

## **AGENDA**

### **CALL TO ORDER**

### **ROLL CALL / QUORUM ANNOUNCEMENT**

### **OLD BUSINESS**

- [1.](#) Approval of Minutes, May 18, 2022, Regular Meeting

### **NEW BUSINESS**

- [2.](#) **Site Plan Case SP-2022-1**

The Applicant proposes to construct one building for a new medical office (Dental) use on the site. The building to be constructed with this site plan is a twenty-six-foot-tall single-story structure that is 3,524 sq. ft. The site plan does show the ability to expand this building in the future, as well as a potential additional building in the future to the east of the proposed building.

### **NOTICES AND COMMUNICATIONS**

#### **REPORTS - Commission and Staff Members**

- Commission Members
- Director, Community & Economic Development
- Director, Public Works / City Engineer
- Director, Wastewater Utility
- Building Inspector, Community & Economic Development

### **ADJOURNMENT**

For information on how to view prior meetings, please visit our website at <https://www.lansingks.org>. If you require any special assistance, please notify the Community and Economic Development Director prior to the meeting.



## PLANNING COMMISSION MAY REGULAR MEETING

Council Chambers, 800 1st Terrace, Lansing, KS 66043  
Wednesday, May 18, 2022 at 7:00 PM

### MINUTES

**CALL TO ORDER** – The regular May meeting of the Lansing Planning Commission was called to order by Chairman Jake Kowalewski at 7:00 p.m.

**ROLL CALL / QUORUM ANNOUNCEMENT**- In attendance were Chairman Jake Kowalewski, Commissioners Nancy McDougal, Mike Suozzo, Janette Labbee-Holdeman, Richard Hannon and Jerry Gies. Chairman Kowalewski noted that there was a quorum present.

#### OLD BUSINESS –

**1. Approval of Minutes, April 20, 2022, Regular Meeting**

Motion was made by Commissioner Labbe-Holdeman to approve the minutes as written and was seconded by Commissioner Suozzo. Commissioner McDougal abstained. Motioned passed 6-0.

#### NEW BUSINESS –

**2. Site Plan Case SP-2022-1**

The Applicant proposes to construct one building that contains two units and four buildings which contain three units for a new townhome development on the site. The buildings are all two-story and range from 1,152 sq. ft. footprint for the two unit building to 1,728 sq. ft. footprint for the three-unit building. Total square footage of each unit will be approximately 1,152 sq. ft.

Commissioner Labbe-Holdeman asked if they are townhomes or apartments, and Mr. Schmitz confirmed that they have a townhome format. Commissioner Labbe-Holdeman then asked if it will be considered affordable housing. Mr. Jeremy Greenamyre with Greenamyre Rentals stated that they are being built to fill a gap, ranging from \$700-\$1500/ month, and that they are doing their best to make them affordable. Commissioner Kowalewski asked about the previous time it came to the planning commission and Mr. Schmitz stated that it was a completely different issue, and that it was a rezoning and different location.

Commissioner Suozzo made a motion to approve, with the conditions outlined on the staff report. Commissioner Hannon seconded it. Motion passed 6-0.

#### NOTICES AND COMMUNICATIONS – None

#### REPORTS: Commission and Staff Members – None

**ADJOURNMENT** – Commissioner Labbe-Holdeman made a motion to adjourn, and it was seconded by Commissioner McDougal. Meeting was adjourned by acclamation at 7:06 pm.

Respectfully submitted,

Melissa Baker, Secretary

Reviewed by,

Matthew R. Schmitz, MPA – Director, Community and Economic Development

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# Planning Commission Staff Report

June 15, 2022

Site Plan Case SP-2022-2

Primus Dental

670 1<sup>st</sup> Terrace

### Project Facts

#### Applicant

Primus Companies

#### Address

670 1<sup>st</sup> Ter.

#### Property ID

099-30-0-20-05-004.02-0

#### Zoning

B-2 General Business District

#### Future Land Use

Commercial

#### Land

54,337.47 SF (1.25 acres)

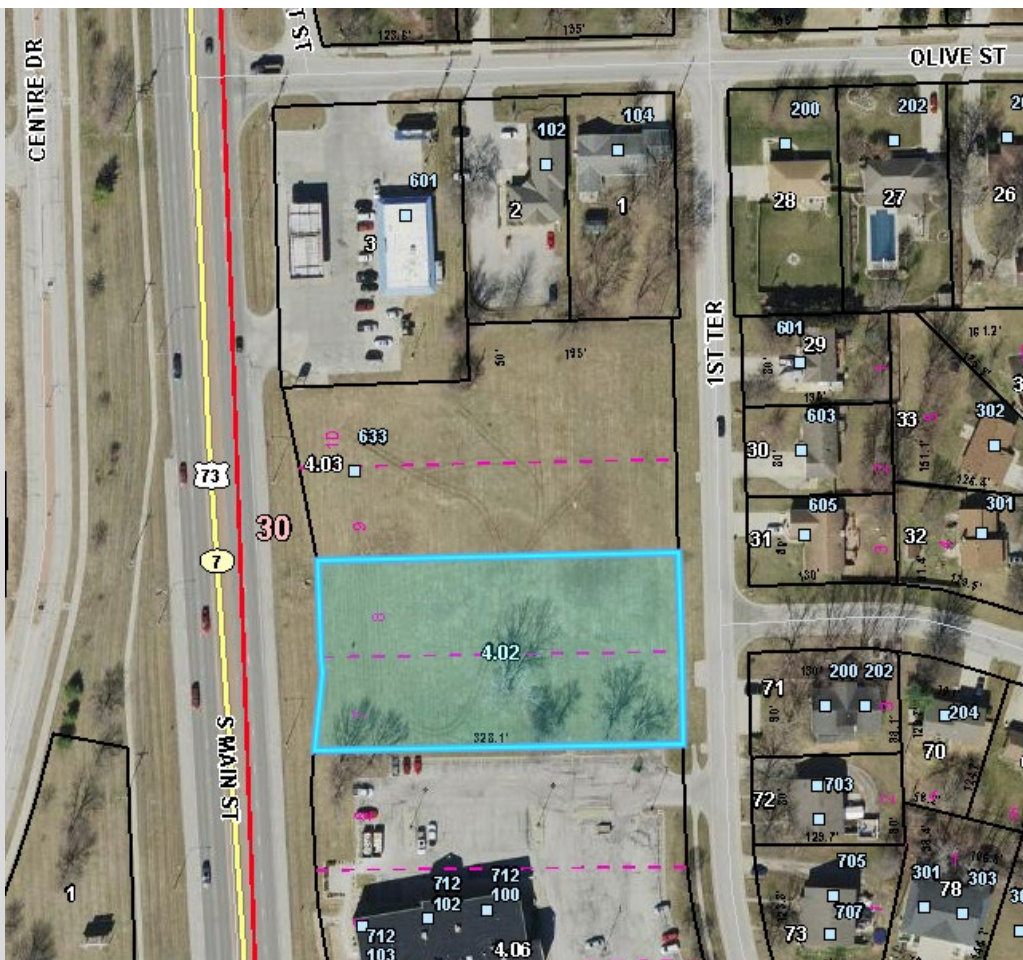
#### Building

Existing: 0 SF

Proposed: 3,524 SF Total

#### Requested Approvals

Site Plan



### Project Summary

The Applicant proposes to construct one building for a new medical office (Dental) use on the site. The building to be constructed with this site plan is a twenty-six-foot-tall single-story structure that is 3,524 sq. ft. The site plan does show the ability to expand this building in the future, as well as a potential additional building in the future to the east of the proposed building.

This is an existing green field site, and no buildings currently exist on the property. The plan includes the site work, landscaping, parking lot improvements, building construction and other appurtenances to the project. Approval of this Site Plan would authorize staff to issue a building permit for the project upon completion of review for compliance with building codes, subject to any conditions added during the approval process at the Planning Commission meeting.

Building elevations are included below, and an overall site plan is attached to this report.

Summary of Open Items

Staff identified the following open items that require further discussion at the Planning Commission meeting. Please see the remainder of this report for more information on each open item.

Community & Economic Development Department

- 1. Outstanding items from the Site Plan Review are noted in the body of the report below.

Public Works Department & City Engineer

- 1. Stormwater items as noted in body of report below.

Wastewater Department

- 1. Wastewater items as noted in body of report below.

Open Items – Community & Economic Development Department

Site Plan Application items

The Community & Economic Development Director has reviewed the site plan for conformance with the site plan requirements as outlined in the Unified Development Ordinance (UDO), as well as the Site Plan Application, and found the following items of concern:

The Director reviewed this site plan application for the following:

- 1. In general, any site plan in compliance with all requirements of this code shall be approved.
  - See comments below.
- 2. In making a determination of compliance, or for site plans accompanying any discretionary review or administrative relief, the review body shall consider whether:
  - The site is capable of accommodating the buildings, proposed use, access, and other site design elements required by the code and will not negatively impact the function and design of rights-of-way or adjacent property.
    - *The site appears to be capable of accommodating the proposed development based on the Unified Development Code. An official review of building feasibility regarding drainage and grading plans will be conducted by the Public Works Department during the review of construction documents.*
  - The design and arrangement of buildings and open spaces is consistent with good planning, landscape design and site engineering principles and practices.
    - *The Site Plan shows a phased pad-site development that will eventually include a second building closer to the street, screening a portion of the parking facilities from the public realm. The Landscape plan demonstrates good practices and provides street trees along the sidewalk. The proposed Site Plan does not show a completed internal sidewalk network. Per 7.02-C:*
      - Generally. Development sites shall include direct sidewalk connections and circulation at the same or greater frequency as provided by vehicles. Sidewalks connect public entrances and sites, in the most direct manner possible, with the following:
        - a. Sidewalks in the public streetscape or along internal access streets.
        - b. Parking areas, and any walkways or crosswalks within the parking areas
        - c. Any civic open space designed for active use.
        - d. Adjacent sites, where pedestrian connections through public streetscapes or internal access is remote.
      - *It should be noted that the proposed first phase of development does not complete the internal sidewalk network, so the Dental Office will not be fully accessible from the sidewalk until the second phase is completed. When the second phase is completed, the internal sidewalk should be directly connected to the public sidewalk to the east.*

- The architecture and building design use quality materials and the style is appropriate for the context considering the proportion, massing, and scale of different elements of the building.
    - *The proposed architectural style and building materials appear to be appropriate for the site, which is located in the broader context of retail/office pad sites along Main Street (K-7). The preliminary drawings appear to fulfill the standards outlined in Article 5.03 Commercial Design Standards.*
  - The overall design is compatible to the context considering the location and relationships of other buildings, open spaces, natural features, or site design elements.
    - *The proposed development is the second recent project in this area, the first being MSA to the north. The proposed project appears to be compatible with this previous project and the existing building to the south.*
  - Whether any additional site-specific conditions are necessary to meet the intent and design objectives of any of the applicable development standards.
    - *No additional conditions are necessary at this time.*
2. The application meets the criteria for all other reviews needed to build the project as proposed.
    - *Official review is underway by other appropriate City Departments, including Public Works and Wastewater. Fulfillment of all criteria as outlined in the UDO will be required before a building permit can be issued for this project.*
  3. The recommendations of professional staff.
    - *Staff recommends approval of this site development plan.*

#### Open Items – Public Works Department

##### Site Plan Application items

The Public Works Director / City Engineer has reviewed the site plan for conformance with City requirements and found items of discussion as shown on the attached marked up Site Plan. Compliance with the City's no net increase policy is not applicable to this project due to a regional detention basin that exists to the east behind the residential subdivision, which was constructed to provide drainage for the entirety of this area.

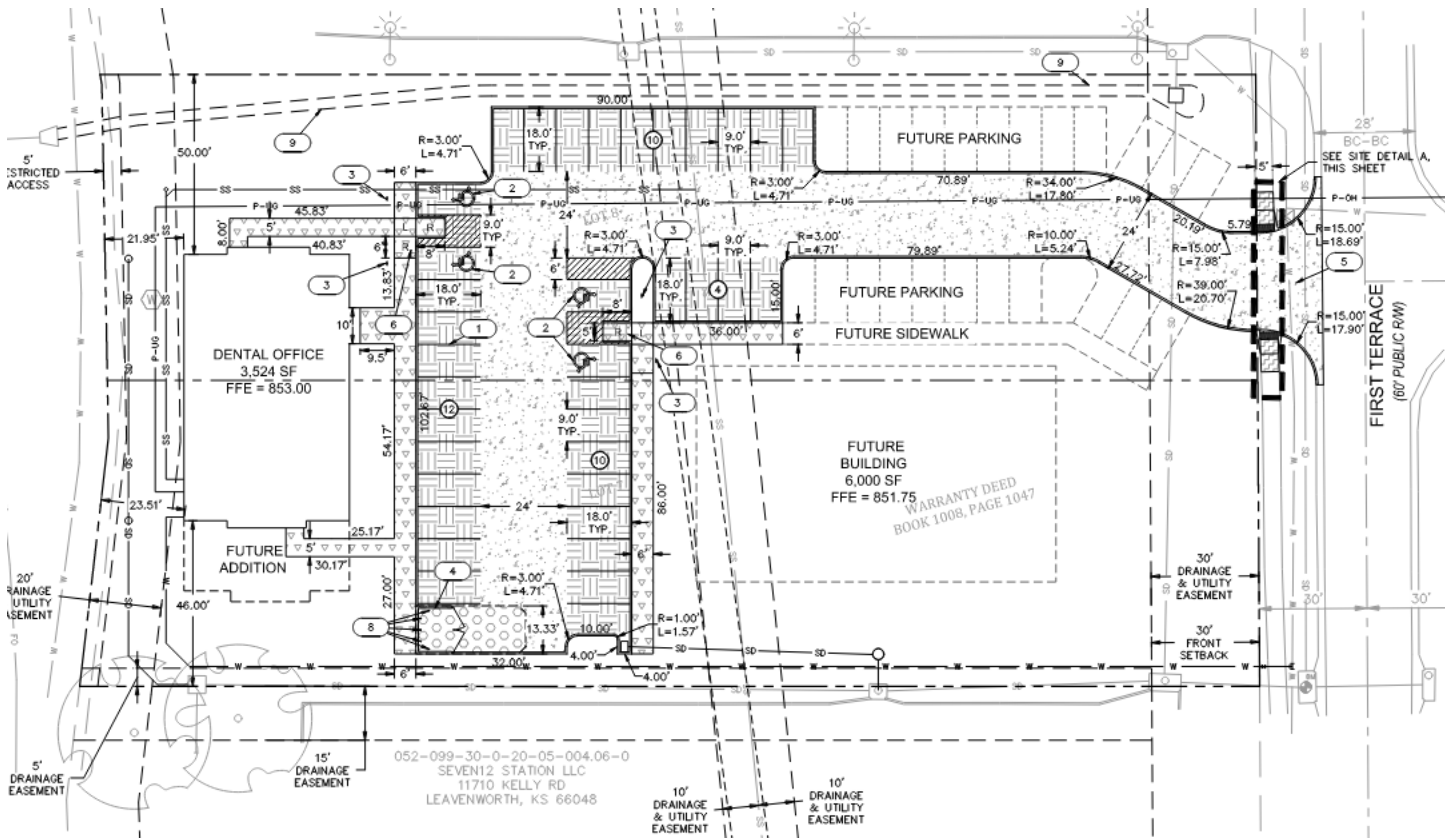
#### Open Items – Wastewater Department

##### Site Plan Application items

The Wastewater Director has reviewed the site plan for conformance with City requirements and found items of discussion as shown on the attached marked up Site Plan. There is a section of existing sewer line that runs under where the proposed future building will be located which will need to be relocated at some point.

Building Site Plan

Below is the building Site Plan that shows the location of the buildings on the lot:



052-099-30-0-20-05-004.06-0  
SEVEN12 STATION LLC  
11710 KELLY RD  
LEAVENWORTH, KS 66048

**Building Elevations**

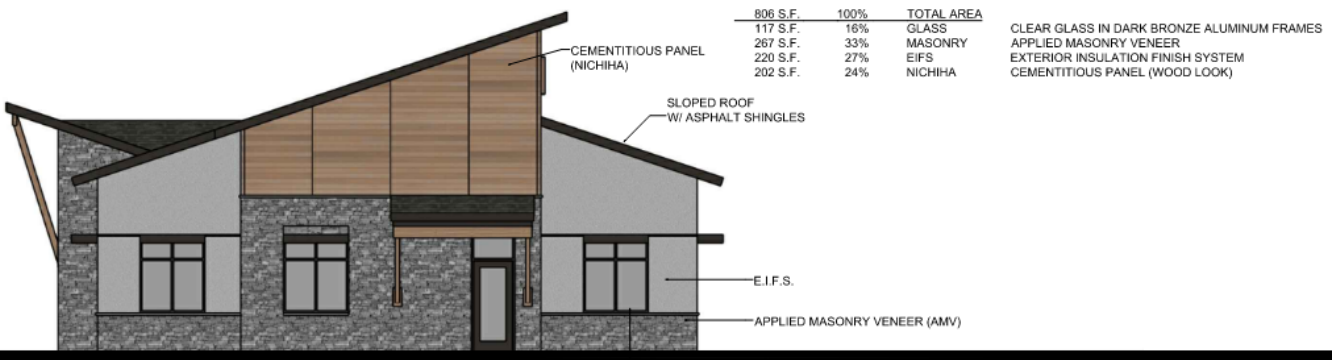
Below are the building elevations:

	1,086 S.F.	100%	TOTAL AREA	
	249 S.F.	23%	GLASS	CLEAR GLASS IN DARK BRONZE ALUMINUM FRAMES
	227 S.F.	21%	MASONRY	APPLIED MASONRY VENEER
	590 S.F.	54%	EIFS	EXTERIOR INSULATION FINISH SYSTEM
	20 S.F.	2%	NICHIHA	CEMENTITIOUS PANEL (WOOD LOOK)



**EAST ELEVATION**  
NO SCALE

NOTE:  
 THESE ELEVATIONS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF LANSING'S ARCHITECTURAL DESIGN STANDARDS AND THE APPROVAL OF THE PLANNING COMMISSION / CITY OF LANSING. CHANGES SHALL NOT BE MADE TO THE APPROVED ELEVATIONS UNLESS APPROVED BY THE LOCAL JURISDICTION.



**NORTH ELEVATION**  
NO SCALE

NOTE:  
 THESE ELEVATIONS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF LANSING'S ARCHITECTURAL DESIGN STANDARDS AND THE APPROVAL OF THE PLANNING COMMISSION / CITY OF LANSING. CHANGES SHALL NOT BE MADE TO THE APPROVED ELEVATIONS UNLESS APPROVED BY THE LOCAL JURISDICTION.

	806 S.F.	100%	TOTAL AREA	
	117 S.F.	15%	GLASS	CLEAR GLASS IN DARK BRONZE ALUMINUM FRAMES
	267 S.F.	33%	MASONRY	APPLIED MASONRY VENEER
	220 S.F.	27%	EIFS	EXTERIOR INSULATION FINISH SYSTEM
	202 S.F.	24%	NICHIHA	CEMENTITIOUS PANEL (WOOD LOOK)

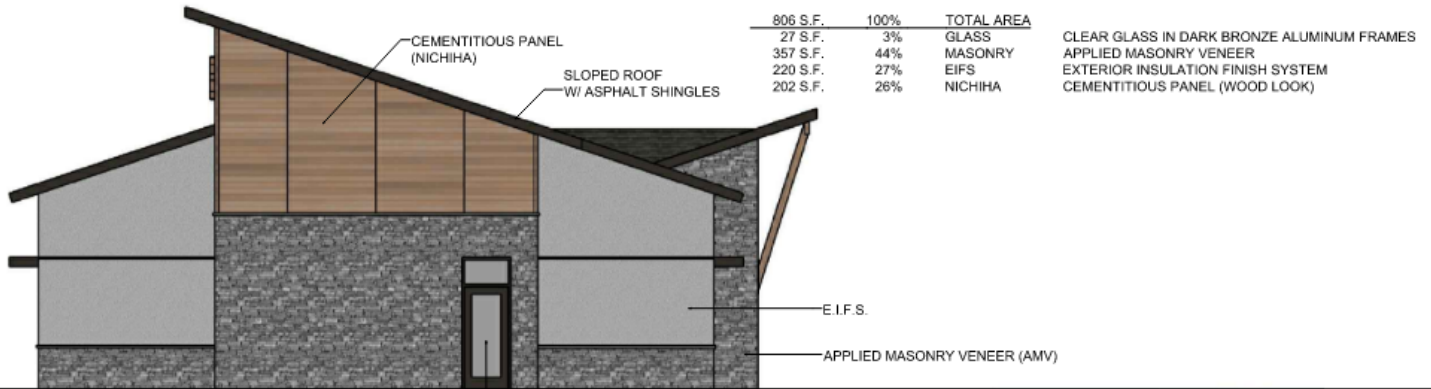
	1,398 S.F.	100%	TOTAL AREA	
	150 S.F.	11%	GLASS	CLEAR GLASS IN DARK BRONZE ALUMINUM FRAMES
	270 S.F.	19%	MASONRY	APPLIED MASONRY VENEER
	929 S.F.	68%	EIFS	EXTERIOR INSULATION FINISH SYSTEM
	49 S.F.	2%	NICHIHA	CEMENTITIOUS PANEL (WOOD LOOK)



**WEST ELEVATION**  
NO SCALE

NOTE:  
 THESE ELEVATIONS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF LANSING'S ARCHITECTURAL DESIGN STANDARDS AND THE APPROVAL OF THE PLANNING COMMISSION / CITY OF LANSING. CHANGES SHALL NOT BE MADE TO THE APPROVED ELEVATIONS UNLESS APPROVED BY THE LOCAL JURISDICTION.

ALUMINUM FRAMED WINDOWS



	806 S.F.	100%	TOTAL AREA	
	27 S.F.	3%	GLASS	CLEAR GLASS IN DARK BRONZE ALUMINUM FRAMES
	357 S.F.	44%	MASONRY	APPLIED MASONRY VENEER
	220 S.F.	27%	EIFS	EXTERIOR INSULATION FINISH SYSTEM
	202 S.F.	26%	NICHIHA	CEMENTITIOUS PANEL (WOOD LOOK)

**SOUTH ELEVATION**  
NO SCALE

NOTE:  
 THESE ELEVATIONS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF LANSING'S ARCHITECTURAL DESIGN STANDARDS AND THE APPROVAL OF THE PLANNING COMMISSION / CITY OF LANSING. CHANGES SHALL NOT BE MADE TO THE APPROVED ELEVATIONS UNLESS APPROVED BY THE LOCAL JURISDICTION.

ALUMINUM FRAMED WINDOWS



## Acknowledgments

The following City of Lansing staff members reviewed this project and provided information for this report:

- Matthew R. Schmitz, MPA – Director, Community & Economic Development
- Michael Spickelmier, P.E – Director, Public Works / City Engineer
- Anthony Zell, Jr., MBA – Director, Wastewater
- Abby Kinney – Planning Consultant, Gould Evans

## Notice of City Codes

The Applicant is subject to all applicable City codes within the Municipal Code – whether specifically stated in this report or not – including, but not limited to, Zoning, Buildings and Construction, Subdivisions, and Sign Code. The Applicant is also subject to all applicable Federal, State, and local laws.

## Recommendation

Staff recommends approval of Project # SP-2022-02, Site Plan for Primus Dental, subject to the following conditions:

1. Outstanding items listed in this Staff Report from Department Heads must be addressed; and
2. All plans must be resubmitted with corrections as shown in this staff report and accompanying markups.

List of Reviewed Plans

Sheet #	Title	Submitted By	Date on Document
C0.0	Cover Sheet – Site Plan	OLS	05.13.2022
C1.0	Existing Conditions and Demolition Plan – Site Plan	OLS	05.13.2022
C2.0	Site Plan – Site Plan	OLS	05.13.2022
C3.0	Grading Plan – Site Plan	OLS	05.13.2022
C3.1	Grading Details – Site Plan	OLS	05.13.2022
C4.0	Utility Plan – Site Plan	OLS	05.13.2022
C5.0	Vehicle Access Plan – Site Plan	OLS	05.13.2022
C6.0	Erosion Control Plan – Site Plan	OLS	05.13.2022
C7.0	Construction Details – Site Plan	OLS	05.13.2022
L1.0	Landscape Plan – Site Plan	OLS	05.13.2022
L2.0	Landscape Details & Notes – Site Plan	OLS	05.13.2022
PH-1	Site Photometric Plan	BCE	05.13.2022
AC001	Color Elevations	PRI	04.28.2022
AC002	Color Elevations	PRI	04.28.2022

OLS *Olsson, Inc.*  
 BCE *BC Engineers Incorporated*  
 PRI *Primus Companies, Inc.*



# Site Plan Application

Date: 05/16/2022

### Applicant / Owner

Applicant Name: Primus Companies  
 Address: 401 8th Ave. SE  
 City, State, Zip: Cedar Rapids, IA 52403  
 Phone: 319-361-5424  
 Email: thad@primus-companies.com

Owner Name: GREENAMYRE RENTALS  
 INC  
 Address: 2500 S 2ND ST  
 LEAVENWORTH, KS 66048-  
 4542  
 City, State, Zip: LEAVENWORTH, KANSAS  
 66048  
 Phone:  
 Email:

### Architect

Name: Olsson  
 Address: 1717 Ingersoll Ave. Suite 111  
 City, State, Zip: Des Moines, IA 50309

Contact: Brad Freeman  
 Phone: 515-867-2755  
 Email: bfreeman@olsson.com

### Project

Site Address: 670 1ST TER., LANSING, KS  
 66043  
 City, State, Zip: LANSING, KANSAS 66043  
 Parcel: 052-099-30-0-20-05-004.02-0  
 Current Zoning: B-2 General Business District

Project Name: Primus Dental  
 Proposed Use: Medical Office  
 Property Size: 1.26  
 Proposed Zoning: B-2 General Business District

Legal: RICHARD BESEL GREENAMYRE, S30, T09, R23E, Lot 7 - 8, ACRES 1.25 Plat Book/Page 13 /36 Lot  
 Width: 328.8 Lot Depth: 328.1 Deed Book/Page 1008/1047

Project Description:

I do hereby certify that the information contained herein is true and correct.

Thad Harker

Name

05-16-2022

Date

# SITE PLAN FOR PRIMUS DENTAL 1ST ST TERRACE LANSING, LEAVENWORTH COUNTY, KANSAS

PROJECT TEAM & UTILITY CONTACT LIST	
<b>OWNER</b> TIMOTHY FILLIMAN, DDS 842 N MAIN STREET LANSING, KS 66043 PH: (913)682.5615	<b>WATER</b> LAN-DEL WATER DISTRICT P.O. BOX 227 LANSING, KS 66043 PH: (913)727.3350
<b>ARCHITECT</b> PRIMUS COMPANIES 401 8TH AVENUE SE CEDAR RAPIDS IOWA, 52401 PH: (319)853.1241	<b>SANITARY SEWER</b> CITY OF LANSING 800 1ST TERRACE LANSING, KS 66043 PH: (913)727.2487
<b>ENGINEER</b> OLSSON, INC. 1717 INGERSOLL AVENUE SUITE 111 DES MOINES, IA 50309 PH: (515)331.6517	<b>STORM SEWER</b> CITY OF LANSING PUBLIC WORKS 730 1ST TERRACE SUITE 3 LANSING, KS 66043 PH: (913)727.2400
<b>SURVEYOR</b> POWELL CWM, INC. 3200 S. STATE ROUTE 291, BLDG. 1 INDEPENDENCE, MO 64057 PH: (816)373.4800	<b>GAS</b> KANSAS GAS SERVICE 2720 2ND AVE LEAVENWORTH, KS 66048 PH: (515)252.6632
	<b>ELECTRIC</b> EVERGY PH: (888)471.5275

913-727-2206



SITE LOCATION MAP  
SCALE: 1"=500'

Sheet List Table	
Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.0	EXISTING CONDITIONS AND DEMOLITION PLAN
C2.0	SITE PLAN
C3.0	GRADING PLAN
C3.1	GRADING DETAILS
C4.0	UTILITY PLAN
C5.0	VEHICLE ACCESS PLAN
C6.0	EROSION CONTROL PLAN
C7.0	CONSTRUCTION DETAILS
L1.0	LANDSCAPE PLAN
L2.0	LANDSCAPE DETAILS & NOTES
PH1	SITE PHOTOMETRIC PLAN



SITE DATA	
PROPOSED USE	DENTAL/OFFICE
PROPOSED LOT SIZE	±1.26 ACRES ±54,697 SF
BUILDING HEIGHT	±26'-0"
REQUIRED PARKING	1 STALL PER 100 SF OF BUILDING
	TOTAL 36 STALLS
PROPOSED PARKING	ADA 2 STALLS
	TOTAL 38 STALLS
BUILDING AREA	3,524 SF
PAVEMENT/PARKING/SIDEWALK AREA	17,711 SF
TOTAL IMPERVIOUS AREA	21,235 SF (38.82%)
TOTAL PERVIOUS AREA	33,462 SF (61.18%)

COMPREHENSIVE / ZONING INFORMATION	
ZONING:	B-2 (GENERAL BUSINESS DISTRICT)
COMPREHENSIVE EXISTING	B-2 GENERAL BUSINESS DISTRICT
COMPREHENSIVE PROPOSED	B-2 GENERAL BUSINESS DISTRICT
FRONT YARD SETBACK	10'-30'
SIDE YARD SETBACK	0'
REAR YARD SETBACK	NONE
MAXIMUM HEIGHT (STORIES)	45' (3 STORIES)

**LEGAL DESCRIPTION:**

(TITLE COMMITMENT DATED MARCH 25, 2022 BY CHICAGO TITLE INSURANCE COMPANY FILE NO.: TX0016703) LOTS 7 AND 8, RICHARD BESEL GREENAMYRE SUBDIVISION, CITY OF LANSING, LEAVENWORTH COUNTY, KANSAS.

