCAD])
- https://aiahistoricaldirectory.atlassian.net (American Architects Directory)

REPOSITORIES

- Santa Clara County Assessor/Recorder Office:
    - Research was requested by EDS during COVID-19 restrictions (on two separate occasions) that at the time did not allow for in-person research or for the county to complete the research for EDS. After the COVID-19 restrictions were lifted, the current owner completed in-person research completed by the current owner.
- San Jose Public Library, MLK, California Room: October 2021, EDS conducted in-person research on

October 1, 2021, with the assistance of the research librarian.

- EDS reviewed historical maps, aerial photographs, and Sanborn Fire Insurance maps
- EDS reviewed city directories available at the California Room including 1919, 1927, 1940, 1934, and 1952.
- EDS also reviewed the county tax reel.[1]

- NWIC Record Search
  - On September 9th, 2021, the NWIC completed a database search (NWIC File #20-2471) of the Property. The record search results included a primary record (43-002072; 1997).
- City of Los Altos
  - On August 27, 2021, EDS reached out via email to the Los Altos Planning Department for assistance with research about the Property. EDS was advised by Guido Persicone, Design Review Commission Liaison, that the city did not have any information about the subject Property. GIS Technician Vency Woo also advised EDS that the city did not have records on the Property. In addition, the current owner requested a permit history in November 2021, received in December 2021, with limited results.
- Los Altos History Museum
  - EDS and the current owner requested research from the museum.

The results of the in-person local repositories, record searches on behalf of EDS and the current owner, and extensive online research are incorporated within the Historic Setting section of this report.

HISTORIC SETTING

The following section provides a brief history of the City of Los Altos and a specific history of the Property. The purpose of this section is to provide an understanding of the development of the area and the specific context within which the built environment resources within the Property were evaluated for historical significance.

MEXICAN PERIOD (1822 – 1846)

In 1821, Mexico declared its independence from Spain and took possession of "Alta California,"[2] marking the end of the Spanish period (1769 – 1821) and the beginning of the Mexican period, also referred to as the "rancho" period, in Alta California. In 1833, the Spanish missions in California were secularized by the Mexican government, and mission-owned land was dissolved. During this time, extraordinary changes occurred throughout Alta California, as the Mexican government lacked the strong oversight and military rule

[1] EDS was unable to find the Property other than information about recent owner, Bruce Palmer.

[2] Alta California was a polity of New Spain founded in 1769 and became a territory of Mexico after the Mexican War of Independence in 1821.

previously imposed by the Spanish, and as such, there were new opportunities for trade when foreign ships that had previously been held off by Spanish guarded military ports could dock and provide a variety of provisions to local settlers throughout California. These new provisions, including tea, coffee, sugars, spices, and spirits, as well as a variety of manufactured goods soon made their way into the region, and the taxes on these imported goods became the main source of revenue for the Mexican government in Alta California. Likewise, products produced in Alta California were exported, which bolstered the hide and tallow trade that became the primary business activity in Alta California during this time. During this time, the Mexican colonial authorities encouraged the settlement of Alta California by providing large land grants called ranchos to politically prominent persons that were loyal to the Mexican government and permitting foreigners to settle the land. As a result, the 20 or so ranchos in Alta California during the Spanish period increased to roughly 800 ranchos that varied from 10,000 to 20,000 acres during the Mexican era.

In 1846, the Property was within unclaimed lands of the Mexican government.

EARLY AMERICAN PERIOD (1848 - 1851)

The beginning of the American Period in California is marked by the end of the Mexican American War (1846-1848), when the United States (U.S.) took possession of Mexican territories, including California, New Mexico, Texas, and Arizona, in the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848. The Treaty of Guadalupe Hidalgo provided resident Mexicans their American citizenship and guaranteed title to ranchos obtained during the Mexican period. However, less than two weeks before the treaty's signing, on January 24, 1848, James Marshall discovered gold at Sutter's Mill, which marked the start of California's Gold Rush (1848 to 1855). Soon, the excitement of the Gold Rush and the promise of fertile and abundant land brought between 150,000 and 200,000 new settlers to California from all over the U.S. and Scotland, Ireland, England, Germany, and France.[3] During this time, many new settlers squatted on land, including Mexican rancho land and unclaimed land. To quickly resolve Mexican rancho land disputes, the U.S. Congress passed the California Land Act of 1851, which established a three-member Public Land Commission (Commission) to determine the validity of prior Spanish and Mexican land grants.[4] The act required landowners who claimed title under the former Mexican government to file a claim with the Commission within two years. Although the Commission eventually confirmed most of the original Mexican land grants, the burden was on landowners to prove their title. The cost of litigation forced many rancho owners to sell off their land to newly arriving settlers, including some who had illegally squatted on their land, as well as land speculators and the lawyers who were hired to defend their land claims in court.[5]

In 1850, the Property was within the Fremont township of Santa Clara County within 640-acres of public land

[3] Karen Clay, *Property Rights and Institutions: Congress and the California Land Act 1851*, The Journal of Economic History, Cambridge University Press, 59(01):122-142, March 1999.

[4] The Spanish government-controlled California land from approximately 1770 to 1821 and the Mexican government-controlled California land from 1821 to 1846.

[5] Nancy Olmsted. *Vanished Waters: A History of San Francisco's Mission Bay*, Mission Creek Conservancy, San Francisco, 1986.

that was surveyed under the Public Land Survey System (PLSS) in the 1850s and made available to new settlers.

HISTORY OF LOS ALTOS (1850 – 1960s)

The following history of the City of Los Altos was taken in part from the 2012 City of Los Altos Historic Resource Inventory (HRI),[6] prepared by CIRCA Preservation Consulting, with additional research conducted by EDS. The context below provides an overview of the development of the City of Los Altos.

In 1850, the present-day City of Los Altos consisted of approximately 100 residents, mostly living on large parcels of land utilized for wheat farming and cattle ranching. During this time, the Property was located within 640-acres of public land covered in dense chamisal,[7] and it was surrounded by several Mexican era ranchos, including La Purísima Concepción to the west, San Antonio to the south, Rincon de San Francisquito to the north, and Pastoria de las Boregas to the north/northeast. At this time, the largest landowner within present-day Los Altos was Juana Briones de Miranda's (Figure 2), who purchased the 4,439-acre Rancho La Purísima Concepción in 1844 from José Gorgonio and his son José Ramon, Ohlone Indians, who were granted the Rancho by then Mexican Governor Juan Alvarado in 1840. Juana, a single mother with eight children, was a medical practitioner and a well-known San Francisco merchant. Juana moved to the rancho in 1847 and built an adobe house within the northern portion of the land. Following the California Land Act of 1851, Juana filed a claim to the Commission for the rancho land, and with the help of her attorney Henry Wager Halleck she fought to retain her land.[8] However, by the early 1860s, Juana had to sell portions of her land to support her family. In 1857, she sold approximately 2,000-acres to Martin Murphy, who had arrived in California in 1844 in the Stephens-Townsend-Murphy Party, the first wagon train to cross the Sierra Nevada into California.[9] Martin paid Juana $7,000 for the land, adding to his approximately 4,800-acre land holdings in the present-day City of Sunnyvale, known then as Bay View Ranch.[10] In the early 1860s, Juana sold 2,000 acres to Joseph P. Hale, establishing the largest cattle ranch and wheat farm in Los Altos. Along with four other families (names unknown), Hale lived within the ranch, known as Hale Ranch, located west of the Property. In 1862, John Snyder arrived in the Los Altos area, where he purchased land and planted grain within what became known as the Snyder Ranch, which comprised 700 acres, of which some acreage was purchased from Juana. When Juana's land claim was finally patented on August 15, 1871,[11] most of the Rancho La Purísima Concepción had been sold to Euro-American settlers or granted to Juana's children.

In the 1850s and 1860s, Santa Clara Valley's primary crops were wheat and grain. During this time, farmers

[6] CIRCA Preservation Consulting, "City of Los Altos Historic Resources Inventory", Prepared for the City of Los Altos, 2012.

[7] Chamisal is a Mexican word that means overgrowth of chamiso, an evergreen shrub.

[8] CIRCA Preservation Consulting, "City of Los Altos Historic Resources Inventory", Prepared for the City of Los Altos, 2012.

[9] Gordon Richards, "Stephens-Townsend-Murphy Party", Truckee Donner Historical Society, accessed September 21, 2021, https://www.truckeehistory.org/the-first-pioneer-wagons-crossed-the-sierra-over-160-years-ago.html.

[10] Los Altos Hills, "Lost Altos Hills History Anthology (1956-2016)", 2016.

[11] Sacramento State Office, "Report of the Surveyor-General of the State of California from August 1, 1898 – August 1, 1898.' 1886.

living in Los Altos loaded their crops onto wagons that were then hauled to the Mountain View Station stage stop, located along the San Francisco-San Jose Stage Road, known today as El Camino Real. In 1864, the Southern Pacific Railroad established a rail line within present-day Mountain View, approximately one mile north of the Mountain View Station stage stop. In 1865, the City of Mountain View was officially laid out. Due to its proximately to the developing City of Mountain View and the new railroad stop, the small community of Los Altos began to grow. In the 1870s, Los Altos consisted of small and large farms planted with both grain and fruit crops. By the 1880s, fruit crops began to replace wheat and grain as the dominant agricultural crop in Santa Clara Valley, and by 1890, many of the larger farms and cattle ranches were subdivided and sold as small farms. During this time, the small farms produced as "much as 200 dollars per acre from prunes, apricots, peaches, cherries, pears, and other fruits."[12] By 1900, the land where the Property is located was planted with fruit trees.

In the early 1900s, land development companies and transportation companies began to buy land in Los Altos for future development. During this time, the area of present-day Los Altos saw large tracts of undeveloped land, including the area where the Property is located, subdivided as part of planned transit development. In Los Altos, Southern Pacific Railroad President Paul Shoup, and his brother, Guy Shoup, who was an attorney for the Southern Pacific, purchased a right-of-way from Palo Alto to Los Altos to run a connecting line through Los Gates and points south. This coincided with Paul Shoup's founding of the Altos Land Company in 1906. Paul, who is known as the father of Los Altos, proposed to link the cities of Palo Alto and Los Gatos with a new rail line through present-day Los Altos; however, the route where the rail line was proposed was located within two adjoining parcels owned by rifle heiress Sarah Winchester, who did not want the railway line to split the two adjacent parcels (Figure 3). On October 19, 1907, the Altos Land Company was incorporated, with Paul Shoup serving as its director. Soon after its incorporation, the Southern Pacific Railroad acquired the company as the newly formed subsidiary, Peninsular Railway. Although the Altos Land Company failed to purchase the right-of-way through Sarah Winchester's property, they instead offered to buy both lots from her. She accepted the offer, which allowed the Altos Land Company to move ahead with its plan to develop the small community. The Altos Land Company kicked off its development plans by sponsoring outdoor land sales events, which coincided with the construction of the new Southern Pacific route from Palo Alto to Los Altos to provide train service through Los Altos. On April 19, 1908, the Southern Pacific train service opened in Los Altos with five trains per day along the route of the present-day Foothill Expressway.

During the early 1900s, the Altos Land Company continued its marketing campaign to sell lots for development to support its new rail line by promoting Los Altos as "the loveliest place on the peninsula" (Figure 4 and Figure 5). As part of their marketing efforts, residents of San Francisco were offered free railroad excursions for a day in the country, with complimentary picnics alongside the tracks where lot sales were being sold. By 1911, there were 50 new houses constructed within Los Altos, as well as several office buildings and stores along Main Street (Figure 6). The 10-acre lots were priced from $400 to $650, and homes could be built from $2,000 to $4,000. The 10-acre lots were also laid out to support small family-owned fruit farmers, including the lots along Hawthorne Avenue. Shoup then laid out the town of Los Altos, and the first business

[12] Jose Salameda, *Memories of Los Altos*, publisher Joe Salameda (January 1, 1982).

to open in downtown Los Altos was Eschenbruecher's Hardware Store at 316 Main Street, which also housed the post office. The Los Altos Water Company, Los Altos Building and Loan, University Land Company, and the railroad company also occupied offices in downtown Los Altos. In 1909, the two-story Shoup Building was constructed at Main and Second streets, which housed a grocery store downstairs, managed by Paul Shoup's brother-in-law, Al Robinson, while the second floor was used as a school, and one teacher taught first through eighth grade. In 1914, the Southern Pacific constructed a new train depot in Los Altos (Figure 7). During this time, the railroad and, in particular, the electric streetcar were vital in opening the suburbs to lower and middle-income residents. Between 1910 and 1930, Los Altos prospered as a small town supported by small family-owned orchards and working-class residents who commuted to areas such as San Jose and San Francisco. During this time, small subdivisions developed, and new roads were constructed; however, housing construction within the new subdivisions was slow.

During the early 1900s, Los Altos residents were mainly of European or American descent. According to the 1910 U.S. Federal Census, no African Americans were living in Los Altos, and there was only one Japanese family and three single Japanese men working as servants, gardeners, or cooks.[13] By the 1920s, the number of Japanese residing in Los Altos had increased, making up approximately 22% of Los Altos' population; however, there were very few Chinese and only three African Americans residing in Los Altos. During the 1920s, many Japanese American and Japanese immigrants found work on the numerous fruit orchard farms throughout Santa Clara Valley, including Los Altos. Most Japanese leased land due to the restrictive and discriminatory land legislation under the California Alien Land Law of 1913, making it difficult for the Japanese to own property. However, some Japanese Americas found a way to purchase property, such as George Furuichi and his family. They moved to Los Altos in 1918 and purchased 5 acres of land on Hawthorne Avenue, 0.2 miles southeast of the Property where they planted fruit trees. During this time, the Furuichi family appeared to have been the only Japanese family who owned property within present-day Los Altos. By the late 1920s, Los Altos had remained a small town with 10-acre lots that were slowly being developed with housing.

By the mid-1930s, the nation was emerging from the Great Depression (1929 – 1933), which had created a surge of bank closures, resulting in the decrease of available capital that impacted agriculture and led to reduced market prices. In 1933, five days after taking the oath of office, Roosevelt called a conference with the secretaries of Agriculture, Interior, and War, along with several others, to discuss his ideas for recruiting 500,000 men to work in the nation's forests and eroded farmlands. Roosevelt's vision was to provide work opportunities, primarily for young men, to repair the land from decades of poor management and over-use, which became known as the "New Deal." As part of the New Deal, on March 31, 1933, the Emergency Conservation Work (ECW) Act was established under Executive Order No. 6101 and created the Civilian Conservation Corps (CCC) and the Works Progress Administration (WPA). The CCC and the WPA were established to create work opportunities that would not interfere with regular employment. As such, they were explicitly directed toward the conservation of natural resources. The Public Works Administration (PWA) was established six years later in 1939, and was created by the National Industrial Recovery Act of 1933

[13] CIRCA Preservation Consulting, "City of Los Altos Historic Resources Inventory", Prepared for the City of Los Altos, 2012.

(NIRA). The PWA projects included extensive improvements and growth to the road system in the Santa Clara Valley and Los Altos.

The 1940s brought significant change to the U.S. when on December 7, 1941, Japan bombed Pearl Harbor, Hawaii, and the U.S. declared war on Japan, marking the entrance of the U.S. into World War II (WWII). Suspecting potential spies within the Japanese American population, the U.S. government quickly enacted a series of measures to restrict the travel of Japanese-Americans and Japanese immigrants to the U.S. and Hawaii. On February 19, 1942, President Roosevelt signed Executive Order 1066, which authorized the internment of 120,000 people of Japanese descent, including Nisei, who were Japanese-Americans born to Japanese parents, and Issei, who were the first generation of Japanese to immigrate to the U.S., in 11 camps located across seven states. In March 1942, the Japanese American communities throughout San Jose were told they would have to "relocate" to military areas. Many of them were sent to the assembly center at Tanforan for assignment to internment camps. In 1942, George Furuichi and his family were sent to the Heart Mountain Relocation Center in northwest Wyoming. In 1943, George was recruited by the U.S. Army during his internment, and he served as part of the famed U.S.-Japanese "Go for Broke" 442 Regimental Combat Team.

The end of WWII also saw the return of U.S. soldiers and returning Japanese residents who were released from internment camps. The War Relocation Authority (WRA) gave each person $25 in cash and a train or bus ticket back to their hometowns for the returning Japanese residents. Some Japanese residents returning home found their belongings stored by churches or trusted neighbors. In contrast, others discovered their homes and businesses in disarray, and their things were often stolen or broken.[14] Unlike many Japanese Americans who lost everything during their internment, George Furuichi and his family could retain their land, which was maintained and protected by close friends. In 1947, George, his sister Helen, and his cousin Tom, who also interned during WWII, opened the Los Altos Nursery, which the Furuichi family-owned until it was sold in 2018.

During the late 1940s, Los Altos and Santa Clara County experienced tremendous job growth related to new industries, including the electronic and defense industries, resulting in a manufacturing boom. The town of Los Altos, like many other cities throughout the U.S., saw a housing boom with the return of soldiers after WWII. As the City grew, many, now 7,922 residents, feared that either Palo Alto or Mountain View would annex the growing town. In 1952, the citizens voted to incorporate the City of Los Altos, becoming the eleventh City in Santa Clara County. By 1960, with the economy booming and new residential housing construction, the population of Los Altos reached 19,696. By this time, the automobile had replaced the train, and in 1964 the Southern Pacific railroad ceased operations in Los Altos. During the 1970s, the technology industry was beginning to grow, and in 1976, Apple co-founders Steve Jobs and Steve Wozniak built the first 50 "Apple I" computers in Steven Jobs' parents' garage in Los Altos.

[14] James C Williams, and Kent Seavey. "Gilroy Yamato Hot Springs National Register of Historic Places Nomination", (NR#95000996), Washington, DC: National Park Service, 1995.

Figure 2. undated photograph of Juana Briones de Miranda (courtesy of the NPS).

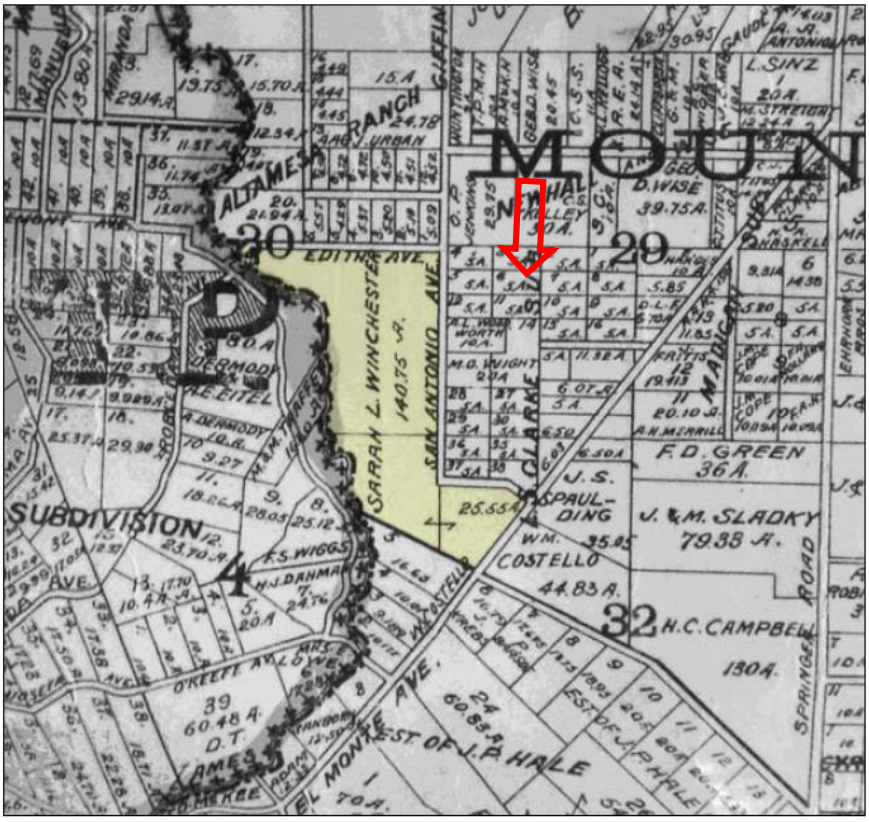


Figure 3. A 1906 tract map is showing the Property (red arrow) concerning the Sarah Winchester parcel (highlight center parcel) that was sold to the Altos Land Company and later became the townsite for Los Altos (courtesy of the Los Altos History House Museum Archives).

Figure 4. ca. 1907 bird's eye view drawing of the developing community of Los Altos (courtesy of the Los Altos History House Museum Archives).

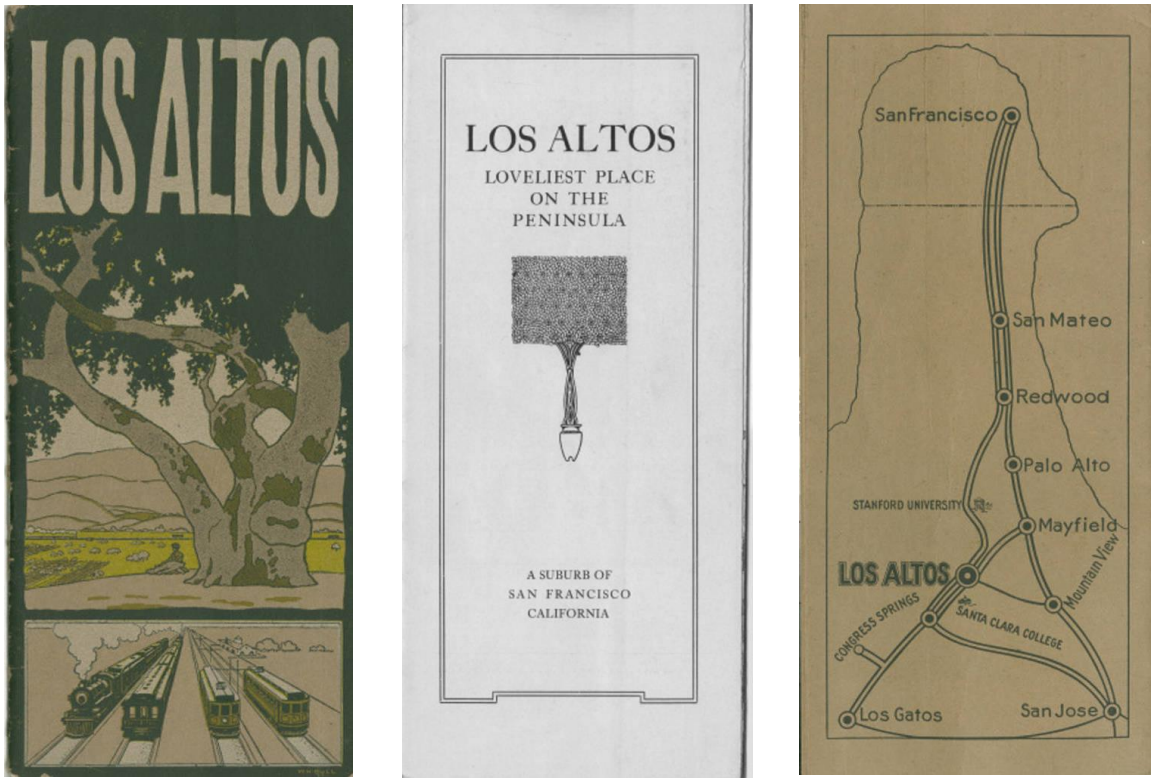


Figure 5. A marketing brochure from the Altos Land Company, advertising the Los Altos as the loveliest place on the peninsula (courtesy of the Los Altos History House Museum Archives).

LOS ALTOS

section of the State; oranges, lemons and limes, unprotected, grow without injury. The elevation, of course, insures good drainage. The water supply is abundant and wholesome —none better. The mountains with extending flanks protect the town against harsh winds.

Fruitfulness

If you will ask at the fruit canneries where the best and earliest apricots come from, they will tell you from the foothill region around Los Altos. Here, too, are produced the finest of dry wine grapes and most excellent table grapes. Prunes, peaches, plums and other fruits are grown in great quantities. Indeed, Los Altos is in the center of a vast fruit orchard, eighty per cent of the valley territory about it for a distance of three miles in any direction being already given over to finely kept orchards of apricots, prunes, olives, almonds, cherries, plums, peaches

LOS ALTOS

Los Altos homes, set amid the beauty of mountain landscape, have at their center the conveniences of good stores.

and to vineyards. Every resident of Los Altos may with little trouble have a home orchard worth while in his backyard.

Railway Facilities

Los Altos is intersected by two railways, one completed, one under construction. The Southern Pacific, to make accessible this wonderful foothill section as a suburban residence place for San Francisco people as well as to shorten the time to Santa Cruz and Santa Cruz mountain resorts, has constructed a double track railway from Mayfield on its peninsula line (a mile south of Palo Alto) twenty miles across to Los Gatos, hugging the foothills along the western side of the Santa Clara valley, thence through the mountains to Santa Cruz. The first station south of Mayfield and the principal station on the cutoff is Los Altos.

The Peninsular Electric Railway, already owning and operating lines between San

Cozy homes, many of them built by San Francisco business men, are spreading rapidly across the poppy fields at Los Altos.

Figure 6. Advertisement from the Altos Land Company, advertising Los Altos as the loveliest place on the peninsula (courtesy of the Los Altos History House Museum Archives).

Figure 7. ca. 1920 photograph of the 1913 Southern Pacific Railroad depot in Los Altos (courtesy of the Los Altos History House Museum Archives).

Figure 8. ca. 1930 photograph of George Furuichi (third from the right) and other Japanese workers. The location is unknown but may have been within his property on Hawthorne Avenue (courtesy of the Los Altos History House Museum Archives).

PROPERTY HISTORY

Prior to the construction of the current built environment resources, the Property was part of unclaimed public land acquired by the U.S. government in 1848. By 1865, the Property had been surveyed under the PLSS and became part of a 640-acre property that consisted of chamisal, a term for the overgrowth of chamiso, an evergreen shrub (Figure 9). By 1873, the 640-acre property was divided into two parcels, one belonging to "Graham" and the other belonging to "Bailey" (Figure 10). During this time, the Property was within the Fremont Township in the county of Santa Clara, and the land where the Property is located was still covered in chamisal. By 1876, the property was divided into smaller parcels, and the subject Property became part of a 40-acre property belonging to T & J.P. Dillon (Figure 11). There were two private roads within the 40-acre property during this time, one of which became South San Antonio Road, located west of the Property, and the other was South El Monte Avenue. No additional information about T. & J.P. Dillon was found.

By 1890, the 40-acre property was part of the L.S. Clarke Subdivision that consisted of 48 10-acre lots, with the Property located within Lot 11 (Figure 12). Although the Property was part of an early subdivision, housing within this area was slow to develop. According to the 1897 and 1899 USGS 15' Palo Alto Quadrangle maps, there were no houses within Lot 11 at this time (Figure 13 and Figure 14). By 1910, new roads were constructed within the subdivision, including Hawthorne Avenue within what was now known as the Altos Acres Tract residential subdivision. The Property was part of a 0.72-acre property (Figure 15); however, it was not until ca. 1922 that the Property was developed with the construction of the ca. 1922 house and ca. 1922 shed.

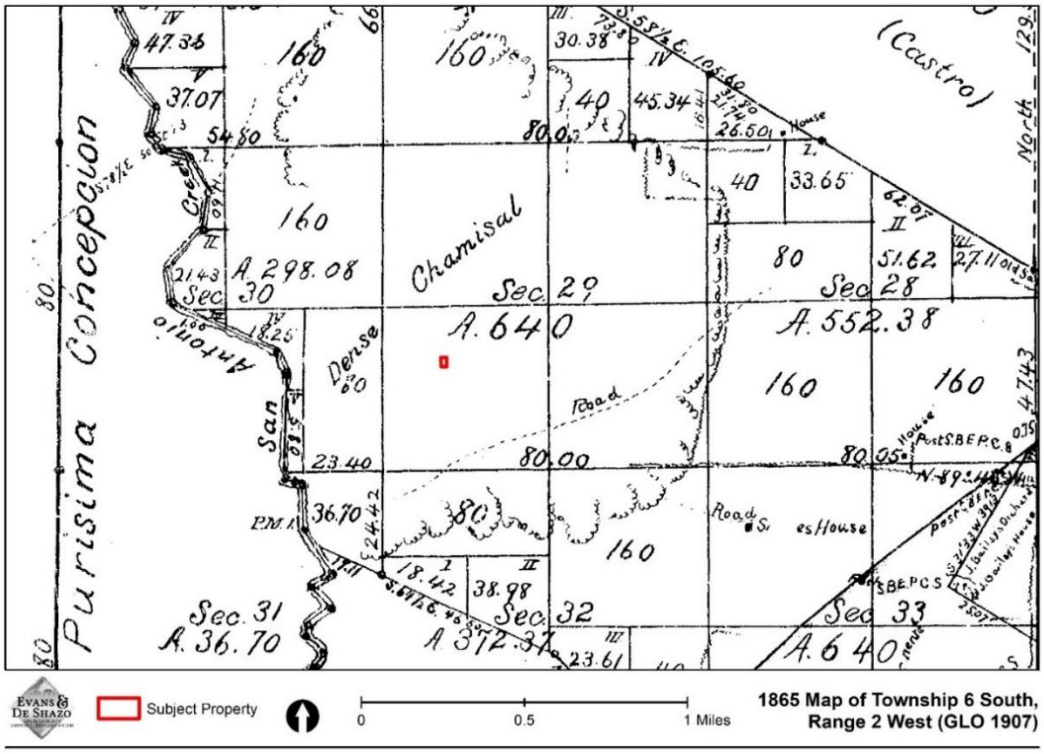


Figure 9. 1865 Government Land Office (GLO) map showing the Property within "Dense Chamisal".

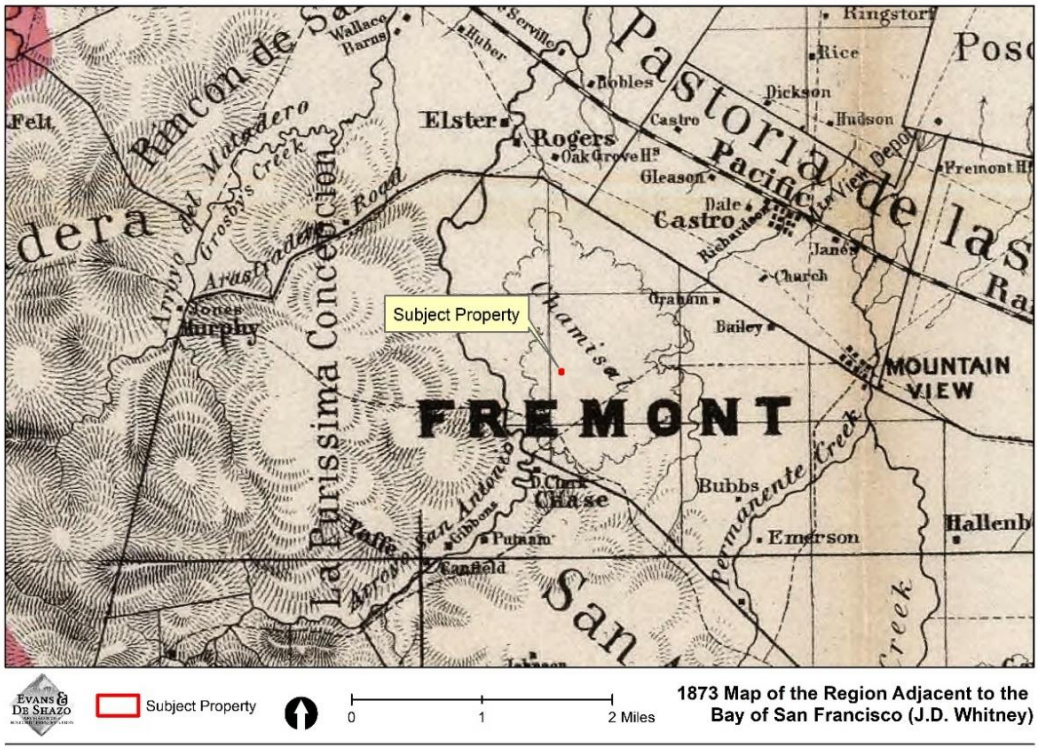


Figure 10. 1873 Hoffman and Whitney map showing the Property within an area still covered in chamisal.