**REFERENCE BEARING:**

BEARINGS SHOWN HEREON ARE BASED ON THE NORTH LINE OF LOT 8, RICHARD BESEL GREENAMYRE SUBDIVISION, A SUBDIVISION IN TH CITY OF LANSING, LEAVENWORTH COUNTY, KANSAS. NORTH 90°00'00" EAST

**BENCHMARK :**

CENTER OF STORM SEWER MANHOLE LID ON CURB INLET AT SOUTHEAST CORNER OF PROPERTY. ELEVATION=839.74

**GENERAL NOTES:**

- ALL WORK SHALL CONFORM TO ALL LOCAL, STATE, AND FEDERAL APPLICABLE LAWS AND REGULATIONS.
- ALL WORK AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE CITY OF LANSING TECHNICAL SPECIFICATIONS, PLANS AND DETAILS SHOWN HEREIN, AND THE CITY OF LANSING DESIGN CRITERIA, LATEST EDITION. IN THE CASE OF A CONFLICT BETWEEN VARYING SPECIFICATIONS, THE MOST STRINGENT SHALL APPLY.
- THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS, STANDARDS, AND SPECIFICATIONS AS APPROVED BY THE APPROPRIATE GOVERNING AGENCY AND OWNER. THE CONTRACTOR SHALL NOT CHANGE OR DEVIATE FROM THESE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER, ENGINEER, AND GOVERNING AGENCY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL JOB SITE SAFETY ON THE PROJECT. THIS SHALL INCLUDE THE SAFETY OF HIS OWN PERSONNEL, SUBCONTRACTORS, ALL VISITORS TO THE SITE, AND THE GENERAL PUBLIC. ALL JOB SITE SAFETY SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND CODES, AND ENSURE COMPLIANCE INCLUDING, BUT NOT LIMITED TO, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
- THE CONTRACTOR SHALL CONTACT KANSAS ONE-CALL AT #811 OR 800-344-7233 A MINIMUM OF 48 HOURS (EXCLUDING WEEKENDS AND HOLIDAYS) IN ADVANCE OF ANY EXCAVATION.
- THE LOCATIONS OF EXISTING UTILITIES AND STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE AND HAVE BEEN SHOWN FROM AVAILABLE SURVEYS AND/OR RECORDS. THERE MAY BE ADDITIONAL UTILITIES PRESENT, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE, EXACT LOCATION/SIZE, ADEQUATELY PROTECT/SUPPORT, AND TO AVOID DAMAGE THERETO. THE CONTRACTOR SHALL INCLUDE, AT NO ADDITIONAL COST, ANY POTHOLING OR EXPLORATORY EXCAVATIONS NECESSARY TO LOCATE EXISTING UTILITIES. UTILITIES SHALL BE LOCATED SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY DUE TO ACTUAL LOCATION OF EXISTING FACILITIES. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE GOVERNING AGENCY AND/OR THE UTILITY OWNER.
- ALL MATERIALS SHALL BE NEW UNLESS OTHERWISE INDICATED IN THE PLANS, AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES SHOWN IN THE PLANS AND/OR SPECIFICATIONS. DO NOT SCALE DRAWINGS - USE ONLY DIMENSIONS PROVIDED ON THESE PLANS.
- ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING ACTUAL QUANTITIES, AND SHALL PROVIDE ALL WORK AND MATERIALS NECESSARY TO CONSTRUCT THE PROJECT IN ITS ENTIRETY.
- CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS NOT DESIGNATED FOR REMOVAL AND THOSE IMPROVEMENTS THAT ARE OUTSIDE THE LIMITS OF THE PROPOSED CONSTRUCTION. CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGE THERETO AND SHALL PROVIDE TEMPORARY FENCING, BARRICADES, SUPPORTS, RESTRAINTS, AND /OR BRACING WHERE REQUIRED TO PROTECT EXISTING IMPROVEMENTS. DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPAIRED AND/OR REPLACED TO EQUAL OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE.
- ALL GRADING AND CONSTRUCTION ACTIVITIES SHALL BE CONFINED TO THE OWNER'S PROPERTY, PUBLIC RIGHT-OF-WAY, PERMANENT EASEMENTS, AND TEMPORARY CONSTRUCTION EASEMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS NOT OBTAINED BY THE OWNER OR OWNER'S REPRESENTATIVES, AND PAY ALL FEES AS REQUIRED BY THE CONSTRUCTION COVERED IN THESE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE APPROPRIATE GOVERNING AGENCIES AND LOCAL FIRE DEPARTMENT OF ALL STREET CLOSURES AND EXISTING FIRE HYDRANTS/FIRE SUPPRESSION TAKEN OUT OF SERVICE AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE SECURITY AND SHALL PROPERLY PROTECT AND BARRICADE THE CONSTRUCTION SITE UNTIL CONSTRUCTION IS COMPLETE. STORAGE, LOSS DUE TO THEFT, OR VANDALISM OF MATERIALS

- AND EQUIPMENT (SECURED OR UNSECURED) WILL BE SOLELY AT THE CONTRACTOR'S EXPENSE.
- TEMPORARY POWER, TELEPHONE, AND WATER FOR THE SITE IS THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL REFER TO OTHER DRAWINGS ISSUED BY ARCHITECT, STRUCTURAL, ELECTRICAL, AND MECHANICAL ENGINEERS. ENSURE COORDINATION OF EXACT LOCATION AND DIMENSIONS OF BUILDINGS, EXITS, RAMPS, UTILITY ENTRANCE LOCATIONS AND GRADES AROUND THE BUILDING. IMMEDIATELY NOTIFY ENGINEER AND ARCHITECT OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL NECESSARY TO COMPLETE THE WORK. ALL TRAFFIC CONTROL DEVICES AND METHODS OF CONTROLLING TRAFFIC THROUGH CONSTRUCTION ZONES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD, AND ALL REVISIONS THERETO INCLUDING LOCAL AND STATE SUPPLEMENTS. ADDITIONAL WORK IN THE RIGHT-OF-WAY OR TRAFFIC CONTROL PERMITS MAY BE NECESSARY AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- IF UNANTICIPATED HAZARDOUS MATERIALS OF ANY KIND ARE ENCOUNTERED IN THE WORK, THE CONTRACTOR SHALL IMMEDIATELY CEASE ALL CONSTRUCTION OPERATIONS AND NOTIFY THE OWNER AND/OR OWNER'S REPRESENTATIVE FOR FURTHER DIRECTION.
- ALL DEBRIS RESULTING FROM CONSTRUCTION AND DEMOLITION SHALL BE HAULED OFF SITE AND DISPOSED OF PROPERLY AND LEGALLY.
- DURING DEMOLITION OPERATIONS, THE CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES USING MEANS OF THEIR CHOICE.
- THE CONTRACTOR SHALL CONTINUOUSLY PROVIDE ADEQUATE STORMWATER MANAGEMENT IN ACCORDANCE WITH THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND CONSTRUCTION STORMWATER PERMIT. THE CONTRACTOR(S) MUST ADHERE TO GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES AT ALL TIMES. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES FOCUS ON KEEPING THE WORK SITE CLEAN AND ORDERLY WHILE HANDLING MATERIALS AND WASTE IN A MANNER THAT ELIMINATES THE POTENTIAL FOR POLLUTANT RUNOFF.
- IN ORDER TO ATTAIN FINAL CERTIFICATION OF OCCUPANCY APPROVAL, DOCUMENTATION WILL BE REQUIRED FROM THE GENERAL CONTRACTOR VIA THE GRADING CONTRACTOR/SOIL EROSION CONTROL CONTRACTOR/OR THE PROJECT CIVIL ENGINEER THAT THE PROJECT MEETS THE CURRENT TOPSOIL PRESERVATION REQUIREMENTS OF THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT (KDHE).
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC RIGHT R.O.W./EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE CITY OF LANSING TO SCHEDULE ANY REQUIRED INSPECTIONS. IT IS IMPORTANT TO NOTE CITY APPROVAL OF THIS PLAN IS SUBJECT TO THE APPLICANT OBTAINING ALL NECESSARY EASEMENTS/AGREEMENTS AND APPLICABLE PERMITS.
- ANY CHANGES TO THE PLANS SHALL BE APPROVED IN WRITING BY THE CITY OF LANSING. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE WITHOUT CITY APPROVAL.
- THE CONTRACTOR SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM ALLOWING CONCRETE SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.
- APPROVED ACCESS WITHIN 100- FEET OF ALL SIDES OF THE BUILDING SHALL BE PROVIDED AS SOON AS CONSTRUCTION OF THE BUILDING STARTS. THE APPARATUS ROAD SHALL COMPLY WITH THE REQUIREMENTS OF THE ADAPTED IFC SECTION R502.2 AND SHALL EXTEND TO WITHIN 100- FEET OF ALL EXTERIOR WALLS AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING.
- A LIMITED TRAFFIC IMPACT STUDY IS ANTICIPATED FOR THE PROJECT; A TRAFFIC IMPACT STUDY SHALL BE COMPLETED BY THE DEVELOPER'S ENGINEER AND APPROVED BY THE CITY OF LANSING BEFORE A VERTICAL BUILDING PERMIT WILL BE ISSUED. IF PUBLIC IMPROVEMENTS ARE REQUIRED FROM THE APPROVED TRAFFIC IMPACT STUDY THEN THE PUBLIC IMPROVEMENTS SHALL BE COMPLETED BY THE DEVELOPER'S CONTRACTOR AND ACCEPTED BY THE CITY OF LANSING BEFORE A TCO OR CO IS ISSUED FOR THIS PROJECT.

REVIEWED BY:

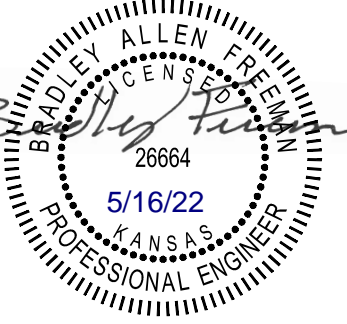
CITY OF LANSING \_\_\_\_\_ DATE \_\_\_\_\_

*Bradley Freeman* \_\_\_\_\_ DATE 5/16/22  
 BRAD FREEMAN, P.E.  
 CIVIL ENGINEER  
 KS#26664

**Reviewed By PW**  
 06/06/2022 9:30:49 AM  
 By mspickelmier

**Reviewed By WW Dept**  
 06/06/2022 11:28:39 AM  
 By T Zell

**Reviewed By CED**  
 06/09/2022 2:48:38 PM  
 By mschmitz



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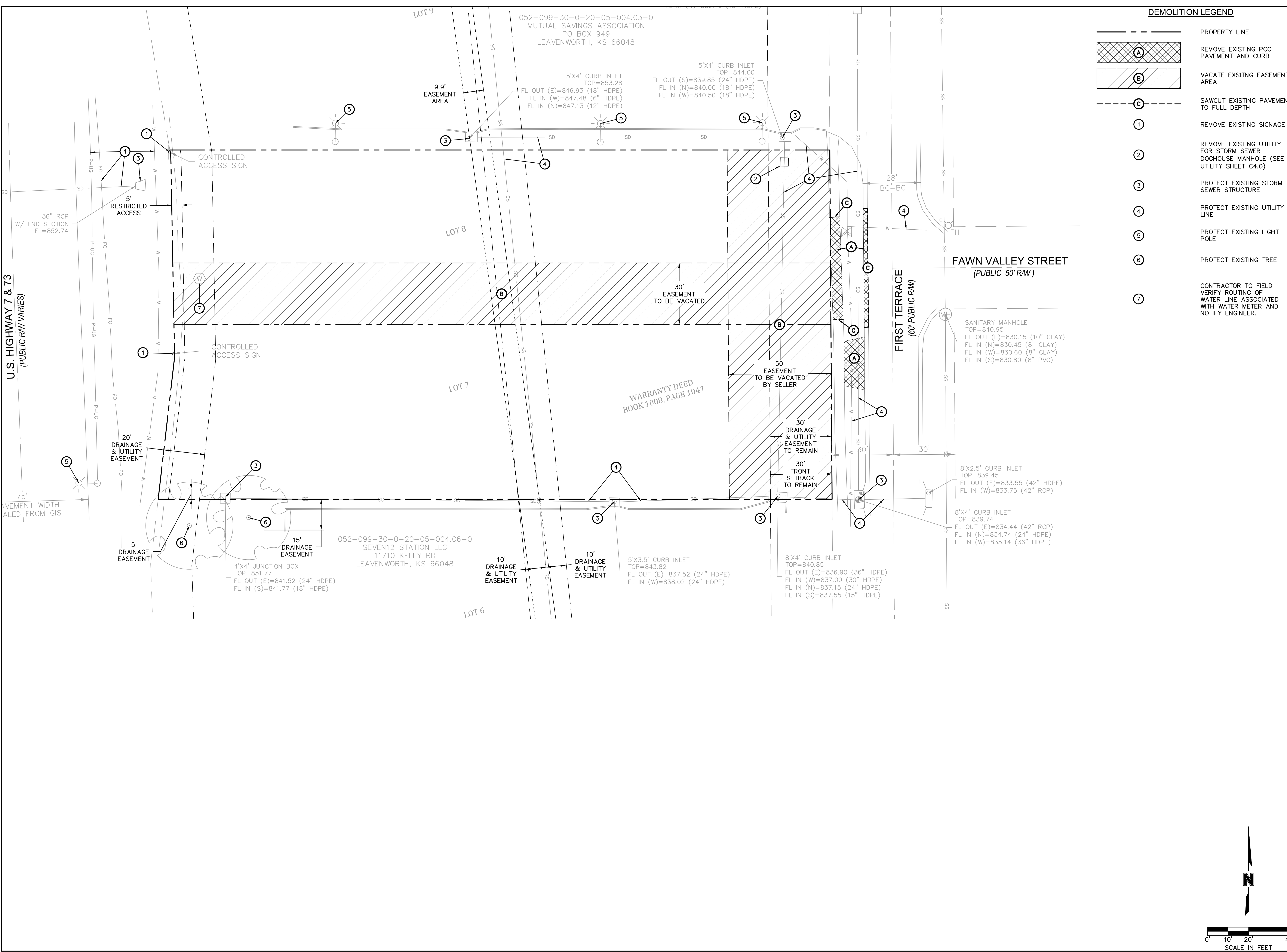
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SITE PLAN  
PRIMUS DENTAL  
1ST ST TERRACE  
LANSING, KS

2022

drawing by: \_\_\_\_\_ RMG  
 checked by: \_\_\_\_\_ ALF  
 approved by: \_\_\_\_\_ BAF  
 QA/QC by: \_\_\_\_\_ BAF  
 project no.: 022-02457  
 drawing no.: C\_TTL01\_02202457  
 date: 05.13.2022

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- ### DEMOLITION LEGEND
- A** REMOVE EXISTING PCC PAVEMENT AND CURB
  - B** VACATE EXISTING EASEMENT AREA
  - C** SAWCUT EXISTING PAVEMENT TO FULL DEPTH
  - 1** REMOVE EXISTING SIGNAGE
  - 2** REMOVE EXISTING UTILITY FOR STORM SEWER DOGHOUSE MANHOLE (SEE UTILITY SHEET C4.0)
  - 3** PROTECT EXISTING STORM SEWER STRUCTURE
  - 4** PROTECT EXISTING UTILITY LINE
  - 5** PROTECT EXISTING LIGHT POLE
  - 6** PROTECT EXISTING TREE
  - 7** CONTRACTOR TO FIELD VERIFY ROUTING OF WATER LINE ASSOCIATED WITH WATER METER AND NOTIFY ENGINEER.

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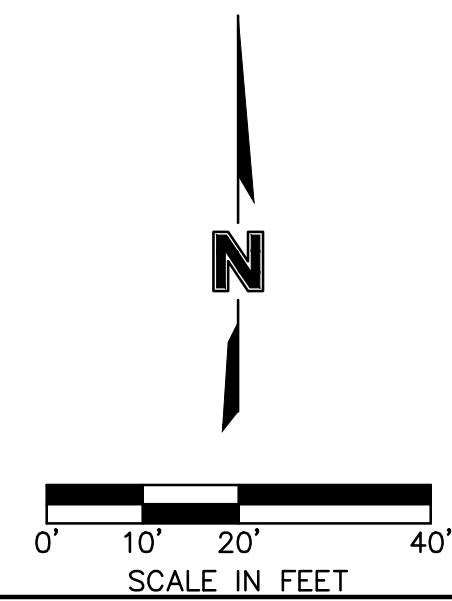
BAILEY ALLEN  
 PROFESSIONAL ENGINEER  
 STATE OF KANSAS  
 NO. 26684  
 5/16/22

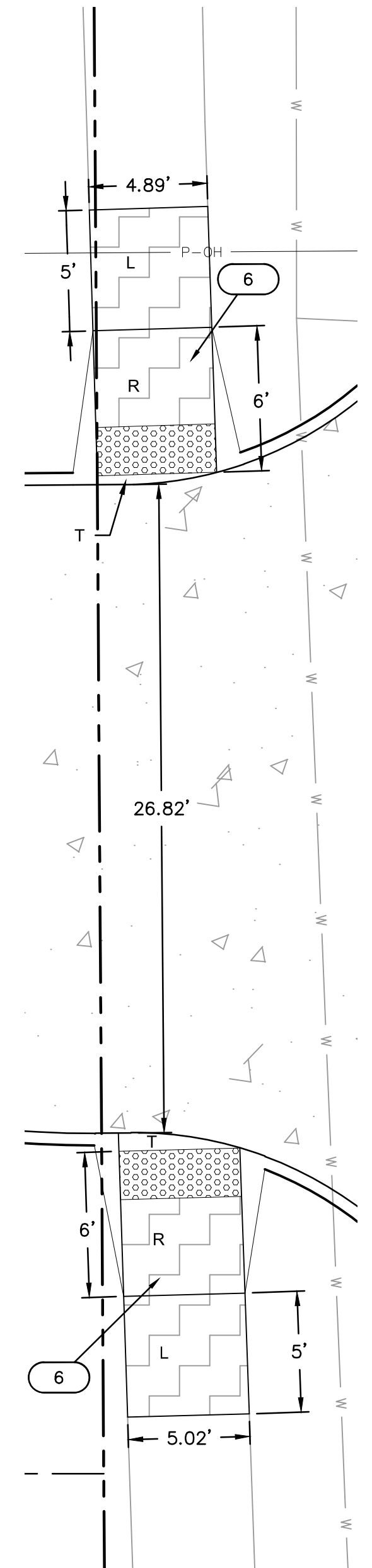
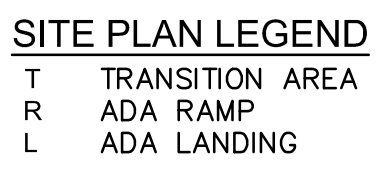
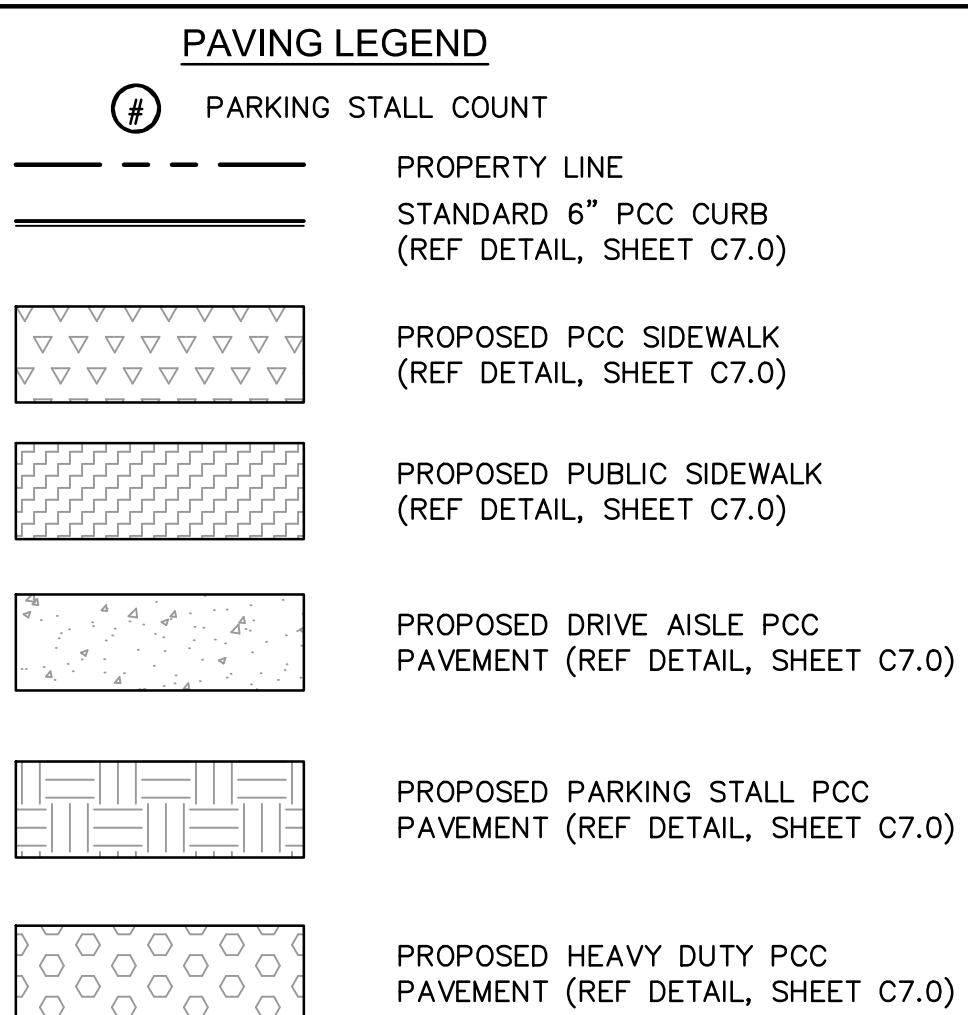
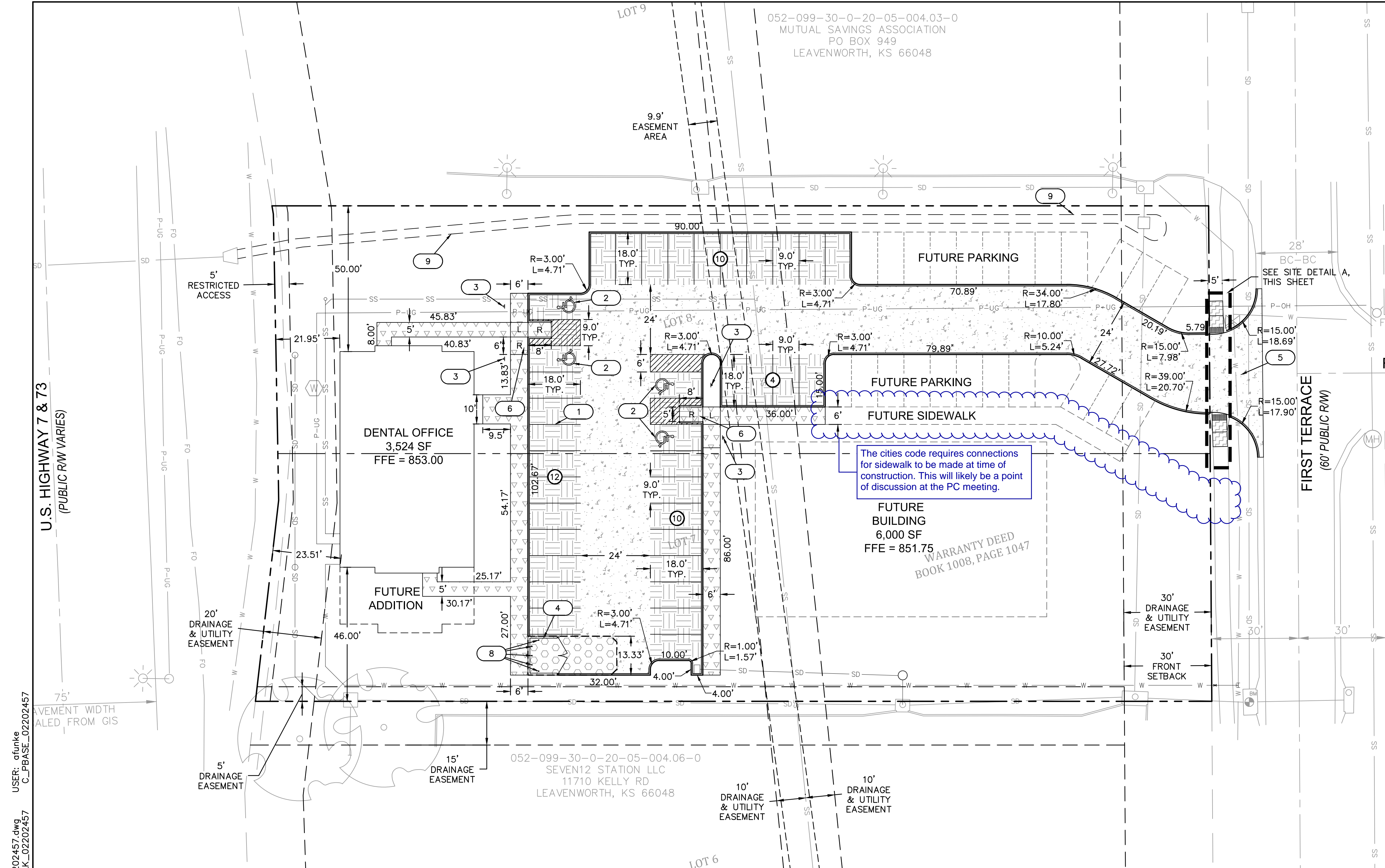
REV. NO.	REVISIONS DESCRIPTION	DATE	REVISIONS

EXISTING CONDITIONS AND DEMOLITION PLAN  
 SITE PLAN  
 PRIMUS DENTAL  
 1ST ST TERRACE  
 LANING, KS

2022

drawn by: RMG  
 checked by: ALF  
 approved by: BAF  
 QA/QC by: BAF  
 project no.: 022-02457  
 drawing no.: C\_DEM01\_02202457  
 date: 05.13.2022





The cities code requires connections for sidewalk to be made at time of construction. This will likely be a point of discussion at the PC meeting.

WARRANTY DEED BOOK 1008, PAGE 1047

**SITE PLAN NOTES:**

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- ALL WORK AND CONSTRUCTION SPECIFICATIONS FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, CITY OF LANSING DESIGN CRITERIA AND THE CITY OF LANSING TECHNICAL SPECIFICATIONS. IN CASE OF A CONFLICT BETWEEN VARYING SPECIFICATIONS, THE MOST STRINGENT SHALL APPLY.
- ALL DIMENSIONS AND RADII ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
- PAVEMENT CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CITY OF LANSING TECHNICAL SPECIFICATIONS AND ALL CITY CODES, SPECIFICATIONS, AND REGULATIONS.
- ALL PAVEMENT MARKINGS FOR PARKING STALLS SHALL BE 4" WIDE WHITE MARKING, CONFORMING TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD, FEDERAL HIGHWAY ADMINISTRATION) AND ALL REVISIONS THERE TO INCLUDING LOCAL AND STATE SUPPLEMENTS.
- ALL SIGNING, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES ON THE DRIVEWAY APPROACHES TO THE PUBLIC STREETS NEED TO BE IN CONFORMANCE WITH THE LATEST EDITION OF THE MUTCD AND ALL REVISIONS THERE TO INCLUDING LOCAL AND STATE SUPPLEMENTS.
- CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCES.

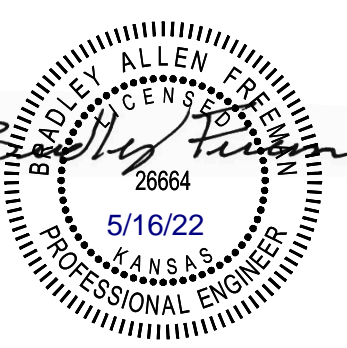
**PAVING NOTES:**

- PROVIDE PORTLAND CEMENT CONCRETE (P.C.C.) AT THICKNESS INDICATED ON PLANS WITH 12-INCH SPECIAL SUBGRADE COMPACTION. ALL EARTHEN SOILS MOISTURE AND DENSITY TO BE BETWEEN OPTIMUM AND +4% OF OPTIMUM.
- UNLESS PROVIDED FOR IN THE PLANS, CONTRACTOR SHALL DEVELOP A CONCRETE PAVEMENT JOINTING PLAN USING THE PROPOSED SITE PLAN AND SITE CONDITIONS. JOINT LAYOUT SHALL BE IN ACCORDANCE WITH ACI 330R "GUIDE FOR THE DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS," AND STANDARD CONSTRUCTION PRACTICES. JOINT DETAILS SHALL BE IN ACCORDANCE WITH THE CITY OF LANSING SPECIFICATIONS. CONTRACTOR SHALL PROVIDE A PAVEMENT JOINTING PLAN FOR OWNER APPROVAL.
- ALL SIGNING, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES ON PROJECT TO BE IN CONFORMANCE WITH THE LATEST EDITION OF MUTCD AND ALL REVISIONS THERE TO INCLUDING LOCAL AND STATE SUPPLEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL ACCESSIBLE AREAS AND ROUTES ARE BUILT IN ACCORDANCE WITH THE PLANS AND THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN. THE SITE MAY BE INSPECTED BY CITY PERSONNEL FOR COMPLIANCE WITH THE STANDARDS.
- ADA ACCESSIBLE PARKING STALLS AND AISLES SHALL BE CONSTRUCTED WITH A MAXIMUM SLOPE OF 2.00% IN ANY DIRECTION. ADA ACCESSIBLE ROUTES SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00% (UNLESS RAMPS AND LANDINGS ARE PROVIDED PER ADA STANDARDS). CURB RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 8.33% (12:1). ACCESSIBLE MANEUVERING AREAS AT DOORS SHALL BE CONSTRUCTED WITH A MAXIMUM SLOPE OF 2.00% IN ANY DIRECTION. CONTRACTOR SHALL FIELD VERIFY ADA GRADES AND FORM WORK PRIOR TO PLACING ANY CONCRETE. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY SHOWN ON THE PLANS.
- CONTRACTOR TO COORDINATE ALL PAVEMENT TESTING.
- PAVING CONTRACTOR TO PLACE TRAFFIC RATED CAPS ON ALL CLEAN-OUTS WITHIN PAVED AREAS.
- ALL ACCESSIBLE STALLS TO BE PAINTED AND SIGNS INSTALLED.
- MAINTAIN 2% MAXIMUM CROSS SLOPE ON SIDEWALKS UNLESS OTHERWISE NOTED. ALL SIDEWALKS TO BE 4" P.C.C. PAVEMENT UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL BOX OUT AND ADJUST UTILITY RIMS TO GRADE PER CITY OF LANSING SPECIFICATIONS.
- IF THERE ARE ANY QUESTIONS OR DISCREPANCIES IN THE PLANS CONCERNING PLACEMENT OF PAVEMENT MARKING AND/OR SIGNS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR APPROVAL BEFORE PROCEEDING WITH WORK.
- ALL ACCESSIBLE PAVEMENT MARKINGS AND SIGNAGE SHALL CONFORM TO ADA GUIDELINES.
- ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.

**SITE PLAN KEYNOTES**

- PROPOSED WHITE PAVEMENT STRIPING, TYP. (CONFORM TO LATEST MUTCD VERSION STANDARDS AND SPECIFICATIONS)
- PROPOSED ADA PAVEMENT MARKING (REF DETAIL SHEET C7.0)
- PROPOSED ADA SIGNAGE (REF DETAIL SHEET C7.0)
- PROPOSED TRASH ENCLOSURE (REF ARCHITECTURAL PLANS)
- PROPOSED CONCRETE DRIVEWAY (PER CITY OF LANSING STANDARDS AND SPECIFICATIONS)
- PROPOSED PERPENDICULAR ADA RAMP (REF DETAIL SHEET C7.0)
- PROPOSED INLINE ADA RAMP (REF DETAIL SHEET C7.0)
- PROPOSED BOLLARD (REF DETAIL SHEET C7.0)
- PROPOSED 3" WIDE FLAT BOTTOM DITCH (REF GRADING SHEET C3.0)

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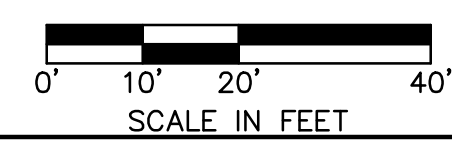
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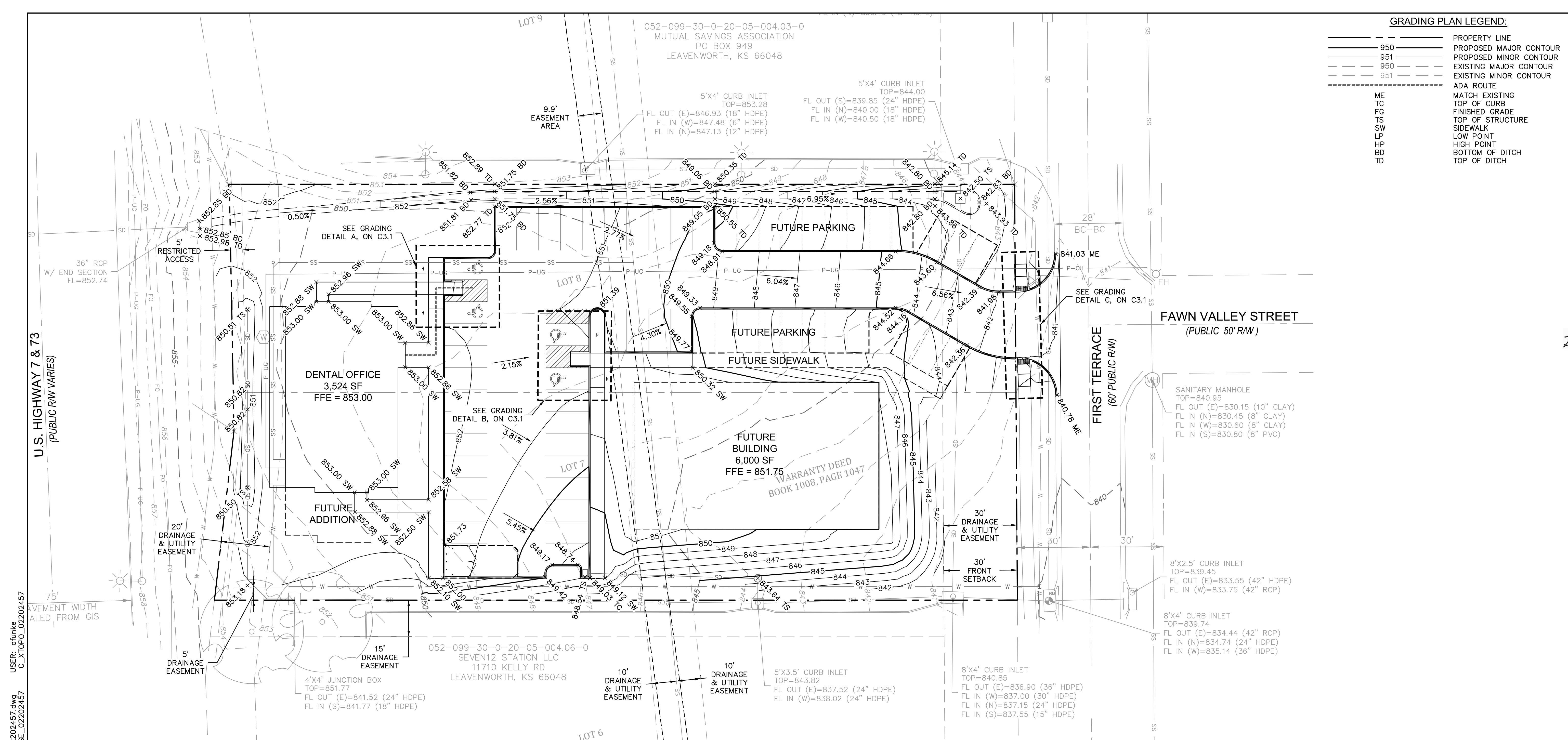
SITE PLAN  
PRIMUS DENTAL  
1ST ST TERRACE  
LANSDING, KS

2022

drawn by: RMG  
checked by: ALF  
approved by: BAF  
QA/QC by: BAF  
project no.: 022-02457  
drawing no.: C\_SIT01\_02202457  
date: 05.13.2022

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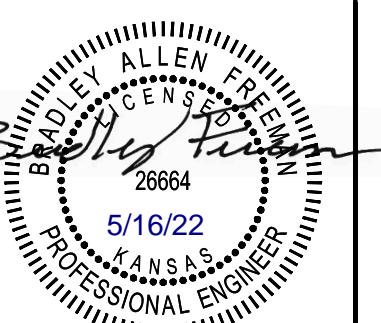




**GRADING PLAN LEGEND:**

—	PROPERTY LINE
— 950 —	PROPOSED MAJOR CONTOUR
— 951 —	PROPOSED MINOR CONTOUR
- - - 950 - - -	EXISTING MAJOR CONTOUR
- - - 951 - - -	EXISTING MINOR CONTOUR
---	ADA ROUTE
ME	MATCH EXISTING
TC	TOP OF CURB
FG	FINISHED GRADE
TS	TOP OF STRUCTURE
SW	SIDEWALK
LP	LOW POINT
HP	HIGH POINT
BD	BOTTOM OF DITCH
TD	TOP OF DITCH

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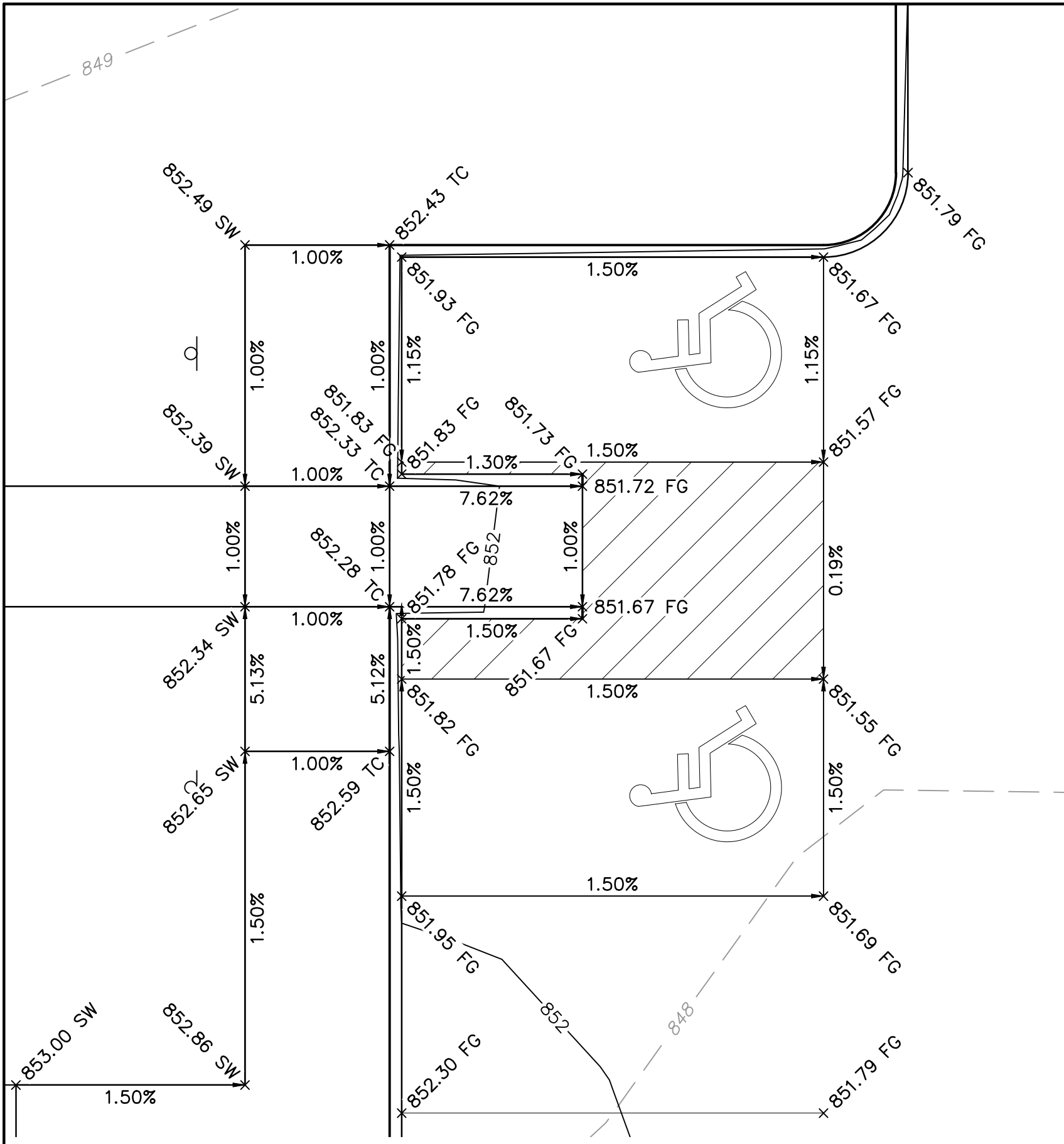
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drawn by: _____ RMG	checked by: _____ ALF	approved by: _____ BAF
QA/QC by: _____ BAF	project no.: 022-02457	drawing no.: C_GRD01_02202457
date: 05.13.2022		

- GRADING NOTES:**
- PRIOR TO ANY GRADING OPERATIONS, ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE ADEQUATELY IN PLACE. REFER TO THE EROSION AND SEDIMENT CONTROL PLAN FOR REQUIREMENTS.
  - THE CONTOUR LINES, SPOT ELEVATIONS AND BUILDING FLOOR ELEVATIONS SHOWN ARE TO FINISH GRADE FOR SURFACE OF PAVEMENT, TOP OF SIDEWALKS, TOP OF FLOOR SLABS, ETC. REFER TO TYPICAL SECTIONS FOR MULCH, SOD, PAVING, SLAB AND AGGREGATE BASE THICKNESS TO DEDUCT FOR SUBGRADE ELEVATIONS.
  - ALL TOP OF CURB AND SIDEWALK ELEVATIONS SHALL BE 6" ABOVE GUTTER ELEVATIONS UNLESS OTHERWISE NOTED. IN AREAS WITH SIDEWALK ABUTTING BACK OF CURB, TOP OF CURB ELEVATIONS SHALL BE EQUAL TO SIDEWALK ELEVATIONS.
  - THE CONTRACTOR SHALL FINISH GRADE SLOPES AS SHOWN NO STEEPER THAN ONE FOOT VERTICAL IN THREE FEET HORIZONTAL.
  - CONTRACTOR SHALL GRADE LANDSCAPED AREAS TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND SIDEWALKS WHEN FINISH LANDSCAPE MATERIALS ARE IN PLACE. SLOPE SHALL BE A 2% MINIMUM.
  - UNLESS OTHERWISE IDENTIFIED IN THE CONTRACT DOCUMENTS, SITE AND BUILDING PAD PREPARATION, GRADING AND EXCAVATION PROCEDURES SHALL CONFORM TO THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT (PROVIDED BY OWNER).
  - IN CASE OF ANY DISCREPANCIES REGARDING EARTHWORK BETWEEN THE GEOTECHNICAL REPORT (PROVIDED BY OWNER) AND THE SPECIFICATIONS SHOWN IN THESE PLANS, NOTIFY THE ENGINEER IMMEDIATELY.
  - A MINIMUM OF 8" OF TOPSOIL IS TO BE PLACED ON ALL NON-PAVED SURFACES WITHIN THE LIMITS OF CONSTRUCTION EXISTING TOPSOIL MAY BE STOCKPILED FOR REUSE. CONTRACTOR SHALL BE RESPONSIBLE TO IMPORT ADDITIONAL SUITABLE TOPSOIL AS REQUIRED. REFER TO SPECIFICATIONS, AND THE KDHE NPDES GENERAL PERMIT STORMWATER RUNOFF FROM CONSTRUCTION ACTIVITIES
  - ALL EXISTING PAVEMENT, UTILITIES, BURIED DEBRIS, RUBBLE, AND/OR STRUCTURES/FOUNDATIONS ENCOUNTERED WITHIN AREAS OF DISTURBANCE SHALL BE COMPLETELY REMOVED PRIOR TO OR DURING EARTHWORK OPERATIONS. WASTED

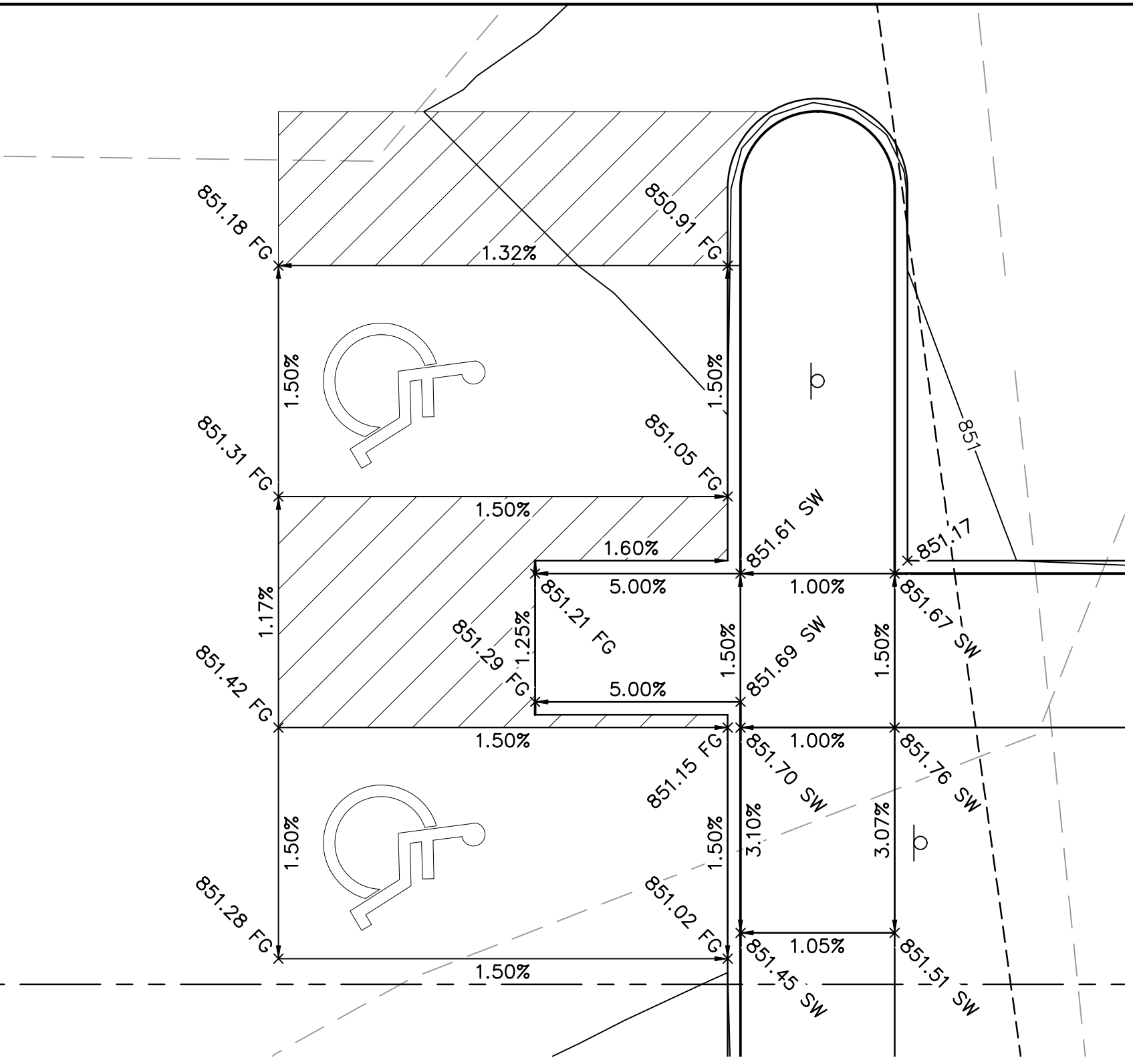
- MATERIAL SHALL NOT BE BURIED ONSITE WITHOUT THE PRIOR APPROVAL OF THE OWNER.
- THE UPPER 24" OF ALL UTILITY TRENCHES IN UNPAVED AREAS SHALL BE BACKFILLED WITH COMPACTED COHESIVE SOILS. SEE GEOTECHNICAL REPORT FOR COMPACTION AND MOISTURE RECOMMENDATIONS.
- FINAL PAVEMENT SUBGRADES SHALL BE PROOFROLLED IMMEDIATELY PRIOR TO THE PLACEMENT OF THE PAVEMENT TO DETECT LOCALIZED AREAS OF INSTABILITY WHICH WILL BE REMOVED AND REPLACE.
- SUITABLE FILL MATERIALS SHALL BE PLACED IN THIN LIFTS OF 4 TO 8 INCHES LOOSE MEASUREMENT, UNLESS OTHERWISE ALLOWED IN THE GEOTECHNICAL REPORT.
- IF REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL LOCAL AND STATE PERMITS AND AUTHORIZATION TO DISCHARGE FROM DEWATERING ACTIVITIES.
- THE CONTRACTOR SHALL DEWATER ALL EXCAVATIONS AND TRENCHES NEEDED FOR THE CONSTRUCTION OF THE PROJECT USING MEANS/METHODS OF HIS CHOICE. ALL DEWATERING ACTIVITIES SHALL MEET THE NPDES GENERAL PERMIT STORMWATER RUNOFF FROM CONSTRUCTION ACTIVITIES REQUIREMENTS. REFER TO THE GEOTECHNICAL REPORT FOR ANTICIPATED LEVELS OF GROUNDWATER AND DEWATERING.
- ALL EXCAVATIONS AND TRENCHES SHALL BE SLOPED/SHORED/BRAVED FOR PROTECTION OF PERSONNEL IN ACCORDANCE WITH OSHA REGULATIONS AND AT THE CONTRACTORS FULL DISCRETION BASED ON THE SITE CONDITIONS. OPEN EXCAVATIONS SHALL BE ADEQUATELY PROTECTED AND/OR FENCED AS NECESSARY AND FOR THE SAFETY OF THE PUBLIC.
- ALL FLOOR SLABS SHALL BEAR ON CONTROLLED FILL.
- CONTRACTOR WILL BE HELD RESPONSIBLE FOR SETTLEMENT DUE TO IMPROPER COMPACTION.
- THE CONTRACTOR SHALL NOTIFY THE OWNER/ENGINEER IMMEDIATELY IF ANY GRADING WILL TAKE PLACE BEYOND THE LIMITS OF DISTURBANCE.
- IF THERE ARE TREES ON SITE THAT DO NOT SHOW UP ON THE PLANS, THE CONTRACTOR SHALL COORDINATE WITH OWNER'S REPRESENTATIVE OR ENGINEER FOR REMOVAL OR RELOCATION, IF REQUIRED.
- CONTRACTOR SHALL GRADE ALL LOW SPOTS TO DRAIN. THE CONTRACTOR SHALL INFORM THE APPROPRIATE GOVERNING AGENCY, OWNER AND/OR OWNING REPRESENTATIVE PRIOR TO

- BEGINNING OF PROOFROLLING.
- ANY GEOTECHNICAL/TESTING REPORTS SOLICITED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE OWNER AND THE ENGINEER.
- GRADING TOLERANCES: BUILDING PAD: -0.0' TO +0.1'; PAVED AREAS -0.0' TO +0.2'; ALL OTHER AREAS: -0.1' TO +0.1'.
- SEE SITE LAYOUT PLAN FOR ADA ACCESSIBLE ROUTES AND PAVING REQUIREMENTS. ALL ADA ACCESSIBLE STALLS/ROUTES SHALL BE CONSTRUCTED PER ADA STANDARDS.
- ALL ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED. TO GET TOP OF CURB ELEVATIONS ADD 6" TO THE ELEVATION SHOWN.
- THE OWNER SHALL MAINTAIN DETENTION FACILITIES UPON COMPLETION OF THE PROJECT.
- BACKFILL TO TOP OF CURB AND BACK OF WALK.
- CONTRACTOR SHALL READ AND FOLLOW THE GEOTECHNICAL SOILS REPORT PROVIDED BY OWNER.
- PROOF ROLL THE EXPOSED SUBGRADE AND REPLACE WITH COMPACTED FILL TO BOTTOM OF CONCRETE DRIVES, CURBS, WALKS AND BUILDING FLOOR ELEVATION.
- NATIVE SOILS, AS APPROVED BY GEOTECHNICAL ENGINEER, MAY BE REUSED FOR COMMON FILL AFTER THEY ARE SORTED TO REMOVE ALL DELETERIOUS MATERIALS SUCH AS CONCRETE, BRICKS AND OTHER RUBLE. DELETERIOUS MATERIALS SHALL BE REMOVED FROM PROJECT SITE. ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- THE UPPER 9-INCHES OF PAVEMENT SUBGRADE FILL SHOULD BE COMPACTED TO A MINIMUM OF 98% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY. FILL PLACED BELOW THIS LEVEL SHOULD BE COMPACTED TO A MINIMUM OF 95%. LOW-PLASTICITY, COHESIVE FILL SHALL BE COMPACTED AND MAINTAINED AT A WATER CONTENT BETWEEN OPTIMUM AND +4% OF OPTIMUM.

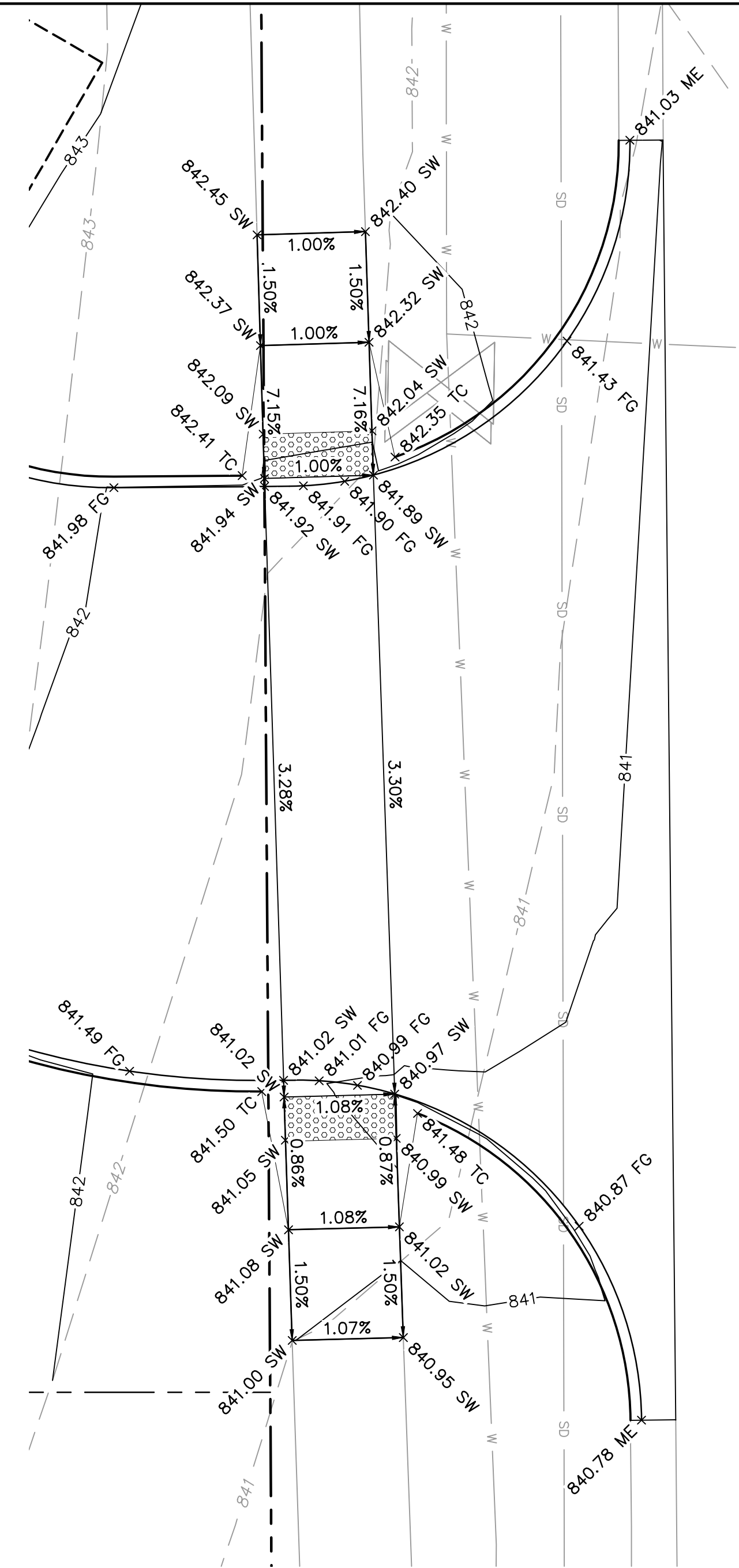
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GRADING DETAIL A:  
SCALE: 1"=5'



GRADING DETAIL B:  
SCALE: 1"=5'

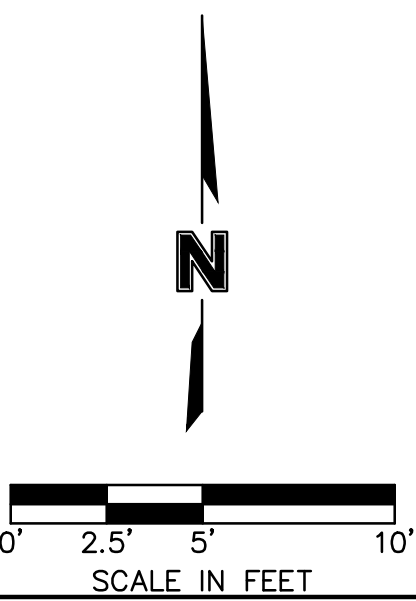


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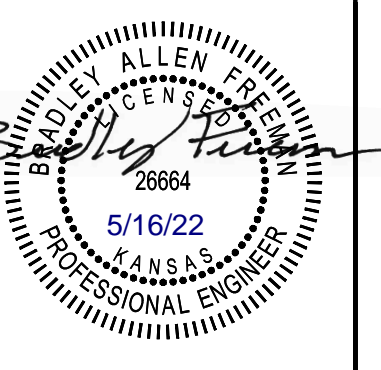
**GRADING PLAN LEGEND:**

---	PROPERTY LINE
—	PROPOSED MAJOR CONTOUR
- - -	PROPOSED MINOR CONTOUR
---	EXISTING MAJOR CONTOUR
- - -	EXISTING MINOR CONTOUR
---	ADA ROUTE
- - -	MATCH EXISTING
—	TOP OF CURB
- - -	FINISHED GRADE
---	TOP OF STRUCTURE
- - -	SIDEWALK
—	LOW POINT
---	HIGH POINT