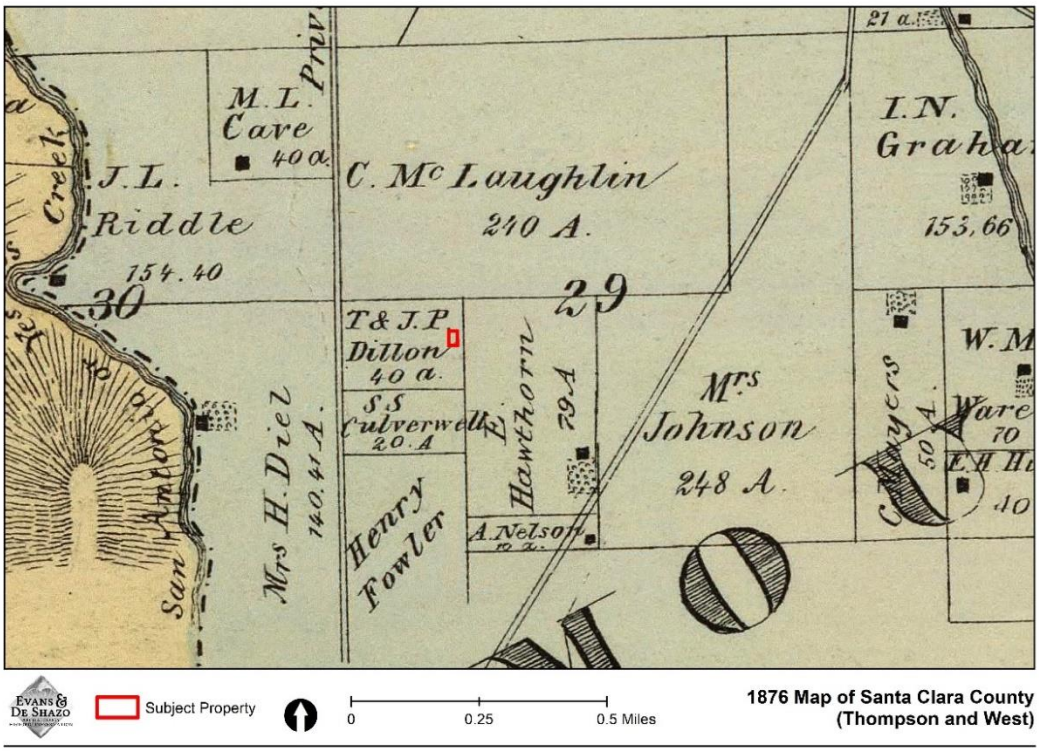


Figure 11. 1876 Thompson and West map showing the Property within T & J.P. Dillon's 40-acre property.

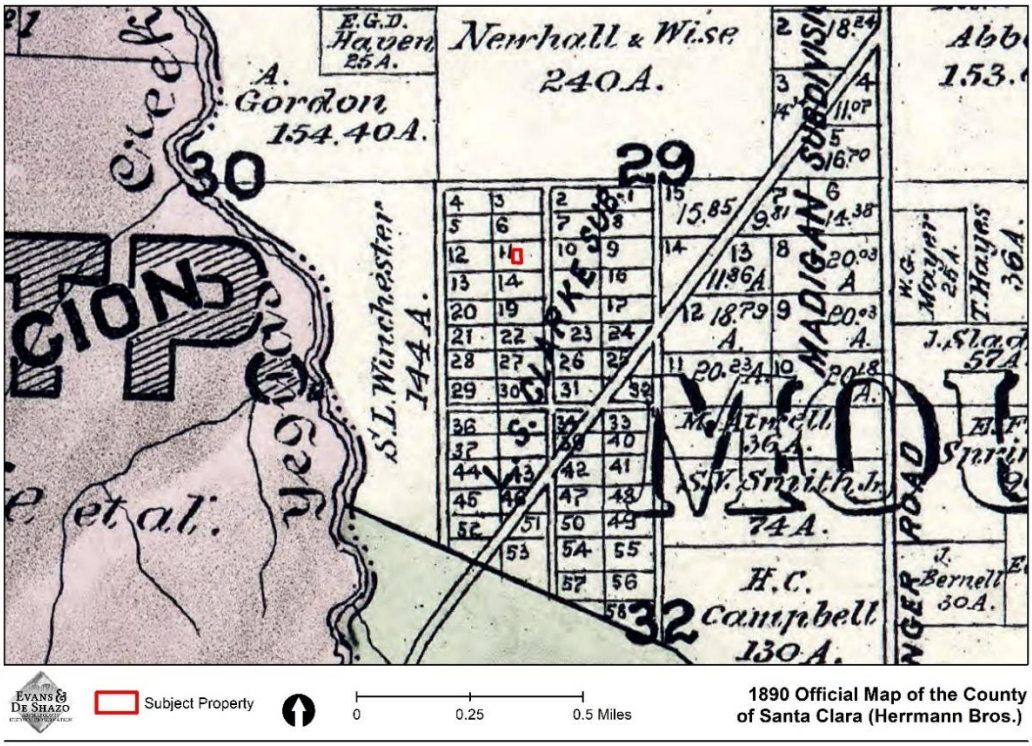


Figure 12. 1890 Hermann Bros. map shows the Property within lot 11 of L.S. Clarke Subdivision.

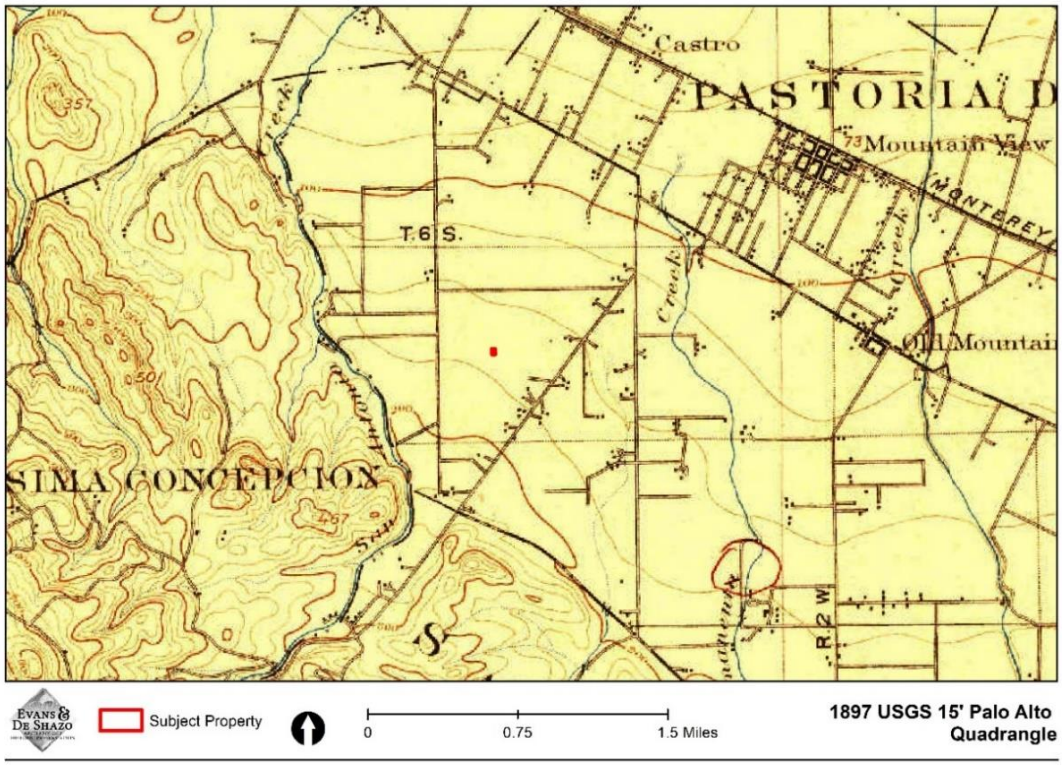


Figure 13. 1897 USGS 15' Palo Alto Quadrangle showing the Property.

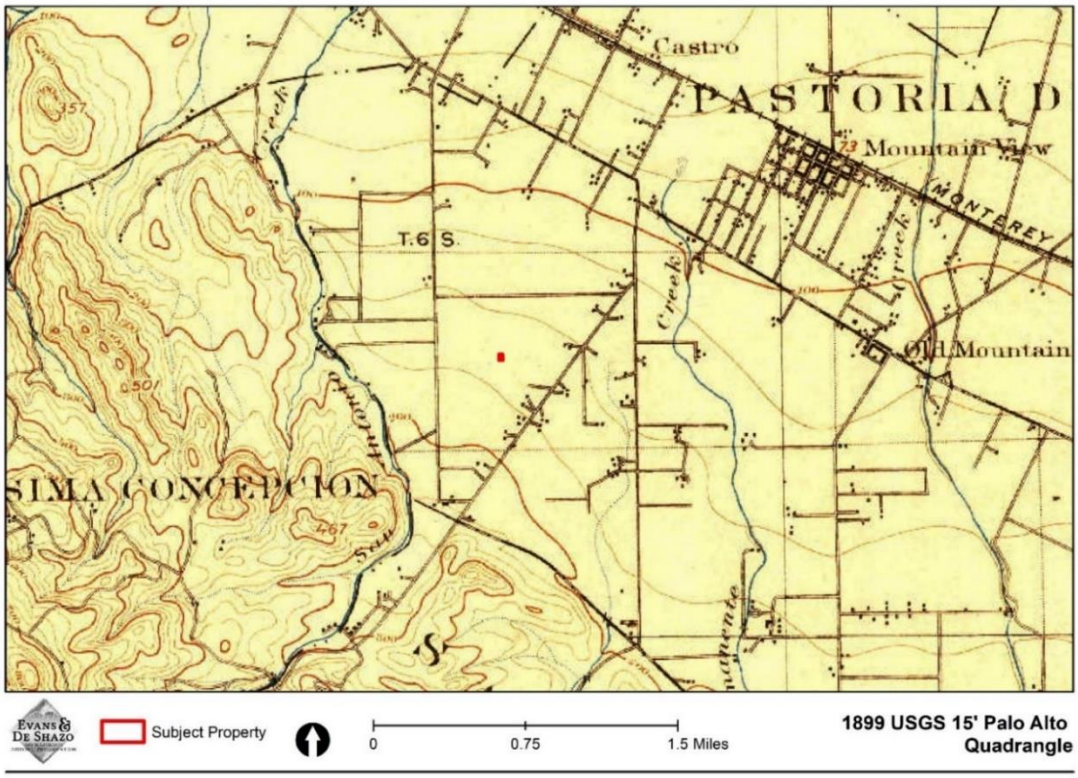


Figure 14. 1899 USGS 15' Palo Alto Quadrangle map showing the Property.

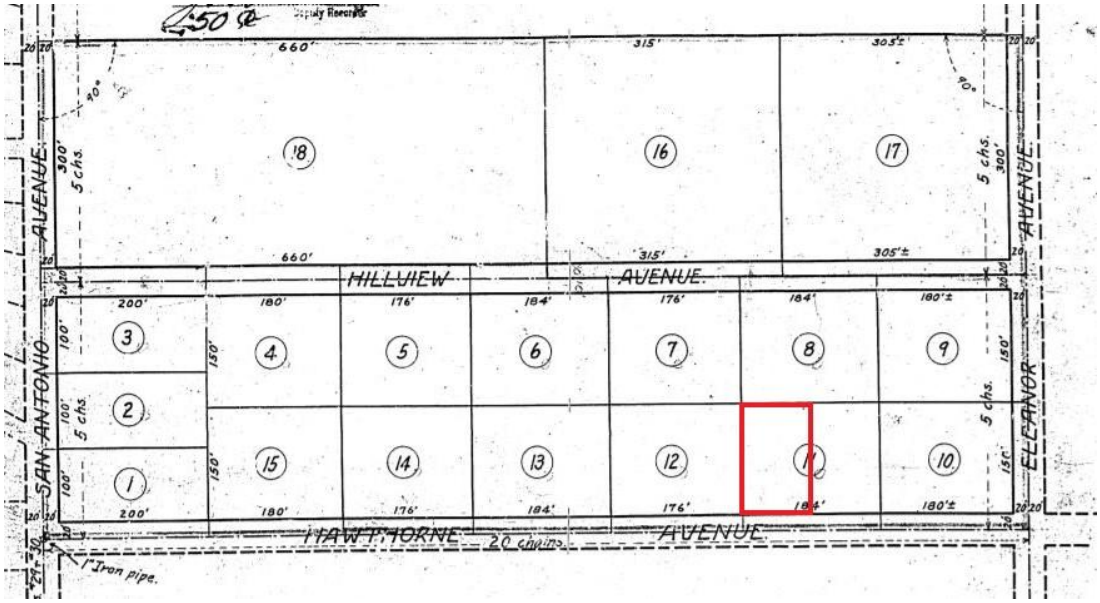


Figure 15. 1910 Subdivision Map of the Alto Acres Tract with the Property boundary outlined in red (courtesy of Santa Clara County).

Table 1. Owners and Occupants related to the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape.

Year	Owner/Occupants	Details
ca. 1922-ca. 1965	Owners: unknown	• Although EDS conducted extensive online and in-person research, the current owner, the first owners of the ca. 1922 house, ca. 1922 shed, and associated landscape were not found. • In 1922, the Property was located within Fremont Township in Santa Clara County • Based on a review of the 1930 and 1940 U.S. Federal Census records, the house addresses on Hawthorne Avenue during this time were not the same as they are today, including 151 Hawthorne Avenue; however, the research did not reveal the original address of the Property. • Aerial photographs between 1930 and 1941 show the Property, including the ca. 1922 house and ca. 1922 shed situated within an orchard. There were very few residential houses on Hawthorne Street or within the neighborhood during this time (Figure 16, Figure 17, and Figure 18). • The 1956 aerial photograph shows the ca. 1922 house and ca. 1922 shed within the Property and a reduction in the orchards and increased houses within the neighborhood (Figure 19).
1964	Owner: C.H. Tabrett	• According to a city permit record (A 8254) for repair work on the ca. 1922 house, due to termite issues, C.H. Tabrett owned the Property in 1964. However, extensive research by EDS and the current owner did not find C.H. Tabrett listed in any city directory or on any deed or any other primary documentation associated with the Property. In addition, EDS did not find anyone with this exact name living in Los Altos during this time. However, it is possible that the initials or names were misspelled, as EDS did find a C.F. Tabrett living in Los Altos, but no documentation shows he lived within the subject Property.
ca. 1965 to 1972	Owners: David Redmond and Florence Eileen Redmond	• The owners of the Property between ca. 1965 and 1972 were David and Florence Redmond. • David was born in Northampton, Northamptonshire, England, in 1904, and Florence was born in Northampton, Northamptonshire, England, in 1913. David and Florence were married in ca. 1935. From the 1930s to ca. 1950, they lived in Northampton, Northamptonshire, England.[15] During this time, David was a foreman for an engineering press shop, and Florence was a housewife. • It is unknown when David and Florence immigrated to the U.S., but in 1958, David and Florence traveled on the ship the Queen Mary from

[15] Ancestry.com, General Register Office; United Kingdom; Volume: *4;* Page: *1383.*

Year	Owner/Occupants	Details
		New York to England.[16] According to the ship's manifest, David and Florence were citizens of the United Kingdom. David's occupation was a lathe operator, and Florence was a housewife. • By ca. 1965, David and Florence were living in Saratoga, California. When they purchased the property, there was a further reduction in the surrounding orchards and an increase in houses within the neighborhood (Figure 20). • In 1970, David and Florence became naturalized citizens of the U.S. • In 1972, David and Florence sold the Property to Bruce Palmer, and David and Mary returned to Northhampton, Northamptonshire, England. Florence died in 1974 in England (Figure 21).[17]
1972 to 2019	Owner: Bruce Wales Palmer Occupants: N/A	• Bruce Palmer was the owner of the Property from 1972 to 2019. • Bruce was born in 1945 in Santa Clara County and attended school at Palo Alto High School. • Bruce appears to have initially lived in the house from 1972 to ca. 2000, but he had moved out of the Property and rented the ca. 1922 house to various occupants from 2000 to 2019. • During Bruce's ownership is when the 1972 inground swimming pool was constructed, and other changes occurred, such as the addition of a door on the west elevation, new fencing, a new roof, furnace, and at least two kitchen and two bath remodels, which may have resulted in the reconfiguration of windows on the north and west elevations of the ca. 1922 house. • No additional information about Bruce was found.

[16] Ancestry.com, The National Archives of the UK; Kew, Surrey, England; Board of Trade: Commercial and Statistical Department and successors: Inwards Passenger Lists.; Class: BT26; Piece: 1410

[17] Ancestry.com, National Archives at College Park; College Park, Maryland, U.S.A.; NAI Number: *613857;* Record Group Title: *General Records of the Department of State;* Record Group Number: *Record Group 59;* Series Number: *Publication A1 5166;* Box Number: *134;* Box Description: *1974 PL – RZ.*

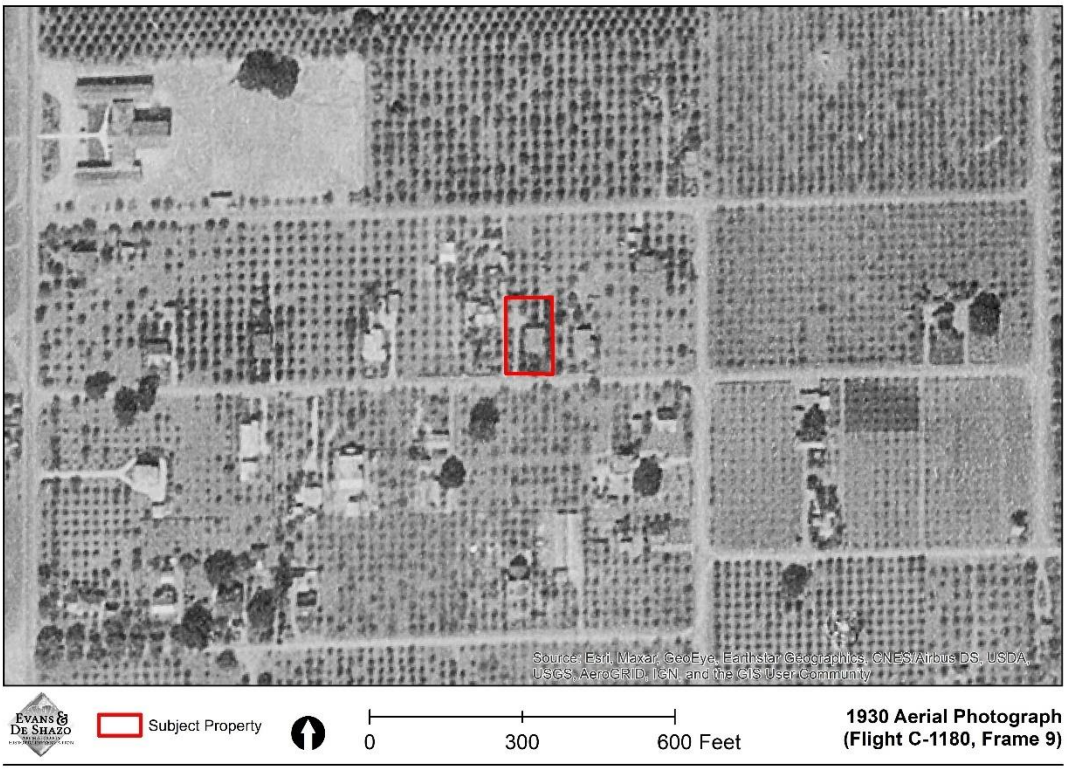


Figure 16. 1930 aerial photograph showing the Property (courtesy of the University of Santa Barbara Library).

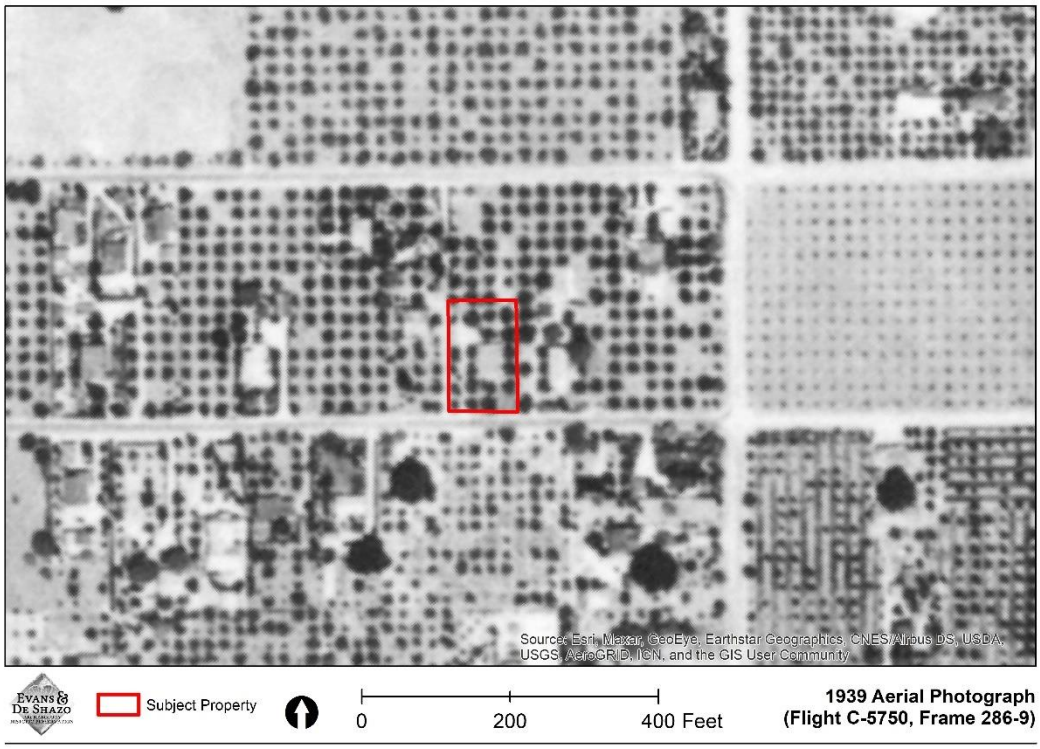


Figure 17. 1939 aerial photograph showing the Property (courtesy of the University of Santa Barbara Library).

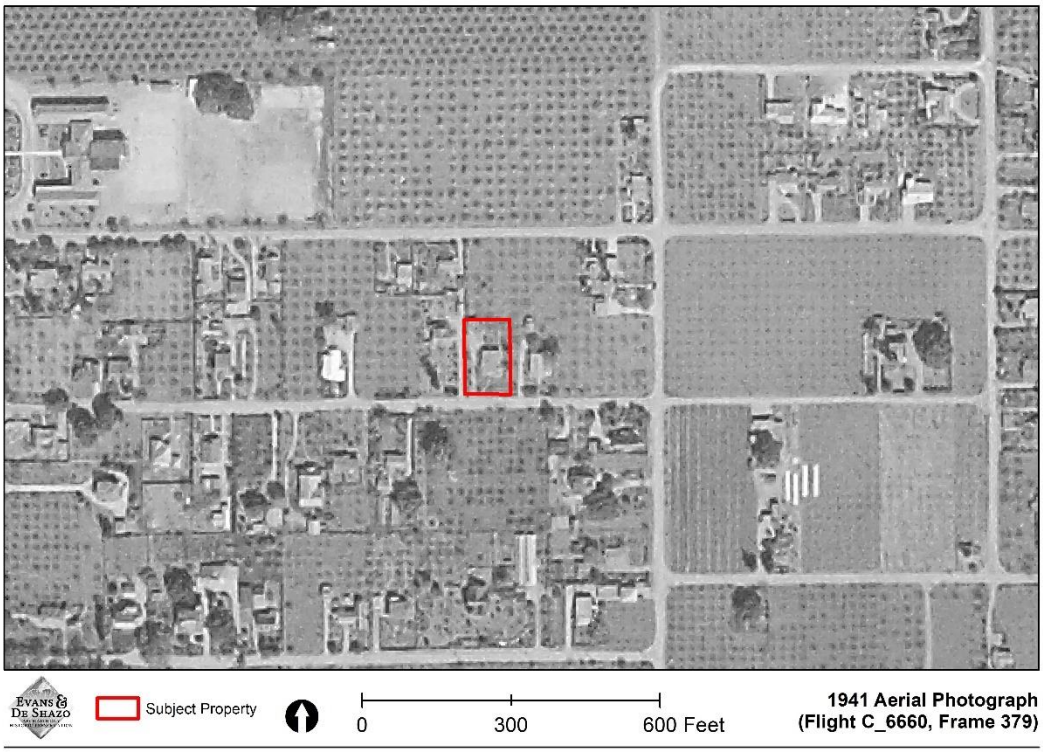
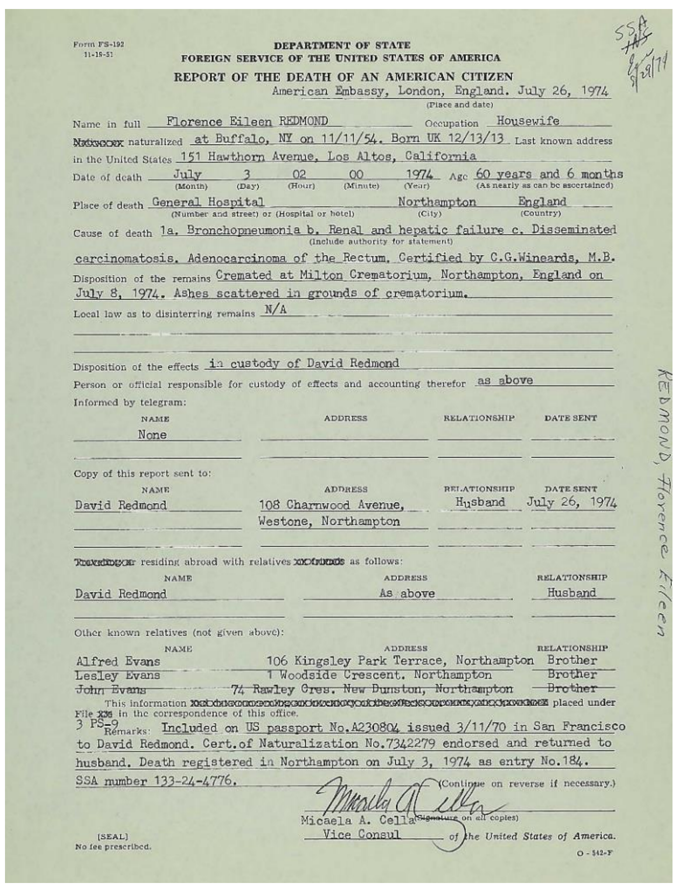


Figure 18. 1941 aerial photograph showing the Property's location surrounded by some houses, but still mainly orchards (courtesy of University of Santa Barbara Library).

Figure 19. 1956 aerial photograph showing the Property and surrounding residential growth (courtesy of the University of Santa Barbara Library).

Figure 20. 1968 aerial photograph of the Property with dense residential development around it (courtesy of University of Santa Barbara Library).



Form FS-192
11-15-51

DEPARTMENT OF STATE
FOREIGN SERVICE OF THE UNITED STATES OF AMERICA
REPORT OF THE DEATH OF AN AMERICAN CITIZEN

American Embassy, London, England. July 26, 1974
(Place and date)

Name in full Florence Eileen REDMOND Occupation Housewife

~~Native~~ naturalized at Buffalo, NY on 11/11/54. Born UK 12/13/13 Last known address in the United States 151 Hawthorn Avenue, Los Altos, California

Date of death July (Month) 3 (Day) 02 (Hour) 00 (Minute) 1974 (Year) Age 60 years and 6 months (As nearly as can be ascertained)

Place of death General Hospital (Number and street) or (Hospital or hotel) Northampton (City) England (Country)

Cause of death 1a. Bronchopneumonia b. Renal and hepatic failure c. Disseminated carcinomatosis. Adenocarcinoma of the Rectum. Certified by C.G.Wineards, M.B. (Include authority for statement)

Disposition of the remains Cremated at Milton Crematorium, Northampton, England on July 8, 1974. Ashes scattered in grounds of crematorium.

Local law as to disinterring remains N/A

Disposition of the effects in custody of David Redmond

Person or official responsible for custody of effects and accounting therefor as above

Informed by telegram:

NAME	ADDRESS	RELATIONSHIP	DATE SENT
None			

Copy of this report sent to:

NAME	ADDRESS	RELATIONSHIP	DATE SENT
David Redmond	108 Charnwood Avenue, Westone, Northampton	Husband	July 26, 1974

~~Traveling or~~ residing abroad with relatives ~~or friends~~ as follows:

NAME	ADDRESS	RELATIONSHIP
David Redmond	As above	Husband

Other known relatives (not given above):

NAME	ADDRESS	RELATIONSHIP
Alfred Evans	106 Kingsley Park Terrace, Northampton	Brother
Lesley Evans	1 Woodside Crescent. Northampton	Brother
~~John Evans~~	~~74 Rawley Cres. New Dunston, Northampton~~	~~Brother~~

This information ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ placed under File ~~XXX~~ 3 PS-9 in the correspondence of this office.

Remarks: Included on US passport No.A230804 issued 3/11/70 in San Francisco to David Redmond. Cert.of Naturalization No.7342279 endorsed and returned to husband. Death registered in Northampton on July 3, 1974 as entry No.184. SSA number 133-24-4776.

(Continue on reverse if necessary.)

Micaela A. Cella (Signature on all copies)
Vice Consul of the United States of America.

[SEAL]
No fee prescribed.

O - 542-F

SSA ~~INS~~ 8/29/74

REDMOND, Florence Eileen

Figure 21. Department of State, report of death of an American citizen, showing the last known address of Florence Redmond as 151 Hawthorne Avenue (Ancestry.com).

ARCHITECTURAL CONTEXT

The following section briefly explains the Craftsman architectural style associated with the ca. 1922 house.

CRAFTSMAN ARCHITECTURAL STYLE (1905 - 1930)

The American Craftsman style is the quintessential house style of America. More popular and more replicated than most others, it is the sum of all that America is. It stands for simplicity, excellence, and utility, and simplicity in design, excellence in craftsmanship, and utility in its functionality. Craftsman houses were inspired mainly by two California brothers – Charles Sumner Greene and Henry Mather Greene. They practiced together in Pasadena from 1893 to 1914 (i.e., California Craftsman, Craftsman Bungalows, or California Bungalow Craftsman). In about 1903, they began to design simple Craftsman-type bungalows. By 1909, they had designed and executed several exceptional landmark examples. Influenced by the English Arts and Crafts Movement, an interest in oriental wooden architecture and their early training in the manual arts appear to have led the Greene's to design and build these intricately detailed buildings. During the early twentieth century, these and similar residences were given extensive publicity in some of the most popular magazines, thus familiarizing the rest of the nation with this style. As a result, a flood of pattern books appeared, offering plans for Craftsman bungalows; some even provided completely pre-cut packages of lumber and detailing to be assembled by local labor. Through these vehicles, the Craftsman house quickly became the most popular and fashionable smaller house in the country.[18]

Common architectural design features of Craftsman architecture include the following:

- Low-pitched roof lines gabled or hipped roof
- Deeply overhanging eaves
- Decorative half-timbering and woodwork
- Front or side-gable roofs with exposed rafters or decorative brackets under eaves
- Front porch beneath the extension of the main roof
- Tapered, square columns ("battered" columns) supporting the roof
- Double-hung windows; 3-over-1 or 6-over-1 double-hung windows
- Hand-crafted stone or woodwork, including wood and shingle siding
- Mixed materials throughout the building

HISTORIC ARCHITECTURAL SURVEY

On June 21, 2021, EDS Principal Architectural Historian Stacey De Shazo, M.A., completed a historic architectural survey of the property, including the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape. The results of the historic architectural survey are documented in the

[18] Virginia McAlester and Lee McAlester, A *Field Guild to American Houses,* New York, Alfred A. Knopf. Munro-Fraser, J.P. 2013.

following section.

CA. 1922 HOUSE

The ca. 1922 house is designed in the Craftsman Bungalow architectural style. The house is asymmetrical with multiple roof plans, including a main front-gable roof form with a lower projecting front gable and an extending front gable porch roof. The roof is low-pitched with wide overhanging eaves and exposed roof beams and rafter tails. The roof is clad in an asphalt membrane material, and the house is clad in stucco in a dash finish. There appears to be at least one rear addition/porch enclosure, which was likely altered in the 1950s. The house is slightly elevated and is situated on a board-formed concrete perimeter and post and pier foundation.

South Elevation (Primary Facade)

The south elevation consists of an asymmetrical design with a main front-gabled roof form, a lower projecting front gable, and an extending front gable porch roof (Figure 22 and Figure 23). The extending porch roof consists of decorative vertical wood boards with open slates that provide ventilation to the porch roof. The porch is supported by three battered columns that rest of square piers clad with red brick (Figure 24). There is a solid porch balustrade clad in red brick laid out in a running bond pattern. The front porch floor is accessed via a set of concrete steps along the primary façade and a set of concrete steps and a secondary entrance along the rear of the porch at the southeast corner of the house. The porch floor is stamped concrete, and the porch ceiling is clad in contemporary stucco, which likely covers the original wood-clad porch roof (Figure 25). Fenestration along this elevation includes two large picture windows that are not original to the house, set in wood window casings (not original) and wide decorative window trim and an oversized wooden front door with three vertical beveled glass and asymmetrical patterns (Figure 26).

Figure 22. South elevation, facing north.

Figure 23. South elevation, facing north.

Figure 24. South elevation, facing north.

Figure 25. Photograph showing the front porch, facing west.

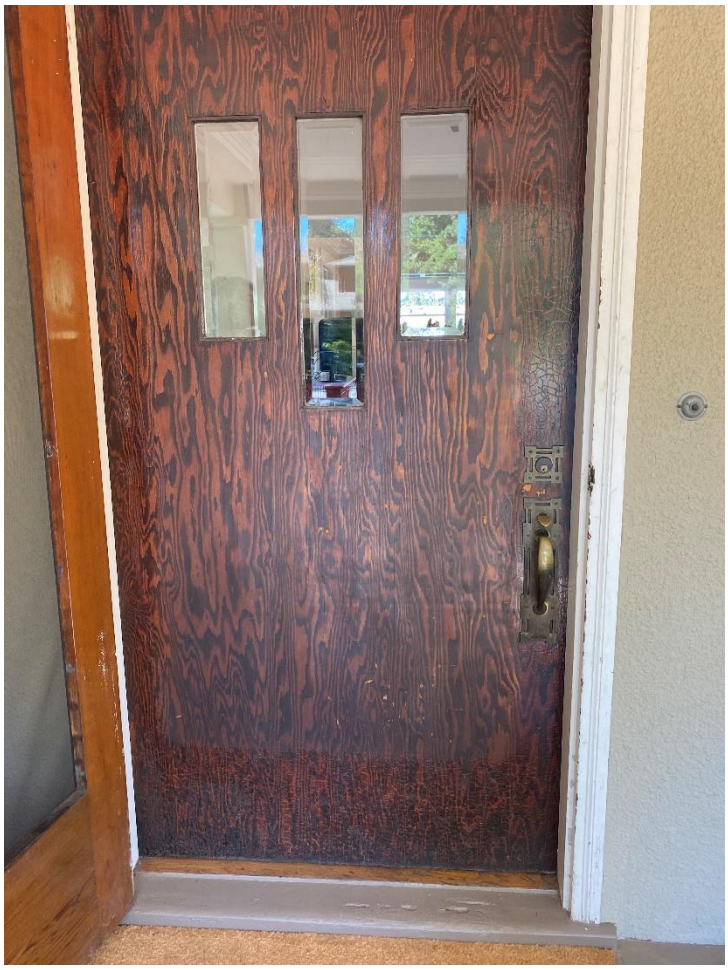


Figure 26. Photograph showing the front door, facing north.

East Elevation

The east elevation consists of a dormer side gable roof that sets above the porch roof and a projecting side gable addition/enclosed porch, both of which appear to be additions and not original to the design (Figure 27 and Figure 28). The side gable roof is set above the porch roof, consisting of exposed beams with the exterior of the original brick chimney projecting through the center of the roof along the roof ridge. The projecting side gable roof addition appears to be an enclosed porch that was altered in the ca. 1950s to allow access to the half-width basement that seems to have been initially accessed via an exterior cellar door that is no longer present. The projecting side gable addition consists of concrete steps and a contemporary hand railing that leads to a rear porch door. Fenestration along this elevation includes a series of three double-hung wood windows with lugs, two casement windows, and a basement window that appears original to the house, and a pair of double-hung wood windows with lugs and a wooden door with upper glazing and lower wood paneling that appear to have been added in the ca. 1950s or ca. 1960s as part of the rear porch enclosure.

Figure 27. East elevation, facing north.

Figure 28. Photograph showing the east elevation, facing southwest.

North Elevation

The north elevation consists of an extending gabled roof with wide overhanging eaves and wood beams (Figure 29). The rear gable mimics the front porch gable detail, with decorative, vertical wood boards with open slates that provide ventilation (Figure 30). There are changes to this elevation that includes a vinyl sliding glass door, added during the 2015 kitchen remodel, which is accessed via a set of steps constructed of what appears to be fiber cement or Hardie decking. There are two narrow, fixed windows that may be original to the house but appear to have been relocated due to either the 1985 or 2015 kitchen remodel. There are also a series of four double-hung wood windows with lugs that appear original to the house, as well as a narrow rectangular basement hopper window. There are two -square vents along this elevation that are not original and were likely added during one of the kitchen remodels.

Figure 29. Photograph showing the north elevation rear roof gable and decorative vertical wood boards along the gable, facing southwest.

Figure 30. North elevation, facing south.

West Elevation

The west elevation consists of a projecting porch side entry gable, which appears to be an addition added in 1985 or 2015 during one of the two-bathroom remodels (Figure 31). Fenestration along the west elevation consists of a pair of double-hung wood windows with lugs (of which one consists of a replacement sash without lugs), two narrow wood windows with lugs that appear to have been relocated during one of the bathroom remodels, a series of four double-hung wood windows with lugs, and a contemporary five-light glass and wood door, added in 1972, set below the projecting gable (Figure 32).

Figure 31. West elevation, facing southeast.

Figure 32. West elevation, facing east.

CA. 1922 SHED

The ca. 1922 shed is a wood-framed front gable form with a low-pitched roof and a wide eave overhang with exposed rafter tails. Along the south elevation, a portion of the building is clad in original horizontal wood boards, and the east, west, and north elevations are clad in contemporary stucco (Figure 33). There are two five-panel wood doors, one along the south elevation (primary façade) and another along the north elevation. There is a tarp covering a wide door opening (Figure 34). There are two windows, including a vinyl sliding window along the north elevation and a double-hung wood window along the east elevation.

Figure 33. Photograph showing the cladding along south and east elevations, facing northwest.

Figure 34. Photograph showing the tarp covering the wide door opening and the front entrance to the shed.

1972 INGROUND SWIMMING POOL

The 1972 inground swimming pool is kidney-shaped and includes a semicircular hot tub attached to the southern end of the swimming pool (Figure 35). The pool decking is constructed of stamped cobblestone and concrete. There is decorative blue tile along the top edge of the pool.

Figure 35. Photograph showing the 1972 inground swimming pool with the hot tub, facing north.

ASSOCIATED LANDSCAPE

The associated landscape includes original square concrete pillars clad in decorative red brick that appear original to the house (Figure 36). The brick-clad concrete pillars are linked together by contemporary iron fencing designed in a semicircular shape. A gravel driveway leads to a wooden fence, which appears to be new (Figure 37).

Figure 36. Photograph showing a concrete pillar and contemporary iron gate along the primary façade, facing north.

Figure 37. Photograph showing the gravel driveway and new wooden fence, facing north.

PREVIOUS ALTERATIONS TO THE CA. 1922 HOUSE

Although the alterations are thoroughly documented in this report's Property History section and the Historical Architectural Survey section, the following section breaks out the most significant alternations in a bulleted list. This is followed by an alternation diagram showing the ca. 1922 house and alternations (Figure 38).

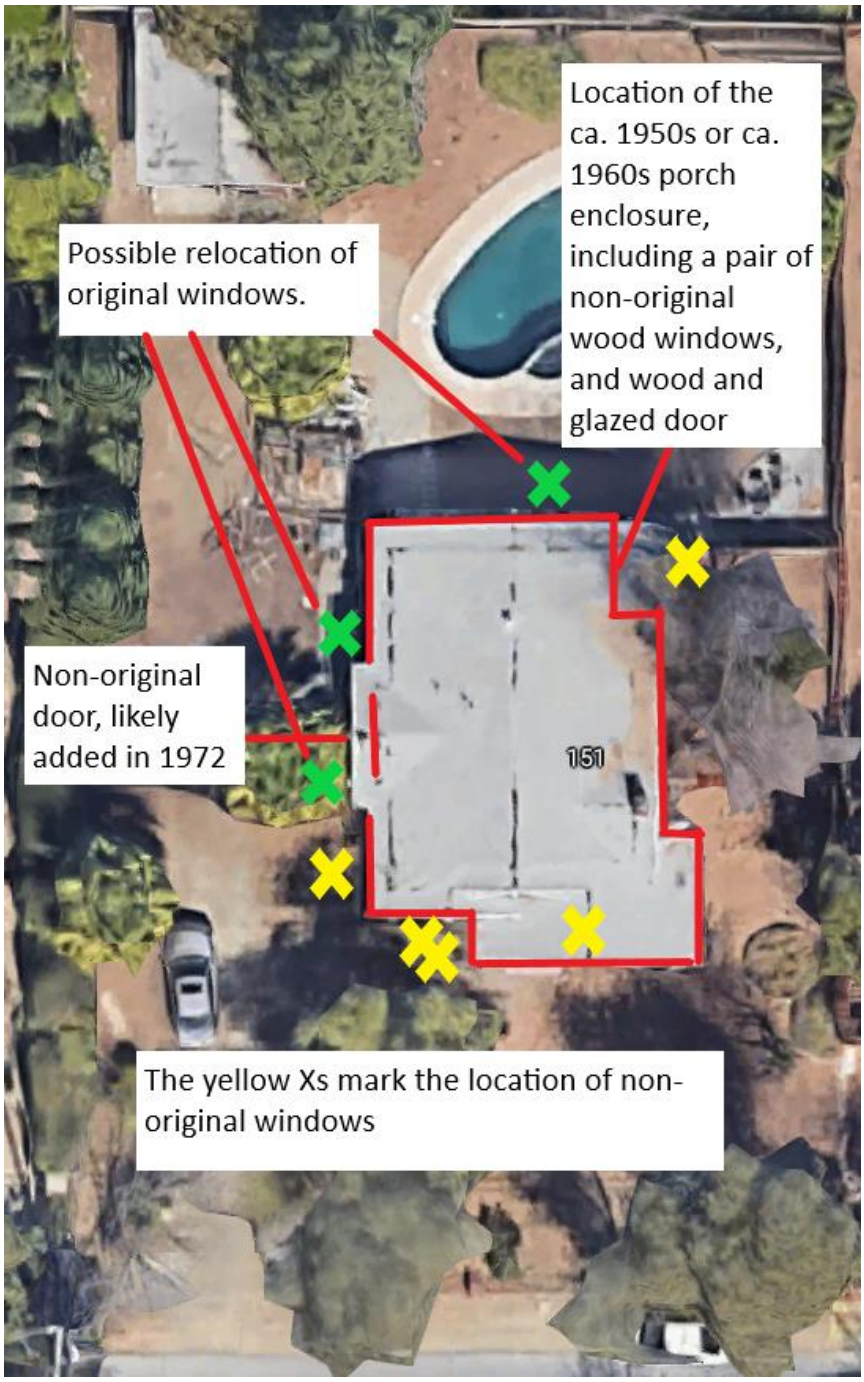


Figure 38. Google aerial view of the Property, showing the alterations.

- **Rear addition/porch enclosure**: The rear addition/porch enclosure, along the north elevation and a portion of the east elevation, consists of alterations in the ca. 1950s or ca. 1960s. These changes created a projecting side gable roof along the northeast corner of the house, enclosing what was likely an original rear porch entrance, providing interior access to the half-width basement, which was originally accessed from the house's exterior.
- **Windows:** There are 26 windows, of which four (detailed below and within Figure 38) are not original to the design of the ca. 1922 house and another four original windows appear to have been relocated due to remodeling efforts in 1985 and 2015.
    - **Replacement/Relocation of Windows**: The primary façade (south elevation) consists of two (2) large picture windows and trim work that is not original to the house (Figure 39); the east elevation consists of a pair of double-hung wood windows (2) with lugs associated with ca. 1950 or ca. 1960 addition (Figure 40); the north elevation consists of two (2) narrow, fixed windows that do not appear to be in their original location (Figure 41); the west elevation consist of two (2) new narrow wood windows with lugs that also do not appear to be in their original location due to changes that occurred in 1985 and 2015. There is also one (1) replacement window sash without lugs within the paired windows near the southwest corner of the house (Figure 42). Although the relocation of the four windows within the house is likely, there are no detailed permit or building records held by the City of Los Altos that can verify this likelihood.

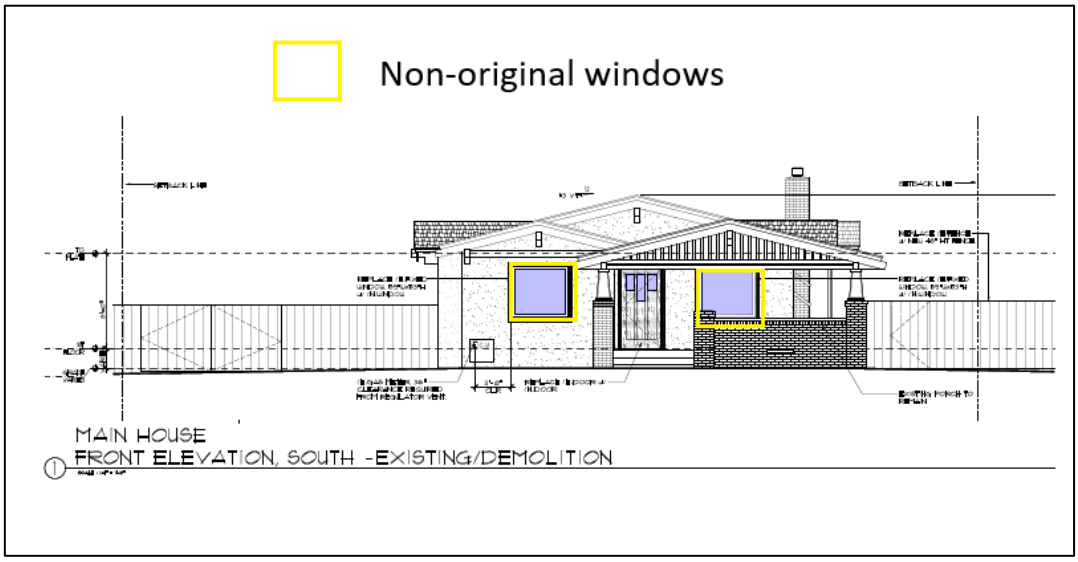


Figure 39. Primary façade (south elevation) showing the non-original windows outlined in yellow (Brownhouse Design; dated 5/27/2022).

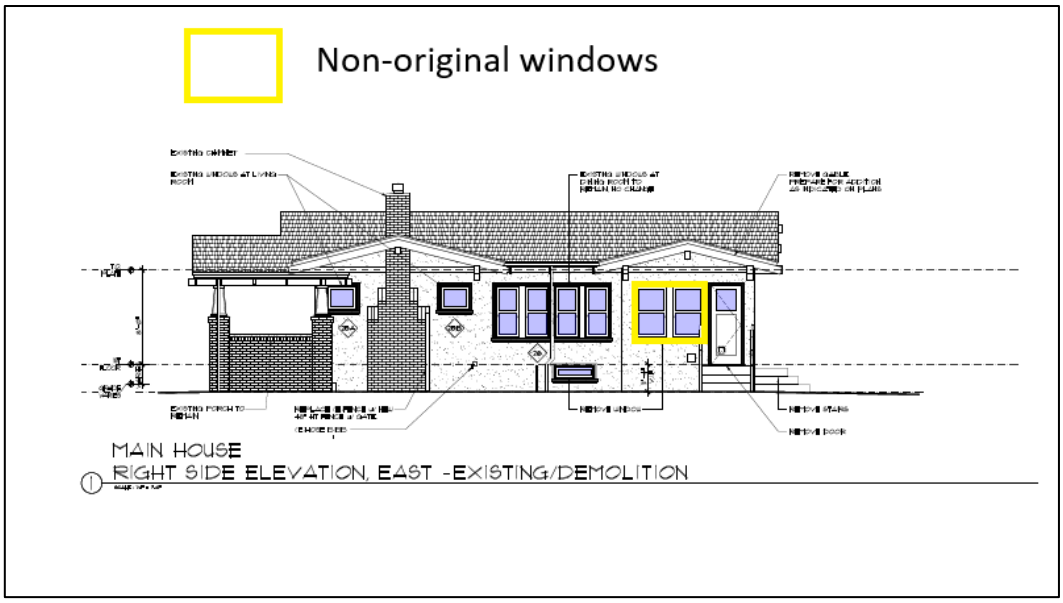


Figure 40. East elevation showing the non-original windows outlined in yellow (Brownhouse Design; dated 5/27/2022).

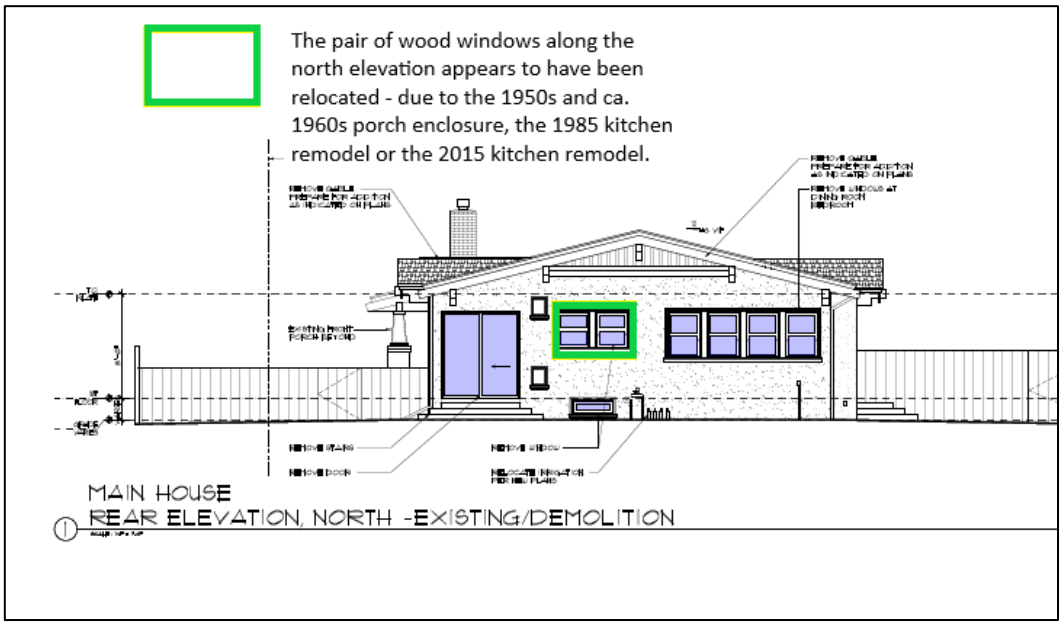


Figure 41. North elevation showing a pair of wood windows (outlined in green) that appear to have been relocated due to remodeling (Brownhouse Design; dated 5/27/2022).

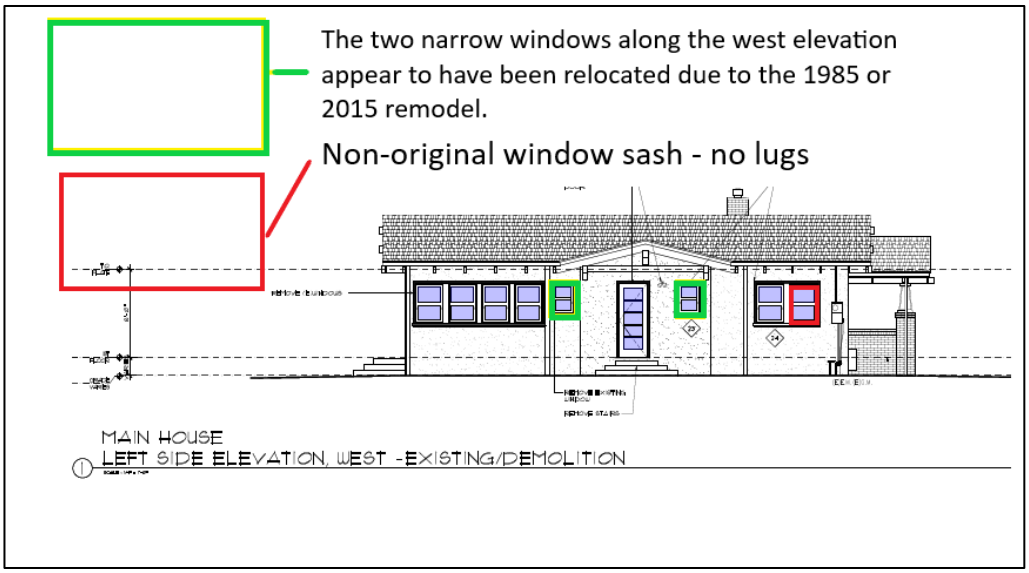


Figure 42. West elevation showing a non-original window sash (outlined in red) and two narrow wood windows (outlined in green) that appear to have been relocated due to remodeling (Brownhouse Design; dated 5/27/2022).

Stucco cladding – the addition to the rear, along the north and east elevations, and where windows were replaced or relocated, would have required the removal of stucco material; as such, within areas where there is window replacement and additions are documented, the stucco is not original.

- **New roof** - 1999, Permit No. 1999-636285
- **Kitchen and Bathroom Remodel and New Addition** – In 1985, Permit No. A 20848 was issued for the remodeling of a bathroom and kitchen within the ca. 1922 house. No further details are available, but it appears that during this addition, the changes to the north and west elevations may have occurred. In 2015 Permit No. 2015-664474 (issued 05/22/2015) to contractor Kevin Yapp. According to the City permit website, the permit is for an "addition" that includes, but not limited to, a kitchen and bath "addition," as well as new plumbing, sheetrock, tile lath, "Rg Fr/El/Mech/Pl", wall and ceiling insulation, and shower pan. The changes not listed, but those that also appear to have been completed under this permit, include a vinyl sliding glass door on the north elevation, providing access to the new kitchen, and a set of steps constructed of what appears to be fiber cement or Hardie decking. Although the permit was issued in 2015, and the work appears to have been completed at this time, the permit was not finalized by the City until 9/6/2020.

EVALUATION OF HISTORICAL SIGNIFICANCE

The Property includes the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape were evaluated to determine eligibility for listing on the CRHR. The ca. 1922 house was evaluated for its association with Craftsman Bungalow architecture with a period of significance of ca. 1922, which is the date when the house is estimated to be constructed. The ca. 1922 shed, 1972 inground swimming pool, and associated landscape are not associated with any known architectural style, form, or architectural landscape design or landscape planning.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The CRHR is an inventory of significant architectural, archaeological, and historical resources in California. Resources can be listed in the CRHR through several methods. State Historical Landmarks and NRHP listed properties are automatically listed in the CRHR. Properties can also be nominated to the CRHR by local governments, private organizations, or citizens. The CRHR follows *similar* guidelines to those used for the NRHP.[19] One difference is that the CRHR identifies the Criteria for Evaluation numerically instead of alphabetically. Another difference, according to the OHP is that "It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the NRHP, but they may still be eligible for listing in the California Register. A resource that has lost its historical character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data".[20]

To qualify for listing in the CRHR, a property must possess significance under one of the four criteria and have historic integrity. Determining integrity consists of evaluating seven variables or aspects that include location, design, setting, materials, workmanship, feeling, and association. According to the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, these seven characteristics are defined as follows:

- **Location** is the place where the historic property was constructed.
- **Design** is the combination of elements that create the form, plans, space, structure, and style of the property.
- **Setting** addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the building(s).
- **Materials** refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.
- **Workmanship** is the physical evidence of the crafts of a particular culture or people during any given period in history.
- **Feeling** is the property's expression of the aesthetic or historic sense of a particular period of time.
- **Association** is the direct link between an important historical event or person and a historic property.

The following section examines the eligibility of the ca. 1922 house, ca. 1922 shed, and associated landscape.

CRHR EVALUATION

1. **(Event): Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.**

   The ca. 1922 house and ca. 1922 shed within the Property were constructed in a planned subdivision

[19] California Code of Regulations, Title 14, Chapter 11.5, Section 4850 et seq

[20] California Office of Historic Preservation Technical Assistance Series #6 California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register).

in a prosperous time in Los Altos; however, the development of the Property is not associated with any housing boom or any event that made a significant contribution to the broad patterns of California's history or cultural heritage. As such, the Property containing the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape does not appear eligible for listing on the CRHR.

Therefore, the Property does not appear individually eligible for listing in the CRHR under Criterion 1.

2. **(Person): Is associated with the lives of persons important in our past.**

   An exhaustive record search and review was completed by EDS, as well as the current owner. Although research included Thorough research of the Property containing the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape was completed; however, the research did not reveal that any person associated with the Property that is important to our past.

   Therefore, the Property does not appear individually eligible for listing in the CRHR under Criterion 2.

3. **(Construction/Architecture): Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.**

   Architecture: The ca. 1922 house is associated with the Craftsman Bungalow architectural style, which was popular throughout the U.S. from 1905 to 1930. The ca. 1922 house retains character-defining features associated with Craftsman Bungalow design, including the multi-front-gabled form, low-pitched roof with wide overhanging eaves, exposed rafters and beams, recessed porch set under an extending porch roof, battered porch columns, wood casement windows, and double-hung wood windows.

   The ca. 1922 shed and associated landscape are not associated with any known architectural style or form, landscape architectural style, or landscape planning design.

   Therefore, the ca. 1922 house within the Property appears individually eligible for listing in the CRHR under Criterion 3.

4. **(Information potential): Has yielded, or may be likely to yield, information important in prehistory or history.**

   Criterion 4 most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion 4 can also apply to built environment resources that contain important information. For a building to be eligible under Criterion 4, it must be a principal source of important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

   The ca. 1922 house does not appear to have the ability to convey information about Craftsman Bungalow architecture. None of the built environment resources within the Property are eligible for listing in the CRHR under Criterion 4.

INTEGRITY

A Property must possess significance under one or more of the above-listed criteria and have historic integrity to qualify for listing in the CRHR. There are seven variables, or aspects, used to judge historic integrity, including location, design, setting, materials, workmanship, feeling, and association.[21] A resource must possess the aspects of integrity that relate to the historical theme(s) and period of significance identified for the built-environment resources. National Register Bulletin 15 explains, "only after significance is fully established can you proceed to the issue of integrity."

The ca. 1922 house within the Property was found to be eligible for listing on the CRHR under Criterion 3; as such, an integrity analysis was completed.

- **Location.** The ca. 1922 house remains at its original location where it was constructed.

  Therefore, the ca. 1922 house retains integrity of location.

- **Design**. There do not appear to have been any significant changes to the 1922 house except for a rear porch enclosure that appears to have been constructed in the 1950s or 1960s and the removal of some original windows along the primary facade. However, the porch enclosure and changes to the primary façade windows are not significant changes. Overall, the ca. 1922 design retains its Craftsman Bungalow design elements such as the multi-gable form with a low-pitched roof with wide eaves and exposed rafters, decorative brackets, a recessed porch set under the roof extension support by battered wood columns, and original wood casement windows and double-hung wood windows.

  Therefore, the ca. 1922 house retains integrity of design from ca. 1922.

- **Setting.** The surrounding area of the ca. 1922 house has not changed and retains its feeling of the setting. The area also retains its feeling of a neighborhood that developed within the early twentieth century. In addition, the 1972 inground swimming pool does not compromise the setting.

  Therefore, the ca. 1922 house retains integrity of setting.

- **Materials**. The 1922 house retains integrity of materials from its original date of construction. The 1922 house materials include original wood windows, brick cladding, decorative wood elements such as roof beams, rafter tails, wood porch columns, and a brick chimney.

  Therefore, the ca. 1922 house retains integrity of materials.

- **Workmanship.** Workmanship is evidenced by skill or craft from a particular period or region. The ca. 1922 house retains workmanship regarding the knowledge and application of materials associated with woodworking.

  Therefore, the ca. 1922 house retains integrity of workmanship.

- **Feeling**. Integrity of feeling is the quality that a historic property has in evoking the aesthetic or

[21] National Park Service, *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: United States Department of the Interior, 1997).

historical sense of a past period. The ca. 1922 house evokes the feeling of the Craftsman Bungalow architecture, including the low-pitched roof and multi-gable form, wide overhanging roof eaves, and front porch, casement, and double-hung wood windows.

Therefore, the ca, 1922 house retains integrity of feeling.

- **Association.** The ca. 1922 house retains association with Craftsman Bungalow architecture.

  Therefore, the ca. 1922 house retains integrity of association from its date of construction.

An assessment of integrity found that the ca. 1922 house retains all seven aspects of integrity.

STANDARDS REVIEW

The Standards review was conducted to ensure compliance with Section 106 of the NHPA and address the proposed Project's potential impacts on the ca. 1922 house, which was determined to be eligible for listing on the CRHR. The Standards review utilized architectural drawings and renderings provided to EDS by Brownhouse Design (dated 5/27/2022).

Secretary of Interior Standards for Rehabilitation Review

The following section addresses the proposed Project within the context of the Secretary of the Interior's Standards for Rehabilitation. **Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values**. When repair and replacement of deteriorated features are necessary, when alterations or additions to the property are planned for a new or continued use, and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment.

According to the Standards, "some exterior and interior alterations to a historic building are generally needed as part of a Rehabilitation project to ensure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include changes to the site or setting, such as the selective removal of buildings or other features of the building site or setting that are intrusive, not character-defining, or outside the building's period of significance."

The Standards, and EDS' analysis of the proposed Project as it relates to the Standards, is presented below. The Project was reviewed using the Project description provided by the architect, which was applied to each of the Standards. The results of the Standards analysis are presented below with an "EDS Response" and a "EDS Analysis" that identifies if the Project conforms with Standards. "EDS Recommendations" are also provided, if warranted.

The following Standards review assesses potential impacts on the ca. 1922 house within the Property.

1. **A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.**

   The ca. 1922 house will continue to be for residential use.

EDS Analysis: The proposed Project complies with Standard 1

2. **The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.**

Potential Stucco Removal and Replacement – Evidenced by Exploratory or Construct Work

Currenty the proposed project will retain the exterior stucco – however, if during the rehabitation exploratory or construction work the stucco is determined to be beyond repair, based on photographic evidence and reviewed by a qualified individual, the following section provides an acceptable alternative to the stucco, meeting the Standards for rehabilitation.

The ca. 1922 house is clad is stucco applied in a dash finish, which was used on Craftsman houses in the 1920s. However stucco was not the typical or preferred cladding for Craftsman architecture, which was more often clad in horizontal wood boards or wood shingles that better convey this style, which was focused on decorative wood elements and woodworking craftsmanship that Craftsman architecture is known for. As such, if the stucco is determined to be beyond repair, a suitable replacement material meeting the Standards for Rehabilstiaon would be stucco, wood shingles, or horizontal wood cladding.

EDS Analysis: *If due to evidence obtained and submitted to the city during exploraty or construction work the stucco will need to be removed, it is not considered a character-defining feature of the ca. 1922 Craftsman house. As such, the stucco, if beyond repair, does not need to be retained or preserved under the Standards for Rehabilitation. Also, the Standards for Rehabilitation allow for changes to the material if the replaced material is a "compataible material" in keeping with the Craftsman design. However, to make this change, the condition of the stucco must be documented and submitted to the city prior to making any changes to the stucco cladding. Furthermore, EDS recommends the replacement with wood shingles or horizontal wood boards, which supports the Craftsman Bungalow design and is material that is compatible with the style.*

Window Replacement

The ca. 1922 house consists of 26 windows, of which four (4) are non-original windows added in ca. 1950s or ca. 1960s, and an additional four appear to have been relocated during remodeling efforts,

The Project proposes to remove **two non-original fixed picture windows along the primary façade (south elevation)** that do not conform with Craftsman architectural style and are replacement windows. These two picture windows will be replaced with multi-light wood windows that are appropriate for the Craftsman design of the house but do not mimic any original windows within the house. Instead, they are compatible with the original Craftsman design in material and style (Figure 43). The two new windows along the primary façade will be custom-made, multi-light, wood and replace the two non-original picture windows.

In addition, the Project proposes to add new window openings and a reconfiguration of windows that would require the removal of 13 double-hung wood windows (north, west, and east elevations), of which two (2), on the east elevation, were added in the 1950s or 1960s and are not original to the ca.

1922 house and the remaining eleven (11), which are original double-hung wood windows, are mainly along the rear (north elevation) and the northwest corner of the house and are not visible from the street view. The windows will be replaced with Marvin wood windows, including divided light fixed, casement, French casement, and awning type windows that are compatible with the Craftsman design.

In summary, the Project proposes to replace two (2) non-original picture windows along the primary façade that do not conform with the Craftsman architectural style and the removal of 13 double-hung windows, of which eleven (11) are original double-hung windows (though four of these appear to have been relocated) and two (2) are non-original windows that will be replaced with Marvin windows.