ME  
TC  
FG  
TS  
SW  
LP  
HP



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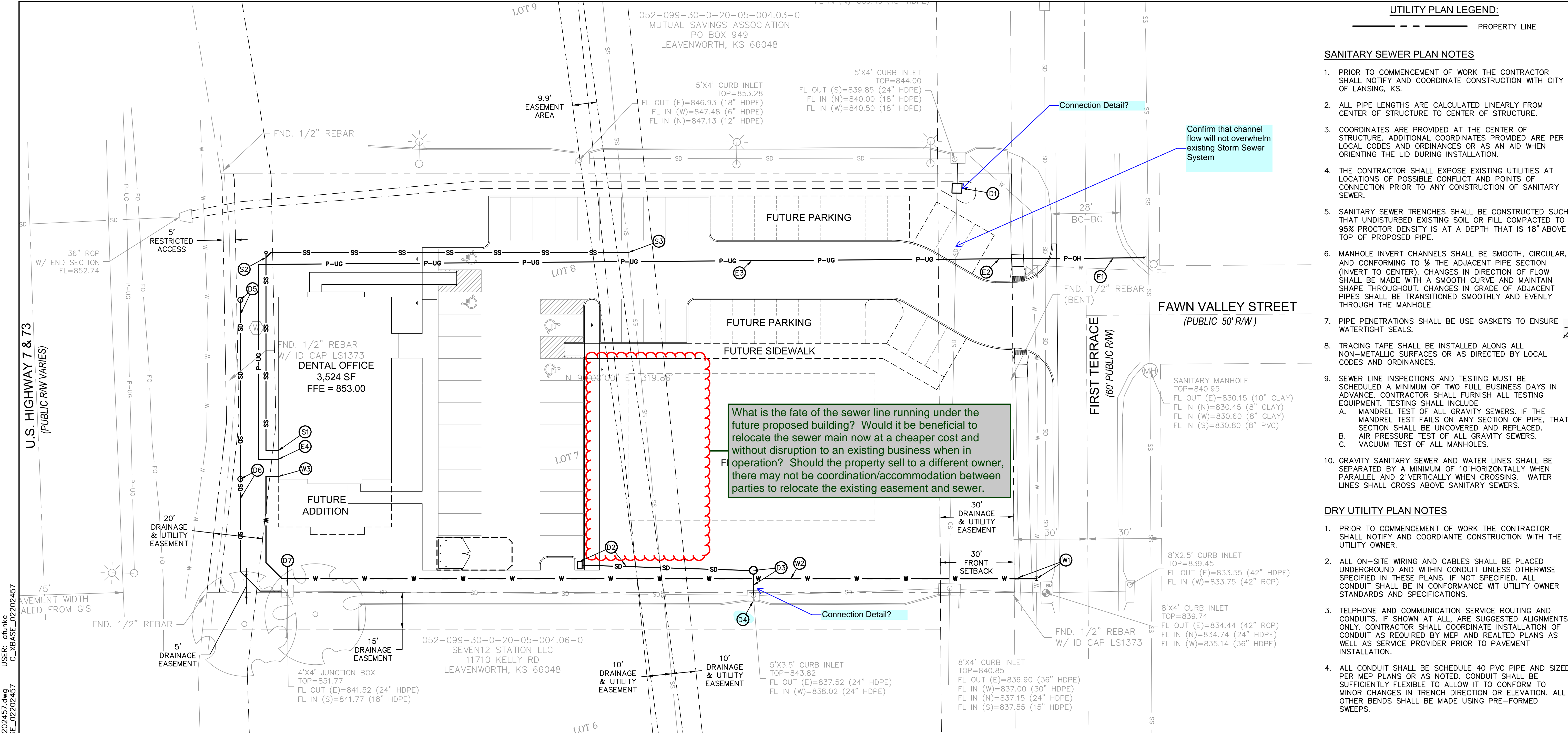
GRADING DETAILS  
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 LANING, KS

2022

drawn by: RMG  
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**SHEET**  
C3.1





**UTILITY PLAN LEGEND:**  
 - - - - - PROPERTY LINE

**SANITARY SEWER PLAN NOTES**

- PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH CITY OF LANSING, KS.
- ALL PIPE LENGTHS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING THE LID DURING INSTALLATION.
- THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF SANITARY SEWER.
- SANITARY SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
- MANHOLE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO 1/2 THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE MANHOLE.
- PIPE PENETRATIONS SHALL BE USE GASKETS TO ENSURE WATERTIGHT SEALS.
- TRACING TAPE SHALL BE INSTALLED ALONG ALL NON-METALLIC SURFACES OR AS DIRECTED BY LOCAL CODES AND ORDINANCES.
- SANITARY SEWER LINE INSPECTIONS AND TESTING MUST BE SCHEDULED A MINIMUM OF TWO FULL BUSINESS DAYS IN ADVANCE. CONTRACTOR SHALL FURNISH ALL TESTING EQUIPMENT. TESTING SHALL INCLUDE:
  - MANDREL TEST OF ALL GRAVITY SEWERS. IF THE MANDREL TEST FAILS ON ANY SECTION OF PIPE, THAT SECTION SHALL BE UNCOVERED AND REPLACED.
  - AIR PRESSURE TEST OF ALL GRAVITY SEWERS.
  - VACUUM TEST OF ALL MANHOLES.
- GRAVITY SANITARY SEWER AND WATER LINES SHALL BE SEPARATED BY A MINIMUM OF 10' HORIZONTALLY WHEN PARALLEL AND 2' VERTICALLY WHEN CROSSING. WATER LINES SHALL CROSS ABOVE SANITARY SEWERS.

**DRY UTILITY PLAN NOTES**

- PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH THE UTILITY OWNER.
- ALL ON-SITE WIRING AND CABLES SHALL BE PLACED UNDERGROUND AND WITHIN CONDUIT UNLESS OTHERWISE SPECIFIED IN THESE PLANS. IF NOT SPECIFIED, ALL CONDUIT SHALL BE IN CONFORMANCE WITH UTILITY OWNER STANDARDS AND SPECIFICATIONS.
- TELEPHONE AND COMMUNICATION SERVICE ROUTING AND CONDUITS, IF SHOWN AT ALL, ARE SUGGESTED ALIGNMENTS ONLY. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AS REQUIRED BY MEP AND RELATED PLANS AS WELL AS SERVICE PROVIDER PRIOR TO PAVEMENT INSTALLATION.
- ALL CONDUIT SHALL BE SCHEDULE 40 PVC PIPE AND SIZED PER MEP PLANS OR AS NOTED. CONDUIT SHALL BE SUFFICIENTLY FLEXIBLE TO ALLOW IT TO CONFORM TO MINOR CHANGES IN TRENCH DIRECTION OR ELEVATION. ALL OTHER BENDS SHALL BE MADE USING PRE-FORMED SWEEPS.

**STORM SEWER KEYNOTES**

- (D1) INSTALL 60" DOGHOUSE MANHOLE WITH 4'X4' AREA INLET GRATE OVERTOP EXISTING STORM WATER LINE. RIM=842.50  
EX INV. ELEV N (24" HDPE)=839.72  
EX INV. ELEV S (24" HDPE)=839.72
- (D2) INSTALL 24" NYLOPLAST DRAIN BASIN WITH 2'X3' HIGH FLOW CURB INLET TOP @ 70 LF OF 12" HDPE @ 2.00% RIM=848.54  
PR. INV. ELEV E (12" HDPE)= 839.82
- (D3) INSTALL 36" NYLOPLAST DRAIN BASIN WITH SOLID GRATE AND 10 LF OF 12" HDPE @ 2.00% RIM= 843.64  
PR. INV. ELEV W (12" HDPE)= 838.42  
PR. INV. ELEV S (12" HDPE)= 838.32
- CONNECT TO EXISTING STRUCTURE. RIM=843.82  
EX. INV. ELEV W (24" HDPE)= 838.02  
EX. INV. ELEV E (24" HDPE)= 837.52  
PR. INV. ELEV N (12" HDPE)= 838.12
- (D5) INSTALL 12" NYLOPLAST DRAIN BASIN WITH DOME GRATE AND 73 LF OF 8" HDPE @ 2.00% RIM=850.51  
PR. INV. ELEV S (8" HDPE)= 844.47
- (D6) INSTALL 12" NYLOPLAST DRAIN BASIN WITH DOME GRATE AND 57 LF OF 8" HDPE @ 2.00% RIM= 850.50  
PR. INV. ELEV S (8" HDPE)= 842.91  
PR. INV. ELEV N (8" HDPE)= 843.01
- CONNECT TO EXISTING STRUCTURE. RIM= 851.77  
EX. INV. ELEV S (18" HDPE)= 841.77  
EX. INV. ELEV E (24" HDPE)= 841.52  
PR. INV. ELEV W (8" HDPE)= 841.77

**WATER KEYNOTES**

- (W1) CONNECT TO EXISTING WATER MAIN WITH TAPPING SLEEVE AND INSTALL A 2" WATER METER. CONTRACTOR TO VERIFY EXISTING MAIN SIZE AND EXACT LOCATION.
- (W2) INSTALL 348 LF OF 2" PRIVATE WATER LINE & ASSOCIATED BENDS.
- (W3) CONNECT TO BUILDING AND REFERENCE MEP PLANS FOR CONTINUATION.

**ELECTRICAL KEYNOTES**

- (E1) COORDINATE WITH UTILITY COMPANY TO INSTALL 59 LF OF OVERHEAD POWER LINE FOR SERVICE TO PROPERTY.
- (E2) COORDINATE WITH UTILITY COMPANY TO INSTALL POWER POLE.
- (E3) INSTALL 388 LF OF CONDUIT AND UNDERGROUND ELECTRICAL LINE FOR SERVICE CONNECTION TO BUILDING.
- (E4) CONNECT TO BUILDING. REFERENCE MEP PLANS FOR CONTINUATION.

**SANITARY SEWER KEYNOTES**

- (S1) CONNECT TO EXISTING BUILDING AND INSTALL 83.5 LF OF 4" PVC SANITARY SEWER LINE @ 2.00%. INV. ELEV (4" PVC) = 847.59
- (S2) INSTALL 4" SANITARY SEWER CLEANOUT AND 148 LF OF 4" PVC SANITARY SEWER LINE @ 2.00%. INV. ELEV (4" PVC) = 845.92
- (S3) CONNECT TO EXISTING SANITARY SEWER MAIN WITH SADDLE CONNECTION PER CITY OF LANSING, KS STANDARDS AND SPECIFICATIONS. CONTRACTOR TO FIELD VERIFY EXISTING SANITARY MAIN INVERT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.  
EX. INV. ELEV N (8" PVC) = 842.86  
EX. INV. ELEV S (8" PVC) = 842.86  
PR. INV. ELEV W (4" PVC) = 842.96

**WATER PLAN NOTES**

- PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH THE UTILITY OWNER.
- ALL PIPE LENGTHS ARE CALCULATED LINEARLY FROM CENTER OF FITTING OR WALL OF VAULT.
- COORDINATES ARE PROVIDED ALONG PIPE CENTERLINE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING INSTALLATIONS.
- THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF WATER.
- WATER PIPE TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
- ALL PRIVATE WATER LINES SHALL BE A MINIMUM OF 48 INCHES AND MAXIMUM OF 60 INCHES BELOW THE FINISHED GRADE ELEVATIONS SHOWN HEREIN UNLESS OTHERWISE NOTED.
- IF AN AS-BUILT OF A WATER LINE IS REQUIRED OR EXPECTED THE CONTRACTOR SHALL NOT BACKFILL THE TRENCH UNTIL AN AS-BUILT SURVEY IS CONDUCTED.
- DISINFECTION AND PRESSURE TESTING OF WATER LINES SHALL BE PERFORMED AND PAID FOR BY THE CONTRACTOR AND AS REQUIRED BY THE UTILITY OWNER.
- ALL EXISTING FIRE HDRANTS ON SITE OR IN THE RIGHT-OF-WAY BETWEEN PROPERTY AND ROADWAY SHALL BE REPAINTED PER LOCAL CODES AND ORDINANCES.
- TRACING TAPE SHALL BE INSTALLED ALONG ALL NON-METALLIC SURFACES OR AS DIRECTED BY LOCAL CODES AND ORDINANCES.

What is the fate of the sewer line running under the future proposed building? Would it be beneficial to relocate the sewer main now at a cheaper cost and without disruption to an existing business when in operation? Should the property sell to a different owner, there may not be coordination/accommodation between parties to relocate the existing easement and sewer.

I believe plumbing code requires 6" PVC for Comm/Bus

Saddle connections are not permitted. Refer to City SD 30-04

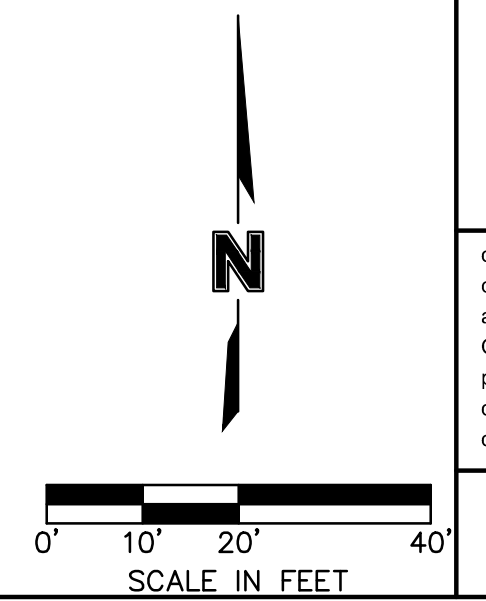
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 5/16/22  
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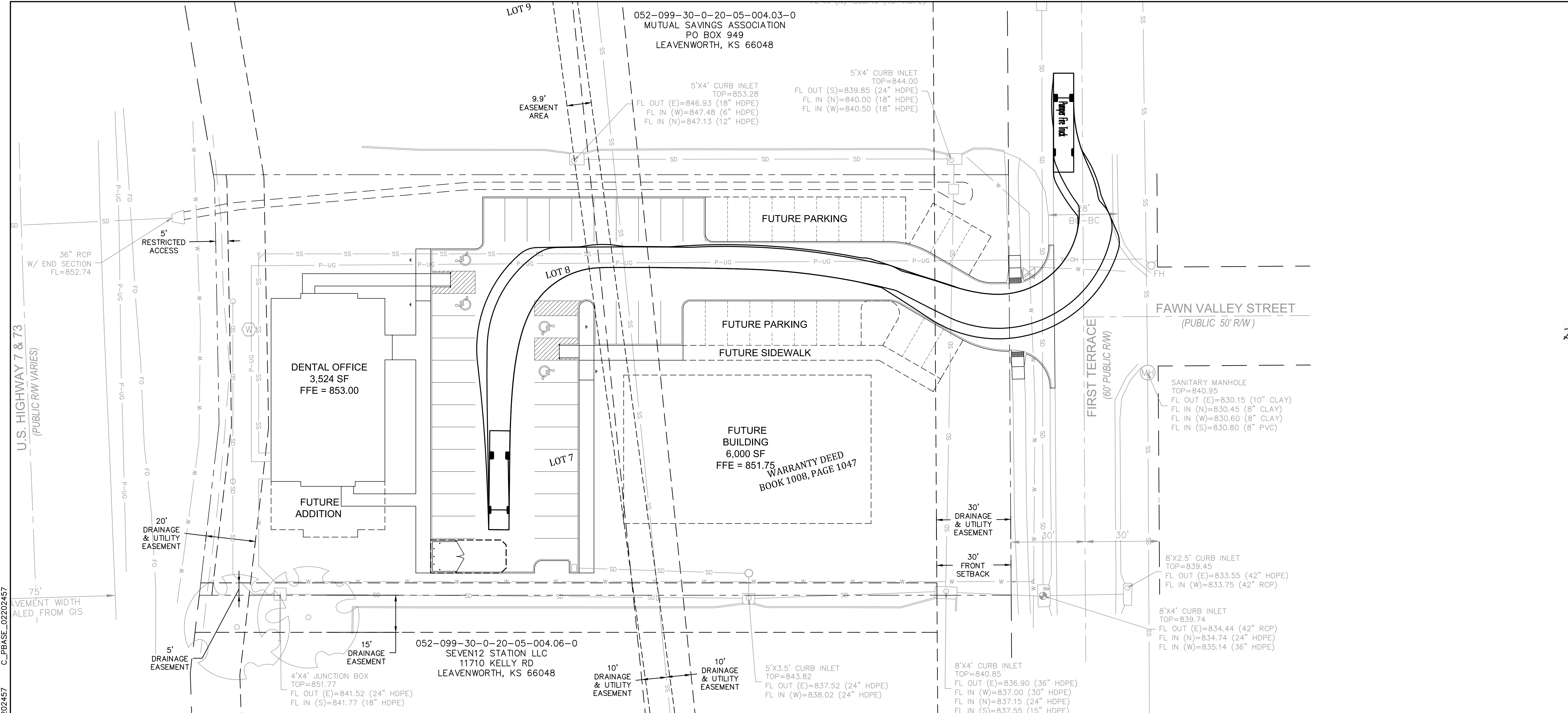
REVISIONS DESCRIPTION	DATE	REV. NO.

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 SITE PLAN  
 PRIMUS DENTAL  
 1ST ST TERRACE  
 LANSING, KS  
 2022

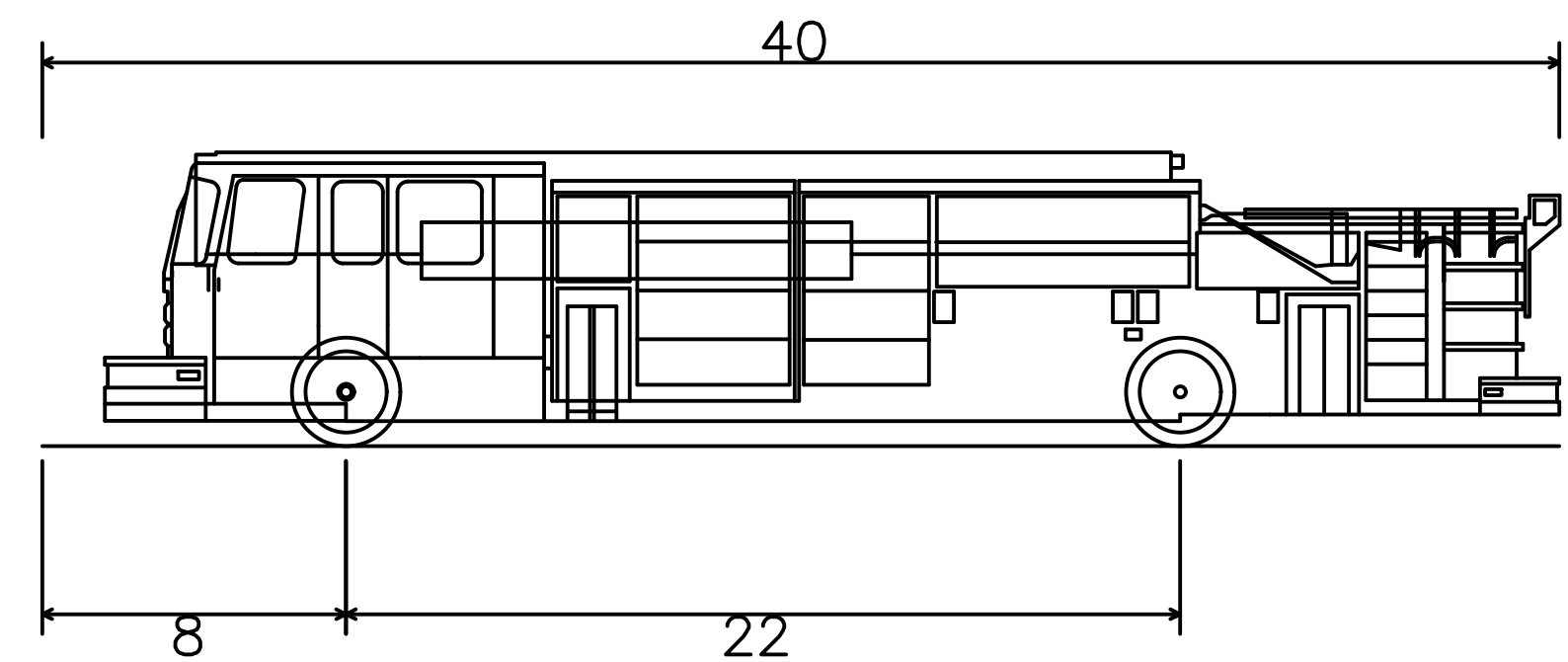
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 checked by: ALF  
 approved by: BAF  
 QA/QC by: BAF  
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 drawing no.: C-UTL01\_02202457  
 date: 05.13.2022



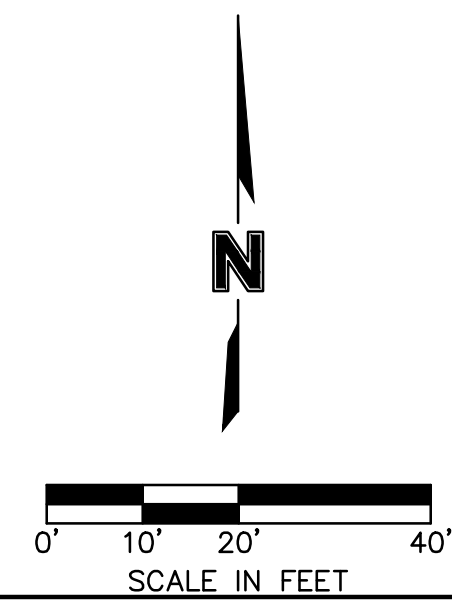
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VEHICLE PROFILE



Pumper Fire Truck	
Overall Length	40.000ft
Overall Width	8.167ft
Overall Body Height	7.745ft
Min Body Ground Clearance	0.656ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Max Wheel Angle	45.00°



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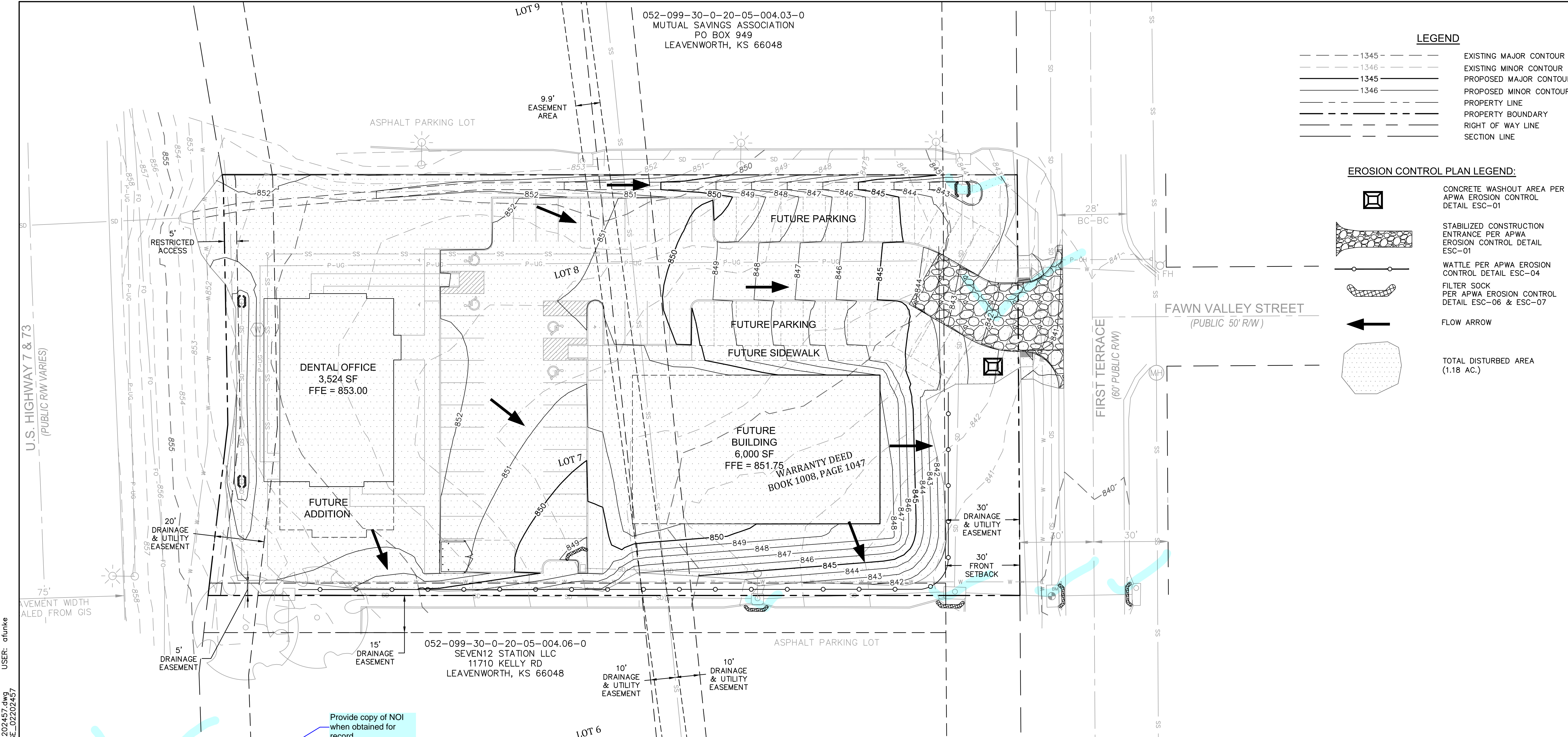
VEHICLE ACCESS PLAN  
 SITE PLAN  
 PRIMUS DENTAL  
 1ST ST TERRACE

2022

LANSDING, KS

drawn by: RMG  
 checked by: ALF  
 approved by: BAF  
 QA/QC by: BAF  
 project no.: 022-02457  
 drawing no.: C\_TURN01\_02202457  
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**LEGEND**

---	1345	EXISTING MAJOR CONTOUR
---	1346	EXISTING MINOR CONTOUR
---	1345	PROPOSED MAJOR CONTOUR
---	1346	PROPOSED MINOR CONTOUR
---		PROPERTY LINE
---		PROPERTY BOUNDARY
---		RIGHT OF WAY LINE
---		SECTION LINE

**EROSION CONTROL PLAN LEGEND:**

[Symbol]	CONCRETE WASHOUT AREA PER APWA EROSION CONTROL DETAIL ESC-01
[Symbol]	STABILIZED CONSTRUCTION ENTRANCE PER APWA EROSION CONTROL DETAIL ESC-01
[Symbol]	WATTLE PER APWA EROSION CONTROL DETAIL ESC-04
[Symbol]	FILTER SOCK PER APWA EROSION CONTROL DETAIL ESC-06 & ESC-07
[Symbol]	FLOW ARROW
[Symbol]	TOTAL DISTURBED AREA (1.18 AC.)