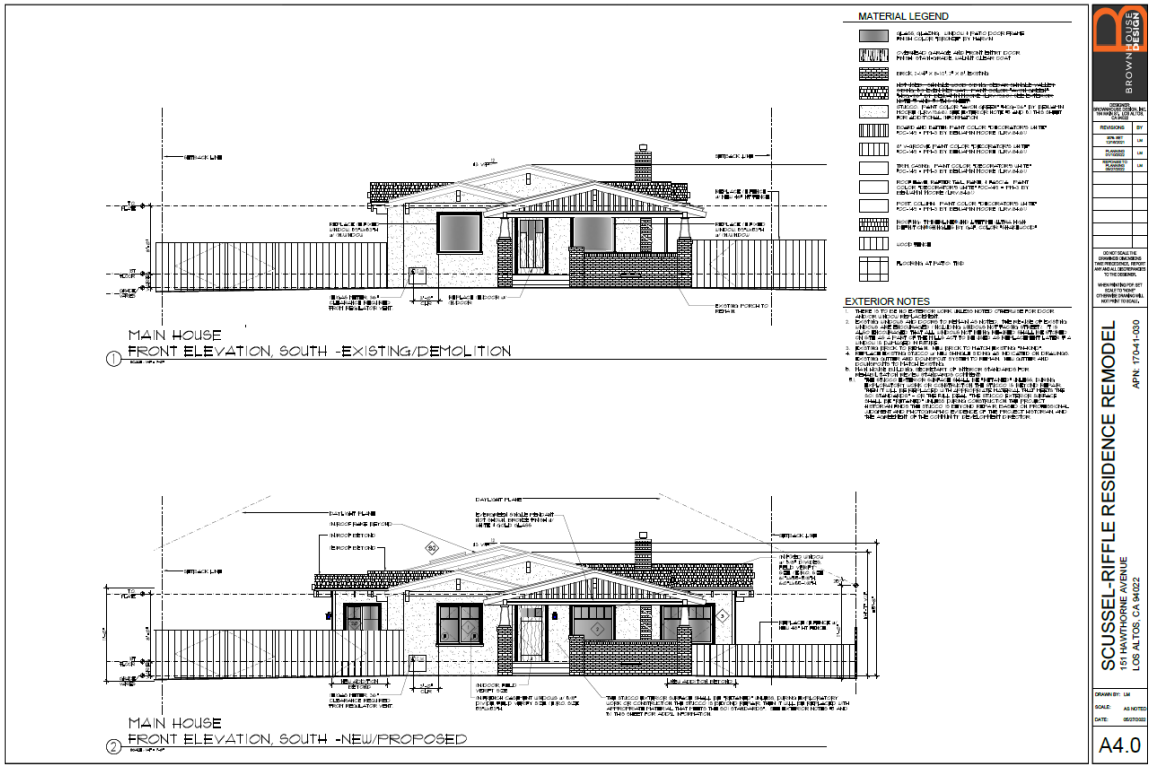


Figure 43. Existing and proposed primary façade (south elevation) of the ca. 1922 house, showing changes to the windows and front door and the side gable additions (Brownhouse Design; dated 5/27/2022).

The Project proposes the removal of two (2) picture windows along the primary façade (south elevation) and replacement with 13 (11 original, of which four have been relocated, and two non-original) double-hung wood windows allowing for the expansion of the house's original form without compromising the integrity of the original Craftsman design. Eight double-hung wood windows (making up a ribbon of four on each elevation) at the northwest corner of the ca. 1922 house will be removed as part of the expansion of the house, which will be set behind the original extending projecting roof form and will not be visible from the public right-of-way. The new window

replacements will be hand-crafted, double-sash Marvin wood windows, with a divided light upper sash and a lower sash without lugs, complementing the Craftsman architectural style and will not impact its integrity or its' CRHR eligibility.

EDS Analysis: *"When alterations or additions to the property are planned for a new or continued use",* [22] *Rehabilitation is the appropriate method under the Standards. The current Project is rehabilitation, not preservation, and as such this method allows for a range of changes provided the project does "**not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes.**"*[23] *This does not mean there cannot be changes, this means that the changes must not affect the integrity of the resource that would make it is no longer eligible for listing under its associated significance.*

*The house currently consists of 26 windows, of which the Project proposes the **removal of eleven (11) original windows**. The new wood windows are designed to conform with the Craftsman architectural style and will be constructed of a wood material that is consistent with the design within its period of significance of ca. 1922. In addition, the primary façade (south elevation) will consist of the restoration of the original Craftsman design but removing the non-conforming picture windows that were added in the 1950s or 1960s. All windows will have wood exteriors, though windows along the side elevations and the rear that are not visible from the street view can have exterior wood cladding. However, wood exteriors are preferable. Although 11 of the 26 windows are original to the house, their removal and replacement will also not affect the integrity of the Craftsman design.*

The proposed Project complies with Standard 2.

3. **Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.**

   The design of the new addition and proposed alterations to the primary façade of the ca. 1922 house, including the new windows and doors, have been carefully considered to complement the original Craftsman Bungalow design of the ca. 1922 house and will not create a false sense of historical development (Figure 44). The new detached garage consists of a modern garage door and extended covered parking supported by narrow and shorten tapered columns set on tall pillars clad in 1/3 running bond pattern, which does not mimic the original tapered columns along the primary façade of the ca. 1922 house (Figure 45).

   EDS Analysis: The proposed Project complies with Standard 3.

[22] National Park Service, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings*, 2017.

[23] Ibid.

Figure 44. The rendering shows the proposed primary façade with shingle cladding and new windows, with narrow upper sash windows (Brownhouse Design; dated 5/27/2022).

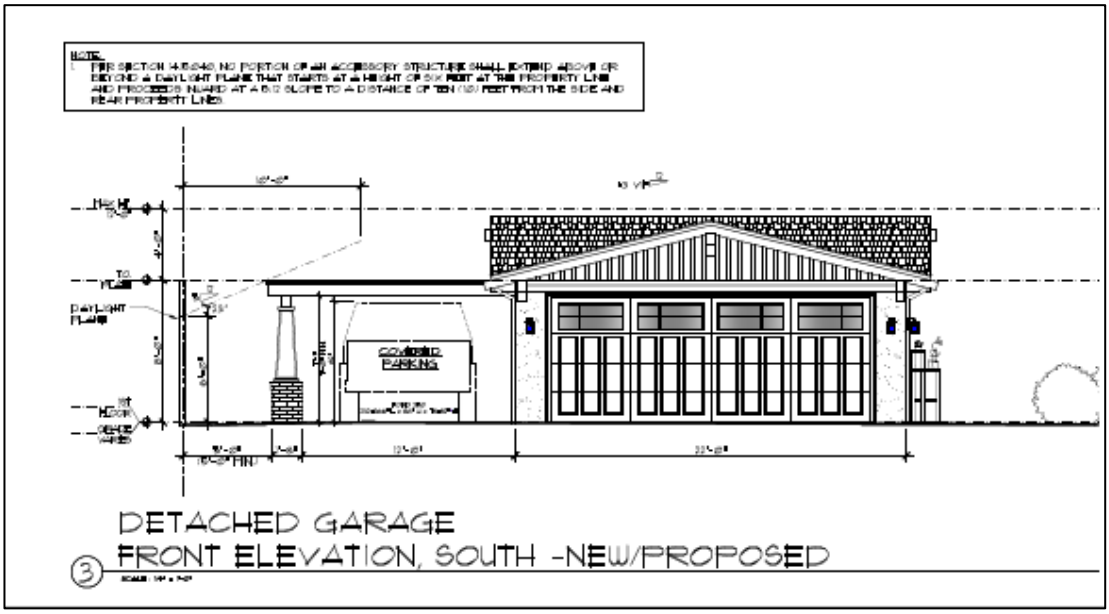


Figure 45. The drawing shows the new detached garage, with a subordinate roof, contemporary garage door, and variation of the porch columns that conform but do not mimic the original tapered columns along the primary façade of the ca. 1922 house (Brownhouse Design; dated 5/27/2022).

4. **Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.**

   There are no proposed changes to the ca. 1922 house after its construction that have become "significant in their own right", including the in-ground swimming pool in 1972.

   EDS Analysis: The proposed Project complies with Standard 4.

5. **Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.**

   Although 11 double-hung wood windows will be removed, these windows are not original to the house. In addition, if the the stucco is removed – after review and approval by the city – it is not a feature that is typical of Craftsman Bungalow architecture, and the stucco is not a distinctive feature of the ca. 1922 house. In addition, the majority of the distinctive features, finishes, and construction techniques, including the form, massing, porch with tapered columns and brick cladding, and decorative wood brackets and timbering, will be preserved.

   EDS Analysis: The proposed Project complies with Standard 5.

6. **Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.**

   There are no proposed changes to deteriorated features.

   EDS Analysis: As such, Standard 6 does not appear to apply.

7. **Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.**

   EDS Analysis: Not applicable to the Project.

8. **Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.**

   EDS Analysis: Not applicable to the HRE, as a professional archaeologist would need to make this determination.

9. **New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.**

   Exterior Alternations

   The Project consists of changes to the exterior of all four elevations of the ca. 1922 house. The Project proposes changes that are designed in a way to be differentiated from the original ca. 1922 Craftsman

Bungalow design, but compliments and conforms with the style.

If it is determined that the existing stucco needs to be replaced, addressed in item 2, EDS recommends wood shingle exterior cladding or horizontal wood boards. Since the the stucco does not characterize the Craftsman Bungalow design and is not a character-defining element of the ca. 1922 house there would be no effect to integrity. In addition, stucco cladding is not typical of this style and does not contribute to the significance of the ca. 1922 house as a good example of Craftsman Bungalow design. According to the Standards, replacing exterior cladding can be done if an acceptable substitute material, such as horizontal wood boards or wood shingles, is utilized so that the new material does not impair the historic character of the resource and will also not impact its ability to be recognized as a Craftsman Revival design.

The **proposed changes to the north and west elevations** would require the removal of historical materials, such as double-hung wood windows, and the introduction of new window openings. However, given these changes are focused on areas of the building that are not visible from the public right-of-way, these changes would not destroy historic materials that characterize the property. The design changes to the north elevation (rear façade) are also compatible with the ca. 1922 house. They include compatible materials, such as multi-light wood windows and differentiated but compatible gabled roof form that is flush with the existing massing and scale of the ca. 1922 house. These changes along the rear and west elevation would not be visible from the public right-of-way. Thus, they would protect the property's historical integrity and its environment.

The proposed **new garage** is new construction and is designed to be compatible with the ca. 1922 house in design, form, scale, and materials. The new garage is constructed of wood framing, with horizontal wood cladding and a low-pitch roof. The building is set back from the ca. 1922 house. It does not intrude on the ca. 1922 house or compete with the character-defining elements of the primary façade (south elevation), allowing the ca. 1922 house to remain the centerpiece of the Property (Figure 46). In addition, the new garage will be situated behind a wooden fence and not visible from Hawthorne Avenue.

EDS Analysis: The proposed Project complies with Standard 9.

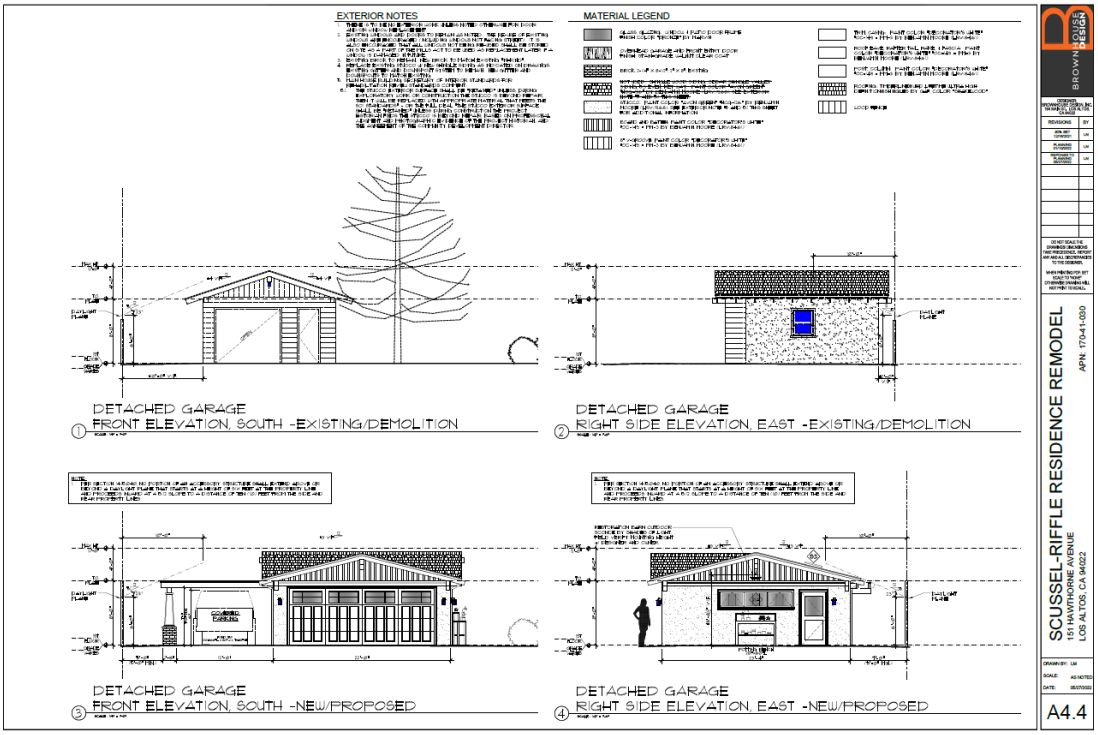


Figure 46. Architectural drawing of the existing detached ca. 1922 shed and the proposed detached garage (Brownhouse Design; dated 5/27/2022).

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The new additions along the side elevations (east and west) are minor side gable additions, which would not impair the original design or form of the ca. 1922 house if removed in the future. The new detached garage will be constructed so that if in the future it is removed, it will not adversely affect the integrity of the ca. 1922 house.

EDS Analysis: The proposed Project does comply with Standard 10.

CONCLUSION

In accordance with CEQA regulations and guidelines, EDS completed an HRE for the Property at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California, within the 0.3-acre (APN 170-41-030) containing the ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape to determine if the Property or any of the built environment resources within the Property are eligible for listing on the CRHR. The methods used to complete the HRE included extensive research and an intensive level historic architectural survey conducted by EDS Principal Architectural Historian Stacey De Shazo, M.A., who exceeds the Secretary of the Interior's qualification standards in Architectural History and History. The HRE was completed following CEQA regulations (PRC § 21000) and the Guidelines for Implementing CEQA (14 CCR § 15000 et seq.).

The ca. 1922 house is currently listed on the OHP's BERD (P-43-002072) and within the City of Los Altos Historic Inventory (2013); therefore, the ca. 1922 house is considered a Historical Resource as defined in Section 15064.5 of the CEQA. Furthermore, the HRE determined that the ca. 1922 house appears individually eligible for listing on the CRHR under Criterion 3 for its association with Craftsman Bungalow architecture with a period of significance of ca. 1922 and retains all seven aspects of integrity. Therefore, due to potential impacts to the historical resource, a Standards review was completed to determine if the proposed Project would impact the integrity of the ca. 1922 house. Based on the Standards review of the architectural drawings by Brownhouse Design (dated 5/27/2022), EDS determined that the proposed Project meets the Standards for Rehabilitation. As such, the proposed Project will have no impact on historical resources. In addition, the property is a qualified historc property and appears eligible for Mills Act tax program.

BIBLIOGRAPHY

American Architects Directory, Published by R.R. Bowker for the American Institute of Architects, 1956, 1962, 1970.

Ancestry.com

General Register Office; United Kingdom; Volume: *4;* Page: *1383*

1940; Census Place: *Santa Clara County*

The National Archives of the UK; Kew, Surrey, England; Board of Trade: Commercial and Statistical Department and successors: Inwards Passenger Lists.; Class: BT26; Piece: 1410

National Archives at College Park; College Park, Maryland, U.S.A.; NAI Number: *613857;* Record Group Title: *General Records of the Department of State;* Record Group Number: *Record Group 59;* Series Number: *Publication A1 5166;* Box Number: *134;* Box Description: *1974 PL – RZ*

Bancroft, Hubert Howe. *History of California: 1801 – 1924.* A.L. Bancroft, 1885.

CIRCA Preservation Consulting, "City of Los Altos Historic Resources Inventory"*,* Prepared for the City of Los Altos, 2012.

Clay, Karen, *Property Rights and Institutions: Congress and the California Land Act 1851*, The Journal of Economic History, Cambridge University Press, 59(01):122-142, March 1999.

Kenneth T. Jackson, Crabgrass Frontier: The Suburbanization of the United States, Oxford University Press, 1985.

Los Altos Hills, "Lost Altos Hills History Anthology (1956-2016)", 2016.

McAlester, Virginia, and Lee McAlester, A Field Guild to American Houses. New York, Alfred A. Knopf. Munro-Fraser, J.P. 2013.

National Park Service, National Register Bulletin: How to Apply the National Register Criteria for Evaluation. Washington, D.C.: United States Department of the Interior. 1990, revised 1997.

Olmsted, Nancy, *Vanished Waters: A History of San Francisco's Mission Bay*, Mission Creek Conservancy, San Francisco, 1986.

Richards Gordon, "Stephens-Townsend-Murphy Party", Truckee Donner Historical Society, accessed September 21, 2021, https://www.truckeehistory.org/the-first-pioneer-wagons-crossed-the-sierra-over-160-years-ago.html.

Sacramento State Office, "Report of the Surveyor-General of the State of California from August 1, 1898 – August 1, 1898.' 1886.

Salameda, Jose, *Memories of Los Altos*, publisher Joe Salameda (January 1, 1982).

Tyler, Norman, Ted Ligibel, and Ilene R. Tyler, Historic Preservation: An Introduction to Its History, Principles, and Practice, New York: W.W. Norton & Co., 2009.

Appendix A:

DPR Forms

EVANS & DE SHAZO, INC
ARCHAEOLOGY HISTORIC PRESERVATION

1141 Gravenstein Highway S.
Sebastopol, CA 9
Tel. 707-823-7400
Email: stacey@evans-deshazo.com

July 8, 2022

RE: Mills Act Application Recommendation Letter for the Property at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California.

To Whom it May Concern,

In 2022, Evans & De Shazo, Inc (EDS) Principal Architectural Historian Stacey De Shazo, M.A., who exceeds the Secretary of Interior's qualification standards in Architectural History and History, completed a Historic Resource Evaluation (HRE) of the property at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California within Assessor Parcel Number (APN) 170-41-030 consisting of a ca. 1922 house, ca. 1922 shed, 1972 inground swimming pool, and associated landscape to determine if the property or any of the built environment resources within the property are eligible for listing on the California Register of Historical Resources (CRHR). Prior to the completion of the HRE, EDS determined that the ca. 1922 house within the property is currently listed on the Office of Historic Preservation's (OHP) Built Environment Resources Directory (BERD) (P-43-002072) and within the City of Los Altos Historic Inventory (2013). As such, the ca. 1922 house is considered a Historical Resource as defined in Section 15064.5 of the California Environmental Quality Act (CEQA). The HRE, completed by EDS under CEQA regulations (PRC § 21000) and the Guidelines for Implementing CEQA (14 CCR § 15000 et seq.), determined that the ca. 1922 house is individually eligible for listing on the CRHR under Criterion 3 for its association with Craftsman Bungalow architecture with a period of significance of ca. 1922 and retains all seven aspects of integrity. Therefore the ca. 1921 house is a qualified historic property and eligible for the Mills Act.

Current Rehabilitation Project

To ensure that the current rehabilitation project (submitted to the city) would not impact the integrity of the ca. 1922 house, EDS completed a Secretary of Interior's Standards for the Treatment of Historic Properties (Standards), which is within the HRE report (updated 7/8/2022).[1] The Standards review was based on the architectural drawings by Brownhouse Design (dated 5/27/2022), submitted to the city. The Standards review determined that the proposed project meets the Standards for Rehabilitation. As such, the proposed project will not impact historical resources and is eligible for the Mills Act.

Mills Act

In 1972, the State adopted legislation (Government Code §§ 50280 – 50290) that created an alternative method for determining the assessed value of specific qualified historical properties, commonly referred to as the Mills Act. The Mills Act is a state law allowing cities to enter into contracts with the owners of historic structures. Such contracts require a reduction of property taxes in exchange for the continued preservation of the property. Property taxes are recalculated annually using a formula in the Mills Act and Revenue and Taxation Code. The Mills Act Program aims to provide economic incentives to foster the

[1] Stacey De Shazo, "Historic Resource Evaluation and Standards Review of the Property at 151 Hawthorne Avenue, Los Altos, Santa Clara County, California", Evans & De Shazo, 2022.

1141 Gravenstein Highway S
Sebastopol, CA
Tel. 707-823-7400
Email: stacey@evans-deshazo.com

preservation of residential neighborhoods and the revitalization of downtown commercial districts. The Mills Act is the single most important economic incentive program in California to restore and preserve qualified historic buildings by private property owners. Enacted in 1972, the Mills Act legislation grants participating local governments (cities and counties) authority to enter into contracts with owners of qualified historic properties who actively participate in the restoration and maintenance of their historic properties while receiving property tax relief.

The law provides an income-based tax formula for legible properties subject to historical property contracts. The Mills Act allows cities and counties to enter into a contract with a property owner of qualified historic property. The state code defines a qualified historic property as a privately owned property that is not exempt from property taxation and which meets either of the following:

(a) Listed in the National Register of Historic Places or located in a registered historic district, as defined in Section 1.191-2(b) of Title 26 of the Code of Federal Regulations.

(b) Listed in any state, city, county, or city and county official register of historical or architecturally significant sites, places, or landmarks.

Qualified Historic Property

A qualified historic property is one that is listed on any federal, state, county, or city register, including the National Register of Historic Places, CRHR, California Historical Landmarks, State Points of Historical Interest, and locally designated landmarks. Owner-occupied family residences and income-producing commercial properties may qualify for the Mills Act program.

Recommendations

Based on the HRE, Standards review, and the requirements of the Mills Act program, EDS recommends that the ca. 1922 house at 151 Hawthorne Avenue, a qualified historic property, is eligible for consideration by the City of Los Altos for the Mills Act. In addition, as required by the city, the property owners are "actively" rehabilitating their property following the Secretary of the Interior's Treatment of Historic Properties, particularly the Standards for Rehabilitation.

Sincerely,

Stacey De Shazo, M.A. Principal Architectural Historian
Evans & De Shazo, Inc.
stacey@evans-deshazo.com

RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:

City of Los Altos
1 North San Antonio Road
Los Altos, CA 94022
Attn: Development Services Director

RECORDING REQUESTED PURSUANT TO GOVERNMENT CODE SECTIONS 6103 and 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

HISTORIC PROPERTY PRESERVATION AGREEMENT

THIS AGREEMENT is made and entered into this _____ day of _____, 2022, by and between the CITY OF LOS ALTOS, a municipal corporation ("City") and Curtis R. Riffle and Karen L. Scussel, Co-Trustee of the Curtis R. Riffle and Karen L. Scussel Family Revocable Living Trust dated November 16, 1998 (collectively, "Owner").

RECITALS

A. California Government Code section 50280, et seq. authorizes cities to enter into contracts with the owners of qualified historical property to provide for the use, maintenance and restoration of such historical property so to retain its characteristics as property of historical significance;

B. Owner holds fee title in and to that certain real property, together with associated structures and improvements thereon, generally located at the street address 151 Hawthorne Avenue, Los Altos, California (the "Historic Property"). A legal description of the Historic Property is attached hereto, marked as Exhibit "A" and is incorporated herein by this reference;

C. On September 7, 1997 the Historical Comission of the City of Los Altos designated the Historic Property as a Historical Resource, pursuant to Chapter 12.44 of the City's Municipal Code. The Historic Property is a qualified historical property pursuant to California Government Code section 50280.1.

D. City and Owner, for their mutual benefit, now desire to enter into this agreement both to protect and preserve the characteristics of historical significance of the Historic Property and to qualify the Historic Property for an assessment of valuation pursuant to the Provisions of Chapter 3, of Part 2, of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW THEREFORE, City and Owner, in consideration of the mutual covenants and conditions set forth herein, do hereby agree as follows:

1. **Effective Date and Term of Agreement.** This Agreement shall be effective and commence on _____, 20__ ("Effective Date") and shall remain in effect for a term of ten (10) years thereafter. Each year upon the anniversary of the Effective Date, such initial term will automatically be extended as provided in paragraph 2, below.

2. **Renewal.** On each anniversary of the Effective Date (hereinafter referred to as the "Renewal Date"), an additional one year term shall automatically be added to the term of this Agreement unless a notice of nonrenewal ("Notice of Nonrenewal") is served as provided herein. If either Owner or City desires in any year not to renew this Agreement for an additional one year term, Owner or City shall serve a written Notice of Nonrenewal upon the other party in advance of the Renewal Date. Such Notice of Nonrenewal shall be effective if served by Owner upon City at least ninety (90) days prior to the Renewal Date, or if served by City upon Owner, such Notice of Nonrenewal shall be effective if served upon Owner at least sixty (60) days prior to the Renewal Date. If either City or Owner timely serves a Notice of Nonrenewal in any year, this Agreement shall remain in effect for the balance of the term then remaining, either from its original execution or from the last renewal date of this Agreement, whichever may apply.

2.1 **Owner Protest of City Nonrenewal.** Within fifteen (15) days after receipt by Owner of a Notice of Nonrenewal from City, Owner may make and file a written protest of the Notice of Nonrenewal. Upon receipt of such protest the City Council shall set a hearing prior to the expiration of the Renewal Date of this Agreement. Owner may furnish the City Council with any information which the Owner deems relevant, and within ten (10) days after demand shall furnish the City Council with any information the City Council may require. The City Council may, at any time prior to the Renewal Date of this Agreement, but without obligation to do so, withdraw its Notice of Nonrenewal.

3. **Assessment of Valuation.** The parties acknowledge that Owner, in consideration for abiding by the terms of this Agreement, shall be entitled to apply for a reassessment evaluation of the Historic Property pursuant to the provisions of Sections 439 et. seq. of the California Revenue and Taxation Code. Owner acknowledges that tax relief afforded to the Owner pursuant to Chapter 3, Part 2, of Division 1 of the California Revenue and Taxation Code may require negotiation with the Santa Clara County Assessor's Office. All tax savings realized by Owner in connection with this Agreement shall be used to preserve, maintain, repair, restore and rehabilitate the Historic Property.

4. **Standards for Historical Property.** Owner shall preserve, repair and maintain the Historic Property and it's Character Defining Features (defined below) as a qualified historic property, in no less than equal to the condition of the Historic

Property on the Effective Date. Owner shall, where necessary, restore and rehabilitate the property according to the rules and regulations of the Office of Historic Preservation of the State Department of Parks and Recreation, the United States Secretary of the Interior's Standards for Rehabilitation and Restoration, the State Historical Building Code, and the City's Historical Preservation Ordinance, as the same may be amended from time to time, and in accordance with the attached ten year schedule of home repair, maintenance and improvement measures prepared by Owner and approved by the City Council, attached hereto as Exhibit "B." Commencing on the fifth anniversary of the Effective Date, and continuing every five (5) years thereafter during the term of this Agreement, Owner shall submit to City an updated ten (10) year schedule of potential home repair, maintenance and improvement measures for the upcoming ten (10) year period, which schedule shall also document all repairs, maintenance, and improvements which have been completed since the Effective Date. Character Defining Features means all historic or other architecturally significant aspects of the Historic Property, including without limitation, the general architectural form, style, materials, design, scale, details, mass, roof line, porch, exterior vegetation and other aspects of the appearance of the exterior and interior of the Historic Property. The Secretary of Interior's Standards for Rehabilitation and Restoration currently in effect (attached hereto and marked as Exhibit "C") shall be incorporated herein by reference and constitute the minimum standards and conditions for the rehabilitation and restoration of the Historic Property. All standards referred to in this Section 4 shall apply to the Historic Property throughout the term of this Agreement. Owner shall not obstruct or obscure the public's ability to view the exterior of the Historic Property from the public right-of-way. Such prohibition shall include, without limitation, a prohibition against the placing of trees, bushes or fences in a location which substantially obscures or obstructs the view from the public right-of-way of the exterior of the Historic Property.

5. **Periodic Examinations.** Owner shall allow reasonable periodic examination, by prior appointment, of the exterior of the Historic Property by representatives of the Santa Clara County Assessor, State Department of Parks and Recreation, State Board of Equalization, and/or the City, as may be necessary to determine Owner's compliance with the terms and provisions of this Agreement.

6. **Provision of Information of Compliance.** Within ten (10) days after request by City, Owner shall furnish City with any and all information requested by the City from time to time which City deems necessary or advisable to determine compliance with the terms and provisions of this Agreement.

7. **Cancellation.** City, following a duly noticed public hearing, as set forth in California Government Code Sections 50285, et seq., may cancel this Agreement if it determines that Owner breached any of the provisions of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historic property and such breach is not cured by Owner within thirty (30) days after City gives Owner notice that a breach has occurred. City may also cancel this Agreement if it determines that the Owner has failed to maintain, preserve, restore or rehabilitate the Historic Property in accordance with the terms of this Agreement and such breach is not cured by Owner within thirty (30) days after City gives Owner notice

that a breach has occurred. If this Agreement is canceled because of failure of the Owner to maintain, preserve, restore and rehabilitate the Historic Property as specified above, the Owner shall pay a cancellation fee to the State Controller as set forth in Government Code Section 50286 as the same may be amended or replaced from time to time.

8. **Destruction.** Notwithstanding any provision of this Agreement to the contrary, the Owner may cancel this Agreement without payment of the cancellation fee set forth in Section 7, if the existing single-family residence (the "Structure") on the Historic Property is damaged by fire, earthquake, or other Act of God or accidental cause to the extent (1) the then fair market value of said Structure is reduced by fifty-one percent (51%) or more; or (2) fifty-one percent (51%) or more of said Structure's floor area is destroyed or irreparably damaged; or (3) fifty-one percent (51%) or more of the Structure's Character Defining Features are destroyed or irreparably damaged; or (4) that the cost to the Owner (less any insurance proceeds payable in connection with such damage) to restore the Structure to its prior condition would exceed Ten Thousand Dollars ($10,000). If the Owner desires to cancel this Agreement under this Section 8, written notice shall be given to the City within ninety (90) days after such damage or destruction occurs.

If the Owner desires to cancel this Agreement due to the circumstances outlined in this Section 8, either party may request a hearing before the City Council to determine (a) the extent of diminution of value, (b) the extent of the damage or destruction to the floor area of the Structure, and/or (c) extent of damage or destruction to the Character Defining Features of the Structure. The City Council may refer any matter relating to (c) to the City's Historical Commission for its findings and recommendations.

If Owner does not cancel this Agreement pursuant to this Section within ninety (90) days after damage or destruction occurs, or the damage or destruction does not exceed the thresholds set forth in the first paragraph of this Section, Owner shall have a reasonable time, not to exceed four (4) months, in which to restore the structure to not less than the condition existing prior to such damage or destruction.

9. **Enforcement of Agreement.** City may specifically enforce, or enjoin the breach of, the terms of this Agreement, if Owner fails to cure any default under this Agreement within thirty (30) days after City gives Owner notice that Owner has breached any of Owner's obligations under this Agreement. If Owner's breach is not corrected to the reasonable satisfaction of the City within thirty (30) days after the notice of breach is given to Owner, then City may, without further notice, declare a default under the terms of this Agreement and bring any action necessary to specifically enforce the obligations of Owner or enjoin any breach under this Agreement, including, but not limited to, bringing an action for injunctive relief against the Owner or such other relief as City may deem appropriate.

City does not waive any claim of default by Owner if City does not enforce or cancel this Agreement upon a default by Owner. All other remedies at law or in equity

which are not otherwise provided for in this Agreement shall be available to the City to pursue if there is a default of this Agreement by Owner. No waiver by City or any breach or default under this Agreement by Owner shall be deemed to be a waiver of any other subsequent breach thereof or default hereunder.

10. **Binding Effect of Agreement; Covenants Running With the Land.** The Owner hereby subjects the Historic Property to the covenants, reservations and restrictions as set forth in this Agreement. City and Owner hereby declare their specific intent that the covenants, reservations and restrictions as set forth herein shall be deemed covenants running with the land and shall pass to and be binding upon the Owner's successors and assigns in title or interest to the Historic Property. Each and every contract, deed or other instrument hereinafter executed, covering or conveying the Historic Property, or any portion thereof, shall conclusively be held to have been executed, delivered and accepted subject to the covenants, reservations and restrictions expressed in this Agreement regardless of whether such covenants, reservations and restrictions are set forth in such contract, deed or other instrument. City and Owner hereby declare their understanding and intent that the burden of the covenants, reservations and restrictions set forth herein touch and concern the land in that the value of the Owner's legal interest in the Historic Property may be affected thereby. City and Owner hereby further declare their understanding and intent that the benefit of such covenants, reservations and restrictions touch and concern the land by enhancing and maintaining the historic characteristics and significance of the Historic Property for the benefit of the public and Owner.

11. **Sale or Transfer of Ownership.** Prior to the sale or transfer of ownership of the Historic Property, the Owner is bound by this Agreement to provide a report to the City which outlines how all tax savings realized by Owner in connection with this Agreement were used to preserve, maintain, repair, restore and rehabilitate the Historic Property. The City shall review and approve the report administratively within twenty-one (21) days. If the City takes no action within that time, the report is deemed adequate.

12. **Cost Reimbursement.** Owner shall, within ten (10) days after demand, reimburse City for all reasonable legal fees and costs and all staff time and costs incurred by City in connection with the preparation and review of this Agreement and the administration of the Agreement during the term of this Agreement.

13. **Notice.** Any notice required to be given by the terms of this Agreement shall be in writing and sent by personal delivery or by United States registered or certified mail, postage prepaid, return receipt requested, addressed as set forth in this Section 13 below at any other address as may be later specified by the parties hereto by notice given in the manner required by this Section 13.

To City:
City of Los Altos
Attn: Historical Commission Liaison
One North San Antonio Road

To Owner:
Curtis R. Riffle, Trustee
Karen L. Scussel, Trustee

Los Altos, CA 94022

Mailed notices shall be deemed delivered three (3) days after the date of posting by the United States Post Office.