**EROSION & SEDIMENT CONTROL NOTES**

1. THIS PROJECT DOES REQUIRE AN NPDES GENERAL PERMIT S-MCST-1703-1 FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT (KDHE).
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PUBLIC STREETS, ACCESS ROUTES, AND WATERWAYS IN THE VICINITY OF THE JOB SITE CLEAN AND FREE OF ROCKS, SOIL AND DEBRIS.
3. THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENTATION CONTROL "BEST MANAGEMENT PRACTICES" (BMPs) PRIOR TO ANY SITE PREPARATION WORK (E.G., CLEARING, GRUBBING, DEMOLITION, OR EXCAVATION).
4. THE PLACEMENT OF EROSION AND SEDIMENT BMPs SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN PREPARED FOR THE PROJECT. CONTRACTOR TO ADJUST QUANTITY, LOCATION, AND TYPE OF EROSION AND SEDIMENT CONTROL BMPs AS NECESSARY FOR THE VARIOUS PHASES OF THE WORK AND AS ACTUAL CONDITIONS WARRANT. CONTRACTOR SHALL CONTINUOUSLY MODIFY THE EROSION AND SEDIMENT CONTROL PLAN WITH CURRENT BMPs IN ACCORDANCE WITH THE CONSTRUCTION STORMWATER PERMIT REQUIREMENTS. ADDITIONAL EROSION AND SEDIMENT CONTROL BMPs EMPLOYED BY THE CONTRACTOR AT HIS DISCRETION WILL NOT BE MEASURED OR PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
5. APPROVED EROSION AND SEDIMENT CONTROL BMPs SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. UNLESS OTHERWISE REQUIRED BY THE STATE'S CONSTRUCTION STORMWATER PERMIT, AT A MINIMUM THE CONTRACTOR SHALL INSPECT ALL BMPs EVERY 7 DAYS, AND AFTER ALL SIGNIFICANT PRECIPITATION EVENTS I.E. RAINFALL, SNOWMELT. ALL NECESSARY MAINTENANCE AND REPAIR ACTIVITIES SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS AFTER DIRECTION BY THE INSPECTOR. ACCUMULATED SEDIMENT AND CONSTRUCTION DEBRIS SHALL BE REMOVED WEEKLY FROM ALL BMPs, OR AT ANY TIME THAT SEDIMENT OR CONSTRUCTION DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMPs.
6. TOPSOIL AND SUITABLE EARTHEN MATERIALS SHALL BE SEGREGATED AND STOCKPILED WITHIN THE LIMITS OF CONSTRUCTION FOR USE ON AREAS TO BE FILLED AND RE-VEGETATED. ANY AND ALL STOCKPILES SHALL BE PLACED IN AN APPROVED LOCATION AND PROTECTED FROM EROSION ELEMENTS USING MEASURES SPECIFIED IN THE EROSION/SEDIMENT CONTROL PLAN AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
7. STABILIZATION IS REQUIRED IMMEDIATELY FOR STOCKPILES THAT WILL BE INACTIVE FOR MORE THAN 14 DAYS.
8. ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC. RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
9. A WATER SOURCE MUST BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND AND FOR MEETING COMPACTION REQUIREMENTS.
10. THE CONTRACTOR MUST KEEP ALL POLLUTANTS, INCLUDING SEDIMENT, CONSTRUCTION DEBRIS,

- AND TRENCH BACKFILL MATERIALS FROM ENTERING THE STORM SEWER SYSTEM.
11. ALL SPILLS INCLUDING, BUT NOT LIMITED TO, PETROLEUM PRODUCTS, SOLVENTS, AND CEMENT SHALL BE CLEANED UP IMMEDIATELY. THE LOCAL CITY/COUNTY AND STATE'S GOVERNING AUTHORITY SHALL BE NOTIFIED IMMEDIATELY.
12. THE CONTRACTOR SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL EXPORTED FROM THE SITE SHALL BE DISPOSED OF AT A SITE PERMITTED TO ACCEPT SUCH MATERIAL.
13. THE USE OF REBAR, STEEL STAKES OR STEEL FENCE POSTS FOR STAKING DOWN STRAW OR HAY BALES IS PROHIBITED. STEEL FENCE POSTS ARE REQUIRED TO SUPPORT SILT FENCING USED AS AN EROSION CONTROL MEASURE.
14. THE CLEANING OF CONCRETE DELIVERY TRUCK CHUTES IS RESTRICTED TO APPROVED LOCATIONS ON THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED. ALL CONCRETE WASTE SHALL BE PROPERLY CLEANED UP AND DISPOSED OF AT AN APPROPRIATE LOCATION.
15. THE CONTRACTOR SHALL CLEAN OUT ALL EXISTING AND PROPOSED INLETS, PIPES AND MANHOLES OF DEBRIS AND SEDIMENTATION AT COMPLETION OF SITEWORK. THIS WORK SHALL BE DONE TO THE SATISFACTION OF THE OWNER AND LOCAL AUTHORITIES. ANY CONSTRUCTION DEBRIS OR MUD DROPPED INTO MANHOLES, INLETS, PIPES OR TRACKED ONTO EXISTING ROADWAYS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY HIS CONSTRUCTION.
16. STABILIZATION IS REQUIRED IMMEDIATELY FOR ANY AREAS THAT WILL BE INACTIVE FOR MORE THAN 14 DAYS.
17. TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT ON SEASONAL WEATHER CHANGES.
18. DO NOT DISTURB AN AREA UNTIL NECESSARY FOR CONSTRUCTION TO PROCEED.
19. MATTING, SOD, OR AN EQUIVALENT EROSION CONTROL MEASURE APPROVED BY THE CITY ENGINEER IS REQUIRED BY CITY ORDINANCE ON SLOPES 3:1 OR GREATER.
20. CONSTRUCTION DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
21. NO HAZARDOUS WASTE MAY BE DISPOSED OF IN SANITARY LANDFILLS.
22. DO NOT DISPOSE OF RUBBLE IN WETLANDS, FLOODPLAINS, OR DRAINAGE WAYS WITHOUT KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT (KDHE) OR JURISDICTION APPROVAL.
23. TREAT OR DISPOSE OF SANITARY WASTES GENERATED ON-SITE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
24. DUMPSTERS SHALL BE COVERED TO PREVENT STORM WATER CONTAMINATION
25. ALL MATERIALS HAULED OFF-SITE SHALL BE SECURED TO PREVENT LITTERING

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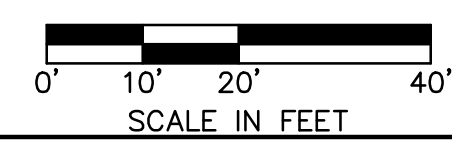
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2022

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SITE PLAN  
PRIMUS DENTAL  
1ST ST TERRACE  
LANSAING, KS

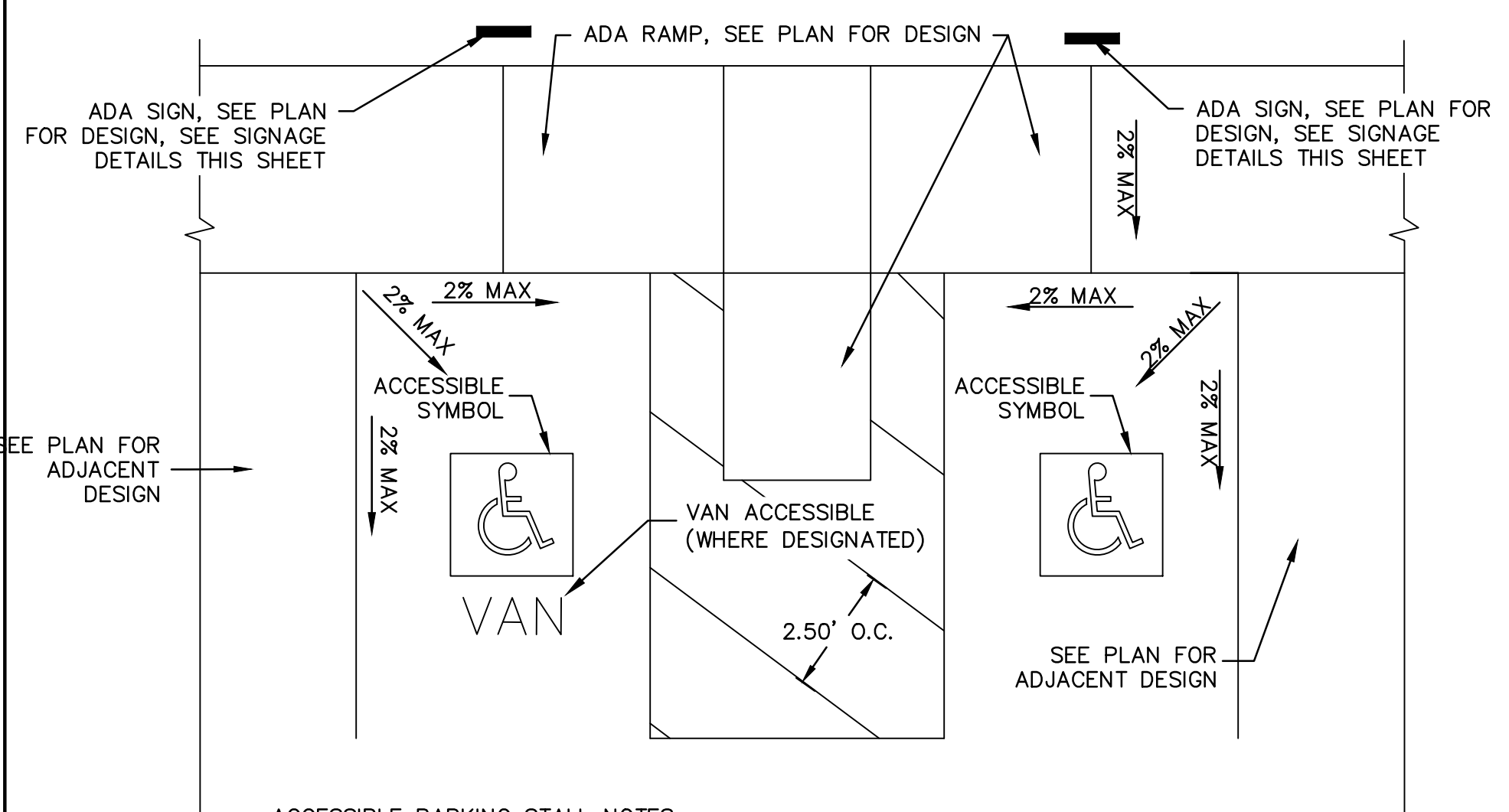
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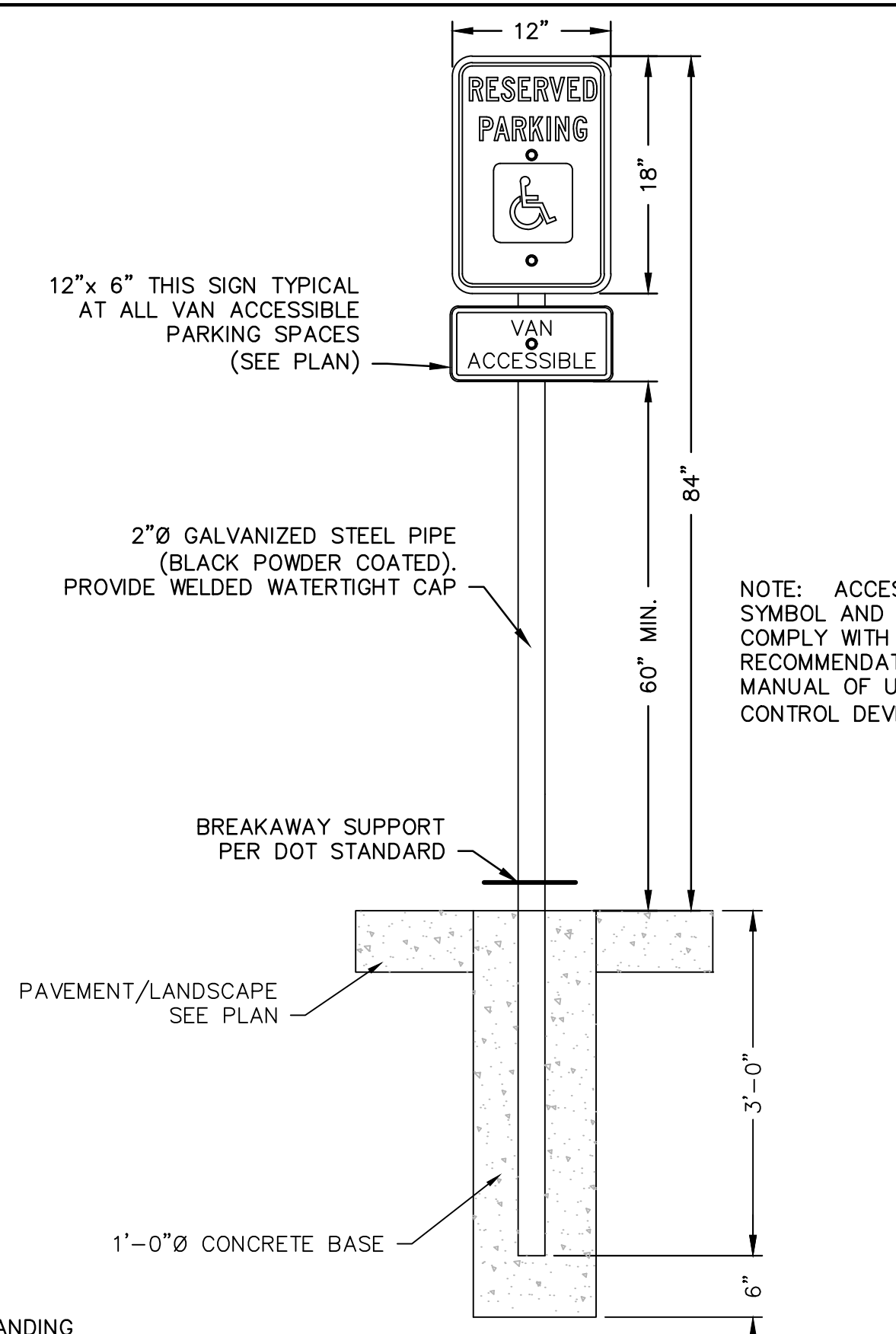
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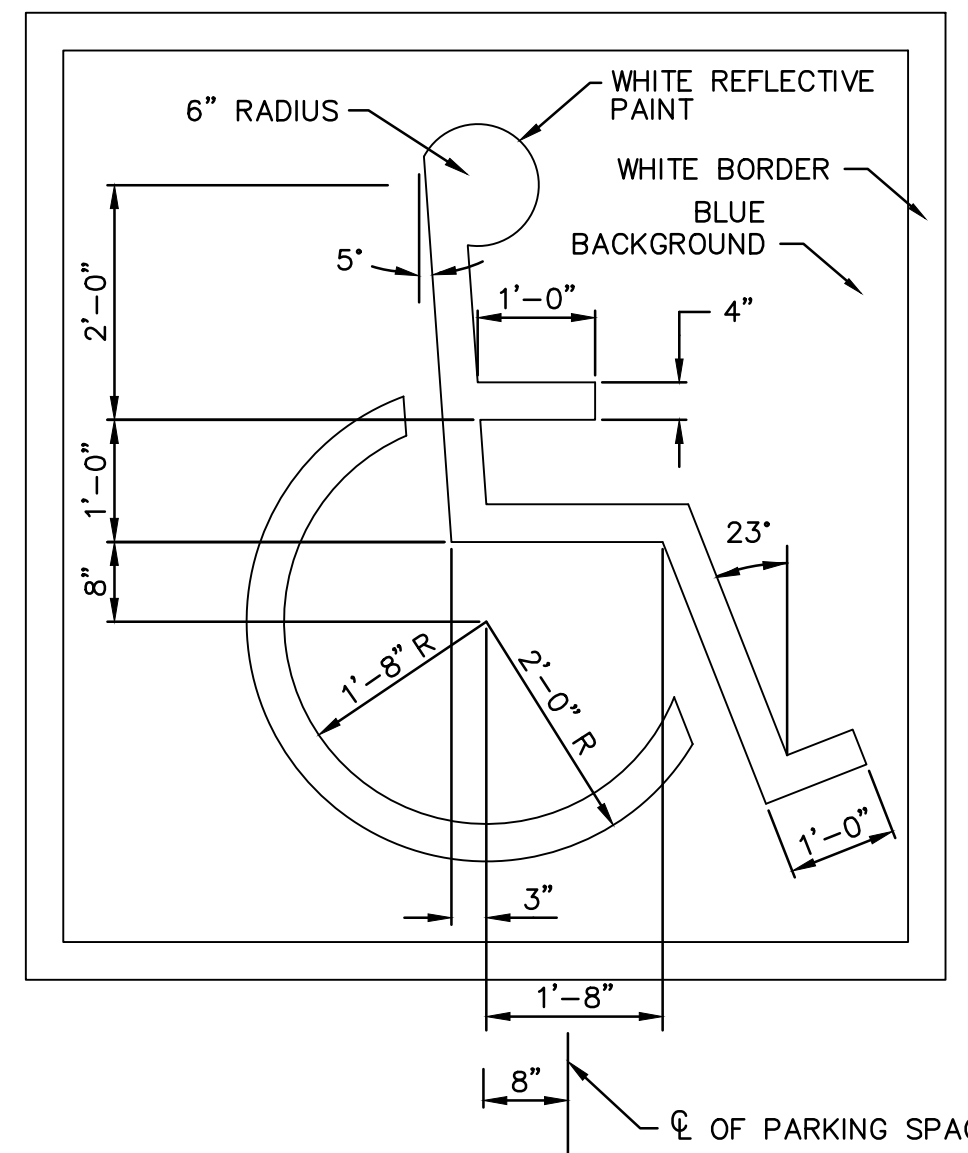
**ADA PARKING DETAIL**  
N.T.S.

**ACCESSIBLE PARKING STALL NOTES:**  
1. ALL ACCESSIBLE STALL PAVEMENT MARKINGS SHALL BE 4" WIDE YELLOW STRIPES.  
2. ACCESSIBLE AISLE SHALL BE 8" WIDE MINIMUM FOR VANS.  
3. ACCESSIBLE PARKING AREA SURFACE SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.  
4. A SIGN MUST MARK ACCESSIBLE PARKING. THE SYMBOL ON THE PAVEMENT IS NOT ADEQUATE.  
5. ACCESSIBLE SYMBOL SHALL BE WHITE WITH BLUE BACKGROUND.  
6. ALL PAVEMENT MARKING PER MUTCD STANDARDS, 2009 EDITION, REVISIONS 1 & 2, MAY 2012

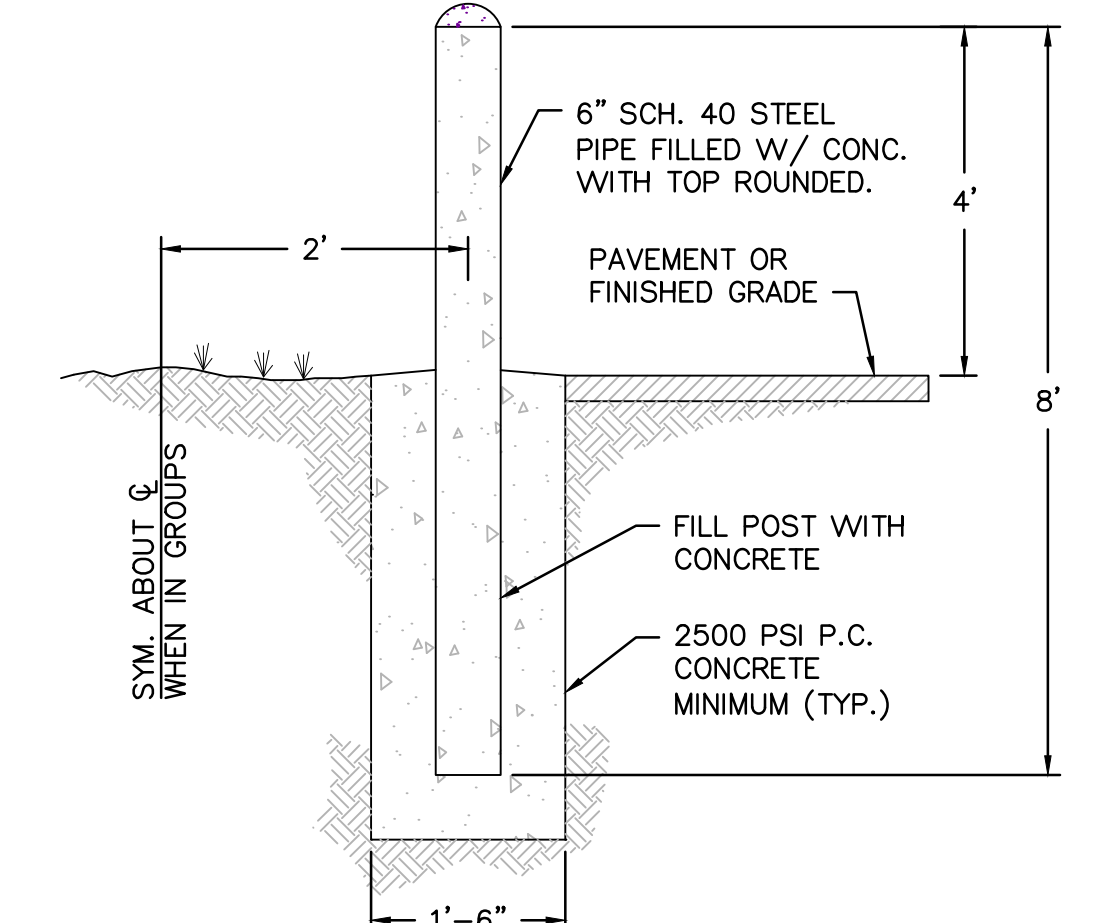


**ADA PARKING SIGN DETAIL**  
N.T.S.

NOTE: ACCESSIBLE PARKING SYMBOL AND SIGNAGE SHALL COMPLY WITH THE APPLICABLE RECOMMENDATIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

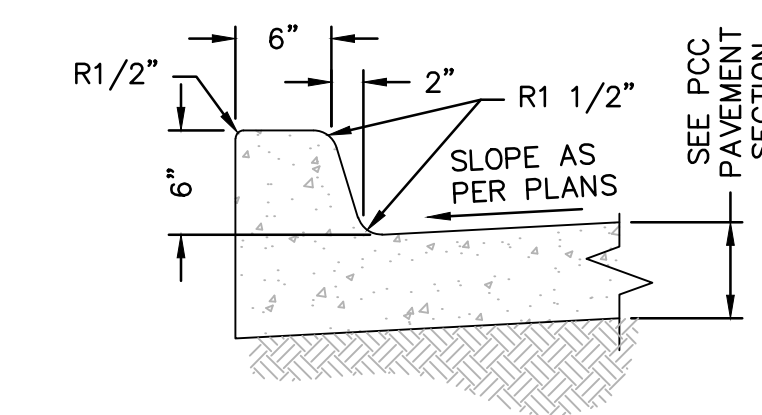


**ADA PAVEMENT MARKING DETAIL**  
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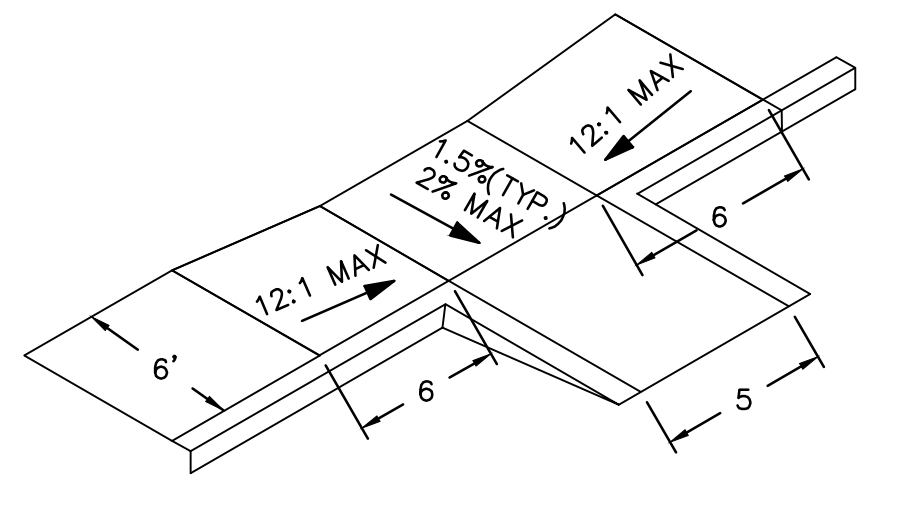
**BOLLARD DETAIL**  
N.T.S.