14. **Notice to Office of Historic Preservation.** Owner shall provide written notice of this Agreement and shall provide a copy of this Agreement to the Office of Historic Preservation of the Department of Parks and Recreation of the State of California within six (6) months following the Effective Date.

15. **Effect of Agreement.** None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto or any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties to be considered joint ventures or members of any joint enterprise.

16. **Indemnity of City.** Owner shall protect, defend, indemnify, and hold City and its elected officials, officers, agents and employees harmless from liability for claims, losses, proceedings, damages, causes of action, liabilities, costs or expense, including reasonable attorneys' fees, which may arise directly or indirectly from the negligence, willful misconduct or breach of this Agreement by Owner or Owner's contractors, subcontractors, agents, employees or other persons acting on Owner's behalf in connection with the Historic Property, or which arise directly or indirectly in connection with Owner's activities in connection with the Historic Property. This Section 16 applies, without limitation, to all damages and claims for damages suffered, or alleged to have been suffered regardless of whether or not the City prepared, supplied or approved any plans, specifications or other documents for the Historic Property.

17. **Binding Upon Successors.** All of the agreements, rights, covenants, reservations and restrictions contained in this Agreement shall be binding upon and shall inure to the benefit of the parties named herein, their heirs, successors, legal representatives, and assigns and all persons acquiring any part or portion of the Historic Property, whether voluntarily or involuntarily, by operation of law or in any manner whatsoever.

18. **Legal Costs.** If legal proceedings are brought by Owner or City to enforce or restrain a violation of any of the covenants, reservations or restrictions contained herein, or to determine the rights and duties of any party hereunder, the prevailing party in such proceeding may recover all reasonable attorneys' fees to be fixed by the court, in addition to court costs and other relief ordered by the court.

19. **Severability.** If any of the provisions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, or by subsequent preemptive legislation, the validity and enforceability of the remaining provisions, or portions thereof, shall not be affected thereby.

20. **Governing Law.** This Agreement shall be construed and governed in accordance with the laws of the State of California.

21. **Recordation.** No later than twenty (20) days after the parties execute and enter into this Agreement, City shall cause this Agreement to be recorded in the Office of the County Recorder of the County of Santa Clara, California.

22. **Amendments.** This Agreement may be amended, in whole or in part, only by a written recorded instrument executed by all of the parties hereto.

23. **Captions.** Section headings and captions of this Agreement are for convenience of reference only and shall not be considered in the interpretation of any of the provisions of this Agreement.

WITNESS WHEREOF, the parties have executed this Agreement effective as of the date first above written.

OWNERS:

By: _____ Dated: _____

By: _____ Dated: _____

CITY OF LOS ALTOS:

By: _____ Dated: _____
City Manager

Attest:

By: _____ Dated: _____
City Clerk

Approved as to Form:

By: _____ Dated: _____
City Attorney

EXHIBIT "A"

LEGAL DESCRIPTION

For APN/Parcel ID(s): 170-41-030

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF LOS ALTOS, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

THE WEST ONE-HALF OF LOT 11, AS DESIGNATED ON THE MAP ENTITLED "MAP OF ALTOS ACRES, LOS ALTOS, SANTA CLARA COUNTY, CALIFORNIA, " WHICH MAP WAS FILED FOR RECORD ON MAY 8, 1911, BOOK "N" OF MAPS, PAGE 49, SANTA CLARA COUNTY RECORDS.

EXHIBIT "B"

SCHEDULE OF IMPROVEMENTS
2023 – 2033

Amortization Schedule for Rehabilitation/Restoration/Maintenance Cost

Description	House	Garage	Amort. Yrs.	Annual Cost
Stucco	$40,000.00	$38,000.00	100	$780.00
Wooden Windows and Doors (new, restored)	$69,000.00	$10,000.00	100	$790.00
Roof (composite shingles)	$45,000.00	$15,000.00	30	$2,000.00
Painting (stucco, windows, decorative tails)	$50,000.00	$30,000.00	10	$8,000.00
Dryrot repairs (tails, beams, framing)	$50,000.00	$ -	10	$5,000.00
Foundation (basement, garage))	$107,500.00	$65,000.00	100	$1,725.00
Framing	$200,000.00	$100,000.00	100	$3,000.00
Trellis	$ -	$20,000.00	50	$400.00
Total	$561,500.00	$278,000.00		**$21,695.00**

Rehabilitation/Restoration/Maintenance Plan and Timeline

Item	Work Task	Type of Work	Year Commenced	Year Completed	Estimated Cost	Annual Amortized Costs**
1	Replace tar and gravel roof with composite shingles	Rehabilitation	2023	2023	$ 45,000	$ 2,000
2	Restore or replace windows and doors (front portion)	Rehabilitation	2023	2023	$ 39,000	$ 790
3	Dryrot repair (front portion)	Rehabilitation	2022	2023	$ 50,000	$ 5,000
4	Stucco repair (front portion)	Rehabilitation	2023	2023	$ 10,000	$ 780
5	Paint external (front portion)	Rehabilitation	2023	2023	$ 20,000	$ 8,000
	Sub-total	**Rehabilitation**			**$ 164,000**	**$ 16,570**

Item	Work Task	Type of Work	Year Commenced	Year Completed	Estimated Cost	Annual Amortized Costs**
7	Framing - expansion of house (rear portion)	Remodel	2022	2023	$ 200,000	$ 3,000
8	Stucco (rear portion)	Remodel	2023	2023	$ 30,000	Included
9	Replace windows and doors (rear portion)	Remodel	2023	2023	$ 30,000	Included
10	Basement upgrade (floors, walls, stairs)	Remodel	2022	2023	$ 107,500	$ 1,725
11	Paint external (rear portion)	Remodel	2023	2023	$ 30,000	Included
	Sub-total	**Remodel**			**$ 397,500**	**$ 4,725**
13	Foundation/slab (Garage & Patio)	New construction	2022	2023	$ 65,000	Included
14	Framing (Garage)	New construction	2022	2023	$ 100,000	Included
15	Stucco & Brick (Garage)	New construction	2023	2023	$ 38,000	Included
16	Windows & doors (Garage)	New construction	2023	2023	$ 10,000	Included
17	Roof (Garage) - Composite Shingles	New construction	2023	2023	$ 15,000	Included
18	Trellis (Garage)	New construction	2023	2023	$ 20,000	$ 400
19	Paint external (Garage)	New construction	2023	2023	$ 30,000	Included
	Sub-total	**New Construction**			**$ 278,000**	**$ 400**
	Sub-total	**Design, Rehab., Remodel, New**			**$ 839,500**	**$ 21,695**
23	Repairs, paint touch-up, caulking	Maintenance	2023	2032	$ 1,000	$ 1,000
24	Annual external cleaning (windows, doors, stucco)	Maintenance	2023	2032	$ 1,000	$ 1,000
25	Annual gutter, roof, and solar panel cleaning	Maintenance	2023	2032	$ 1,000	$ 1,000
26	Landscape repairs and maintenance	Maintenance	2023	2032	$ 8,000	$ 8,000
	Sub-total	**Maintenance**			**$ 10,000**	**$ 10,000**
	Total	**All**			$ 849,500	$ 31,695

EXHIBIT "C"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION AND RESTORATION

Rehabilitation:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Restoration:

1. A property will be used as it was historically or be given a new use that interprets the property's restoration period.

2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alterations of features, spaces and spatial relationships that characterize the period will not be undertaken.

3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.

4. Materials, features, spaces and finishes that characterize other historical periods will be documented prior to their alteration or removal.

5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.

6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials.

7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.

8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

10. Designs that were never executed historically will not be constructed.

DATE: August 8, 2022

AGENDA ITEM #6

AGENDA REPORT

TO: Historical Commission

FROM: Sean Gallegos, Senior Planner

SUBJECT: H22-0002 – 725 University Avenue

RECOMMENDATION:

Recommend approval of an addition and minor exterior alterations to a Historic Resource property subject to the listed findings

---

PROJECT DESCRIPTION

The project is an application for alterations to a 403 square-foot accessory structure on a designated historic resource property at 725 University Avenue. The scope of work includes a 63 square-foot addition to the one-story accessory structure (garage) and exterior alterations to the exterior side and rear of the structure, including demolition of 85 square feet, for an accessory structure with a total area of 403 square feet.

BACKGROUND

On July 27, 2018, the Historical Commission approved an application for alterations to the historic resource property at 725 University Avenue. The scope of work includes modifications to the front, side, and rear yard areas of the property, including demolition of a non-historic pergola and accessory structure, construction of a new accessory structure along the rear property line, new landscaping, decks, garden tower, outdoor kitchen, fire pit, new spa, and associated hardscape and landscaping improvements.

On April 27, 2020, the Historical Commission approved a Historical Advisory Review for a second-story addition and exterior modifications to the existing two-story historic resource structure. The scope of work includes a 60 square-foot addition at the second story and exterior alterations to the front, interior side, exterior side, and rear of the structure, including demolition of 40 square feet of a 160 square-foot non-historic accessory structure (shed).

The residence at 725 University Avenue, known as the Scheid Residence was constructed in 1911 during Los Altos' early residential development period. This large, rambling two-story Craftsman style house is a good representative example of its style, and retains a good degree of integrity of location, workmanship, feeling, design and materials. The 2011 Department Parks and Recreation (DPR) forms that provides additional information about the structure's historic significance and physical integrity is included as Attachment A.

DISCUSSION

The historic character of the accessory structure is commensurate with that of a circa 1911 Gates House. The project historian has noted the east wall has already been compromised by the non-historic addition. While the accessory structure (garage) is being slightly enlarged, the proposed addition and exterior modifications continue to maintain the building's character, as a simple ancillary building.

The accessory structure alterations include minor changes to the roof and elevations that alter but maintain the mass and general appearance of the structure. The proposed alterations are only visible from Lee Street and the alley and will not compromise the historic character of the house or overall property. The garage will be clad in painted wood shingles with an asphalt roof shingle matching that of the house. The double hung and casement windows will be painted wood. The new Lee Street garage door while slightly wider, will follow the same design as the existing door.

Historical professional, Charles Duncan with Interactive Resource reviewed the project to ensure consistency with the Secretary of the Interior's Standards for the Treatment of Historic Structures (SOIS) (Attachment B and C), and the historian's and staff's comments are provided below:

1. *A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.*

   Response: This application assumes the structure's continued use as a garage The proposed alterations are required to slightly enlarge the original garage footprint to create a full two car garage. The alterations will not change the defining characteristics of the building nor its site and environment.

2. *"The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided."*

   Response: The mass, scale, general geometry, and appearance will remain. The removal of the addition to the east is a part of a non-historic structure.

3. *"Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken."*

   Response: The limited project scope only includes an enlargement of the garage. It is a very simple, restrained building that does not add conjectural features or elements from other buildings.

4. *"Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved."*

   Response: The garage currently has an addition that is not considered a contributor to the historic character of the property. There are no apparent changes that have acquired historic significance.

5. *"Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved."*

   Response: While the garage is being slightly enlarged, it is an extremely simple ancillary building. The east wall has already been compromised by the non-historic addition. The south wall will be reconstructed only 2'-4" to the south of the original wall using the same framing techniques with the same wood shingle cladding.

6. *"Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence."*

   Response: There are no deteriorated features.

7. *Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.*

   Response: Because the work is limited, there will be no physical or chemical treatments that will affect the wood shingle or wood trim.

8. *Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.*

   The project scope does not include invasive foundation work or landscaping that would affect the site. Because the ground was disturbed previously in 1911, and subsequently with landscape improvements, it is unlikely that undisturbed archeological resources are present at the site.

9. *"New additions, exterior alterations, or related new construction shall destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale and architectural features to protect the historic integrity of the property and environment.*

   Response: The scope of this project is minimal involving moving two walls of a roughly square garage out by a maximum of 2'-4". Rather than differentiating, the new work from the old, it seems more appropriate, because the scale is so small, to rebuild the new walls to match the existing original walls.

10. *"New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."*

    Response: There would be no impetus with historical meaning to make this work reversible. As a garage, which is a minor ancillary building, the posed work would have no impact on the overall character of the property.

As outlined in the report from the Historical professional, Charles Duncan with Interactive Resource, the proposed demolition, addition, and exterior alterations do not adversely affect the physical integrity or the historic significance of the property and are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Structures.

In order to make a positive advisory recommendation, the Commission will need to find that the project is consistent with the provisions of the Historic Preservation Ordinance and does not adversely affect the physical integrity or the historic significance of the property. Once the Commission provides a recommendation, the project will be reviewed by the Design Review Commission.

Community Outreach
The applicant conducted community outreach by mailing a letters with renderings of the accessory structure to neighbors in the immediate neighborhood context. A copy of the letter mailed to neighbors is provided as attachment B. Staff has not received any public comment regarding the proposed project.

Cc: D. DiVittorio, Applicant and Architect
E. and L. Albert, Owners

Attachments
A. Secretary of the Interior's Standards Review Report, Interactive Resources
B. Community Outreach Letter
C. Project Plans

FINDINGS

H22-0002 – 725 University Avenue

With regard to the Advisory Review, the Historical Commission finds the following in accordance with Section 12.44.140 of the Municipal Code:

1. The project complies with all provisions of the Historic Preservation Ordinance (Chapter 12.44); and

2. The project does not adversely affect the physical integrity or the historic significance of the subject property.

CONDITIONS

H20-0001 – 725 University Avenue

GENERAL

1. **Expiration**
   The Historical Commission Advisory Review approval will expire on August 8, 2024, unless prior to the date of expiration, a building permit is issued, or an extension is granted pursuant to Section 14.76.090 of the Zoning Code.

2. **Approved Plans**
   The approval is based on the plans and materials received on July 6, 2022, except as may be modified by these conditions.

3. **Indemnity and Hold Harmless**
   The applicant/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.

INCLUDED WITH THE BUILDING PERMIT SUBMITTAL

4. **Conditions of Approval**
   Incorporate the conditions of approval into the title page of the plans.

ATTACHMENT A

725 University Avenue Garage Alterations
Los Altos, CA
Secretary of the Interior's Standards Project Analysis

Interactive Resources
Project No. 2021-053

Report Date:
February 25, 2022

Prepared for:
Eric and Lauren Albert
1757 Pilgrim Avenue
Mountain View, CA
94022

INTERACTIVE RESOURCES
architects + engineers
117 Park Place
Richmond, CA 94801

Table of Contents

Introduction

At the request of Eric and Lauren Albert, and their Architect Danielle DiVitorio, Interactive Resources, Inc. (IR) has prepared this Project Analysis Report to assess the proposed garage alterations at 725 University Avenue, Los Altos California, relative to its adherence to the Secretary of the Interior's Standards for the Treatment of Historic Properties Standards (SOIS). The subject property is identified as an individual historic resource in the City of Los Altos Historic Resources Inventory, Section IV, resource number 75 as the Scheid Residence. A larger project was analyzed for the main house in a report issued on January 28, 2020 by Interactive Resources. The garage alterations discussed in this report were not contemplated at that time. This report serves as an adjunct to the original report. The purpose of this analysis is to demonstrate that the proposed work adheres to the SOIS applying the Rehabilitation Treatment.

Methodology

Interactive Resources conducted a site visit on January 10th, 2020. Attending from IR was Charles Duncan, Preservation Architect. The purpose of the visit was to gather information on the property through direct observation, photograph the property, understand the neighborhood context and to gauge the nature of the proposed alterations. During that visit, sufficient information was collected to address the current and more modest garage alteration without an additional site visit. The proposed design was obtained by IR through the office of Di Vittorio Architecture and Design. In addition, the online Sanborn Map archive at the San Francisco Public Library was used to determine the earliest recorded (1926) configuration of the garage.

Descriptions

Property Description

The property (APN 175-18-057) is located on the north side of University Avenue at the intersection of Lee Street. It is bound by an alley at the rear and an adjacent property to the east. The lot is approximately one-third of an acre. There is no Sanborn Fire Insurance Map available from the 1911 construction date of the house; however, the 1926 Sanborn map shows that the property was composed of three combined lots which is the current condition. (Figure 1)

Figure 1 – 1926 Sanborn Fire Insurance Map of the vicinity showing the property

At the extreme northwest corner of the property at the corner of Lee Street and the alley is an ancillary building that shows up on the 1926 map. This may have been an early garage. The DPR forms are silent on the presence of the garage as contributor to the historic character of the property; however, the 1926 map shows a square ancillary building (designated by an "A"- looking more like a "D") at the corner of Lee Street and the alley at the north property line. At the time of construction of the house in 1911, it was not unusual for turn of the twentieth century houses of this type to have detached garages for early automobiles set apart from the main house. The earliest house with a garage that this author has encountered is the 1903 Gates House in San Jose which was owned by a physician who used a car in his practice. There is no direct evidence that the ancillary building at 725 University Avenue was a garage, but the term ancillary building was commonly used for "garage" in Sanborn Maps, and the structure faces directly onto Lee Street. In addition, the architectural stature of the subject house is commensurate with that of the Gates House. The original owner of the property was a salesman (as described in the DPR Forms) which could suggest that he owned a car as well. It seems reasonable to conclude that the garage is original to the property's1911 construction. (Figure 2)

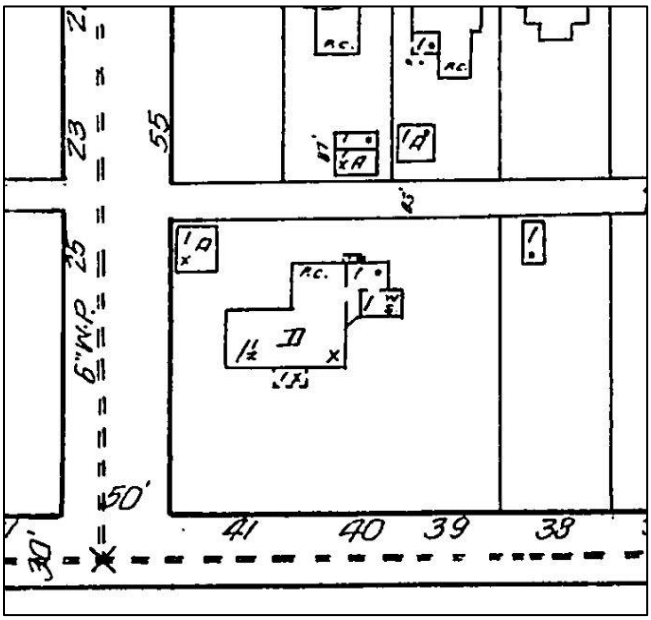


Figure 2 – 1926 Sanborn Map of the property showing the garage in the upper left-hand corner

Existing Garage Description

The garage is located at the intersection of Lee Street and the alley at the rear of the property. It is comprised of two sections. The original part is a rough square of 20'-2½" x 18'-4 ¼" with the 20-foot side being the Lee Street front. The second portion is an addition to the rear of the garage that is 8'-6" by 14'-4". The roof of the larger portion is gable ended with the ridge paralleling Lee Street and the addition perpendicular to Lee Street. It has large overhangs with exposed rafters at the eaves. The roof is clad in asphalt shingles. The building is clad in painted wood shingles. A wide roll up wooden door is the automobile entry facing Lee Street and there are wood double hung and casement windows facing the alley to the north and yard to the east.

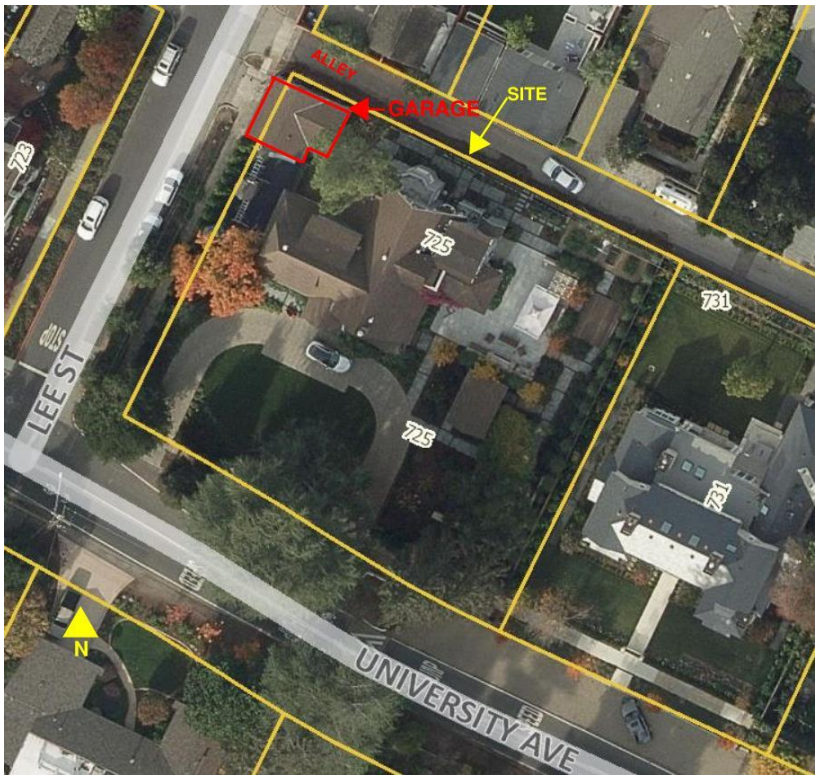


Figure 3 – Current satellite image of the site (County Assessor's Office overlayed on Google Maps image) Note that the Assessor's property lines (yellow) are imprecise relative to the satellite image

The 1926 Sanborn Map and its subsequent 1932 amendment show a square ancillary structure. The scale of Sanborn maps is very small - at one foot to one fiftieth of an inch, but they are notable for their accurate footprints. The current Google Maps configuration shows an extension of the garage to the east (rear) giving the garage an "L" configuration. We believe that the date of this addition is 1959. We also believe that this addition to the garage is not a contributor to the historic fabric of the property. (Figures 4 through 8)

Figure 4 – Lee Street (front) elevation

Figure 5 – Lee Street (front) elevation

Figure 6 –North (alley side) elevation

Figure 7 –East (addition) elevation

Figure 8 – South (garage – to left, and addition – to right) elevation

Project Description

The current garage is not large enough to park two cars side by side. The owners wish to alter the existing garage to accommodate a two-car configuration. This entails moving the south wall to the south by 2'-4"and the east (rear wall) to the east by 1'4". However, this increase in footprint puts the overall lot coverage over the allowable limit. To that end, the 1959 addition will be demolished to bring the square footage of lot coverage to within the allowable limit.

The garage alterations include minor changes to the roof and elevations that alter but maintain the mass and general appearance of the structure. The proposed alterations are only visible from Lee Street and the alley and will not compromise the historic character of the house or overall property. The garage will be clad in painted wood shingles with an asphalt roof shingle matching that of the house. The double hung and casement windows will be painted wood. The new Lee Street garage door while slightly wider, will follow the same design as the existing door. (Figures 9 through 12)

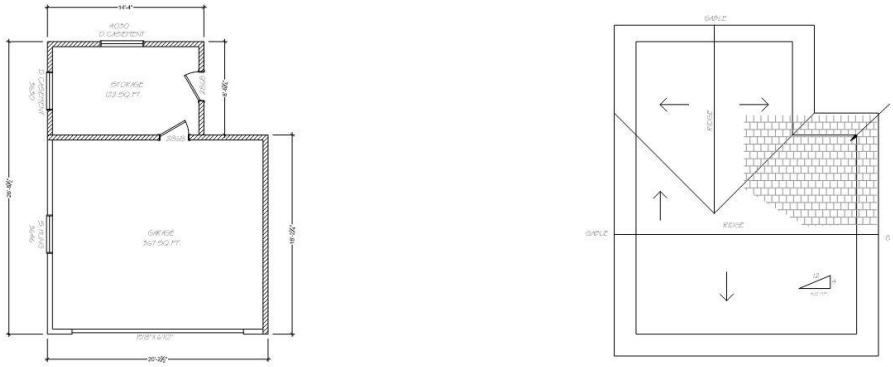


Figure 9 –Existing garage plan to left, and existing roof plan to right

Figure 10 –Proposed garage plan to left, and proposed roof plan to right

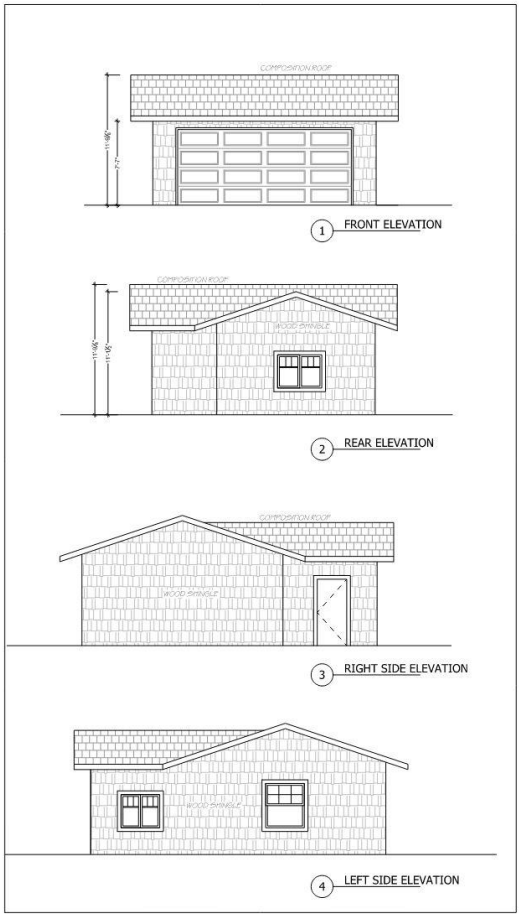


Figure 11 –existing elevations

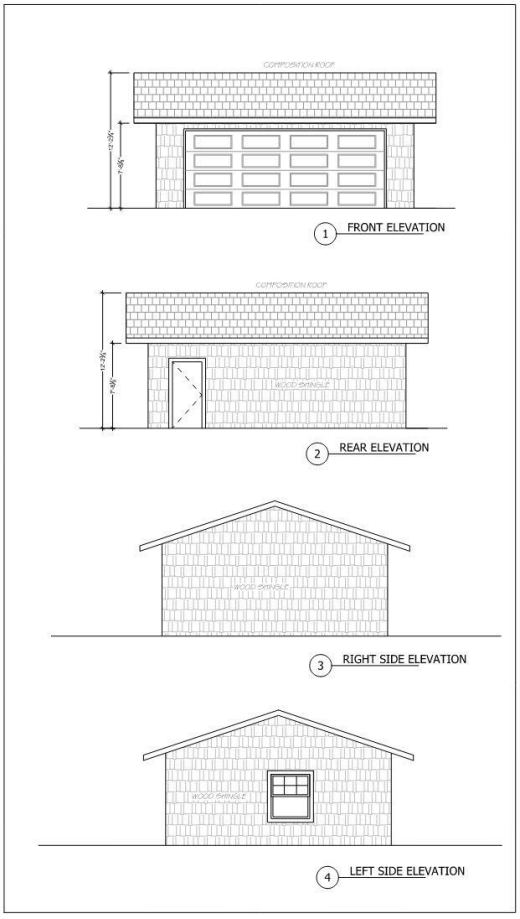


Figure 12 – proposed elevations

Consistency with the Secretary of the Interior's Standards

Regulatory Setting

In accordance with the requirements of the California Environmental Quality Act (CEQA), any proposed work on properties appearing on a historical inventory at the local, state, or federal level, should be done in compliance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer, 1995).

The subject property is identified as an historic resource in the City of Los Altos Historic Inventory. As it is currently understood, the proposed work involving the alterations to 725 University Avenue qualifies as a Rehabilitation project as defined by the *Secretary's Standards and Guidelines*:

The Secretary of the Interior defines Rehabilitation as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural value.

The *2017 CEQA Statute and Guidelines* publication states that a proposed project may have a significant effect on the environment if it would create "an effect that may cause a substantial adverse change in the significance of a historical resource." Specifically, substantial adverse changes include "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (*CEQA Guidelines* section 15064.5(b)(1)).

The *2017 CEQA Statute and Guidelines* publication further states that:

> "Generally, a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for… Rehabilitating…Historic Buildings* or the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995) shall be considered as mitigated to a level of less than a significant impact on the historical resource (*CEQA Guidelines* section15064.5(b)(3))".

A project's impact on a historic resource may be considered less than significant if the project is implemented in accordance with the Secretary's Standards.

Project Analysis using the Secretary of the Interior's Standards for the Treatment of Historic Properties – Rehabilitation Treatment

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

   Commentary: This application assumes the structure's continued use as a garage The proposed alterations are required to slightly enlarge the original garage footprint to create a full two car garage. The alterations will not change the defining characteristics of the building nor its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

   Commentary: The mass, scale, general geometry, and appearance will remain. The removal of the addition to the east is a non-historic structure.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

   Commentary: The limited project scope only includes an enlargement of the garage. It is a very simple, restrained building that does not add conjectural features or elements from other buildings.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

   Commentary: The garage currently has an addition that is not considered a contributor to the historic character of the property. There are no apparent changes that have acquired historic significance.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

   Commentary: While the garage is being slightly enlarged, it is an extremely simple ancillary building. The east wall has already been compromised by the non-historic addition. The south wall will be reconstructed only 2'-4" to the south of the original wall using the same framing techniques with the same wood shingle cladding

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

   Commentary: There are no deteriorated features.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

   Commentary: Because the work is limited, there will be no physical or chemical treatments that will affect the wood shingle or wood trim.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

   Commentary: The project scope does not include invasive foundation work or landscaping that would affect the site. Because the ground was disturbed previously in 1911, and subsequently with landscape improvements, it is unlikely that undisturbed archeological resources are present at the site.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

   Commentary: The scope of this project is minimal involving moving two walls of a roughly square garage out by a maximum of 2'-4". Rather than differentiating, the new work from the old, it seems more appropriate, because the scale is so small, to rebuild the new walls to match the existing original walls.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

    Commentary: There would be no impetus with historical meaning to make this work reversible. As a garage, which is a minor ancillary building, the posed work would have no impact on the overall character of the property.

Conclusion and Finding

Under CEQA, a project's impact on a historic resource may be considered less than significant if the project is implemented in accordance with the Secretary's Standards.

Based on the above analysis, the proposed design appears to be consistent with the Secretary *of Interior's Standards for the Treatment* of *Historic Properties – Rehabilitation Treatment.*

Consultant Qualifications

Pursuant to Code of Federal Regulations, 36 CFR Part 61, the author, Charles Duncan meets the Secretary of the Interior's qualification standards for professionals in historic architecture and architectural history.

References

California Natural Resources Agency. *2017 California Environmental Quality Act (CEQA) Stature and Guidelines.* Palm Desert, CA: Association of Environmental Professionals (AEP) 2017.

City of Los Altos Historic Preservation Ordinance and Resource Inventory

City of Los Altos, Historical Commission Staff Report 15-H-02 – 725 University Avenue, Gallegos, Sean

DiVittorio Architecture & Design, Architectural site plan floor plans, and elevations used in this report, February 2022

Google Maps, www.google.com/maps, accessed, January 15, 2020

McAlester, Virginia and Lee. *A Field Guide to American Houses.* New York: Alfred A. Knopf, 1992.

Sanborn Fire Insurance Maps, Los Altos, 1926 and 1926 –1932 editions, San Francisco Public library Online Archive.

Santa Clara County Assessor's Office. Property records for APN 175-18-057. Accessed on-line.

State of California Department of Parks and Recreation (DPR) Primary Record Forms, Scheid Residence. Recorded by Circa: Historic Property Development. Recorded 2011.

Weeks, Kay and Grimmer, Anne. *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating Restoring & Reconstructing Historic Buildings.* Washington D. C.: National Park Service, 1995.

June 1, 2022

Hi Neighbors!

We wanted to say HI as we're preparing to *finally* move into 725 University Ave, likely by the end of June. When we bought the house in September 2019 we never anticipated it'd take us so long to move. We and our son Sammy (who is now 4 and a half!) can't wait to be in the neighborhood and to get to meet all of you.

We do have one more thing to ask of the city as we attempt to wrap up the remodel, and we wanted to let you know about it. When we bought the house its detached garage was described as a 2-car garage. Unfortunately that's not quite the case — it's not deep or wide enough to fit two modern cars. Fortunately there's an extra storage area in the back of the garage which is not historical. We are proposing to remove that extra storage area while making the garage about 3' wider and 2.5' deeper, reducing the overall square footage of the detached garage building by a little bit while giving us space to fit 2 cars inside. We'll keep the exterior style of the garage the same as it is today; it'll just be a little bit wider. We've included another page which shows what it will look like.