NOTE:  
1. ALL PIPES SHALL BE PAINTED TRAFFIC YELLOW

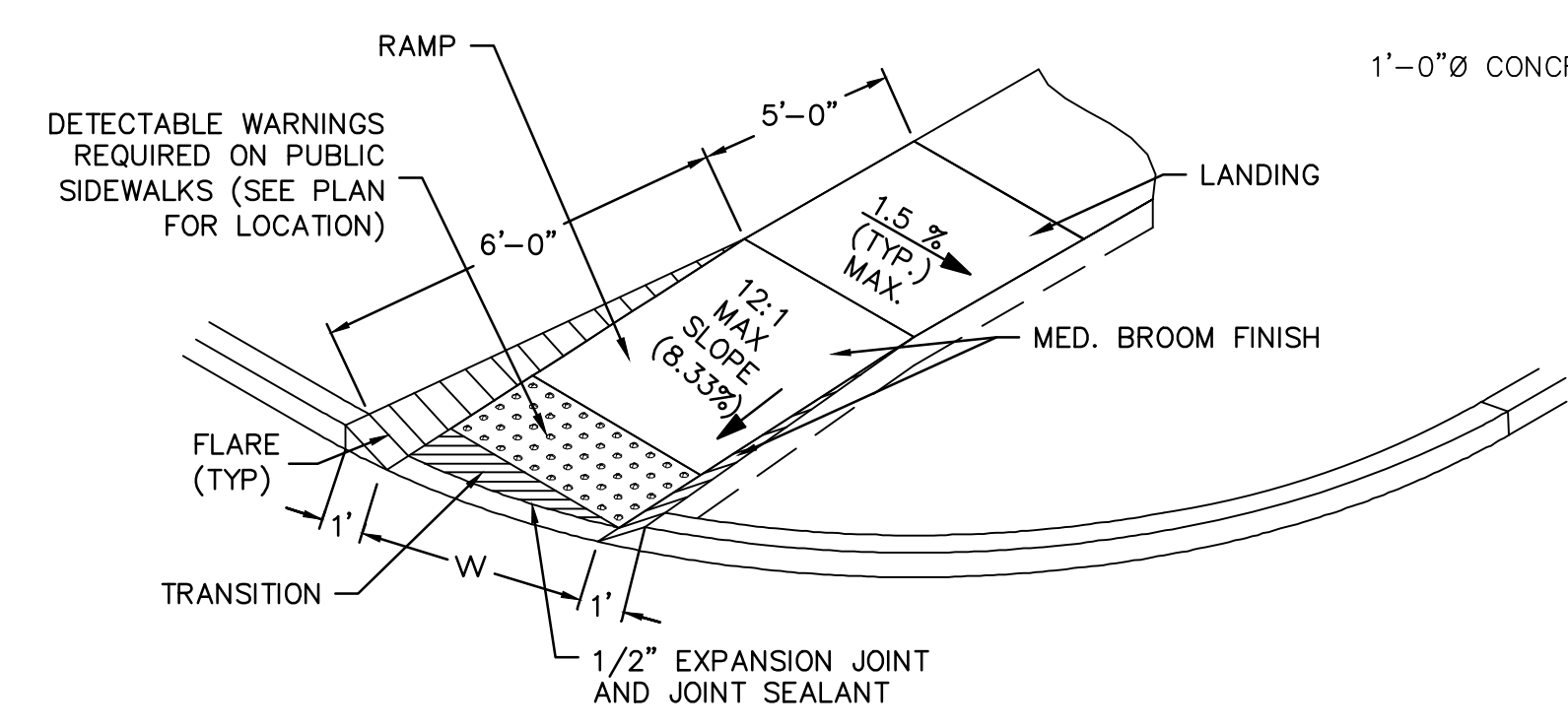


**6" INTEGRAL CURB DETAIL**  
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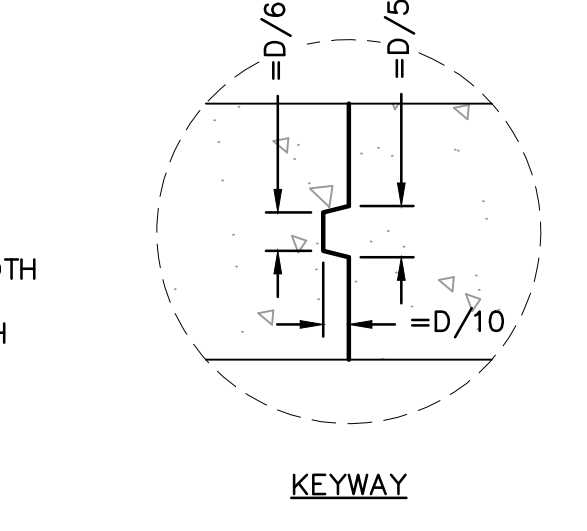
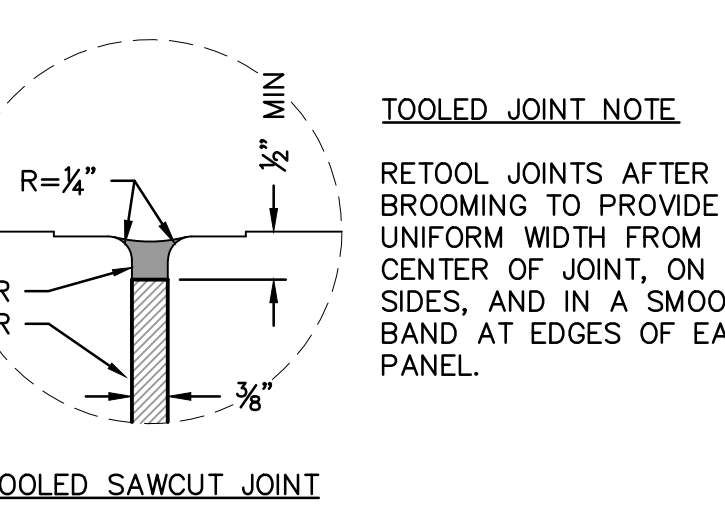
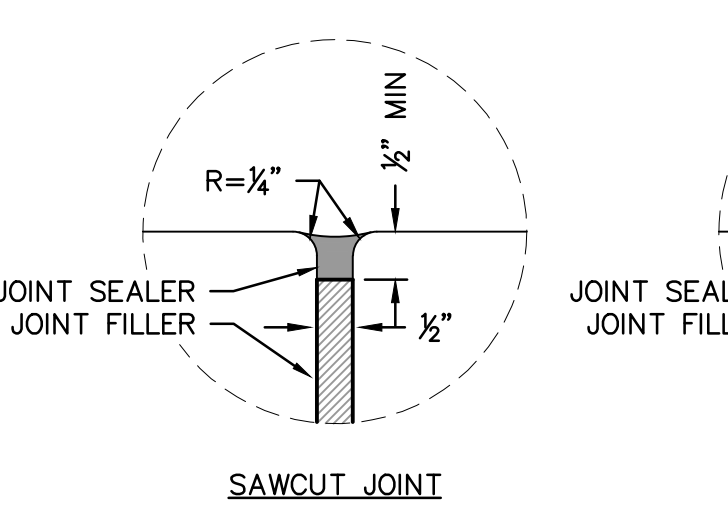
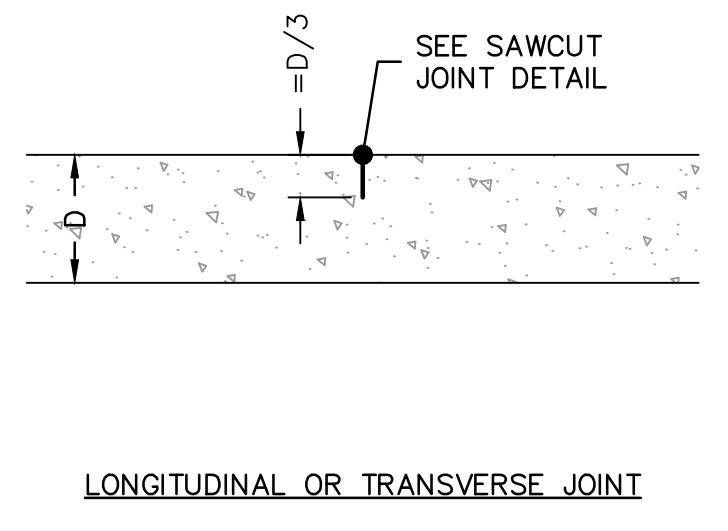
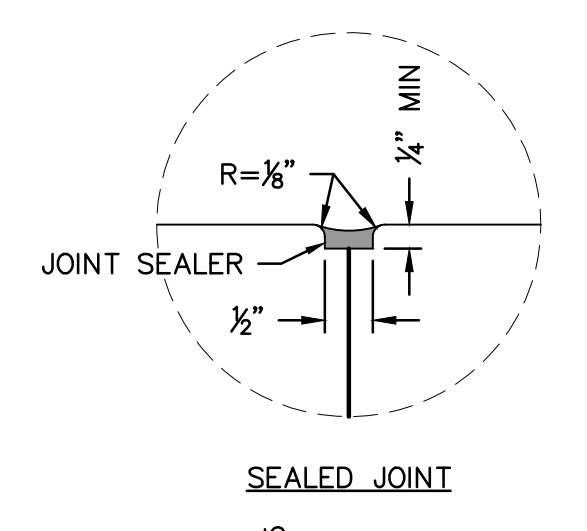
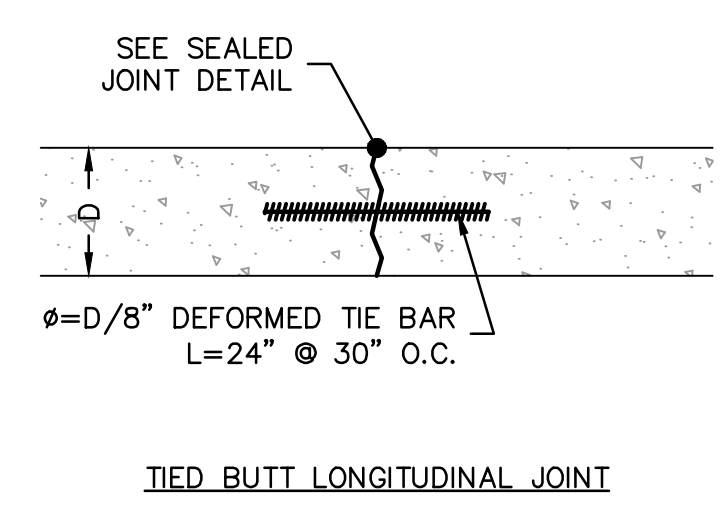
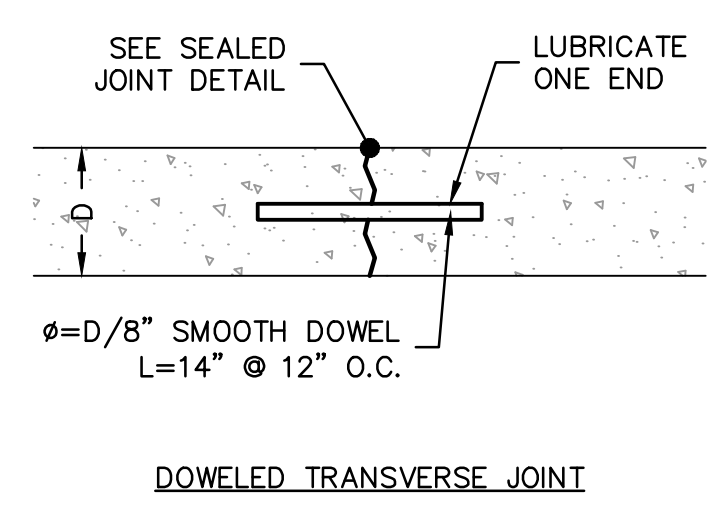
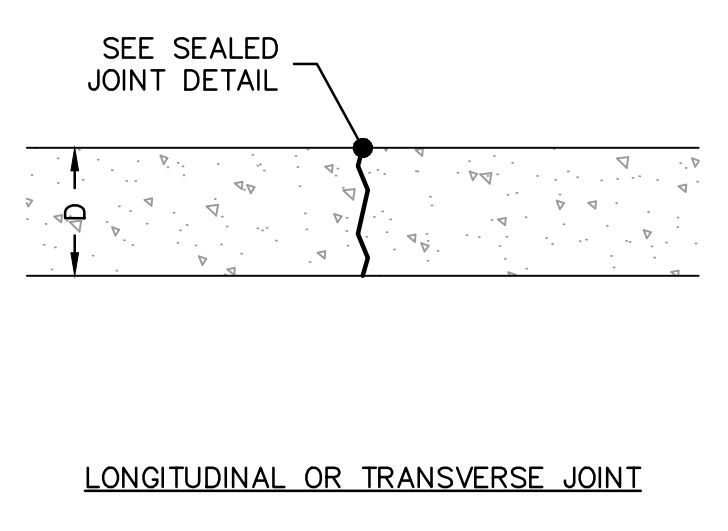
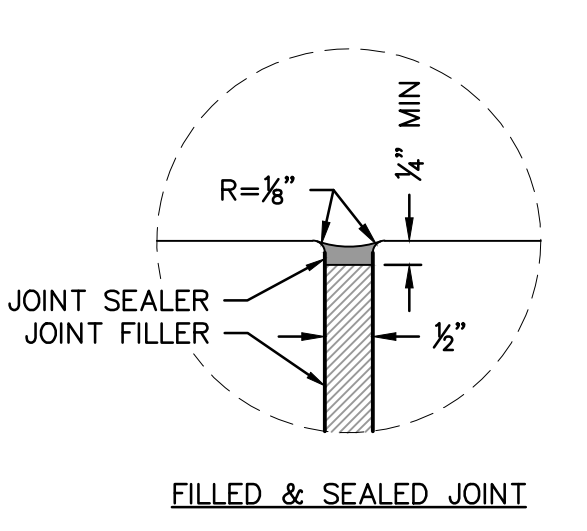
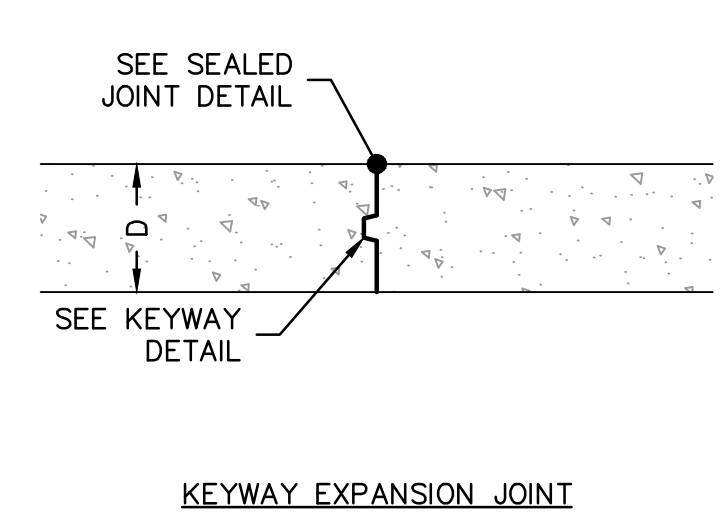
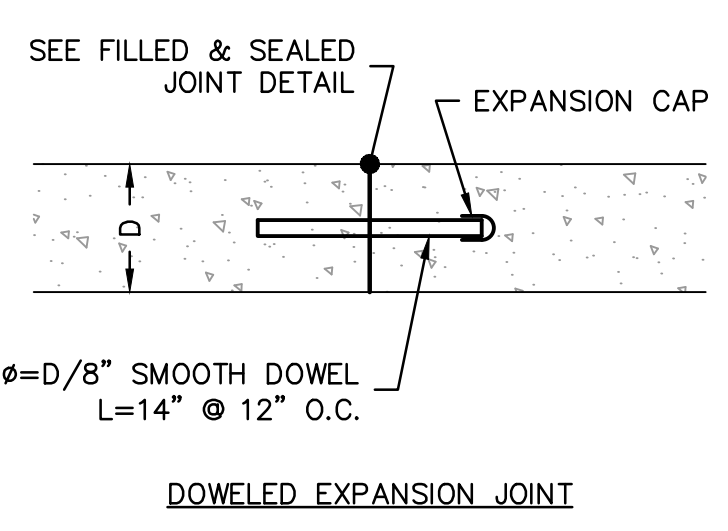
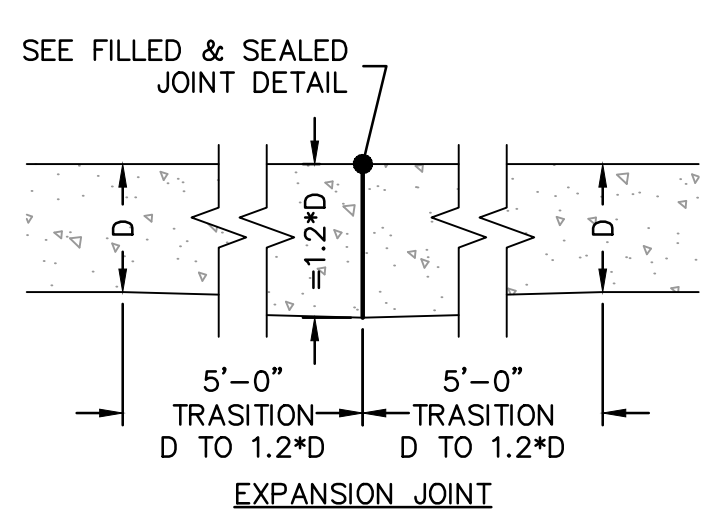
GENERAL NOTES:  
1. 3/4" ISOLATION JOINTS WITH 5/8" DIA. X 2' SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.  
2. 1" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.  
3. FIX DOWEL BARS WITH BAR SUPPORTS.  
4. DEPTH OF CURB SHALL BE A MINIMUM OF 8" THROUGH HANDICAP ACCESSRAMP.



**IN-LINE ADA RAMP**  
N.T.S.

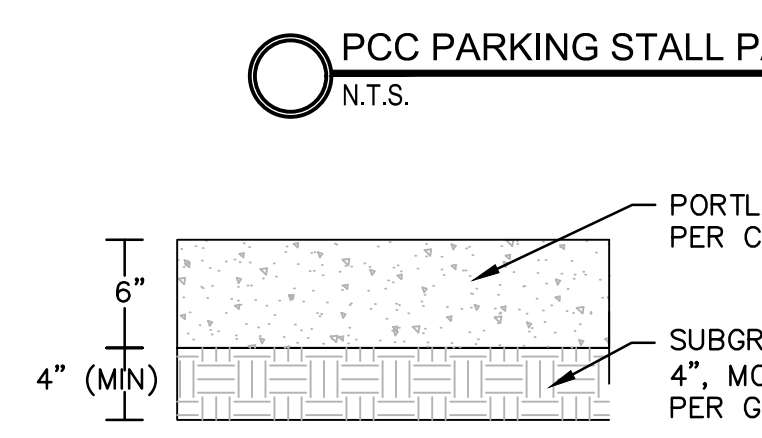


**PERPENDICULAR ADA RAMP**  
N.T.S.



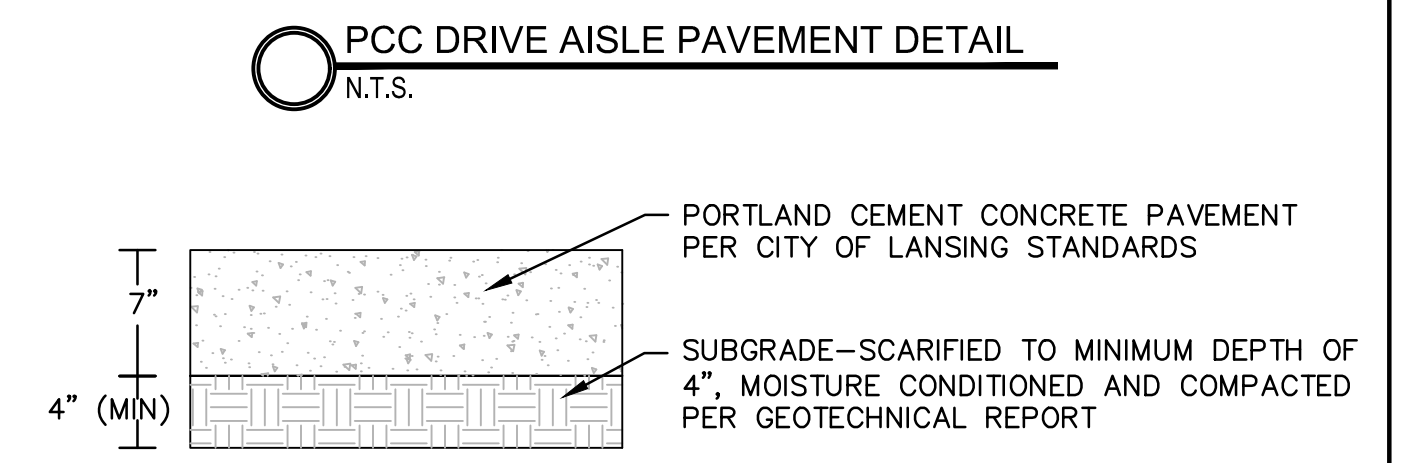
**CONCRETE JOINT DETAILS**  
N.T.S.

**TOOLED JOINT NOTE**  
RETOOL JOINTS AFTER BROOMING TO PROVIDE UNIFORM WIDTH FROM CENTER OF JOINT, ON BOTH SIDES, AND IN A SMOOTH BAND AT EDGES OF EACH PANEL.



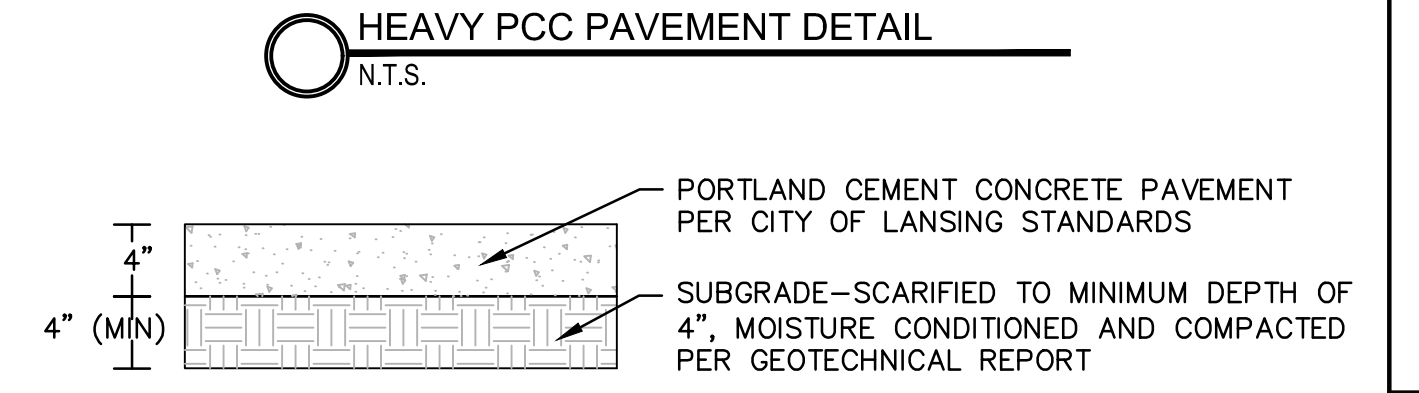
**PCC PARKING STALL PAVEMENT DETAIL**  
N.T.S.

PORTLAND CEMENT CONCRETE PAVEMENT PER CITY OF LANSING STANDARDS  
SUBGRADE-SCARIFIED TO MINIMUM DEPTH OF 4". MOISTURE CONDITIONED AND COMPACTED PER GEOTECHNICAL REPORT  
OPTION 2: MOISTURE-CONDITIONED BETWEEN -2 TO +3 PERCENT OPTIMUM, AND RECOMPACTED TO 95% MAXIMUM DENSITY PER ASTM D-698 (STANDARD PROCTOR)



**PCC DRIVE AISLE PAVEMENT DETAIL**  
N.T.S.

PORTLAND CEMENT CONCRETE PAVEMENT PER CITY OF LANSING STANDARDS  
SUBGRADE-SCARIFIED TO MINIMUM DEPTH OF 4". MOISTURE CONDITIONED AND COMPACTED PER GEOTECHNICAL REPORT  
OPTION 2: MOISTURE-CONDITIONED BETWEEN -2 TO +3 PERCENT OPTIMUM, AND RECOMPACTED TO 95% MAXIMUM DENSITY PER ASTM D-698 (STANDARD PROCTOR)



**HEAVY PCC PAVEMENT DETAIL**  
N.T.S.

PORTLAND CEMENT CONCRETE PAVEMENT PER CITY OF LANSING STANDARDS  
SUBGRADE-SCARIFIED TO MINIMUM DEPTH OF 4". MOISTURE CONDITIONED AND COMPACTED PER GEOTECHNICAL REPORT  
OPTION 2: MOISTURE-CONDITIONED BETWEEN -2 TO +3 PERCENT OPTIMUM, AND RECOMPACTED TO 95% MAXIMUM DENSITY PER ASTM D-698 (STANDARD PROCTOR)

**SIDEWALK PAVEMENT DETAIL**  
N.T.S.

**olsson**  
1717 Ingersoll Ave  
Suite 111  
Des Moines, IA 50309  
TEL 515.331.6517  
www.olsson.com

Professional Engineer  
5/16/22  
KANSAS  
26684

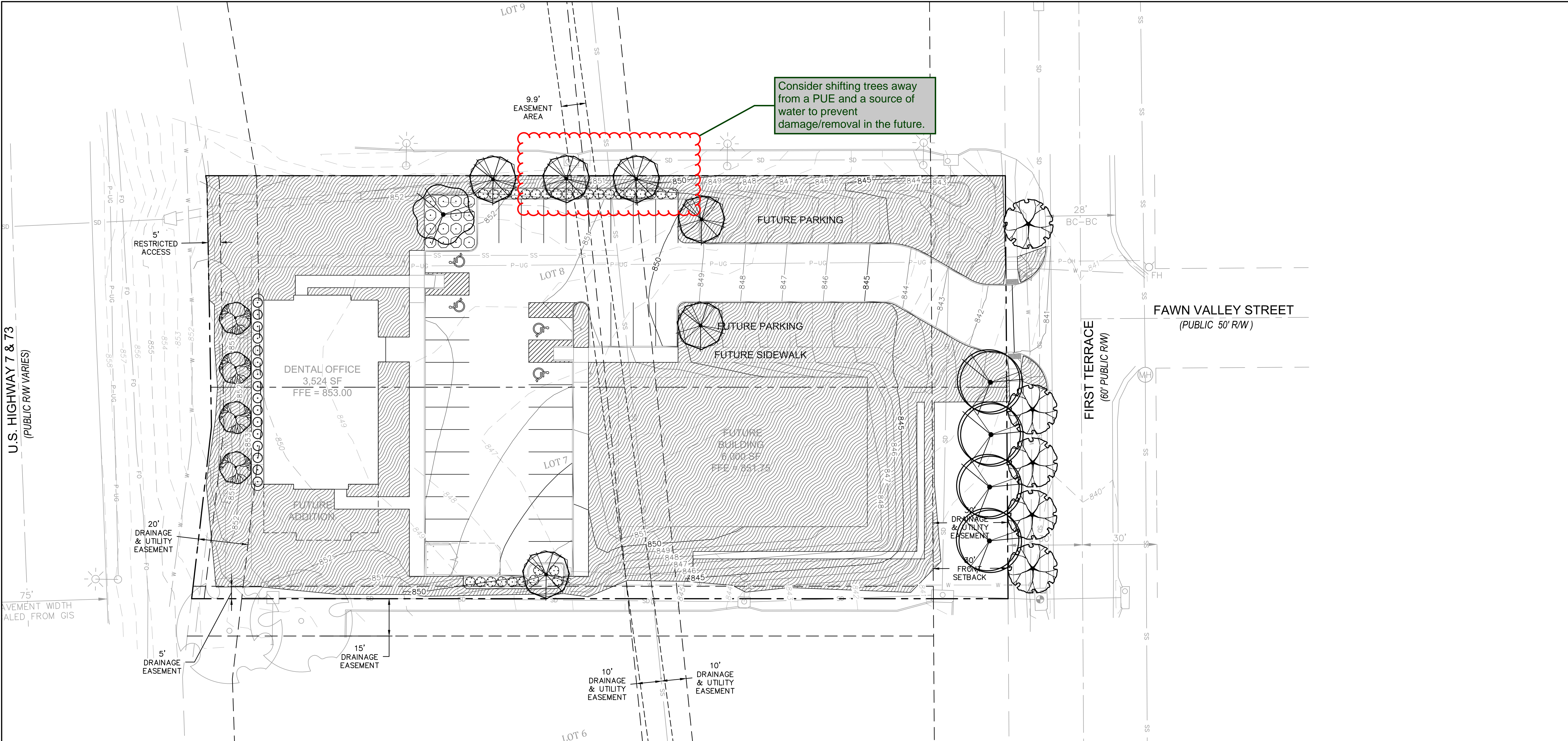
REV. NO.	DATE	REVISIONS DESCRIPTION

CONSTRUCTION DETAILS  
SITE PLAN  
PRIMUS DENTAL  
1ST ST TERRACE  
2022  
LANSING, KS

drawn by:	RMG
checked by:	ALF
approved by:	BAF
QA/QC by:	BAF
project no.:	022-02457
drawing no.:	C-DTL01-02202457
date:	05.13.2022

**SHEET**  
C7.0

DWG: F:\2023\02001-02500\022-02457\40-Design\AutoCAD\Final Plans\Sheets\CNC\1\SC01\_02202457.dwg  
 DATE: May 15, 2022 5:13pm  
 USER: ofurks  
 C:\P\SCOP\_02202457  
 XREFS: C:\BASE\_02202457  
 C:\BASE\_02202457



**LANDSCAPE REQUIREMENTS (PER TABLE 6-1)**

SITE ELEMENT	REQUIRED RATIO	REQUIRED	PROVIDED
STREETSCAPE & FRONTAGE	1 LARGE TREE PER 40' LOT FRONTAGE; 2 LARGE TREES PER 40' IF BUILDINGS SETBACK MORE THAN 30'	(170' FRONTAGE, BUILDINGS SET BACK MORE THAN 30') 9 LARGE TREES	9 LARGE TREES
FOUNDATION	1 ORNAMENTAL TREE PER 25' OF BUILDING FRONTAGE	(78' FRONTAGE) 4 ORNAMENTAL TREES	4 ORNAMENTAL TREES
	5 SHRUBS FOR 25' OF BUILDING FRONTAGES	(78' FRONTAGE) 16 SHRUBS	16 SHRUBS
PARKING	1 LARGE TREE PER 40' OF PARKING PERIMETER	(216' PERIMETER) 6 LARGE TREES	6 LARGE TREES
	5 SHRUBS FOR 25' OF PERIMETER	(216' PERIMETER) 44 SHRUBS	44 SHRUBS
	1 LARGE TREE PER 40 PARKING SPACES IN INTERNAL ISLANDS	(36 SPACES) 1 LARGE TREE	1 LARGE TREES

**PLANT SCHEDULE**

ORNAMENTAL TREES	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	CALIPER
	4	ACER PALMATUM 'BLOODGOOD' / BLOODGOOD JAPANESE MAPLE	N/A	B & B	1.5"
OVERSTORY TREES	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	CALIPER
	6	ACER GRISEUM 'JFS KWBAGRI' TM / FIREBURST PAPERBARK MAPLE	N/A	B & B	2"
	5	GINKGO BILOBA 'AUTUMN GOLD' TM / AUTUMN GOLD MAIDENHAIR TREE	N/A	B & B	2"
	4	ULMUS 'PATRIOT' / PATRIOT ELM	N/A	B & B	2"
	1	ZELKOVA SERRATA 'GREEN VASE' / GREEN VASE SAWLEAF ZELKOVA	N/A	B & B	2"
SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	CALIPER
	29	AZALEA X 'BLUE DANUBE' / BLUE DANUBE AZALEA	18" HT.		
	16	CHAMAECYPARIS PISIFERA 'GOLDEN MOP' / GOLDEN MOP THREADLEAF SAWARA CYPRESS	18" HT.		
	15	SYRINGA MEYERI 'PALIBIN' / DWARF KOREAN LILAC	18" HT.		
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT	CONDITION	CALIPER
	29,382 SF	TURF SOD / DROUGHT TOLERANT FESCUE BLEND	SQFT		

**GENERAL LANDSCAPE NOTES:**

- QUANTITIES LISTED IN THE PLANT LIST SCHEDULE ARE FOR ESTIMATES ONLY. TREES, SHRUBS, AND GROUND COVER OF CONTRACT QUANTITIES SHALL BE THE NUMBER OF ITEMS SHOWN ON THE DRAWINGS.
- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION.
- ALL DISTURBED AREAS NOT OTHERWISE SPECIFIED WITH GROUND COVER ARE TO BE PLANTED WITH SOD MATCHING THE SPECIFIED TYPE.
- TREES, SHRUBS, AND PLANTING BEDS SHALL BE SURFACED WITH BROWN HARDWOOD MULCH.
- MULCH PLANTING BEDS SHALL RECEIVE SHOVEL-CUT EDGE WHERE ADJACENT TO TURF.
- THE LANDSCAPE CONTRACTOR SHALL REFER TO ENGINEERING DRAWINGS FOR ANY AND ALL EXISTING AND/OR PROPOSED UTILITIES. IF THERE ARE ANY DISCREPANCIES, CONFLICTS, AND/OR DEVIATIONS BETWEEN THE LANDSCAPE DRAWINGS AND THE EXISTING OR PROPOSED CONDITIONS, THE LANDSCAPE CONTRACTOR IS TO CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY.
- ALL UNDERGROUND UTILITIES ARE TO BE FIELD-VERIFIED PRIOR TO COMMENCEMENT OF WORK.