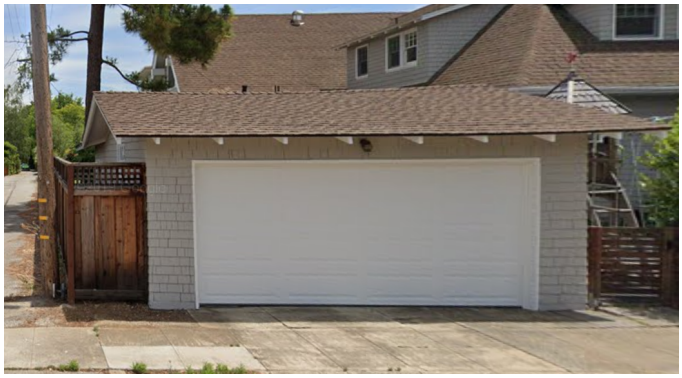
Due to the unusual layout of the property and the house's classification as a Los Altos Historic Resource, this change requires a variance from the city's Design Review Commission and approval from the Historical Review Commission. This will be discussed at upcoming hearings from those commissions. Dates and times are available on the city's web site, losaltosca.gov.

Having garage space for 2 cars turns out to be even more important to us than it was back in 2019. We're thrilled that after 3 years of IVF, we're expecting identical twin girls this fall! We can't wait to have all 3 kids playing in the neighborhood and joining the huge crowds for Halloween.

If you have any questions or thoughts on the garage change (or about anything else about our multi-year remodel), or if you'd like to say hi, or if you have little kids who would love playmates, we'd love to hear from you! Please drop us a note or give us a call. Thanks!

Eric, Lauren, and Sammy Albert
408-460-8354
laurenanderic@lmfeja.com

Here is what the garage looks like today, followed by renderings of what it will look like after the changes:



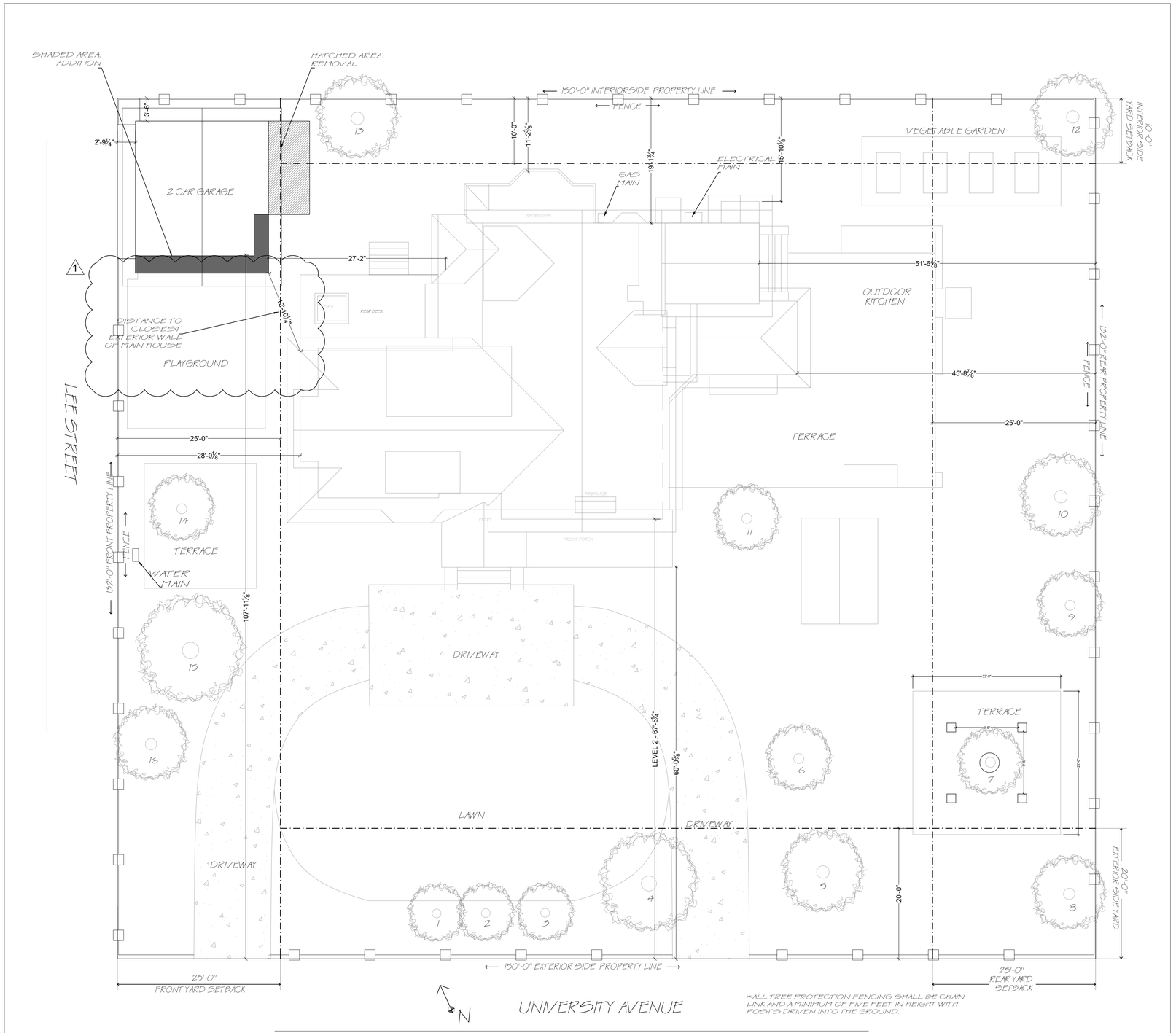
EXISTING GARAGE IMAGES

PROPOSED RENDERINGS

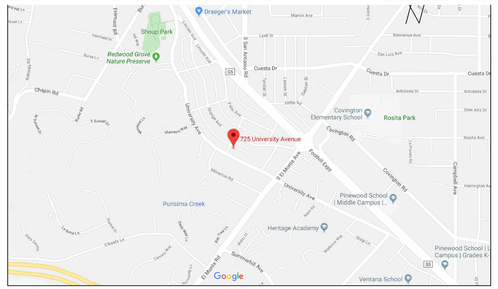
Please Note: The rendering inadvertently leaves out the exposed roof rafters at the bottom of the roof. They will still be there, maintaining the style of the garage as it is today.

ATTACHMENT C

SITE PLAN



VICINITY MAP



SHEET INDEX

PROJECT TEAM

ARCHITECTURAL DESIGNER
DANIELLE DIVITTORIO
PH: 408.655.0565
EMAIL: D_DIVITTORIO@YAHOO.COM

GENERAL CONTRACTOR
JIM WALTERS CONSTRUCTION
PH: 650.596.9751
JIMWALTERSCONSTRUCTION@GMAIL.COM

STRUCTURAL ENGINEER
JOHN DIVITTORIO
PH: 408.316.9281
EMAIL: JAD_ENG1@YAHOO.COM

PROJECT NOTES

SCOPE OF WORK:

REMODEL OF GARAGE TO MAKE TRUE TWO CAR GARAGE. REMOVE STORAGE AREA AT BACK OF SHED, 89 SQ.FT. TOTAL. ADDITION TO SIDE OF GARAGE OF 63 SQ.FT. TOTAL GARAGE SQUARE FOOTAGE DECREASED BY 22 SQ.FT. SIDE WINDOW TO REMAIN AS IS. NEW GARAGE DOOR AND NEW DOOR OUTSIDE OF BACK OF GARAGE. PROPOSED 2 EV CHARGERS.

ZONING R-1-10 LOT #57 APN #175-18-057 - YEAR BUILT: 1911 HISTORIC RESOURCE
LOT SIZE: 19,800 SF.

EXISTING HOUSE: 4,122 SF.
EXISTING GARAGE: 425 SF.

OCCUPANCY - R-3; TYPE OF CONSTRUCTION - VB

NOTE
THE FOLLOWING CODES AND REGULATIONS AS MENDED BY THE STATE OF CALIFORNIA AND LOCAL JURISDICTION ARE APPLICABLE TO THIS PROJECT.

CRC 2019 CALIFORNIA RESIDENTIAL CODE
CEC 2019 CALIFORNIA ELECTRICAL CODE
CBC 2019 CALIFORNIA BUILDING CODE
CPC 2019 CALIFORNIA PLUMBING CODE
CMC 2019 CALIFORNIA MECHANICAL CODE
CEC 2019 CALIFORNIA ENERGY CODE
CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS

ZONING COMPLIANCE

	EXISTING	PROPOSED	ALLOWED/REQ.
Lot Coverage: *Land area over 6' in height*	3220 sq.ft. 16.3%	3198sq.ft. 16.1%	5940 sq.ft. 30 %
Floor Area: *Measured to outside surface of exterior walls - garage included in totals*	4727 sq.ft. GARAGE: 425 sq. ft.	4705 sq.ft. GARAGE: 403 sq.ft.	4730 sq.ft. 35%
SETBACKS:			
Front	2 ft. 10 in.	2 ft. 10 in.	25 ft.
Rear	121 ft.	126 ft.	25 ft.
Right Side (1st/2nd) EXTERIOR	107 ft. 10 in.	105 ft. 2 in.	20 ft./ 20 ft.
Left Side (1st/2nd) INTERIOR	3 ft. 6 in.	3 ft. 6 in.	10 ft./ 17.5 ft.
HEIGHT - GARAGE	11 ft. 2 3/4 in.	11 ft. 6 1/2 in.	12 ft.

SQUARE FOOTAGE BREAKDOWN

	EXISTING	CHANGE IN	TOTAL PROP.
HABITABLE LIVING AREA: *Includes habitable basement*	4182 sq.ft.	n/a	4182 sq.ft.
NON- HABITABLE AREA: *Covered porches/open structures not included*	425 sq.ft.	-22 sq.ft.	403 sq.ft.

LOT CALCULATIONS

NET LOT AREA:		19800 sq.ft.
FRONT YARD HARDSCAPE AREA: *Shall not exceed 50% of setback*	(garage, playground floor, driveway)	1471 sq.ft. 44%
LANDSCAPE BREAKDOWN:	Total hardscape area (existing and prop)	6435 sq. ft.
	Existing softscape (undisturbed) area	13365 sq. ft.
	(N) softscape (new or replaced landscape) area	0 sq. ft.
	Sum of all three should equal the site's net lot area	

SITE PLAN AND COVER SHEET

REVISIONS	BY
1 5/13/2022	

DI VITTORIO
ARCHITECTURE & DESIGN
1512 WALNUT DRIVE
CAMPBELL CA. 95008
408.655.0565

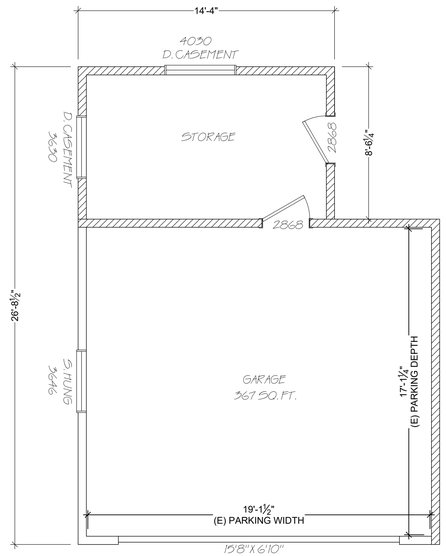
PROPOSED REMODEL TO:
ALBERT RESIDENCE
ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS, CA 94022
408.460.8354

DRAWN BY: DANIELLE DIVITTORIO
CHECKED BY:
SCALE: 1/8" = 1'0"
DATE: FEB. 28, 2022
SHEET NO. SA.1

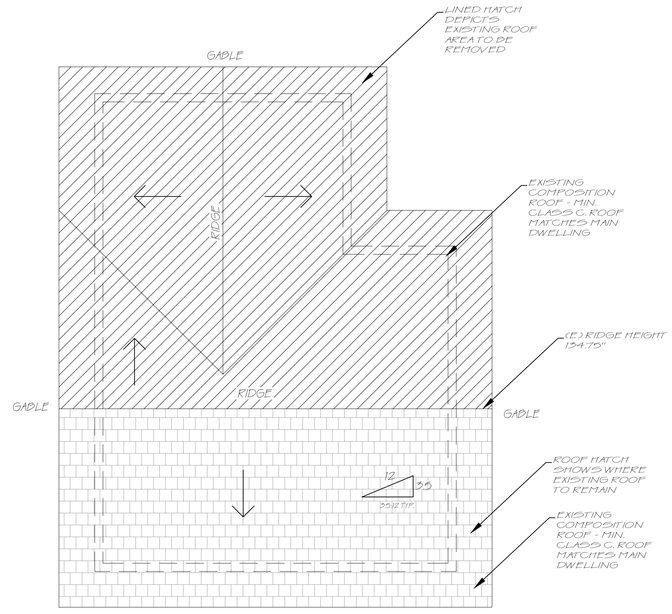
WALL LEGEND

- EXISTING WALL TO REMAIN
- WALL TO REMOVE
- NEW WALL
- EXTERIOR WALL TO BE INTERIOR WALL

DIMENSIONS TO FINISHED WALL



EXISTING FLOOR PLAN - GARAGE



EXISTING ROOF PLAN - GARAGE

REVISIONS	BY
1 5/13/2022	

DI VITTORIO
ARCHITECTURE & DESIGN
1512 WALNUT DRIVE
CAMPBELL CA. 95008
408.655.0565

PROPOSED REMODEL TO:

ALBERT RESIDENCE

ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS, CA 94022

408.460.8354

DRAWN BY: DANIELLE DIVITTORIO

CHECKED BY:

SCALE: 1/4" = 1'-0"

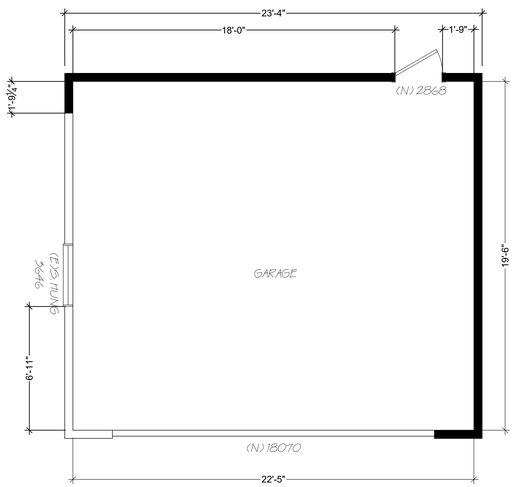
DATE: FEB. 28, 2022

SHEET NO. A1.1

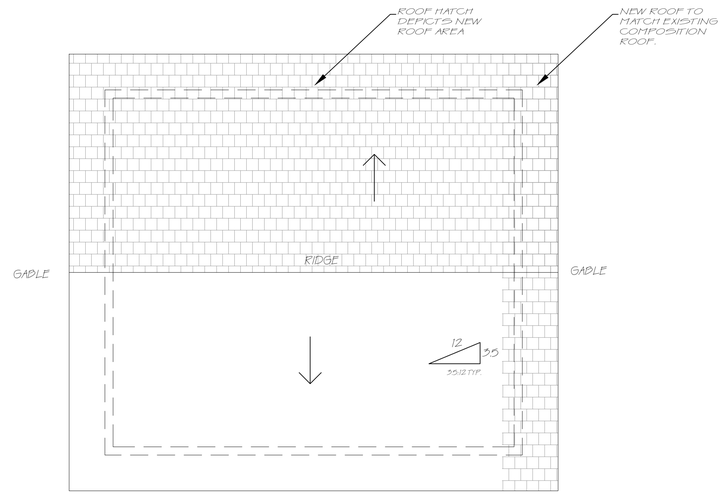
WALL LEGEND

- EXISTING WALL TO REMAIN
- WALL TO REMOVE
- NEW WALL
- EXTERIOR WALL TO BE INTERIOR WALL

NOTE: DIMENSIONS TO ROUGH FRAMING STUDS



PROPOSED FLOOR PLAN - GARAGE



PROPOSED ROOF PLAN - GARAGE

REVISIONS	BY
1 5/13/2022	

DI VITTORIO
ARCHITECTURE & DESIGN
1512 WALNUT DRIVE
CAMPBELL CA. 95008
408.655.0565

PROPOSED REMODEL TO:

ALBERT RESIDENCE

ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS, CA 94022
408.460.8354

DRAWN BY: DANIELLE DIVITTORIO

CHECKED BY:

SCALE: 1/4" = 1'-0"

DATE: FEB. 28, 2022

SHEET NO. A1.2

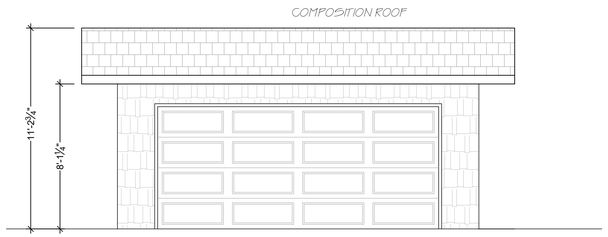
KEY

- FOUNDATION VENTS
- COMPOSITION ROOF
- EXISTING SHINGLE SIDING
- EXISTING FIREPLACE BRICK
- ATTIC VENT AT GABLE

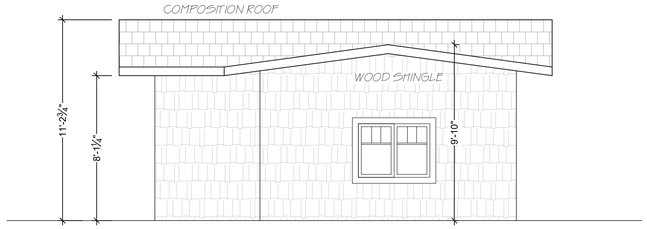
TREAD, RISER, HANDRAIL SPECS:
HAND RAILS SHALL BE 34" TO 38" ABOVE THE NOSING OF TREADS. ENDS OF HANDRAILS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1½" BETWEEN THE WALL AND THE HANDRAIL.
HANDGRIP PORTION OF HANDRAILS SHALL BE NOT LESS THAN 1¼" NOR MORE THAN 2" IN CROSS SECTIONAL DIMENSIONS AND SHALL HAVE A SMOOTH GRIPPING SURFACE WITH NO SHARP CORNERS. SEE THE ABOVE MENTIONED CODE CHAPTER FOR ADDITIONAL INFORMATION REGARDING HANDRAIL REQUIREMENTS.

36" DEEP LANDING AS REQUIRED; 4" MIN, 7¾" MAX STEP DOWN FOR INSWING AND SLIDING DOORS; SLOPE 2% AWAY FROM HOUSE

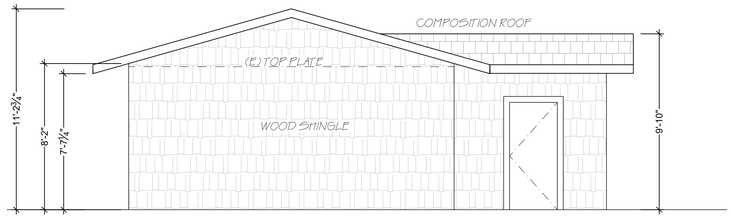
ALL STAIRWAYS TO BE MIN. 36" WIDE FOR RISE, RUN HANDRAIL AND GUARDRAIL REQUIREMENTS.



1 FRONT ELEVATION



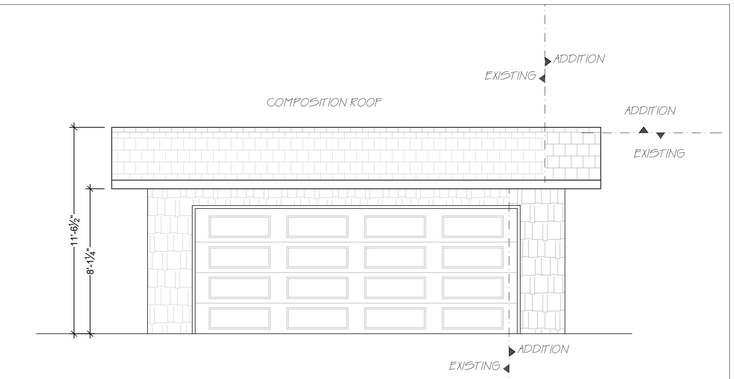
2 REAR ELEVATION



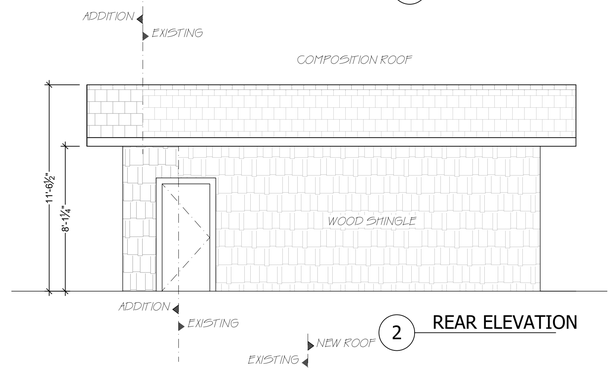
3 RIGHT SIDE ELEVATION

4 LEFT SIDE ELEVATION

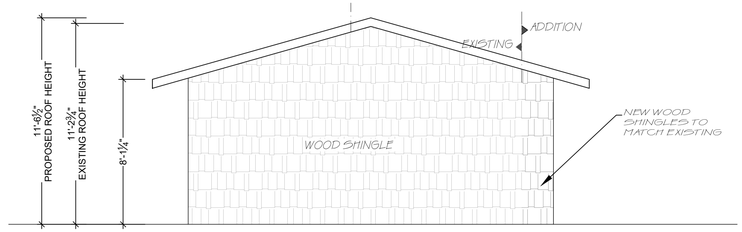
EXISTING ELEVATIONS



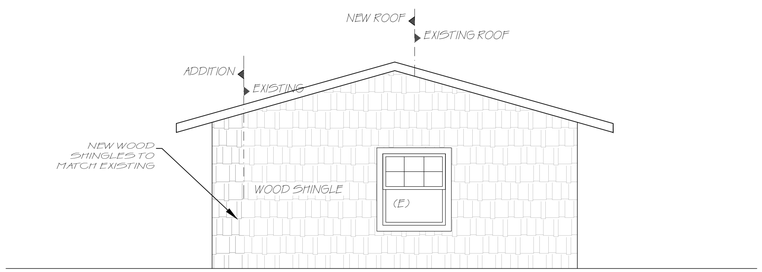
1 FRONT ELEVATION



2 REAR ELEVATION



3 RIGHT SIDE ELEVATION



4 LEFT SIDE ELEVATION

PROPOSED ELEVATIONS

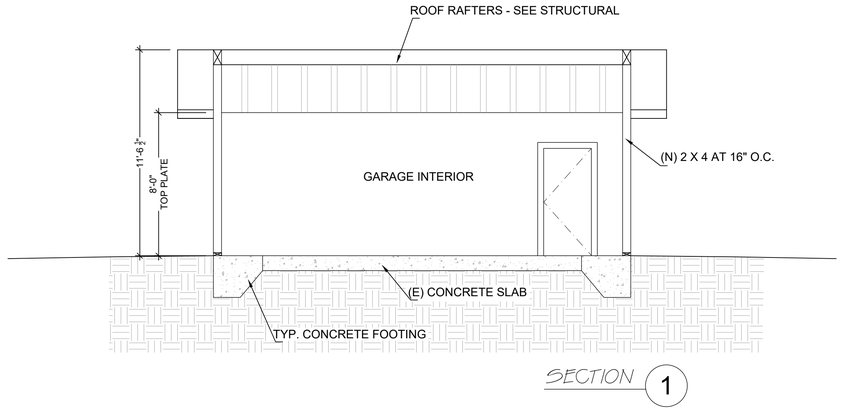
REVISIONS	BY
1 5/13/2022	

DI VITTORIO
ARCHITECTURE & DESIGN
1512 WALNUT DRIVE
CAMPBELL CA. 95008
408.655.0565

408.460.8354

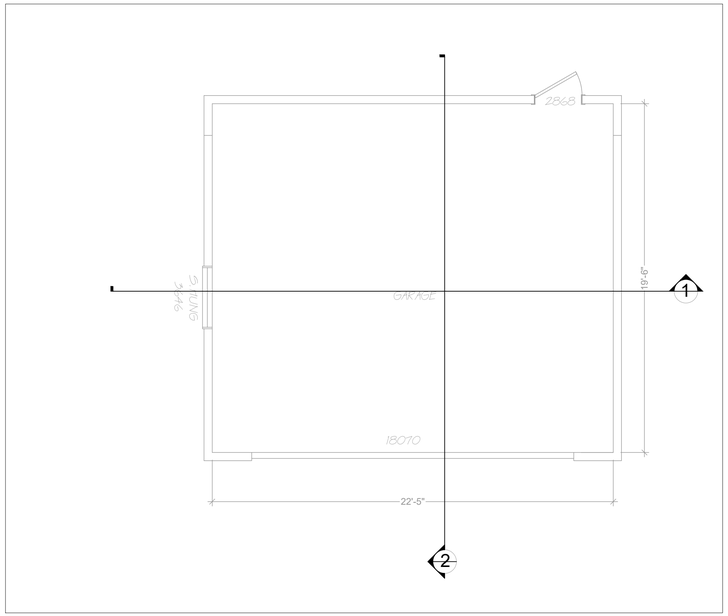
PROPOSED REMODEL TO:
ALBERT RESIDENCE
ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS, CA 94022

DRAWN BY: DANIELLE DIVITTORIO
CHECKED BY:
SCALE: 1/4" = 1'-0"
DATE: FEB. 28, 2022
SHEET NO. A1.3



SECTION 1

SECTION 2



REFERENCE PLANS

PLAN NOTES

A. WEATHER RESISTIVE BARRIERS SHALL BE INSTALLED AS REQUIRED IN SECTION R703.2 AND, WHERE APPLIED OVER WOOD BASED SHEATHING, SHALL INCLUDE A WATER RESISTIVE VAPOR-PERMEABLE BARRIER WITH A PERFORMANCE AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D PAPER (R703.7.3)
B. PLASTERING WITH PORTLAND CEMENT PLASTER SHALL NOT BE LESS THAN THREE COATS WHEN APPLIED OVER METAL LATH OR WIRE LATH AND SHALL BE NOT LESS THAN TWO COATS WHEN APPLIED OVER MASONRY, CONCRETE, PRESSURE-PRESERVATIVE TREATED WOOD OR DECAY-RESISTAND WOOD AS SPECIFIED IN SECTION R317.1 OR GYPSUM BACKING (R703.7.2)
C. A MINIMUM 26 GA. GALVANIZED CORROSION RESISTANT WEEP SCREED WITH (R703.7.2.1)
1. A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3-1/2 INCHES PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE AT ALL EXTERIOR WALLS.
2. THE SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE EARTH OR 2 INCHES ABOVE PAVED AREA.

PROPOSED SECTIONS

REVISIONS	BY
1 5/13/2022	

DI VITTORIO
ARCHITECTURE & DESIGN
1512 WALNUT DRIVE
CAMPBELL CA. 95008
408.655.0565

PROPOSED REMODEL TO:
ALBERT RESIDENCE
ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS, CA 94022
408.460.8354

DRAWN BY: DANIELLE DIVITTORIO
CHECKED BY:
SCALE: 1/4" = 1'0"
DATE: FEB. 28, 2022
SHEET NO. A1.4

LIGHT FIXTURE NOTES:

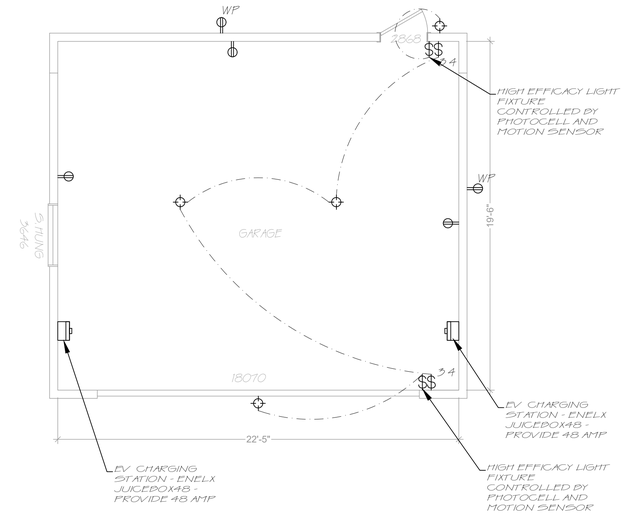
- ALL LIGHTING TO BE HIGH EFFICACY (ie pin based CFL; pulse-start MH, HPS, GU-24 sockets other than LEDs, LED luminaries with integral source)
- SCREW BASED PERMANENTLY INSTALLED LIGHT FIXTURES MUST CONTAIN SCREW BASED JA8 (JOINT APPENDIX 8) COMPLIANT LAMPS. JA8 COMPLIANT LIGHT SOURCES MUST BE MARKED AS "JA8-2016 OR JA8-2016-E"
  - JA8-2016-E LUMINAIRES ARE DEEMED APPROPRIATE FOR USE IN ENCLOSED LUMINAIRES.
- ALL CAN LIGHTS TO BE IC/AT RATED.
- THE FOLLOWING LOCATIONS TO HAVE JA8 COMPLIANT LIGHT SOURCES, CONTROLLED BY VACANCY SENSORS OR DIMMERS (exception closets less than 70SF and hallways):
  - CEILING RECESSED DOWNLIGHT LUMINAIRES
  - LED LUMINAIRES WITH INTEGRAL SOURCES
  - PIN-BASED LED LAMPS
  - GU-24 BASED LED LIGHT SOURCES
- ONE FIXTURE IN BATHROOM TO BE CONTROLLED BY VACANCY SENSOR.
- EXHAUST FANS SWITCHED SEPARATE FROM LIGHTING.
- OUTDOOR LIGHTING AS HIGH EFFICACY WITH MANUAL ON/OFF SWITCH AND PHOTOCONTROL AND MOTION SENSOR.

ELECTRICAL NOTES:

- TERMINATION OF ALL ENVIRONMENTAL AIR DUCTS SHALL BE A MIN. OF 3 FT. FROM ANY OPENINGS INTO THE BUILDING. (DRYERS, BATH AND UTILITY FANS, ETC. MUST BE 3 FT. AWAY FROM DOORS, WINDOWS, OPENING SKYLIGHTS OR ATTIC VENTS)
- NO DOMESTIC DISHWASHING MACHINE SHALL BE DIRECTLY CONNECTED TO A DRAINAGE SYSTEM OR FOOD WASTE DISPOSER WITHOUT THE USE OF AN APPROVED DISHWASHER AIR GAP FITTING ON THE DISCHARGE SIDE OF THE DISHWASHING MACHINE. LISTED AIRGAPS SHALL BE INSTALLED WITH THE FOOD-LEVEL (FL) MARKING AT OR ABOVE THE FLOOD LEVEL OF THE SINK OR DRAINBOARD, WHICHEVER IS HIGHER.
- MINIMUM TWO 20-AMP SMALL APPLIANCE BRANCH CIRCUITS ARE REQUIRED FOR THE KITCHEN AND ARE LIMITED TO SUPPLY WALL AND COUNTER SPACE OUTLETS FOR THE KITCHEN, DINING SPACE, OR SIMILAR AREAS. Note: these circuits cannot serve outside plugs, range hood, disposals, dishwashers, or microwaves -- only the required countertop/wall outlets including the refrigerator.
- ALL BRANCH CIRCUITS THAT SUPPLY OUTLETS INSTALLED IN DWELLING UNIT kitchens, family rooms, dining rooms, living rooms, bedrooms, sunrooms, closets, hallways, laundry areas or similar rooms SHALL BE BE PROTECTED BY AN ARCH FAULT CIRCUIT.
- MAINTAIN THE REQUIRED WORKING CLEARANCES AT THE AC EXTERIOR ELECTRICAL DISCONNECT.
- VACANCY SENSOR'S ON ONE LIGHT IN THE FOLLOWING ROOMS: BATHROOMS, GARAGE, LAUNDRY, AND UTILITY ROOMS PER 150.0 (k)2 CEC.
- MINIMUM SEPARATE ELECTRICAL CIRCUITS FOR:
  - 20AMPS FOR THE BATHROOMS 210.11B(3) CEC
  - 20 AMP LAUNDRY CIRCUIT 210.11 (B) (2) CEC
  - DRYER 30 AMP MINIMUM 220V
  - MOTOR (FAU)

ELECTRICAL LEGEND

$	SWITCH
$DIM	DIMMER SWITCH
$3 4	3 AND 4 WAY SWITCH
	ARC FAULT CIRCUIT INTERRUPTER RECEPTACLE OUTLET
	DEDICATED CIRCUIT
WP	WATERPROOF DUPLEX RECEPTACLE OUTLET
GFI	GROUND FAULT INTERRUPTER RECEPTACLE OUTLET
U	ARC FAULT CIRCUIT INTERRUPTER RECEPTACLE OUTLET W/ USB
	SURFACE MOUNTED LED LIGHT FIXTURE
P	PENDANT LOW VOLTAGE LIGHT FIXTURE
	RECESSED LED LIGHT FIXTURE - ALL CANNED LIGHTS TO BE IT/AT RATED
	ENERGY STAR - EXHAUST VENTILATION FAN EQUIPPED WITH BACKDRAFT DAMPERS
	CEILING FAN WITH LED LIGHT FIXTURE
	SMOKE DETECTOR 110V W/ 10 YEAR BATTERY BACK UP AND INTERCONNECTED
	CARBON MONOXIDE /SMOKE DETECTOR 110V W/ 10 YEAR BATTERY BACK UP
	HEATING REGISTERS PER R309.9 CRC



PROPOSED ELECTRICAL PLAN

REVISIONS	BY
1 5/13/2022	

DI VITTORIO
ARCHITECTURE & DESIGN
1512 WALNUT DRIVE
CAMPBELL CA. 95008
408.655.0565

PROPOSED REMODEL TO:

ALBERT RESIDENCE

ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS, CA 94022
408.460.8354

DRAWN BY: DANIELLE DIVITTORIO

CHECKED BY:

SCALE: 1/4" = 1'0"

DATE: FEB. 28, 2022

SHEET NO. E1

2019 CALIFORNIA GREEN BUILDING CODE REQUIREMENTS
(CALGreen Code or CGC)

Feature or Measure
(For full details of the code requirements see the 2019 Cal Green Code)

SITE DEVELOPMENT 4.106
- A plan has been developed and will be implemented to manage storm water drainage during construction per CGC4.106.2 AND 4.106.3
- 4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF SOIL ARE NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE, SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION. NOTE: REFER TO THE STATE WATER RESOURCES CONTROL BOARD FOR PROJECTS WHICH DISTURB ONE ACRE OR MORE OF SOIL OR ARE PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURB ONE ACRE OR MORE OF SOIL.
- 4.106.3 GRADING AND PAVING - CONSTRUCTION PLANS SHALL INDICATE HOW THE SITE GRADING OR DRAINAGE SYSTEM WILL MANAGE ALL SURFACE WATER FLOWS TO KEEP WATER FROM ENTERING BUILDINGS. EXCEPTION: ADDITIONS AND ALTERATIONS NOT ALTERING THE DRAINAGE PATH.

ELECTRIC VEHICLE (EV) CHARGING FOR NEW CONSTRUCTION. 4.106.4
- New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electrical vehicle supply shall be installed in accordance with California Electrical Code, Article 625.

Exceptions:
- On a case by case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
  1.1 Where there is no commercial power supply
  1.2 Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than $400.00 per dwelling unit
- ADU and JADU without additional parking facilities

INDOOR WATER USE 4.303
- Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, 4.303.1.4
- 4.303.1.1 Water Closets - The effective flush volume of all water closets shall not exceed 1.28 gallons per flush.
- 4.303.1.2 Urinals - The effective flush volume of wall mounted urinals shall note exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.
- 4.303.1.3 Showerheads. Single Shower heads shall have a max. flow rate of not more than 1.8 gallons per minute at 80psi. Showerheads shall be certified to the performance criteria of US EPA WaterSense Specification for showerheads.
  -- Multiple Showerheads serving one shower - the combined flow rate of all shower heads and/or other shower outlets controlled by a single valve shall note exceed 1.8 gallons/min at 80 psi. Or shower designed to only allow one shower outlet to be in operation at a time.
- 4.303.1.4 FAUCETS - Residential lavatory faucets. The max. flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The min. flow rate shall note be less than 0.8 gallons per min at 20 psi.
  4.303.1.4.4 Kitchen faucets. The max. flow rate shall note exceed 1.8 gallons per min at 60 psi. They may temporarily increase above the flow rate but not to exceed 2.2 gallons/min at 60 psi and must default to a max. flow rate of 1.8 gallons/min at 60 psi.

ENHANCED DURABILITY AND REDUCED MAINTENANCE 4.406
- Rodent proofing. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING 4.408
- Recycle and/or salvage for reuse a min. of 65% of nonhazardous construction and demolition was in accordance with either Section 4.408.2, 4.408.3, 4.408.4 or meet a more stringent local construction and demolition waste management ordinance. Exceptions see 4.408.1.
  4.408.2 Construction waste management plan
  4.408.3 Waste management company
  4.408.5 Documentation - Notes: Sample forms found in "A Guide to California Green Building Standards Code (Residential)" located at http://www.hcd.ca.gov/building-standards/calgreen/cal-green-form.shtml may be used to assist in documenting compliance with this section.

BUILDING MAINTENANCE AND OPERATION 4.410
- 4.410.1 Operation and maintenance manual. At the time of final inspection, a manual shall be placed in the building. Manual to include what is listed 4.410.1

ENVIRONMENTAL QUALITY 4.501
- The provisions of this chapter outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

FIREPLACES 4.503
- Any installed gas fireplace shall be a direct vent sealed combustion type. Any installed woodstove or pellet stove shall comply with US EPA New Source Performance Standards emission limits as applicable and have permit label indicating they are certified.

POLLUTANT CONTROL 4.504
- 4.504.1 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris, which may enter the system.

INTERIOR MOISTURE CONTROL 4.505
- Shall meet or exceed the provisions of the California Building Standards Code
- 4.505.2 Concrete Slab foundation - required to have a vapor retarder by the CBC Chapter 19 or concrete slab on ground floors require a vapor retarder by CRC Chapter 5 and comply with this section.
- 4.404.3 Moisture content of building materials - Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content.

INDOOR AIR QUALITY AND EXHAUST 4.506
- 4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with listings in section 4.508.1 Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. Humidity controls shall be capable of adjustment between a relative humidity range of less than or equal 50% to a max. 80%.

ENVIRONMENTAL COMFORT 4.507
4.507.2 Heating and air conditioning system design. Shall be sized, designed and have their equipment selected using the following methods:
1. The heat loss and heat gains is established according to ANSI/ACCA 2 Manual J 2016
2. Duct systems sized according to ANSI/ACCA 1 Manual D - 2016
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2014

RESIDENTIAL BATHROOM (2019 CRC, CPC)

TUB AND SHOWER REQUIREMENTS
- The mixing valve in a shower (including over a tub) shall be pressure balancing set at a maximum 120˚ F. The water-filler valve in bathtubs/whirlpools shall have a temperature limiting device setat a maximum of 120˚ F. The water heater thermostat cannot be used to meet these provisions. (CPC 408.3, 409.4)
- New or reconfigured shower stalls shall be a minimum finished interior of 1,024 square inches, be capable of encompassing a 30 inch diameter circle. Any doors shall swing out of the enclosure have a clear opening of 22 inches minimum. (CPC 408.5, 408.6)
- Shower stalls and bathtubs with shower heads installed, shall have walls finished with a nonabsorbent surface for a minimum of 6 feet above the floor. (CBC 1209 and CRC R307.2)
- Hydro-massage tubs (i.e. Jacuzzi tubs) shall have access to the motor, be supplied by a GFCI protected dedicated circuit, and be listed by a recognized testing agency (i.e. UL). All metal cables, fittings, piping, or other metal surfaces, within 5 feet of the inside wall of the Hydromassage tub shall be properly bonded. Hydro-massage tubs shall be bonded with a minimum #8 AWG bare copper wire and the bonding shall be accessible. (CEC 680.70)
- Underlayment material used as backers for wall tile or solid surface material in tub and shower enclosures shall be either glass mat/fiber-reinforced gypsum backing panels (i.e. DensShield, Dens Armor Plus), non-asbestos fiber-cement/fiber mat back board (i.e. Hardibacker, cement board). All material shall be installed in accordance with the manufacturer's recommendations. Water-resistant gypsum board (i.e. purple board) may be used when attached directly to studs, overlaid with minimum Grade B building paper and wire lath. Tile shall be attached to the wire lath. (CBC 2509 and CRC R702.4)
- Shower floors shall be lined with an approved shower pan or an on-site built watertight approved lining (i.e. hot mop). On-site built shower linings shall extend a minimum of 3 inches vertically up the wall and shall be sloped ¼" per foot to weep holes. (CPC 408.7)
- When a curb is provided at a shower, it shall be a minimum of 1 inch above the shower floor and between 2 inches and 9 inches above the top of the drain. A watertight nailing flange that extends a minimum of 1 inch high shall be installed where the shower floor meets the vertical surface of the shower compartment. The finished floor of the shower compartment shall be uniformly sloped between ⅛" and ½" per foot towards to the drain. (CPC 408.5) Where a curb is not provided at the shower compartment, the entire bathroom shall be considered a wet location. The flooring in the entire bathroom shall comply with the water proofing requirements described above for shower floors (previous bullet) and all lighting fixtures shall be approved for wet locations.
- If installing a tub next to an existing fire rated wall/walls (i.e. between apartment units or townhomes, etc.) the integrity of the fire rated wall/walls construction shall be maintained (i.e., fire-blocking shall be installed in the wall/walls per R302.11 and R302.11.1 of the CRC andshall be constructed per CRC 302 Fire-Resistant Construction. Continuity of such fire-resistancerated wall/walls shall be per R302.2.3 of the CRC. (i.e., continuity of protection shall be full height from floor to ceiling, etc.)
- A Fire Permit "FP" shall be required when remodeling structures that have existing fire sprinklers. A fire inspection shall be required prior to a building rough inspection all trades anda fire final inspection shall be required before a building final can be signed-off. Fire inspectorsshall sign-off all fire inspections on the building permit.

WATER CLOSET REQUIREMENTS
- The water closet shall have a clearance of 30 inches wide (15 inches on center) and 24 inches in front. (CPC 402.5)
- Where the water closet (or other plumbing fixture) comes into contact with the wall or floor, the joint shall be caulked and sealed to be watertight. (CPC 402.2)

TEMPERED GLAZING (CBC 2406.4, 2403.1 AND CRC 308.1 R308.4)
- Tempered glazing shall be installed in the locations listed below. Tempered glazing shall be permanently identified by a manufacturer marking that is permanently applied and cannot be removed without being destroyed (e.g. sand blasted, acid etched, ceramic fired, laser etched, or embossed).
- Within a portion of wall enclosing a tub/shower where the bottom exposed edge of the glazing is less than 60 inches above the standing surface and drain inlet.
- Within 60 inches of a tub/shower where the glazing is less than 60 inches above the walking surface.
- Glazing within 24 inches of either side of the door in the plane of the door in a closed position.
- Glazing on the hinge-side of an in-swinging door that is installed perpendicular to a door in a closed position and within 24 inches of the door.

ELECTRICAL AND LIGHTING REQUIREMENTS
- All receptacles shall be GFCI protected and tamper-resistant (TR). If any new/additional outletsare installed, the bathroom shall have a dedicated 20-amp circuit. (CEC 210.8, 210.11, 406.12)
- Exhaust fans with a minimum ventilation rate of 50 CFM are required in all bathrooms, even if anoperable window is installed. Exhaust fans and lighting shall have separate control switches (evenif a combination unit is installed). The exhaust fan may need to be supplied by a GFCI protectedcircuit based on the manufacturer's requirements. (CEES 150.0(k), 150.0(o))
- Lighting fixtures located within 3 feet horizontally and 8 feet vertically of the bathtub rim orshower stall threshold shall be listed for a damp location, or listed for wet locations where subjectto shower spray. (CEC 410.10)
- Receptacles exceeding 20 amperes in a wet location shall have an enclosure that is weatherproofwhen the attachment plug is removed. (CEC 406.9(B)2)
- Receptacles shall not be installed within or directly over a bathtub or shower stall. (CEC 406.9(C))
-
- All installed lighting fixtures shall be high efficiency.At least one light fixture shall be controlled by a vacancy sensor switch that requires a manual on activation (does not automatically turn on) and automatically turns off within 30 minutes after the room is vacated. All other light fixtures shall be controlled by a vacancy sensor or dimmer.
- All light fixtures shall contain bulbs that are labeled as JA8-2019 (JA8-2019-E for sealed lens orrecessed fixture). Screw base bulbs are permitted, except in recessed lighting fixtures.
- Recessed lighting shall be listed as IC (zero clearance to insulation) and AT (air tight), besealed/caulked between the fixture housing and ceiling, shall not contain a screw base socket,and contain bulbs marked with JA8-2019-E efficiency label. (CEES 150.0(k))

WATER EFFICIENT PLUMBING FIXTURES (CALGREEN 301.1.1, 40.303)
- Residential buildings undergoing permitted alterations, additions, or remodels are required to replace all non-compliant plumbing fixtures (based on water efficiency) throughout the house with water-conserving plumbing fixtures. The following table shows what is considered to be a non-compliant plumbing fixture and the current water efficiency standards for various plumbing fixtures. All existing non-compliant plumbing fixtures shall be replaced with fixtures meeting the current standards.

- Residential building constructed after January 1, 1994 are exempt from this requirement.

Plumbing Fixture	Non-complaint Plumbing Fixture	Current Standard for the max flow Rate of newly installed plumbing fixtures
Water Closet (toilet)	Greater than 1.6 gallons/flush	1.28 gallons/flush
Showerhead	Greater than 2.5 gallons/min	1.8 gallons/min at 80 psi
Faucet - Bathroom	Greater than 2.2 gallons/min	1.2 gallons/min at 60 psi
Faucet - Kitchen	Greater than 2.2 gallons/min	1.8 gallons/min at 60 psi (average)

SMOKE AND CARBON MONOXIDE ALARMS (CBC 907.2.10, CRC 314 and 315)
- Smoke alarms shall be installed on the ceiling or wall (between 4" and 12" of the ceiling) in all sleeping rooms, each area/hallway adjacent to sleeping rooms, each story of the building, and in any basement. Smoke alarms shall be replaced 10 years after the date of manufacture listed on the alarm (if no date is listed the alarm shall be replaced). Newly installed smoke alarms shall have a 10-year battery.
- Carbon monoxide (CO) alarms shall be installed on the ceiling or wall (above the door header) in each area/hallway adjacent to sleeping rooms, each occupiable story, and within a bedroom if the bedroom or attached bathroom contains a fuel-burning appliance. CO alarms are not required if there is no fuelburning appliance or fireplace in the house and where the garage is detached from the house.

EGRESS NOTE (CRC 2019)
- 1002.1 Maintenance
  Means of egress shall be maintained in accordance with the California Fire Code.
- 1003.2 Ceiling height -The means of egress shall have a ceiling height of not less than 7 feet 6 inches (2286 mm) above the finished floor.

Exceptions:
Sloped ceilings in accordance with Section 1207.2.
Ceilings of dwelling units and sleeping units within residential occupancies in accordance with Section 1207.2.
Allowable projections in accordance with Section 1003.3.
Stair headroom in accordance with Section 1011.3.
Door height in accordance with Section 1010.1.1.
Ramp headroom in accordance with Section 1012.5.2.
The clear height of floor levels in vehicular and pedestrian traffic areas of public and private parking garages in accordance with Section 406.2.2.
Areas above and below mezzanine floors in accordance with Section 505.2.
In Group I-2, I-2.1 and I-3 occupancies, the means of egress shall have a ceiling height of not less than 8 feet (2439 mm).

ELEVATION DETAILS (2019 CRC, CBC)

The nominal thickness and attachment of exterior wall coverings shall be in accordance with Table R703.3(1), the wall covering material requirements of this section, and the wall covering manufacturer's installation instructions. Cladding attachment over foam sheathing shall comply with the additional requirements and limitations of Sections R703.15 through R703.17. Nominal material thicknesses in Table R703.3(1) are based on a maximum stud spacing of 16 inches (406 mm) on center.
- Stucco shall be $\frac{7}{8}$" thick and three coats applied over approved wire lath and two layers of grade D building paper. Provide Weep Screed. (CBC 2510.6/crc R703.2)
- Provide spark arrestor for any new or existing chimney. (CBC 2113.9.1/CRC 1003.9.1)
- Roof Slopes >2:12 AND <4:12 with asphalt shingles have two layers of 15 lbs felt applied shingle style (CBC 1507.2)
- Provide all under - floor areas with cross ventilation at $\frac{1}{150}$ for the entire area with 50% of the required vent area be ventilators located at a minimum of 3' above eave or cornice vents. Screens over the openings shall have $\frac{1}{8}$" to $\frac{1}{4}$" openings. (CBC 1203/CRC R806)
- Provide Attic Access (22"x30" min) and Under floor access (18"x24" min) for new areas (CRC R408.4/ CBC 1209)
- Provide under-floor clearance of 18" for joists to earth and 12" clearance from girders to earth (CBC 2304.11.2/CRC R317.1)

RESIDENTIAL LIGHTING (2019 CALIFORNIA TITLE 24 SECTION 150)
1. Luminaire Requirement
A. Luminaire Efficacy. All installed luminaires shall meet the requirements in TABLE 150.0-A.
B. Blank Electrical Boxes--The number of electrical boxes that are more than 5 feet above the finished floor and do not contain a luminaire or other device shall be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
C. Recessed Downlight Luminaires in Ceilings -- In addition to complying with 150.0(k)1A, luminaires recessed into ceilings shall meet all of the following requirements:
i. Be listed, as defined in Section 100.1, for zero clearance insulation contact (IC) by Underwriters Laboratories or other nationally recognized testing/rating laboratory; and
ii. Have a label that certifies the luminaire is airtight with air leakage less than 2.0 CFM at 75 Pascals when tested in accordance with ASTM E283. An exhaust fan housing shall not be required to be certified airtight; and
iii. Be sealed with a gasket or caulk between the luminaire housing and ceiling, and have all air leak paths between conditioned and unconditioned spaces sealed with a gasket or caulk; and
iv. For luminaires with hardwired ballasts or drivers, allow ballast or driver maintenance and replacement to be readily accessible to building occupants from below the ceiling without requiring the cutting of holes in the ceiling; and
v. Shall not contain screw base sockets.

A. Electronic Ballasts for Fluorescent Lamps. - Ballasts for fluorescent lamps rated 13 watts or greater shall be electronic and shall have an output frequency no less than 20 kHz.
B. Night Lights, Step Lights and Path Lights. Night lights, step lights and path lights shall not be required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
C. Lighting Integral to Exhaust Fans - Lighting integral to exhaust fans shall meet the applicable requirements of Section 150.0(k).
D. Screw based luminaires - Screw based luminaires shall contain lamps that comply with Reference Joint Appendix JA8.
EXCEPTION to Section 150.0(k)1G: Luminaires with hard-wired ballasts for high intensity discharge lamps.
E. Light Sources in Enclosed or Recessed Luminaires - Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, shall not be installed in enclosed or recessed luminaires.
F. Light Sources in Drawers, Cabinets and Linen Closets.
Light sources internal to drawers, cabinetry or linen closets shall not be required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power and emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.

2. INTERIOR LIGHTING SWITCHING DEVICES AND CONTROLS
A. All forward phase cut dimmers used with LED light sources shall comply with NEMA SSL 7A.
B. Exhaust fans shall be controlled separately from lighting systems.
EXCEPTION to Section 150.0(k)2B: Lighting integral to an exhaust fan may be on the same control as the fan provided the lighting can be turned OFF in accordance with the applicable provisions in Section 150.0(k)2 while allowing the fan to continue to operate.
C. Lighting shall have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.
EXCEPTION to Section 150.0(k)2C: Ceiling fans may provide control of integrated lighting via a remote control.
D. Lighting controls and equipment shall be installed in accordance with the manufacturer's instructions.
E. No controls shall bypass a dimmer, occupant sensor or vacancy sensor function where that dimmer or sensor has been installed to comply with Section 150.0(k).
F. Lighting controls shall comply with the applicable requirements of Section 110.9.
G. An Energy Management Control System (EMCS) may be used to comply with control requirements in Section 150.0(k) if at a minimum it provides the functionality of the specified controls in accordance with Section 110.9, meets the installation certificate requirements in Section 130.4 meets the EMCS requirements in Section 130.0(e), and complies with all other applicable requirements in Section 150.0(k)2.
H. A multiscene programmable controller may be used to comply with dimmer requirements in Section 150.0(k) if at a minimum it provides the functionality of a dimmer in accordance with Section 110.9, and complies with all other applicable requirements in Section 150.0(k)2.
I. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces shall be controlled by an occupant or vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it shall be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
J. Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, shall have dimming controls.
EXCEPTION 1 to Section 150.0(k)2K: Luminaires in closets less than 70 square feet.
EXCEPTION 2 to Section 150.0(k)2K: Luminaires in hallways.
K. Undercabinet lighting shall be controlled separately from ceiling-installed lighting such that one can be turned on without turning on the other.

ELECTRICAL NOTES (2019 CEC)
- Provide general use electrical receptacles so that no point along the floor line is more than 6' from receptacle and any wall space > 2' has a receptacle (except in bathrooms and kitchen countertops) (210.52)
- All 15-20 amp, 125 and 250 volt non locking type receptacles in the areas specified in 406.12 (1)-(7) shall be listed tamper resistant receptacles. (406.12)
- All new outlets (receptacles, switches, lighting, etc) in family, dining, livign, bedrooms, hallways, etc. shall be on circuits protected with combination arc-fault circuit interrupter (210.12)
- Smoke (with 10 year battery) and carbon monoxide alarms in new construction and additions shall hardwire with a battery back-up and interconnected (CBC 907.2 CRC R314-R315)
- Closet lights shall be fluorescent, have sealed lens, or LED listed for the storage area. (410.16)
- Provide a dedicated 20 AMP circuit for the furnace and provide a receptacle within 25' (210.63)
- All lighting as high efficacy (ie pin based CFL; Pulse - start MH, HPS, GU24 sockets other than LEDS, LED Luminaires with integral source, etc) CEC table 150.0A
- All compliant light sources in the following locations are controlled by vacancy sensors or dimmers (exception closets less than 70 sf and hallways:
  -- ceiling recessed downlight luminaries
  -- LED luminaries with integral sources
  -- Pin based LED lamps
  -- GU-24 based LED light sources
- At least one fixture in each bathroom controlled by a vacancy sensor. CEC 150.0
- Separate switching for any under cabinet lighting (including kitchen lighting) from other lighting systems. CEC 150.
- Exhaust fans (excludes kitchen exhaust hood) switched separate from lighting (or utilize a device where lighting can be turned off while the fan is running).
- All other bathroom lights are high efficacy luminaries or controlled by a vacancy sensor that complies with CEC section 110.9 and shall not have a control that allows the luminaries to be turned on automatically or that has an override allowing the luminaries to be always on.

GREEN CODE

REVISIONS	BY

DI VITTORIO
ARCHITECTURE & DESIGN
1512 WALNUT DRIVE
CAMPBELL CA, 95008
408.655.0565

408.460.8354

PROPOSED REMODEL TO:
ALBERT RESIDENCE
ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS, CA 94022

DRAWN BY: DANIELLE DIVITTORIO

CHECKED BY:

SCALE: NOT TO SCALE

DATE: FEB. 28, 2022

SHEET NO. GB.1

GENERAL NOTES:

1. ALL WORK SHALL COMPLY WITH THE 2019 CALIFORNIA BUILDING CODE, PLUMBING CODE, MECHANICAL CODE; NATIONAL ELECTRIC CODE AND ALL APPLICABLE STATE, COUNTY, AND LOCAL CODES AND STANDARDS.
2. CONTRACTOR SHALL INFORM THE DESIGNER OF ANY AND ALL MODIFICATIONS TO THE DRAWINGS AS REQUESTED AND/OR REQUIRED BY INSPECTOR AND/OR ANY GOVERNING AGENCY.
3. THE CONTRACTOR, SUB CONTRACTOR, AND OWNER SHALL HOLD HARMLESS, INDEMNIFY AND DEFEND THE PLAN MAKER AND THEIR CONSULTANTS FROM ANY AND ALL LIABILITY CLAIMS, LOSES, OR DAMAGES ARISING OR ALLEGED TO ARISE FROM THE PERFORMANCE OF THE WORK DESCRIBED IN THESE CONSTRUCTION DOCUMENTS.
4. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES THAT HE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY.

FOUNDATION NOTES:

1. Foundation concrete shall have a minimum compressive strength of 2500 psi.
2. Unless specified otherwise, reinforcing steel shall be deformed bars of billet or axle steel per ASTM A615 Grade 40. For #5 and bigger bars, Grade 60 shall be used.
3. Rebar, dowels and other embedded elements shall be ssecured in place before pouring concrete. Reinforcement shall be clean and free of extraneous material.
4. Rebar Clearance:
   a. 3" clearance shall be provided where concrete is cast again earth,
   b. 2" clearance for concrete exposed to earth or weather but cast against forms,
   c. 3/4" clearance for slabs and walls where concrete is not exposed to earth or weather.
5. Lap all reinforcing splices a minimum of 48 bar diameters but in no case less than 24".
6. Anchor Bolts:
   a. Anchor bolts shall be A307 steel, with an actural diameter of 5/8" and shall be 10" long minimum. Embedment into concrete shall be 7" minimum.
   b. Each anchor bolt shall be attached to mud/ sill plate with an iron plate washer of 3"x3"x1/4".
   c. Two bolts minimum each piece of mudsill plate.
   d. Anchor bolts shall be minimum of 6", but no more than 12" from each end of the sill plate.
   e. Anchor bolts may be substituted by epoxy anchors of equal diameter, and installation shall follow approved ICC report.
7. Holdowns:
   a. Holdown locations shall not be scaled off of foundation plans. They shall be located by close evaluation of architectural floor plans, shearwall plans, and the framing plans.
   b. For all holdown installations, contractor shall refer to manufacturer's specifications for embedment, coverage and other requirements.
8. Fasteners
   a. Fasteners and connectors in contact with preservative-treated wood, or for fire-retardant-treated wood used in exterior applications or wet or damp locations, shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper.

FRAMING NOTES:

1. Floor/ Roof Sheathing Notes:
   a. Floor and Roof sheathing panels shall not be less than 24" inches wide, unless all edges are solidly blocked.
   b. Floor and Roof sheathing shall be installed with the face grain perpendicular to framing members below, stagger the adjacent panels by 4 feet, glued and nailed with 10d screw shank common nails at 6" o.c. at all panel edges and at 10" o.c. at all intermediate supports for the floor sheathing; and nailed (with no glue) with 8d common nails at 6" o.c. at all panel edges and at 12" o.c. at all intermediate support for roof sheathing.
   c. The sheathing panels shall be installed such that there is an 1/8" gap between panel edges to allow for possible swelling and/ or expansion.
2. Wall Framing Notes:
   a. CDX or OSB sheathing with APA span rating of 24/0 or better shall be used with all panel edges blocked and nailed per the Shear Wall Schedule. All intermediate supports shall be nailed with 8d common or galvanized box nails at 12" o.c.
   b. 2x joists and 4x beams shall be Douglas-Fir Larch #2 or better.
   c. Studs, top plates, sill plates and posts shall be Douglas-Fir Larch Standard Grade or better for heights up to 10ft., and Douglas-Fir Larch #2 or better for height greater than 10ft.
   d. Mud sill, wood in direct contact with concrete and other members located within 6" of finish grade shall be pressure treated Douglas-Fir Larch.
   e. All lumber shall have a moisture content of 19% or less prior to placement.
3. Stick Framing Notes:
   a. U.O.N., all ceiling joists shall be 2x6 at 24" o.c. (Maximum span is 10'-0")
   b. U.O.N., all hips, valleys and ridges shall be 2x8.
   c. Kickers supporting purlins are to be 2x4 spaced no more than 4'-0" o.c.
4. Hardware:
   a. All framing anchors, straps, hangers, post caps, column bases, holdowns, angles and clips shall be manufactured by SIMPSON or equal. Nailing schedule shall be in accordance with the product requirements for maximum tabulated loads. Unless noted otherwise, Simpson type "N" nails shall be used with the above framing connectors.
   b. U.O.N. all flush mounted single floor joists shall use LU210 hangers and all flush mounted single roof rafters shall use "LSU" hangers.
   c. U.O.N. all flush mounted sawn lumber beams or multiple joists shall use "HHUS" hangers.
   d. 16d and 10d fasteners are common nails and shall be used throughout this project except all toe nailing shall be 8d nails. 10d common nails may be replaced with 16d sinkers. Box nails shall not be used unless specified.
   e. All nails exposed to the weather shall be hot-dipped galvanized nails.

APPROVAL LISTINGS FOR PRE-ENGINEERED STRUCTURAL ELEMENTS:

1. TJI Floor Joists/ LSL Beams/ PSL Beams: ICC ES ESR-1153; ESR-1387
2. Simpson Strong-Tie Steel Strong-Walls: ICC ES ESR-1679

DESIGN CRITERIA:

1. DESIGN LOADS:

	DEAD LOAD	LIVE LOAD
Roof:	16 psf	20 psf
Exterior Walls:	12 psf	
Interior Walls:	8 psf	

2. SOIL CRITERIA:
   Minimum Width of Footing: 12 inches
   Minimum Depth of Footing: 12 inches
   Soil Bearing Pressure: 1500 psf
   Coefficient of Friction: 0.30
3. SEISMIC:
   Site Class: D
   Seismic Design Category: E
   Seismic Force Resisting System: Bearing Wall (Light-Framed Walls with Wood Structural Panels)
   I = 1.0
   Ss = 2.244
   S1 = 0.807
   Fa = 1.2
   Fv = 1.7
   R = 6.5
   Ω_o = 3
   Cd = 4
4. WIND:
   Basic Wind Speed = 92 MPH
   Exposure Category = B
   Topographic Factor, K_{zt} = 1.0
   Risk Category: II
   Enclosure Classification: Enclosed
5. LUMBER PROPERTIES:

	Fv (psi);	Fb (psi);	E (ksi);
Douglas Fir Larch #2:	180	900	1,600
Douglas Fir Larch #1:	180	1000	1,700
Timberstrand (LSL):	310	2325	1,550
Microllam (LVL):	285	2600	1,900
Parallam (PSL):	290	2900	2,000

ABBREVIATIONS

A & B	ABOVE AND BELOW	F.F.	FINISH FLOOR	(N)	NEW	U.N.O.	UNLESS NOTED OTHERWISE
A.B.	ANCHOR BOLTS	F.H.	FULL HEIGHT	N/A	NOT APPLICABLE	U.O.N.	UNLESS OTHERWISE NOTED
ABV	ABOVE	F.H.O.B.	FULL HEIGHT OF BLDG.	NAIL'G	NAILING	VERT.	VERTICAL
A.F.F.	ABOVE FINISH FLOOR	FIN	FINISH	N.T.S.	NOT TO SCALE	WDW.	WINDOW
A.P.A.	AMERICAN PLYWOOD ASSO.	F.J.	FLOOR JOIST	O/	OVER	W.W.F.	WELDED WIRE FABRIC
ARCH	ARCHITECTURAL	FLR	FLOOR	O.C.	ON CENTER	W/	WITH
B.F.W.	BALLOON FRAMED WALL	F.N.	FIELD NAIL	OPEN'G	OPENING	W/O	WITHOUT
BEL.	BELOW	F.N.	FACE NAIL	OPT.	OPTIONAL	@	AT
BLK'G	BLOCKING	FNDN.	FOUNDATION	O.S.B.	ORIENTED STRAND BOARD	||	PARALLEL
BM.	BEAM	F.O.C.	FACE OF CONCRETE	PC'S	PIECES	⊥	PERPENDICULAR
BTM	BOTTOM	F.O.S.	FACE OF STUDS	PERIM.	PERIMETER	℄	CENTER LINE
BRG	BEARING	F.P.	FIREPLACE	PERP.	PERPENDICULAR	U	HANGER
C	CAMBER	FTG.	FOOTING	PL/PLT	PLATE	/_	STEEL ANGLE
CANT.	CANTILEVER	FRM'G	FRAMING	PLC'S	PLACES		
C.J.	CEILING JOIST	F.W.O.B.	FULL WIDTH OF BLDG.	PLY'D	PLYWOOD	NOTE:	REFER TO SIMPSON STRONG-TIE CO'S CATALOG FOR HARDWARE ABBREVIATION.
CLG	CEILING	g	GAUGE	P.T	PRESSURE TREATED		
CLR	CLEARANCE	GALV.	GALVANIZED	RAF.	RAFTERS		
C.M.U.	CONC. MASONRY UNIT	GAR.	GARAGE	RDWD	REDWOOD		
CONC	CONCRETE	G.E.T.	GABLE END TRUSS	REQ'D	REQUIRED		
CONN	CONNECT, CONNECTION	GEN.	GENERAL	RET.	RETAINING		
CONST	CONSTRUCTION	GLB.	GLU-LAM BEAM	RDG.	RIDGE		
CONT	CONTINUOUS	G.T.	GIRDER TRUSS	RR	ROOF RAFTER		
CSK	COUNTERSINK	GR.	GRADE	S.A.D.	SEE ARCH. DRW'GS		
CTR	CENTER	HDR	HEADER	SCH.	SCHEDULE		
DBL	DOUBLE	HGR	HANGER	SEC.	SECTION		
DET	DETAIL	HORIZ.	HORIZONTAL	SHT.	SHEET		
D.F.	DOUGLAS FIR	H.I.	HEIGH I	SHTG	SHEATHING		
DIA	DIAGONAL	INFO.	INFORMATION	SIM.	SIMILAR		
DIAPH	DIAPHRAGM	INT.	INTERIOR	SIMP.	SIMPSON STRONG-TIE COMPANY		
DIM	DIMENSION	J.H.	JOIST HANGER	S.O.G.	SLAB-ON-GRADE		
DIR	DIRECTION	J.T.	JACK TRUSS	SPC'G	SPACING		
DR	DOOR	K.P.	KING POST	SPECS	SPECIFICATIONS		
DWG	DRAWING	K.S.	KING STUD	SQ.	SQUARE		
(E)	EXISTING	LOC.	LOCATION	STRUCT.	STRUCTURAL		
EA	EACH	MANUF.	MANUFACTURER	S.W.S.	SHEAR WALL SCHEDULE		
E.F.	EACH FACE	MAT'L	MATERIAL	S.W.T.	SHEAR WALL TYPE		
ELE/ELEV	ELEVATION	MAX.	MAXIMUM	T&B	TOP AND BOTTOM		
EMB	EMBEDMENT	M.B.	MACHINE BOLT	T&G	TONGUE AND GROOVE		
E.N.	EDGE NAIL	MEZZ.	MEZZANINE	T.N.	TOE NAIL		
EQ.	EQUAL	M.I.	MALLEABLE IRON	T.O.	TOP OF		
E.W.	EACH WAY	MIN	MINIMUM	T.O.C.	TOP OF CONCRETE		
E.W.E.F.	EACH WAY EACH FACE			T.O.S.F.	TOP OF SUB-FLOOR		
EXP	EXPANSION			T.O.W	TOP OF WALL		
EXT.	EXTERIOR			TOT	TOTAL		
				TYP.	TYPICAL		