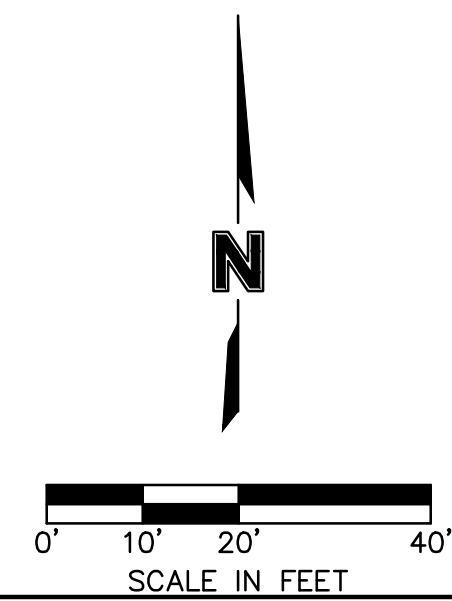
**olsson**  
 1717 Ingersoll Ave  
 Suite 111  
 Des Moines, IA 50309  
 TEL 515.331.6517  
 www.olsson.com

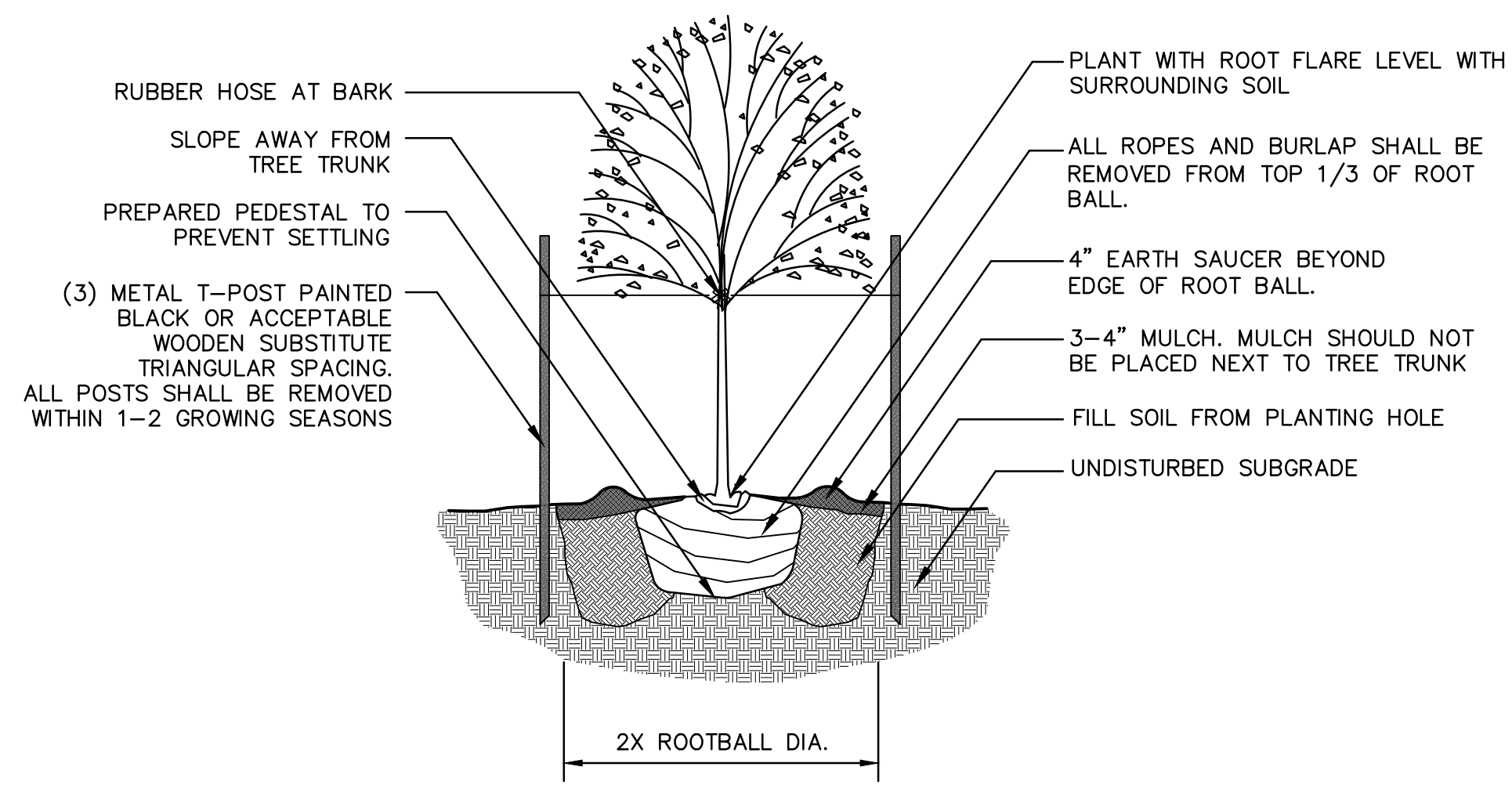
REV. NO.	DATE	REVISIONS DESCRIPTION

LANDSCAPE PLAN  
 SITE PLAN  
 PRIMUS DENTAL  
 1ST ST TERRACE  
 LANING, KS  
 2022

drawn by: RMG  
 checked by: ALF  
 approved by: BAF  
 QA/QC by: BAF  
 project no.: 022-02457  
 drawing no.: C\_LSC01\_02202457  
 date: 05.13.2022

**SHEET L1.0**

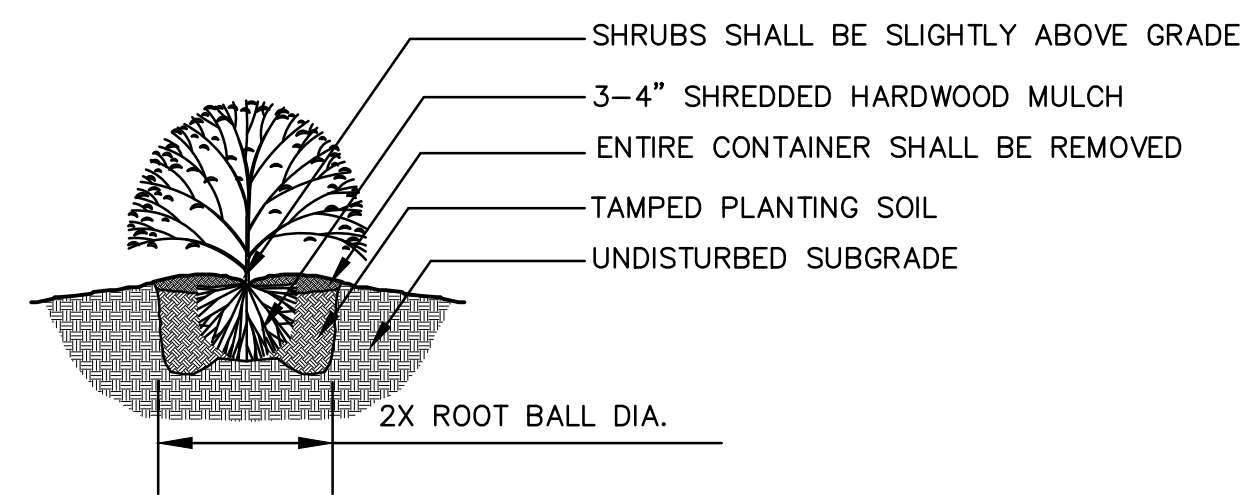




- NOTES:
1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING
  2. IN AREAS OF TURF, SURROUND BED WITH 6' DIAMETER OF MULCH

### 1 Deciduous Tree Planting Detail

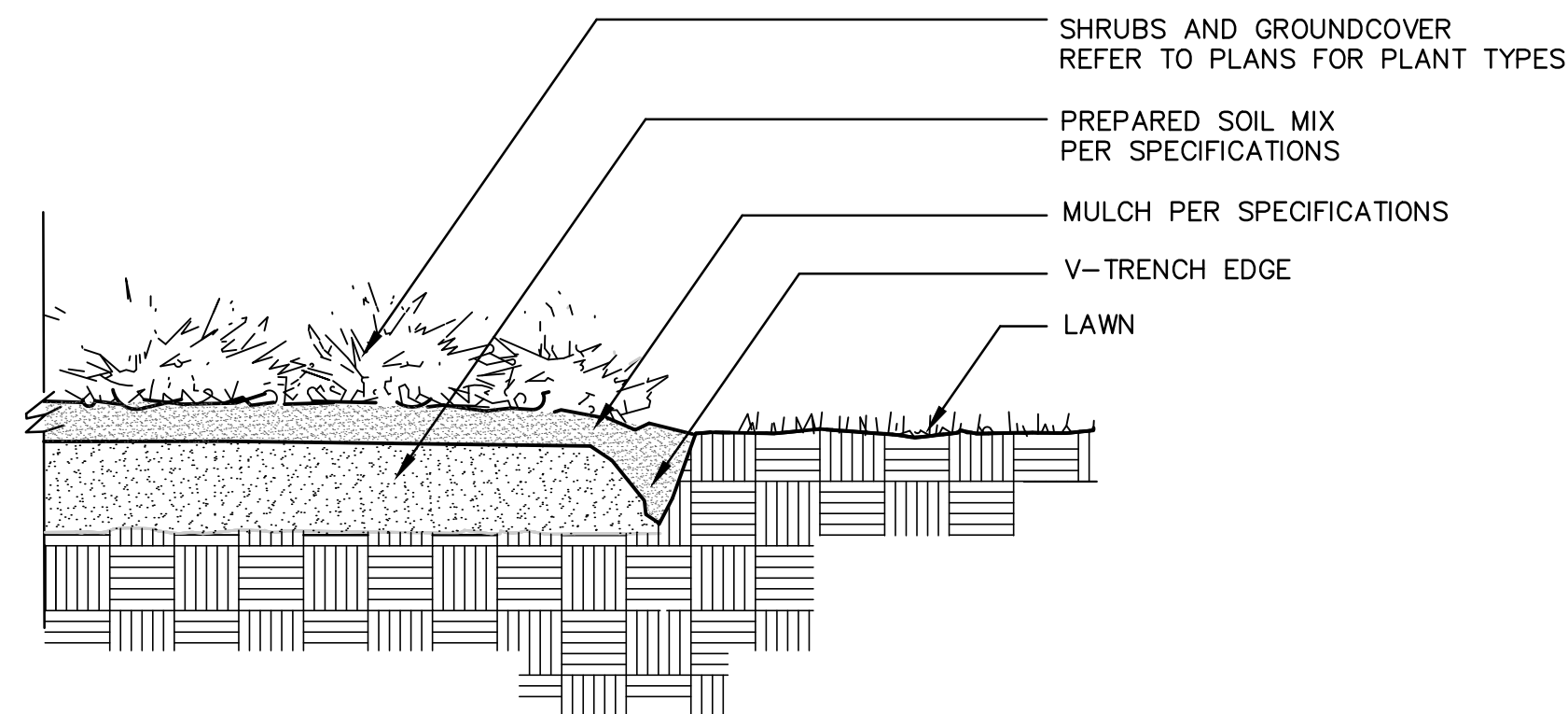
not to scale



- NOTES:
1. MINIMUM ROOT SPREAD TO BE IN ACCORDANCE WITH ANLA STANDARDS
  2. PRUNE DAMAGED LIMBS OR ROOTS AFTER INSTALLATION
  3. MAKE SURE ROOTS DO NOT DRY OUT DURING INSTALLATION
  4. SOAK GENEROUSLY TO COMPACT AND SETTLE

### 2 Shrub Planting Detail

not to scale



### 3 V-Trench Edging Detail

not to scale

### PLANTING NOTES

1. ALL WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES.
2. LOCATE AND FLAG ALL UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL PROTECT EXISTING OVERHEAD AND UNDERGROUND UTILITIES. ANY DAMAGE TO SUCH SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
3. PLANTS AND OTHER MATERIALS ARE QUANTIFIED AND SUMMARIZED FOR THE CONVENIENCE OF THE CITY AND LOCAL GOVERNING BODIES. CONFIRM AND INSTALL SUFFICIENT QUANTITIES TO COMPLETE THE WORK AS DRAWN.
4. PLAN IS SUBJECT TO CHANGES BASED ON PLANT SIZE AND MATERIAL AVAILABILITY. ALL CHANGES OR SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. ALL PLANT MATERIAL SHALL BE NURSERY GROWN TO MEET MINIMUM SIZE AS SPECIFIED IN THE AMERICAN STANDARD FOR NURSERY STOCK ESTABLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANLA). THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
6. ALL TREES SHALL BE CALIPERED AND ANY UNDERSIZED TREES SHALL BE REJECTED. SPECIFIED CALIPER MEASUREMENT FOR TREES SHALL BE MEASURED AT 12" ABOVE THE GRADE.
7. PLANTING OF TREES, SHRUBS, SODDED AND SEEDED TURFGRASS SHALL BE COMMENCED DURING EITHER THE SPRING (MARCH 15-JUNE 15) OR FALL (SEPTEMBER 1 - OCTOBER 15) PLANTING SEASON AND WITH WATER AVAILABLE FOR IRRIGATION PURPOSES.
8. CONTRACTOR SHALL STAKE OR MARK ALL PLANT MATERIAL LOCATIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL HAVE THE LANDSCAPE ARCHITECT APPROVE ALL STAKING PRIOR TO INSTALLATION. FIELD ADJUSTMENTS MAY BE NECESSARY BASED UPON FIELD CONDITIONS (I.E. ROOT BALL AND DROP INLET CONFLICT). ALL ADJUSTMENTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
9. THE LANDSCAPE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH PLANTING MIX.
10. A PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL SHRUB BEDS PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL.
11. BACKFILL ALL PLANTING BEDS TO A MINIMUM 12-INCH DEPTH WITH PLANTING SOIL MIX. PLANTING SOIL MIX SHALL CONSIST OF ONE (1) PART PERLITE, ONE (1) PART PEAT MOSS, AND TWO (2) PARTS CLEAN LOAM TOPSOIL. THOROUGHLY MIX PLANTING SOIL COMPONENTS PRIOR TO PLACEMENT.
12. ALL LANDSCAPE PLANTING AREAS, EXCLUDING TURF AREAS SHALL BE MULCHED WITH A MINIMUM OF 3-4" SHREDDED HARDWOOD MULCH UNLESS OTHERWISE NOTED ON PLANS.
13. CULTIVATED LANDSCAPE EDGING IS TO BE USED ON ALL LANDSCAPE BEDS ABUTTING SODDED OR SEEDED AREAS.
14. LANDSCAPE CONTRACTOR IS TO BE RESPONSIBLE FOR WATERING ALL PLANT MATERIALS UNTIL THE TIME THE PERMANENT IRRIGATION SYSTEM IS FULLY FUNCTIONAL AND ACCEPTANCE OF THE PROJECT HAS TAKEN PLACE. ANY MATERIAL WHICH DIES, OR DEFOLIATES (PRIOR TO ACCEPTANCE OF THE WORK) WILL BE PROMPTLY REMOVED AND REPLACED.
17. THE CONTRACTOR WILL COMPLETELY GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF ACCEPTANCE. CONTRACTOR WILL MAKE ALL REPLACEMENTS PROMPTLY (AS PER DIRECTION OF OWNER).

# olsson

1717 Ingersoll Ave  
Suite 111  
Des Moines, IA 50309  
www.olsson.com

REVISIONS DESCRIPTION

DATE

REV. NO.

REVISIONS

LANDSCAPE DETAILS & NOTES  
SITE PLAN

PRIMUS DENTAL  
1ST ST TERRACE

LANSSING, KS

2022

drawn by: RMG  
checked by: ALF  
approved by: BAF  
QA/QC by: BAF  
project no.: 022-02457  
drawing no.: C\_LSC02\_02202457  
date: 05.13.2022

SHEET  
L2.0

**D-Series Size 1 LED Area Luminaire**

**Specifications**

- EPA: 1.01 ft<sup>2</sup> (0.094 m<sup>2</sup>)
- Length: 33" (841 mm)
- Width: 13" (330 mm)
- Height H1: 7-1/2" (190 mm)
- Height H2: 3-1/2" (91 mm)
- Weight (max): 27 lbs (12.2 kg)

**Introduction**

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAR2 PIRHN DDBXD

Series	LEDs	Color temperature	Distribution	TSVS	Type V	Voltage	Mounting	Shipped included
DSX1 LED	Forward optics P1 P4 P7 P2 P5 P8 P3 P6 P9	30K 3000K 40K 4000K 50K 5000K	T1S Type I short T2S Type II short T3M Type III medium T4M Type IV medium TFTM Forward throw medium	TSVS Type V very short TSS Type V short TSM Type V medium TSW Type V wide TSL Type I short TSM Type II medium TSM Type III medium TSM Type IV medium TFTM Forward throw medium	TSVS Type V very short TSS Type V short TSM Type V medium TSW Type V wide TSL Type I short TSM Type II medium TSM Type III medium TSM Type IV medium TFTM Forward throw medium	MVOLT <sup>1</sup> XVOLT (277V-480V) <sup>1</sup>	SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPRMA Square pole universal mounting adapter RPRMA Round pole universal mounting adapter	Shipped separately KXMB DDBXD U Max arm mounting bracket adaptor (specify finish) <sup>1</sup>

Control options	Other options	Finish
<b>Shipped installed</b> NLTAR2 High-tilt projection <sup>1</sup> enabled <sup>1</sup> PIRHN Network, high-flow motion/ambient sensor <sup>1</sup> PER NEMA two-lock receptacle only (orders ordered separately) <sup>1</sup> PERK Five pin receptacle only (orders ordered separately) <sup>1</sup> PERV Seven pin receptacle only (orders ordered separately) <sup>1</sup> DWG 0-10v dimming wires pulled outside fixture for use with an external control, ordered separately <sup>1</sup> DS Dual switching <sup>1</sup>	PIR High-flow, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 16" <sup>1</sup> PIRHN High-flow, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 16" <sup>1</sup> PIRKFCV High-flow, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 16" <sup>1</sup> PIRKFCVW Hi-beat, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 16" <sup>1</sup> FAD Field adjustable output <sup>1</sup>	DDBD Dark bronze DBD Black DNAD Natural aluminum DWHD White DDBTD Textured dark bronze DBDSD Textured black DNADTD Textured natural aluminum DWHDW Textured white

LITHONIA LIGHTING COMMERCIAL OUTDOOR

One Lithonia Way • Cary, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com

DSX1 LED Rev. 1/15/20 © 2011-2020 Acuity Brands Lighting, Inc. All rights reserved.

Page 1 of 8

**LITHONIA LIGHTING**

**FEATURES & SPECIFICATIONS**

**INTENDED USE** - These specifications are for USA standards only. Square Straight Steel is a general purpose light pole for up to 30-foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

**CONSTRUCTION** - Pole Shaft: The pole shaft is of uniform dimension and wall thickness and is made of a weldable grade, hot rolled, commercial quality steel tubing with a minimum yield of 55 KSI (11-gauge, 1196), or 50 KSI (7-gauge, 1793). Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available dual welds are 4", 5" and 6".

**Pole Top:** A flush non-metallic black top cap is provided for all poles that will receive drilling patterns for side-mount luminaire arm assemblies or when ordered with PF option.

**Handhole:** A reinforced handhole with grounding provision is provided at 18" from the base on side A. Positioning the handhole lower may not be possible and requires engineering review; consult Tech Support Outdoor for further information. Every handhole includes a cover and cover attachment hardware. The handhole has a nominal dimension of 2.5" x 5".

**Base Cover:** A durable ABS plastic two-piece full base cover, finished to match the pole, is provided with each pole assembly. Additional base cover options are available upon request.

**Anchor Base/Bolts:** Anchor base is fabricated from steel that meets ASTM A36 standards and can be altered to match existing foundations; consult factory for modifications. Anchor bolts are manufactured to ASTM F1554 Standards grade 55, 55 KSI minimum yield strength and tensile strength of 75-95 KSI. Top threaded portion (nominal 12") is hot-dipped galvanized per ASTM A-153.

**HARDWARE** - All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

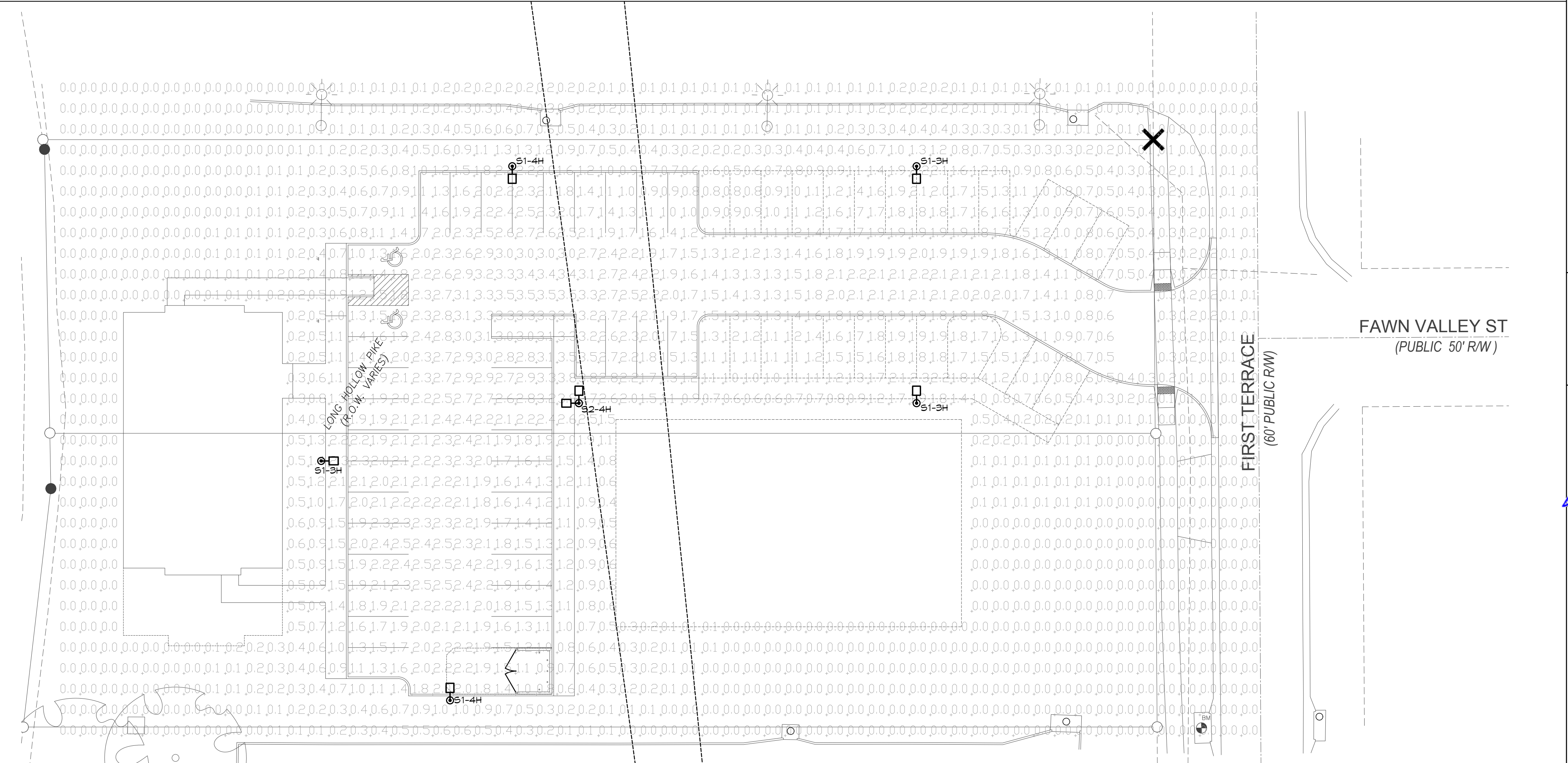
**FINISH** - Extra durable standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Hot-dipped Galvanized, Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes. Factory applied primer paint finish is available for customer field paint applications.

**WARRANTY** - 1-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**NOTE:** Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

See fasteners next page.

OUTDOOR POLE-SSS

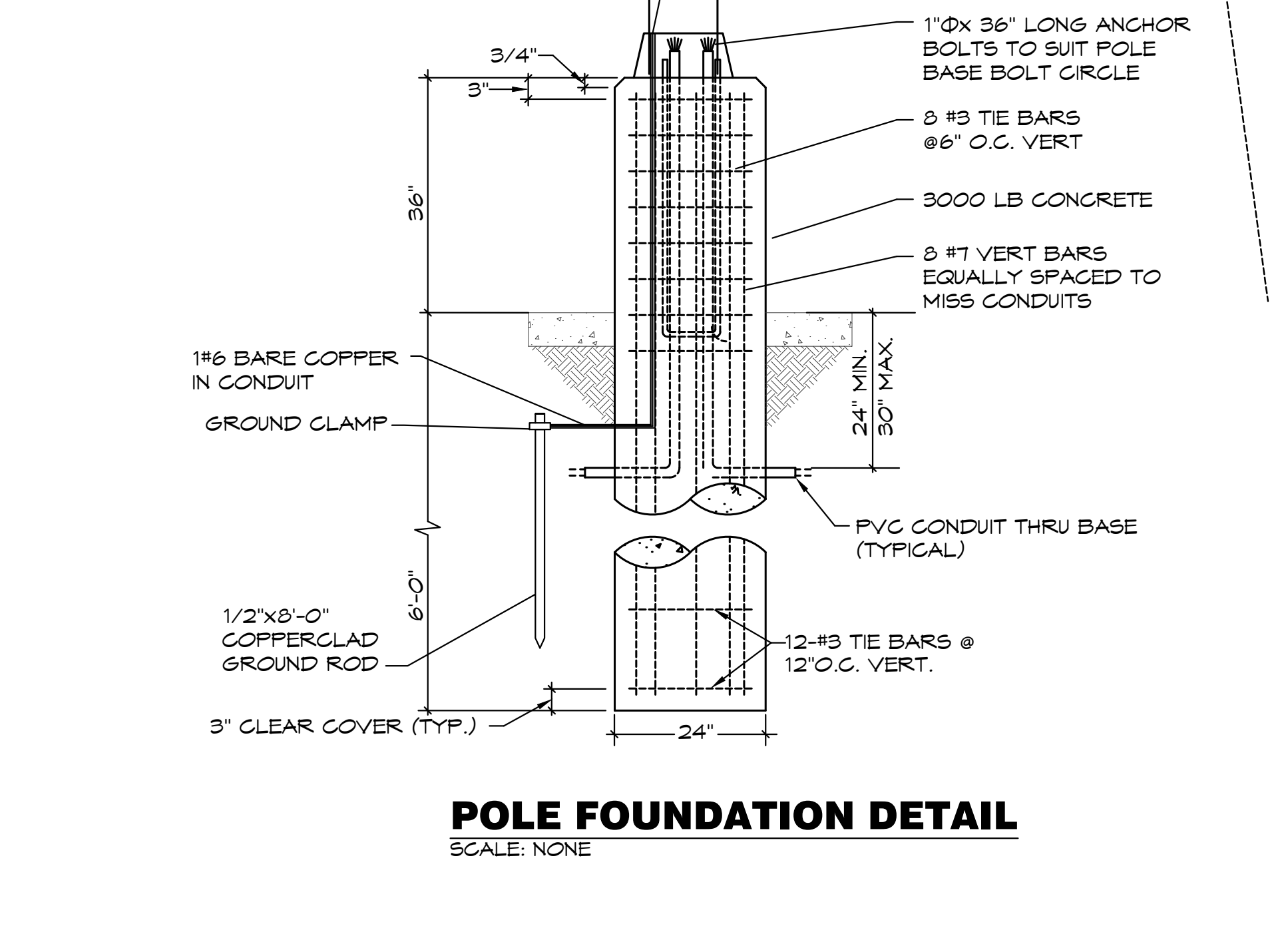


**SITE PHOTOMETRIC PLAN**

NORTH SCALE: 1"=20'

**LIGHT FIXTURE SCHEDULE**

MARK NO.	MANUFACTURER & CATALOG NUMBER	VOLTS WATTS	LIGHT SOURCE	DESCRIPTION	EQUIVALENT MANUFACTURERS
S1-3H	LITHONIA DSX1-P2-40K-T3M-MVOLT-SPA-DDBXD-HS W/ SSS-20-4C-DM19AS-VD-DDBXD POLE	120 70	LED 4000K 9000 LUMS	POLE MOUNTED LED FIXTURE WITH TYPE 3 DISTRIBUTION, BRONZE FINISH. FIXTURE TO BE MOUNTED ON 20' SQUARE STEEL POLE W/ BRONZE FINISH AND VIBRATION DAMPER ON 3' CONCRETE BASE. SEE POLE BASE DETAIL ON THIS SHEET. HOUSE SIDE SHIELD	OR EQUAL APPROVED BY ARCH/ENGINEER
S1-4H	LITHONIA DSX1-P2-40K-TFTM-MVOLT-SPA-DDBXD-HS W/ SSS-20-4C-DM19AS-VD-DDBXD POLE	120 70	LED 4000K 9000 LUMS	POLE MOUNTED LED FIXTURE WITH TYPE 4 DISTRIBUTION, BRONZE FINISH. FIXTURE TO BE MOUNTED ON 20' SQUARE STEEL POLE W/ BRONZE FINISH AND VIBRATION DAMPER ON 3' CONCRETE BASE. SEE POLE BASE DETAIL ON THIS SHEET. HOUSE SIDE SHIELD	OR EQUAL APPROVED BY ARCH/ENGINEER
S2-4H	LITHONIA (2)DSX1-P2-40K-TFTM-MVOLT-SPA-DDBXD-HS W/ SSS-20-4C-DM29AS-VD-DDBXD POLE	120 140	LED 4000K 9000 LUMS EACH	(2) POLE MOUNTED LED FIXTURES (90° ORIENTATION) WITH TYPE 4 DISTRIBUTION, BRONZE FINISH. FIXTURE TO BE MOUNTED ON 20' SQUARE STEEL POLE W/ BRONZE FINISH AND VIBRATION DAMPER ON 3' CONCRETE BASE. SEE POLE BASE DETAIL ON THIS SHEET. HOUSE SIDE SHIELD	OR EQUAL APPROVED BY ARCH/ENGINEER



BC PROJECT #22303 KANSAS PE COA #E-359

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5/13/2022

REGISTERED PROFESSIONAL ENGINEER

M. BECKMANN

KANSAS

26301

**Lansing Dental Office**

Lansing, KS

**REVISION**


21120  
05-13-2022

**PH-1**

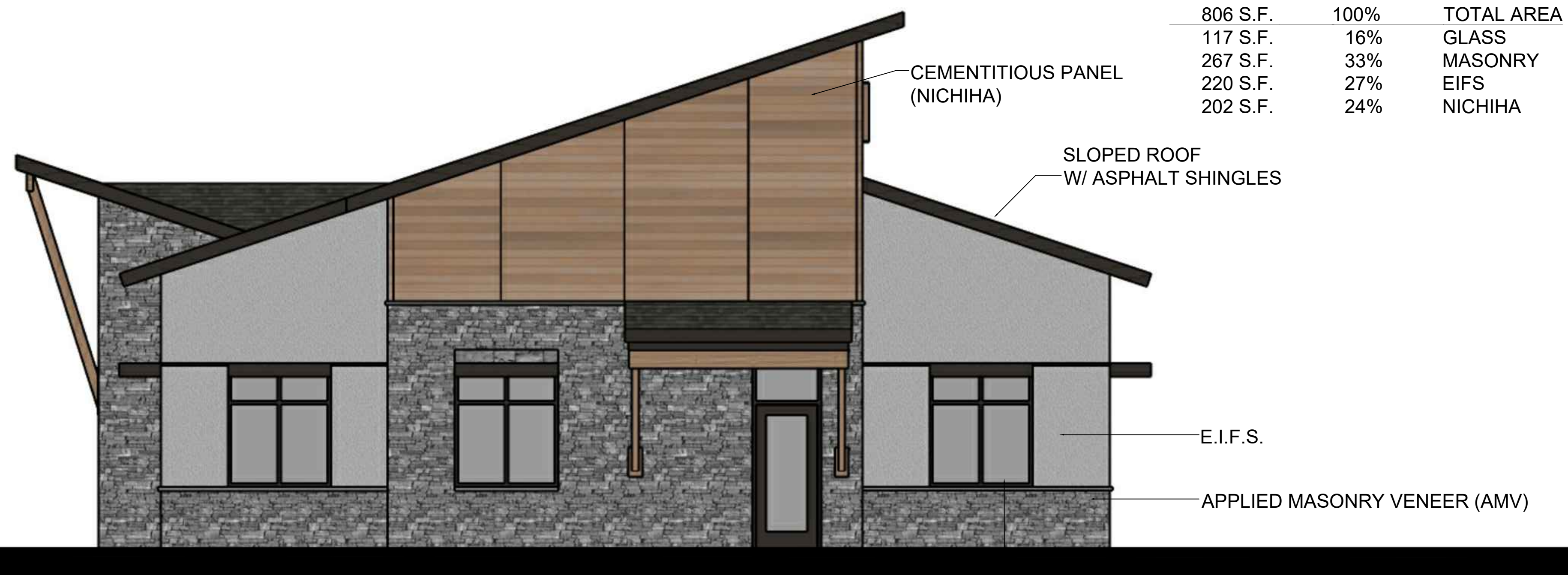
1,086 S.F.	100%	TOTAL AREA	CLEAR GLASS IN DARK BRONZE ALUMINUM FRAMES APPLIED MASONRY VENEER EXTERIOR INSULATION FINISH SYSTEM CEMENTITIOUS PANEL (WOOD LOOK)
249 S.F.	23%	GLASS	
227 S.F.	21%	MASONRY	
590 S.F.	54%	EIFS	
20 S.F.	2%	NICHIHA	



**EAST ELEVATION**  
NO SCALE

NOTE:  
THESE ELEVATIONS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF LANSING'S ARCHITECTURAL DESIGN STANDARDS AND THE APPROVAL OF THE PLANNING COMMISSION / CITY OF LANSING. CHANGES SHALL NOT BE MADE TO THE APPROVED ELEVATIONS UNLESS APPROVED BY THE LOCAL JURISDICTION.