SHEAR WALL SCHEDULE

PW1 = 260 PLF

Shear Material:	3/8" CDX or OSB
Wall Framing:	2x DF at 16" o.c., Block all Panel Edges
Edge Nailing:	8d Common @ 6" o.c.
Field Nailing:	8d Common @ 12" o.c.
Sill Nailing:	(4) 16d Common every 16" into 1-1/2" min. Joist/Block; or LTP4 at 24" o.c. @ 2X Rim
Block Nailing:	A35/LTP4 at 24" o.c. @ 2X Blocking/Rim

PW2 = 350 PLF

Shear Material:	3/8" CDX or OSB
Wall Framing:	2x DF at 16" o.c., Block all Panel Edges
Edge Nailing:	8d Common @ 4" o.c.
Field Nailing:	8d Common @ 12" o.c.
Sill Nailing:	(6) 16d Common in (2) rows every 16" into (2) 1-1/2" wide or (1) 2-1/2" Jst/Blk; or LTP4 at 16" o.c. @ 2X Rim
Block Nailing:	A35/LTP4 at 16" o.c. @ 2X Blocking/Rim

PW3 = 490 PLF

Shear Material:	3/8" CDX or OSB
Wall Framing:	2x DF at 16" o.c., Block all Panel Edges 3x members shall be used at all abutting panel edges occuring at sill plates, top plates, end posts and studs. The foundation sill plate shall be 3x Pressure-Treated Douglas-Fir (P.T.D.F.) at S.O.G.
Edge Nailing:	8d Common @ 3" o.c. (nails shall be staggered)
Field Nailing:	8d Common @ 12" o.c.
Sill Nailing:	(8) 16d Common in (2) rows every 16" into (2) 1-1/2" wide or (1) 2-1/2" Jst/Blk; or LTP4 at 12" o.c. @ 2X Rim
Block Nailing:	A35/LTP4 at 12" o.c. @ 2X Blocking/Rim

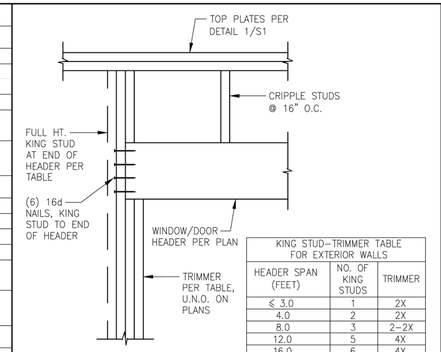
PW4 = 640 PLF

Shear Material:	3/8" CDX or OSB
Wall Framing:	2x DF at 16" o.c., Block all Panel Edges 3x members shall be used at all abutting panel edges occuring at sill plates, top plates, end posts and studs. The foundation sill plate shall be 3x Pressure-Treated Douglas-Fir (P.T.D.F.) at S.O.G.
Edge Nailing:	8d Common @ 2" o.c. (nails shall be staggered)
Field Nailing:	8d Common @ 12" o.c.
Sill Nailing:	(10) 16d Common in (2) rows every 16" into (2) 1-1/2" wide or (1) 2-1/2" Jst/Blk; or LTP4 at 10" o.c. @ 2X Rim
Block Nailing:	A35/LTP4 at 10" o.c. @ 2X Blocking/Rim

PW8 = 770 PLF

Shear Material:	1/2" CDX or OSB
Wall Framing:	2x DF at 16" o.c., Block all Panel Edges 3x members shall be used at all abutting panel edges occuring at sill plates, top plates, end posts and studs. The foundation sill plate shall be 3x Pressure-Treated Douglas-Fir (P.T.D.F.) at S.O.G.
Edge Nailing:	10d Common @ 2" o.c. (nails shall be staggered)
Field Nailing:	10d Common @ 12" o.c.
Sill Nailing:	(3) 3/8" Dia. x 6" Lag Bolts every 16" into min. 3-1/2" Beam/Blk; or LTP4 at 8" o.c.
Block Nailing:	A35/LTP4 at 8" o.c.

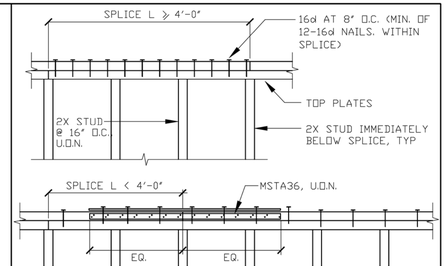
NOTES:
1. a. Contractor shall review all typical shearwall connection details prior to the start of construction.
   b. All shear material on shearwalls shall be extended from horizontal diaphragm to horizontal diaphragm.
2. SILL NAILING
   a. Sill nailing is the fastening of the sill plate located at the bottom of the shear wall, through the horizontal diaphragm (floor sheathing) into the framing member below. Care must be taken to ensure the penetration of these fasteners into the blocking, rim joists, or beam below.
   b. Sill nailing does not apply when the sill plate is resting directly over the concrete surface. In this case, anchor bolts as indicated on the foundation plans shall be used.
   c. Sill nailing may be omitted and replaced with a minimum of (2)16d at 16" o.c. for the following conditions:
      * at all non-shear wall locations
      * At exterior shear walls where the shear material (panel) covering the upper level shear wall is one-piece and extends continuously across the floor thickness to the rim joist (upper floor condition) or the mud sill (ground floor condition) below. In this case, shear wall edge nailing must be provided along the rim joist or blocking at the floor level, and along the sill plate of the upper level shear wall.
3. BLOCK NAILING
   a. Block nailing is the fastening of blocking, rim joists or the beam located directly below the shearwall above to the top plates or beams immediately below.
   b. All blocking other than those located underneath the shearwall shall be held in place by one of the following methods:
      * for 2x blocking/joists: 8d toe nails spaced a maximum of 8" on center.
      * for Tjl or similar blocking/joists: 16d Sinkers at 8" on center applied vertically through the bottom chord.
      * for TimberStrand or similar vertical-laminated lumber: A35 at 24" o.c.
4. PANEL JOINTS & 3X FRAMING
   Where shear material is applied on both faces of a shearwall and nail spacing is closer than 6" on center, all of the following requirements shall be met:
   a. When the horizontal shear panel joints occur at the sill and top plates, 3x members shall be used for the sill and top plates.
   b. the vertical shear panel joints of shear walls on opposite faces of the same wall shall fall on different framing members, unless such framing members are 3x or thicker. When 3x framing is used, the nails on both sides of the 3x shall be staggered.
5. NAILS:
   All Common nails specified in the above Schedule may be replaced with hot-dipped galvanized box nails. Minimum nail diameter shall be 0.131" for 8d nails and 0.148" for 10d nails.



KING STUD-TRIMMER TABLE FOR EXTERIOR WALLS

HEADER SPAN (FEET)	NO. OF KING STUDS	TRIMMER
≤ 3.0	1	2X
4.0	2	2X
8.0	3	2-2X
12.0	5	4X
16.0	6	4X

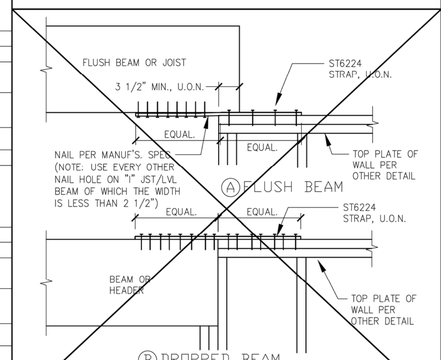
5 TYP. WINDOW/DOOR FRAMING DETAIL



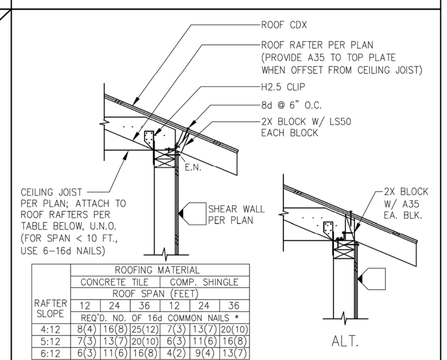
NOTE: STRAPS WIDER THAN 1 1/2" SHALL BE NAILED FLATWISE ACROSS TOP PLATE ONLY

NOTE:
THIS DETAIL SHALL APPLY TO ALL EXTERIOR WALLS; AND THE ENTIRE LENGTH OF ANY WALL THAT CONTAINS A SHEAR WALL.

1 TYP TOP PLATES



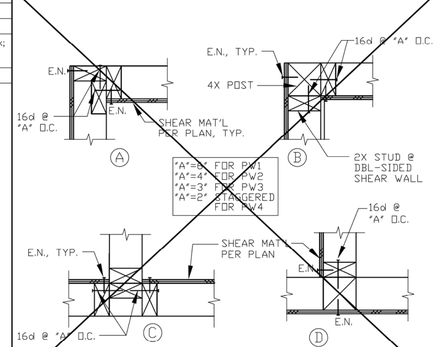
6 BEAM-TO-TOP PLATES CONNECT.



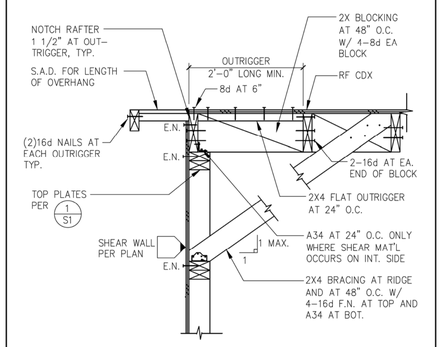
RAFTER SLOPE	ROOFING MATERIAL: CONCRETE TILE / COMP. SHINGLE; ROOF SPAN (FEET): 12 / 24 / 36 / 12 / 24 / 36; REQ'D. NO. OF 16d COMMON NAILS *
4:12	8(4) | 16(8) | 25(12) | 7(3) | 13(7) | 20(10)
5:12	7(3) | 13(7) | 20(10) | 6(3) | 11(6) | 16(8)
6:12	6(3) | 11(6) | 16(8) | 4(2) | 9(4) | 13(7)

* MAY SUBSTITUTE WITH SDS 1/4"X3" WOOD SCREWS (USE NO. IN PARENTHESIS)

2 TYP. EAVE DETAIL

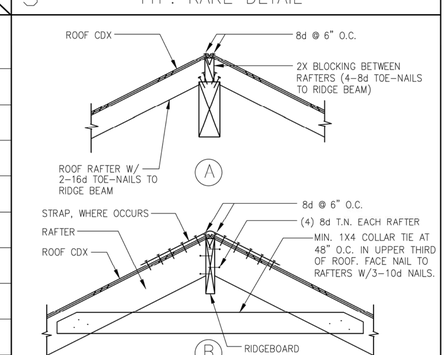


7 SHEAR WALL CORNERS



3 TYP. RAKE DETAIL

SHEET INDEX



4 TYP. RIDGE DETAIL

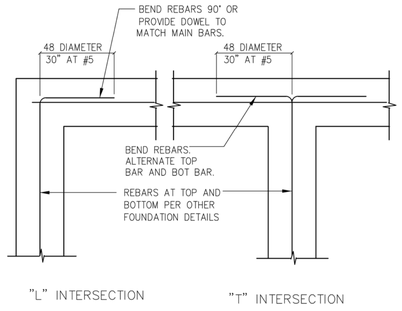
BY | REVISIONS | DATE | NO.

JAD Engineering, Inc.
Civil Engineers
1545 Santa Monica Avenue
San Jose, CA 95118
(408) 316-9281

ALBERT RESIDENCE
ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS, CALIFORNIA

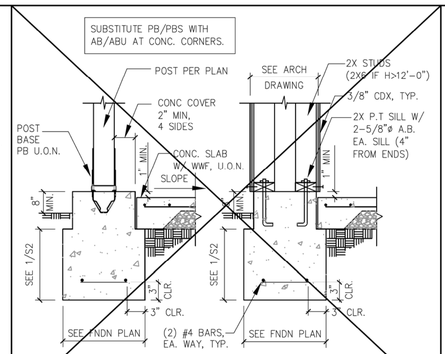
REGISTERED PROFESSIONAL ENGINEER — DIV. — No. C58895 Exp. 6-30-23 — CIVIL — STATE OF CALIFORNIA

DATE	02-02-2022
SCALE	1" = 1'-0"
PROJECT	
DRAWN BY	
SHEET NO.	S1
OF	— SHEETS

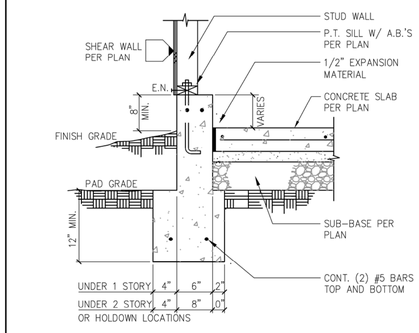


17

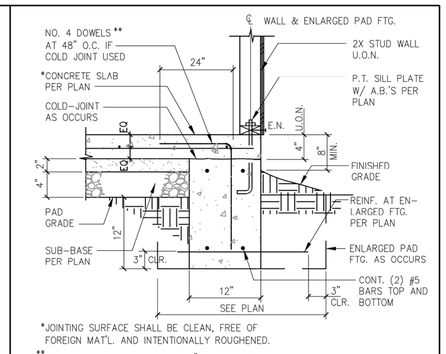
13 TYP. LAPPING



9 TYP. PAD FTG AT PORCH



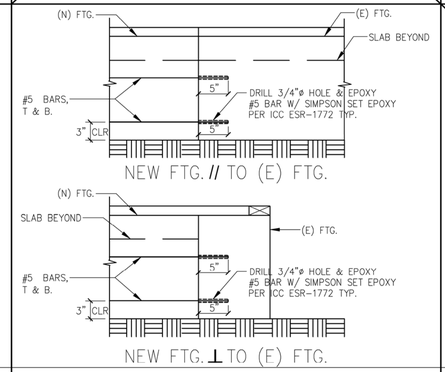
5 EXT. FTG AT GARAGE



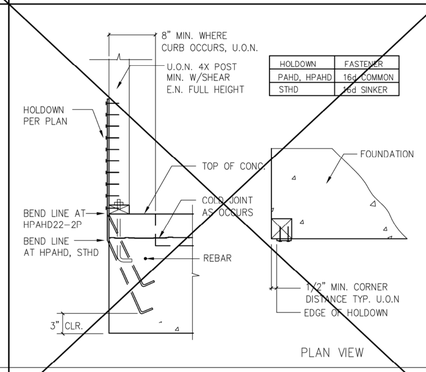
1 TYP. EXTERIOR FOOTING

18

14

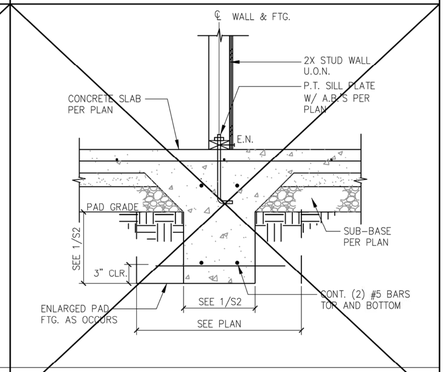


10

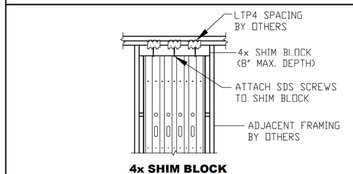


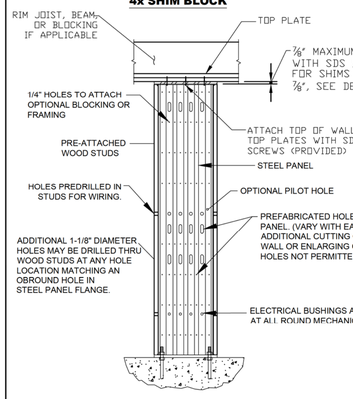
HOLDOWN	FASTENER
PAHD, HPAHD	16d COMMON
STHD	16d SINKER

6 TYP. PA, HPA, STHD HOLDOWN



2 TYP. INTERIOR FOOTING

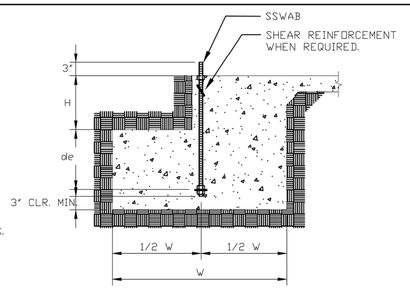




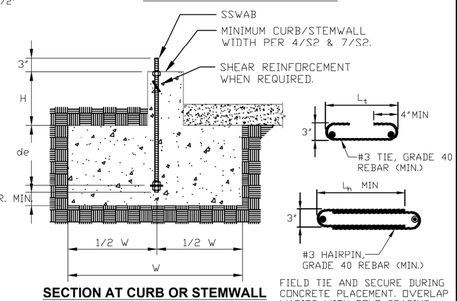
SSW ANCHOR BOLTS

STEEL STRONG-WALL WIDTH	MODEL NO.	DIAMETER	LENGTH	l_e
12" MODEL	SSWAB3/4x24	3/4"	24"	19"
	SSWAB3/4x24HS	3/4"	24"	19"
	SSWAB3/4x30	3/4"	30"	25"
	SSWAB3/4x30HS	3/4"	30"	25"
	SSWAB3/4x36HS	3/4"	36"	31"
15", 18", 21" AND 24" MODELS	SSWAB1x24	1"	24"	19"
	SSWAB1x24HS	1"	24"	19"
	SSWAB1x30	1"	30"	25"
	SSWAB1x30HS	1"	30"	25"
	SSWAB1x36HS	1"	36"	31"

20



SECTION AT SLAB ON GRADE



SECTION AT CURB OR STEMWALL

FIELD TIE AND SECURE DURING CONCRETE PLACEMENT. OVERLAP VARIES WITH BOLT SPACING.

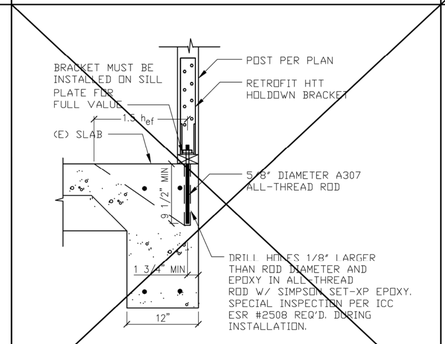
SHEAR REINFORCEMENT

MODEL	SHEAR REINF.	L_v/L_h
SSW12	(1) #3 TIE	9"
SSW15	(1) #3 TIE	12"
SSW18	(1) #3 HAIRPIN	14"
SSW21	(1) #3 HAIRPIN	15"
SSW24	(2) #3 HAIRPINS	17"

MODEL WIDTH	ANCHORAGE SOLUTIONS FOR 2003 AND 2006 IBC LOADS[1,4]					
	2500 PSI		3000 PSI		4500 PSI	
	WIND[2] W/W_1	SEISMIC[3] W/W_1	WIND[2] W/W_1	SEISMIC[3] W/W_1	WIND[2] W/W_1	SEISMIC[3] W/W_1
12" WALL	20/8	30/12	21/7	28/11	15/4	24/8
15" WALL	26/9	43/16	22/8	45/20	16/6	38/16
18" WALL	31/12	43/16	34/13	45/20	24/8	38/16
21" WALL	36/15	43/16	38/15	45/20	27/11	38/16
24" WALL	41/17	43/16	38/15	45/20	28/12	38/16

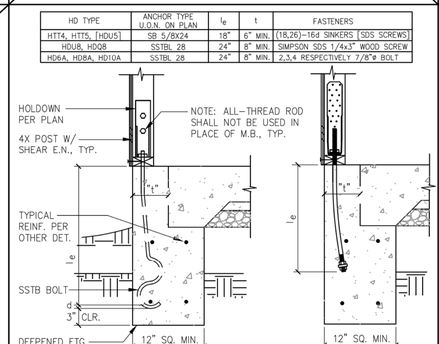
1. ASSUMES CRACKED CONCRETE WITH NO SUPPLEMENTARY REINFORCEMENT PER ACI 318.
2. WIND INCLUDES SEISMIC DESIGN CATEGORY A & B.
3. SEISMIC DENOTES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 & 2 FAMILY DWELLINGS IN SDC C MAY USE WIND SOLUTIONS.

12

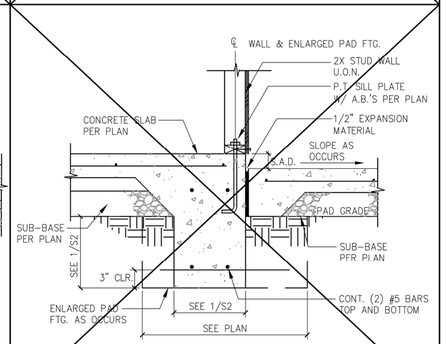


11 RETROFIT HOLDOWN DETAIL

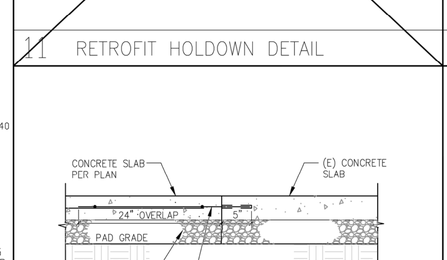
HD TYPE	ANCHOR TYPE U.O.N. ON PLAN	l_e	t	FASTENERS
HTT4, HTT5, [HDU5]	SB 5/8X24	18"	6" MIN.	(18,26)-16d SINKERS [SDS SCREWS]
HDU8, HDQ8	SSTBL 28	24"	8" MIN.	SIMPSON SDS 1/4x3" WOOD SCREW
HD6A, HD8A, HD10A	SSTBL 28	24"	8" MIN.	2,3,4 RESPECTIVELY 7/8"ø BOLT



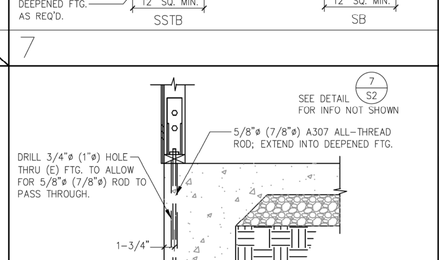
7



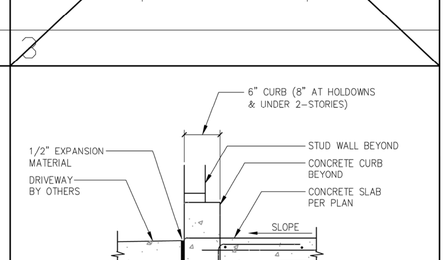
3



12



8



4

NO.	DATE	REVISIONS	BY

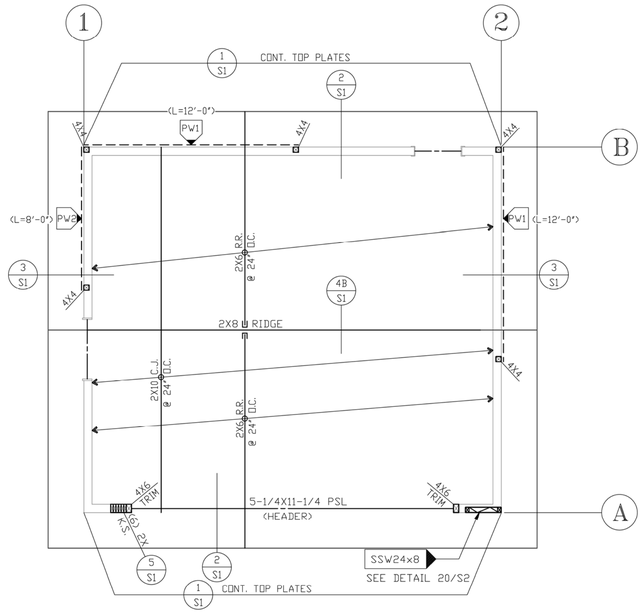
JAD Engineering, Inc.
Civil Engineers
1545 Santa Monica Avenue
San Jose, CA 95118
(408) 316-9281

ALBERT RESIDENCE

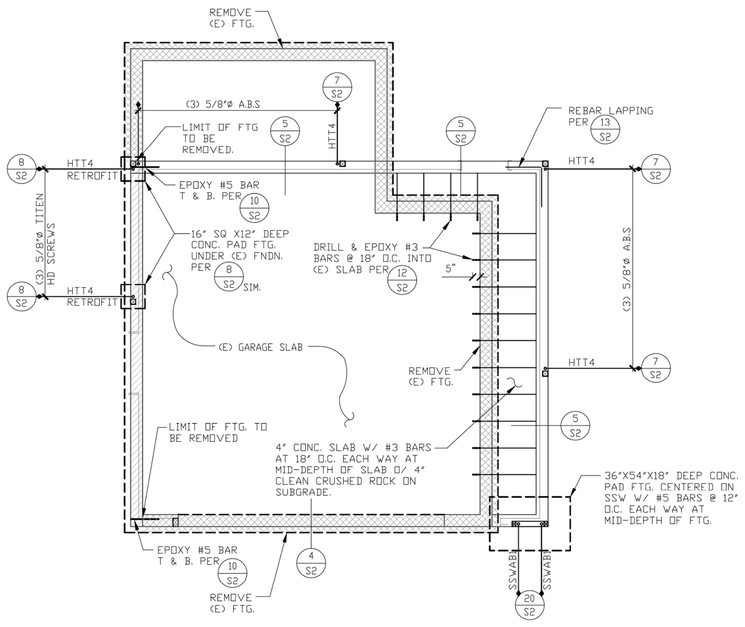
ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
Joel Bolton
No. C58895
Exp. 6-30-23
CIVIL
STATE OF CALIFORNIA

DATE	02-02-2022
SCALE	1" = 1'-0"
PROJECT	
DRAWN BY	
SHEET NO.	S2
OF — SHEETS	



ROOF FRAMING PLAN



FOUNDATION PLAN

PARTIAL ROOF FRAMING NOTES:

1. HEADERS: The following Header Schedule shall be used where header size is not specified on the plans. Unless noted otherwise, all headers shall be DF-Larch #2 or better:

Supporting ROOF Load only:		
	2x4 Wall	2x6 Wall
Up to 4' span	4x6	6x6
4' to 6' span	4x8	6x8
6' to 8' span	4x10	6x10

2. Roof sheathing may be CDX or OSB, and shall be one of the following:

7/16" with 24/16 APA span rating
1/2" with 24/0 APA span rating

3. Roof edge-nailing of 8d at 6" o.c. shall be applied along the full length of the collector trusses.

4. STUDS:
   a. Exterior Walls & Interior Bearing/Shear Walls
      - When supporting 2 stories above, regardless the height, use 2x6 DF-Larch #2 or better at 16" o.c.
      - Up To 10' Tall: 2x4 studs at 16" o.c. shall be DF-Larch #2 Grade or better
      - More than 10' Tall: 2x6 studs shall be DF-Larch #2 or better unless called out differently on plans.
   b. Interior Non-Bearing Walls:
      - Up To 14' Tall: 2x4 studs may be DF-Larch of Std Grade or better spaced 16" or 24" o.c.
      - More than 14' Tall: all studs shall be 2x6 DF-Larch #2 grade or better spaced at 16" o.c. unless called out differently on plans.
   c. Plumbing Walls: studs in non-bearing walls with holes greater than 2.5" in diameter shall be 2x6. For exterior walls, bearing walls and shearwalls, with holes greater than 1.5", and up to 3.5" max, in diameter, studs shall be 2x6. Holes shall be drilled through center of studs. Studs with holes greater than 2" shall be double studs, stitch nailed together per nailing schedule.

5. PLATES:
   a. All exterior walls and interior structural bearing/shear walls shall have double top plates and be spliced for continuity.
   b. Top & sole plates shall be DF-Larch Std grade or better.

6. TRUSS HANGERS:
   a. For individual, non-girder trusses, use the following Simpson hangers, U.N.O.:
      - Up to 15' span : LUS14
      - 15' TO 25' span : LUS16
      - 25' TO 40' span : HUS16
   b. For girder trusses, use the Simpson hangers HGUS**, U.N.O.

PARTIAL FOUNDATION NOTES:

1. CONCRETE:
   a. Concrete shall be of normal weight and fc'= 2500 psi minimum at 28 days.
      - Cement to be Portland cement ASTM C-150 type I or II. Type V may be required, see General Notes for additional requirements
      - Aggregate per ASTM C-33
      - Water to be clean and potable.
      - High alumina cement must not be used in concrete because of high sulfide contents.
      - No admixtures containing calcium chlorides or other chlorides shall be added to the concrete
   b. Unless shown otherwise on plans, cold joints are not allowed.
   c. Concrete placement shall be in one continuous operation, uniformly placed and must be vibrated and well consolidated.
   d. Concrete shall be cured per ACI 318-14 section 5.11 and ACI Committee 308 "Standard Practice for Curing Concrete".

2. REBAR:
   a. Reinforcing steel, #4 bars or less, may be ASTM A615 Grade 40; #5 bars or greater shall be Grade 60.
   b. Reinforcing bars to be welded shall be ASTM A706.
   c. Lap all reinforcing splices a minimum 48 bar diameters but in no cases less than 24".

3. HOLDOWN NOTES:
   a. Holdown rods/straps shall be set in place prior to foundation inspection and concrete pouring.
   b. At the strap holdowns, a #4 rebar by 48" long must be centered and wired over the holdown return hook.
   c. Simpson "SSTB" bolts shall be used if so specified on plans or details. Where not specified, holdown rods may be standard "J" or "L" bolts, or threaded rod with double nut and washer at bottom.
   d. Through bolts for HDA/HD Holdowns shall be ASTM A307 Grade A machine bolts. All-thread rods shall not be used in place of machine bolts.

4. POST BASE: U.O.N., individual isolated posts bearing on concrete shall be secured by Simpson PB connectors (PBS at exterior locations) placed in the concrete.

5. ANCHOR BOLTS:
   a. Unless noted otherwise on the foundation plans, sill plates for all the exterior walls, interior bearing walls and interior shearwalls shall be anchored to the foundation with 5/8" minimum nominal diameter anchor bolts, embedded at least 7 inches into the concrete and spaced not more than 4 Ft. apart, with two bolts per piece, each one not more than 12 inches or less than 7 bolt diameters (4-3/8") from end.
   b. Each anchor bolt shall be mounted on a mudsill/sill plate with an iron plate washer a minimum of 0.229"x3"x3". The plate washer must extend to within 1/2" of the sheathed edge of the sill plate.

6. SUB-BASE
   a. SUB-BASE preparation, see soils report for subbase and vapor barrier requirements.
   b. Foundations shall be founded on native soil and/or Engineered Fill. See soils report for required specifications for Engineered fill.

7. FRAMING:
   a. Unless specified otherwise, all holdowns (strap and rod) shall be attached to a 4x post which receives shear wall edge nailing along full height.
   b. Where multiple studs are approved as a holdown post, the multiple pieces shall be internailed together with a minimum of 16d at 6" o.c.
   c. ICC-ES approved powder driven anchor pins (shot pins) may be used at all interior non-Shear Wall locations. Shot pins shall be used in conjunction with plate washers and shall be spaced no more than 32" o.c.

8. FASTENERS
   a. Fasteners and connectors in contact with preservative-treated wood, or for fire-retardant-treated wood used in exterior applications or wet or damp locations, shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper.

NOTE:
SEE ARCHITECTURAL PLANS FOR DIMENSIONS

LEGEND:

- (E) FOUNDATION
- (E) FOOTING TO BE REMOVED
- (N) FOUNDATION

NO.	DATE	REVISIONS	BY

JAD Engineering, Inc.
Civil Engineers
1545 Santa Monica Avenue
San Jose, CA 95118
(408) 316-9281

ALBERT RESIDENCE
ERIC AND LAUREN ALBERT
725 UNIVERSITY AVENUE
LOS ALTOS CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C58895
Exp. 6-30-23
CIVIL
STATE OF CALIFORNIA

DATE 02-02-2022
SCALE 1" = 1'-0"
PROJECT
DRAWN BY
SHEET NO. S3
OF — SHEETS