ALUMINUM FRAMED  
WINDOWS



806 S.F.	100%	TOTAL AREA	CLEAR GLASS IN DARK BRONZE ALUMINUM FRAMES APPLIED MASONRY VENEER EXTERIOR INSULATION FINISH SYSTEM CEMENTITIOUS PANEL (WOOD LOOK)
117 S.F.	16%	GLASS	
267 S.F.	33%	MASONRY	
220 S.F.	27%	EIFS	
202 S.F.	24%	NICHIHA	

**NORTH ELEVATION**  
NO SCALE

NOTE:  
THESE ELEVATIONS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF LANSING'S ARCHITECTURAL DESIGN STANDARDS AND THE APPROVAL OF THE PLANNING COMMISSION / CITY OF LANSING. CHANGES SHALL NOT BE MADE TO THE APPROVED ELEVATIONS UNLESS APPROVED BY THE LOCAL JURISDICTION.

ALUMINUM FRAMED  
WINDOWS



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# Lansing Dental Office Lansing, KS

REVISION


COLOR  
ELEVATIONS

RM  
21120  
04.28.2022

AC001







May 16th, 2022

City of Lansing, KS  
Community & Economic Development Department  
800 First Terrace  
Lansing, KS 66043

**Re: Stormwater Letter – Primus Dental**

To Whom It May Concern:

We are submitting this letter on behalf of Primus Companies for the proposed development of a parcel of land located on 1<sup>st</sup> st Terrace in Lansing, KS. The purpose of this letter is to provide compliance with the city’s storm water discharge criteria, and compliance with the previously approved stormwater Management Studies performed by GBA and EBH for the regional detention. This report follows the design requirements of the Lansing Design Criteria for Storm Drainage Facilities.

The following exhibits are attached for your reference:

- Exhibit A – Existing Conditions
- Exhibit B – Proposed Conditions
- Exhibit C – Storm Water Calculations

**Existing Drainage Conditions:**

The existing site is approximately 1.26 acres of a temporarily undeveloped lot (*See Exhibit A*). The existing site topography generally slopes to the east, and runoff is directed into first terrace where it eventually is routed into the existing storm sewer along the street. An existing 36” RCP directs flow into our site from the west side of Hwy 7. There is no information for the flows from this existing pipe however there are no proposed modifications to the pipe, and it shall remain as is in the proposed conditions. The pre-developed site was assigned a “C” value of 0.65. The existing site drainage conditions are summarized in the table below. (*See Exhibit C*).

Table 1 – Existing Conditions Hydrologic Parameters

Drainage Area	Area (acres)	C	Tc (min)
On site	1.26	0.65	5
Offsite	0.16	0.30	5

Table 2 – Summary of Existing Onsite Flows

Drainage Area	Q <sub>10</sub> (cfs)	Q <sub>25</sub> (cfs)	Q <sub>100</sub> (cfs)
Outfall A	6.28	7.15	8.52

**Proposed Conditions:**

The proposed overall development of the site will be medical office use and contain a new building and associated parking and utilities. Future improvements include an additional building and parking. The proposed impervious area of the overall development, including future improvements, will be 0.72 acres, which is a 57% increase. This is in conformance with the previous report prepared by GBA, with an assumed increase area of 80% (C=0.80) for Heavy Industrial Areas. The proposed improvements will increase the impervious area on site, and therefore increase the runoff volumes as shown in Table 4 (See Exhibit B). The proposed site topography will mimic the existing site and direct water to the east where a portion of the site will flow into First Terrace, and another portion to be captured by storm inlet and routed to the existing storm sewer along First Terrace. The existing 36" RCP discharge will be routed overland by swale along the north property line and into a proposed area inlet and into the existing storm sewer. During larger storm events the area inlet will overflow into First Terrace. The proposed development was assigned a "C" value of 0.80 for Heavy Industrial, which is in conformance with the previously approved drainage reports prepared by GBA and EBH. The proposed site drainage conditions are summarized in the table below. (See Exhibit C).

Table 3 – Proposed Overall Conditions Hydrologic Parameters

Drainage Area	Area (acres)	C	Tc (min)
On site	1.26	0.80	5
Offsite	0.16	0.16	5

Table 4 – Summary of Proposed Onsite Flows

Drainage Area	Q <sub>10</sub> (cfs)	Q <sub>25</sub> (cfs)	Q <sub>100</sub> (cfs)
Outfall A	7.65	8.71	10.38

**Stormwater Detention:**

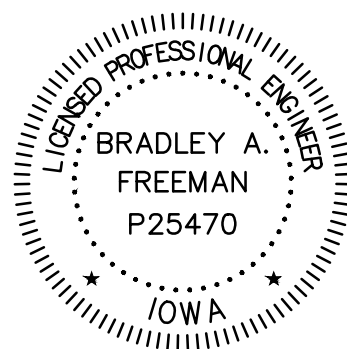
The proposed development detention is provided by an existing pond to the southeast of the development. The pond was designed to accommodate these proposed improvements. Per the conditions noted above for the assumed increase of impervious area, there are no recommendations to modify the existing detention pond.

**Conclusions:**

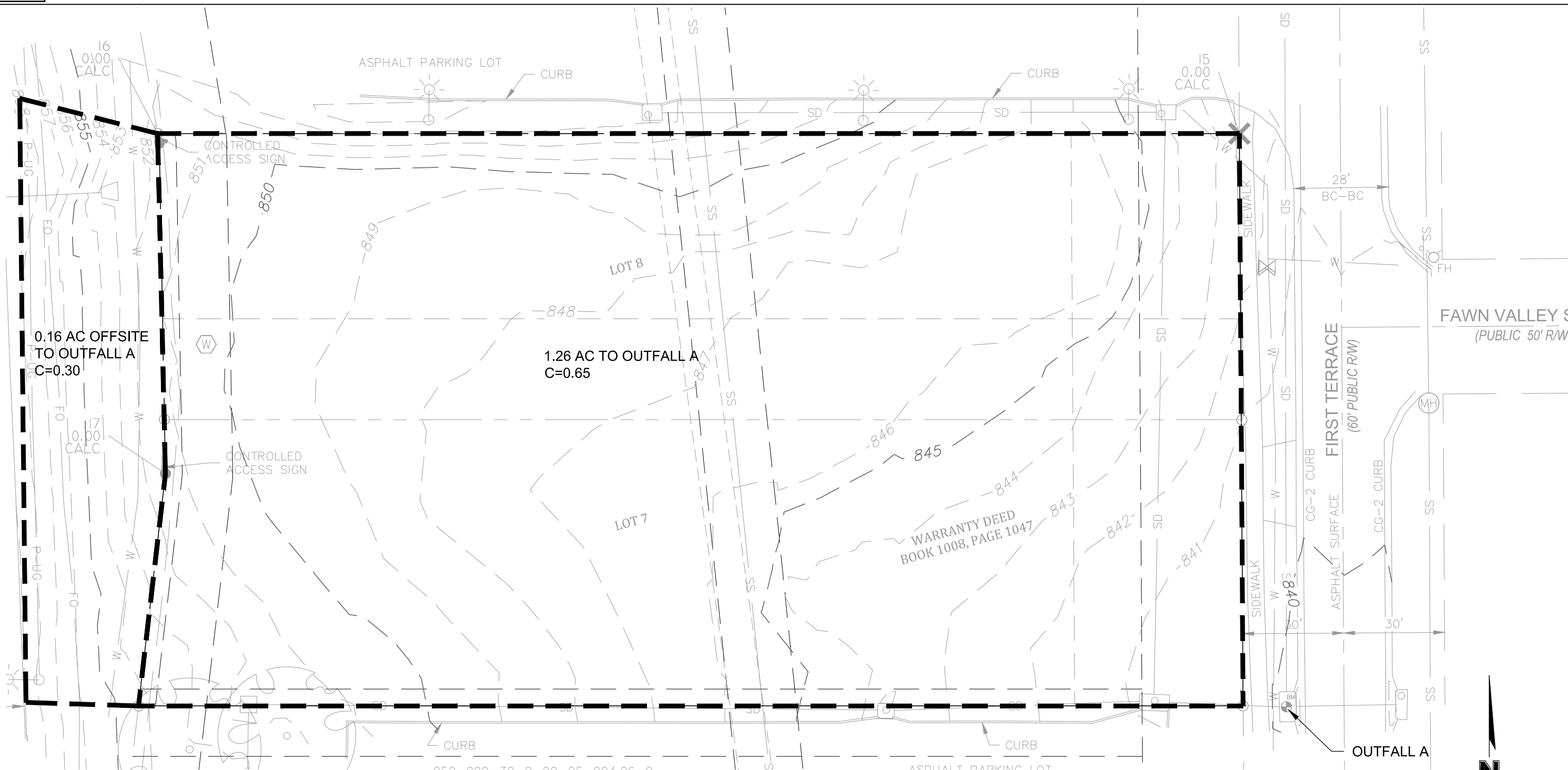
The proposed improvements shall be constructed in accordance with the City of Lansing's Engineering Design Criteria. The stormwater discharge from the proposed development will not exceed the design capacities of the adjacent public storm sewer systems or regional detention.

Based on the information provided herein, we request your approval of this storm drainage Letter. If you have any questions or comments or need additional information, please do not hesitate to call me at (515) 867-2755 or via e-mail at bfreeman@olsson.com.

Sincerely,  
**OLSSON**  
  
 Bradley Freeman, PE  
 Project Engineer

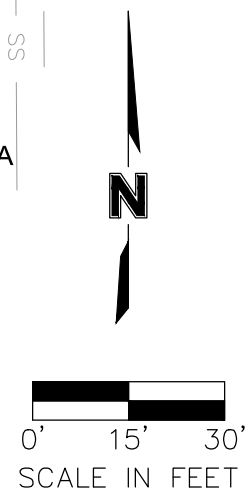


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DATE: May 12, 2022 10:19am XREFS: C\_XBASE\_02202457 C\_PBASE\_02202457



**LEGEND**

--- DRAINAGE BOUNDARY



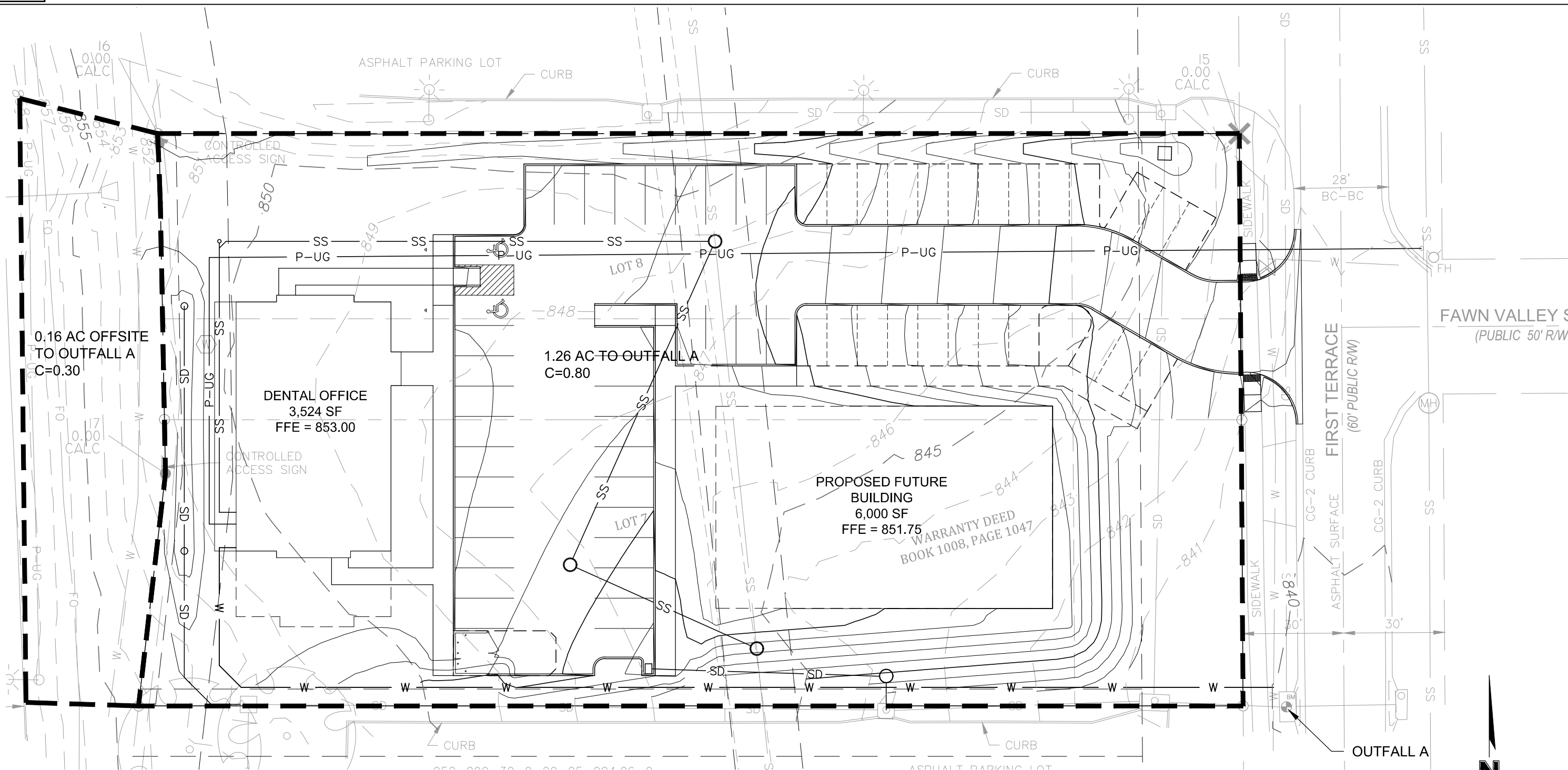
PROJECT NO:	022-02457
DRAWN BY:	BF
DATE:	5/11/2022

**EXISTING CONDITIONS**

**olsson** 7157 Vista Drive  
West Des Moines, IA 50266  
TEL 515.331.6517

EXHIBIT
A

DWG: F:\2022\02001-02500\022-02457\40-Design\Reports\GNCV\EXHB.dwg USER: bfreeman  
 DATE: May 12, 2022 10:21am XREFS: C\_XBASE\_02202457 C\_PBASE\_02202457



**LEGEND**

--- DRAINAGE BOUNDARY



PROJECT NO: 022-02457

DRAWN BY: BF

DATE: 5/11/2022

**PROPOSED CONDITIONS**

**olsson**

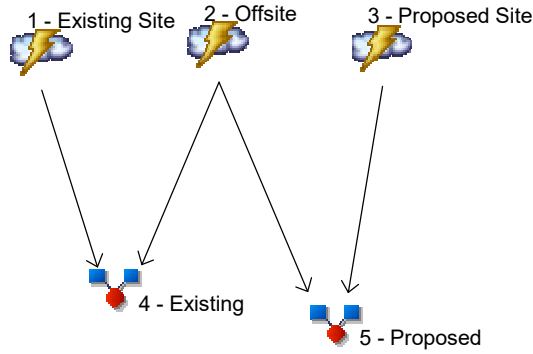
7157 Vista Drive  
 West Des Moines, IA 50266  
 TEL 515.331.6517

EXHIBIT

**B**

# Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022



## Legend

Hyd. Origin	Description
1 Rational	Existing Site
2 Rational	Offsite
3 Rational	Proposed Site
4 Combine	Existing
5 Combine	Proposed

**Watershed Model Schematic..... 1**

**Hydrograph Return Period Recap..... 2**

**10 - Year**

**Summary Report..... 3**

**Hydrograph Reports..... 4**

        Hydrograph No. 1, Rational, Existing Site..... 4

        Hydrograph No. 2, Rational, Offsite..... 5

        Hydrograph No. 3, Rational, Proposed Site..... 6

        Hydrograph No. 4, Combine, Existing..... 7

        Hydrograph No. 5, Combine, Proposed..... 8

**25 - Year**

**Summary Report..... 9**

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        Hydrograph No. 1, Rational, Existing Site..... 10

        Hydrograph No. 2, Rational, Offsite..... 11

        Hydrograph No. 3, Rational, Proposed Site..... 12

        Hydrograph No. 4, Combine, Existing..... 13

        Hydrograph No. 5, Combine, Proposed..... 14

**100 - Year**

**Summary Report..... 15**

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        Hydrograph No. 1, Rational, Existing Site..... 16

        Hydrograph No. 2, Rational, Offsite..... 17

        Hydrograph No. 3, Rational, Proposed Site..... 18

        Hydrograph No. 4, Combine, Existing..... 19

        Hydrograph No. 5, Combine, Proposed..... 20

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# Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	Rational	----	----	----	----	----	5.937	6.753	----	8.052	Existing Site
2	Rational	----	----	----	----	----	0.348	0.396	----	0.472	Offsite
3	Rational	----	----	----	----	----	7.307	8.311	----	9.910	Proposed Site
4	Combine	1, 2,	----	----	----	----	6.284	7.149	----	8.524	Existing
5	Combine	2, 3,	----	----	----	----	7.654	8.707	----	10.38	Proposed



# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	5.937	1	5	1,781	----	----	----	Existing Site
2	Rational	0.348	1	5	104	----	----	----	Offsite
3	Rational	7.307	1	5	2,192	----	----	----	Proposed Site
4	Combine	6.284	1	5	1,885	1, 2,	----	----	Existing
5	Combine	7.654	1	5	2,296	2, 3,	----	----	Proposed

# Hydrograph Report

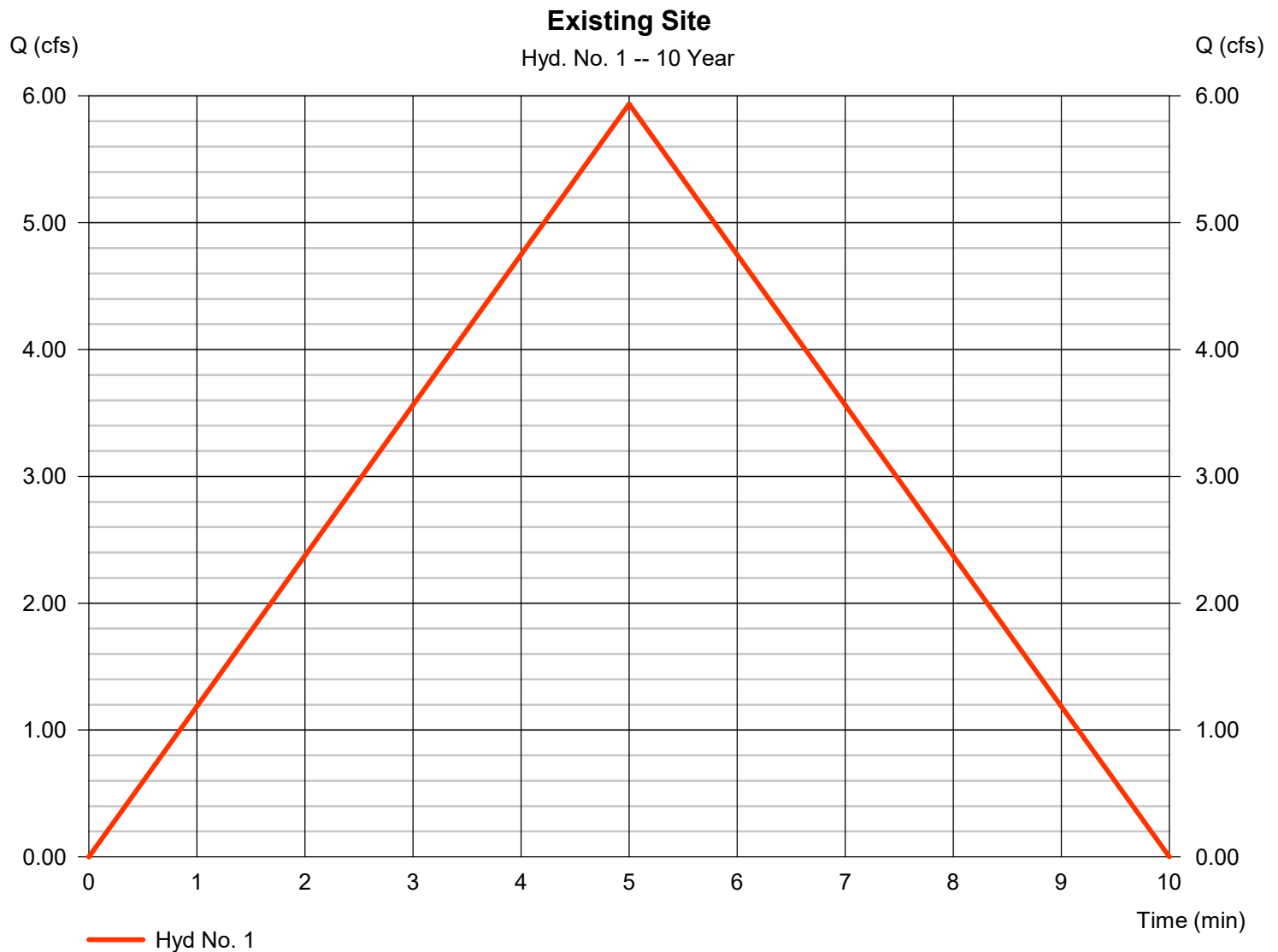
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 1

### Existing Site

Hydrograph type	= Rational	Peak discharge	= 5.937 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 1,781 cuft
Drainage area	= 1.260 ac	Runoff coeff.	= 0.65
Intensity	= 7.249 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

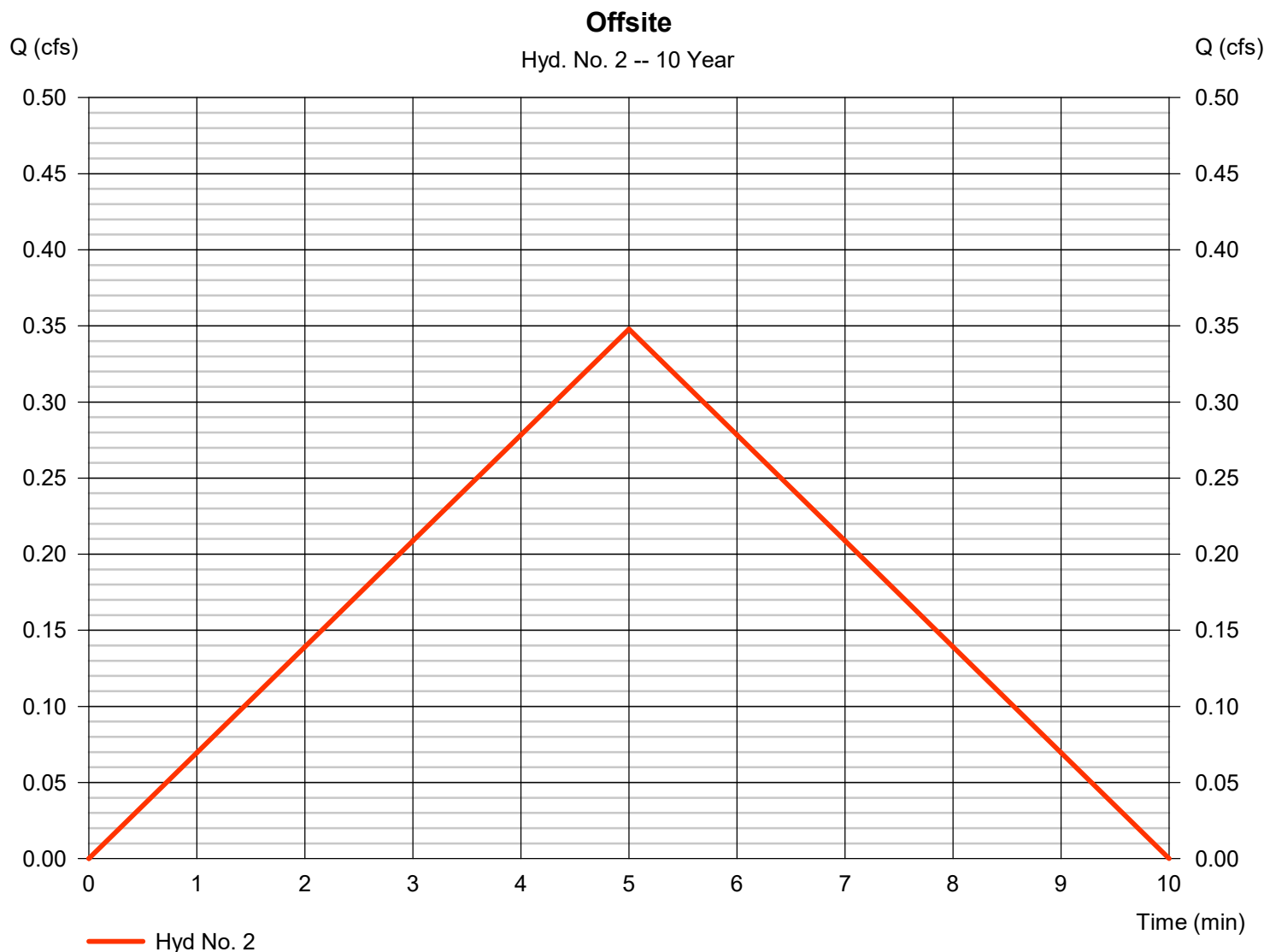
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 2

Offsite

Hydrograph type	= Rational	Peak discharge	= 0.348 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 104 cuft
Drainage area	= 0.160 ac	Runoff coeff.	= 0.3
Intensity	= 7.249 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 3

### Proposed Site

Hydrograph type	= Rational	Peak discharge	= 7.307 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,192 cuft
Drainage area	= 1.260 ac	Runoff coeff.	= 0.8
Intensity	= 7.249 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

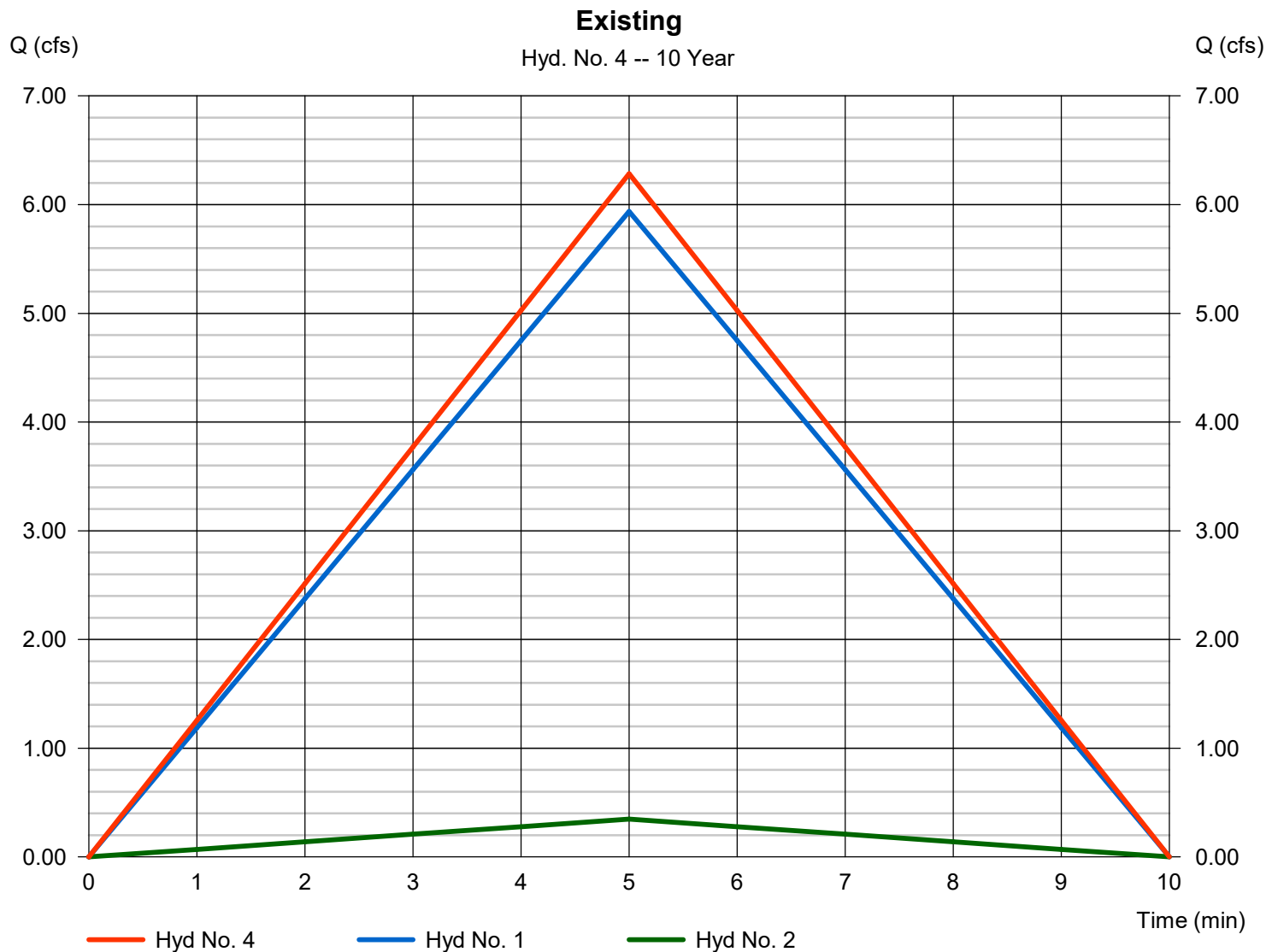
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 4

Existing

Hydrograph type	= Combine	Peak discharge	= 6.284 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 1,885 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 1.420 ac



# Hydrograph Report

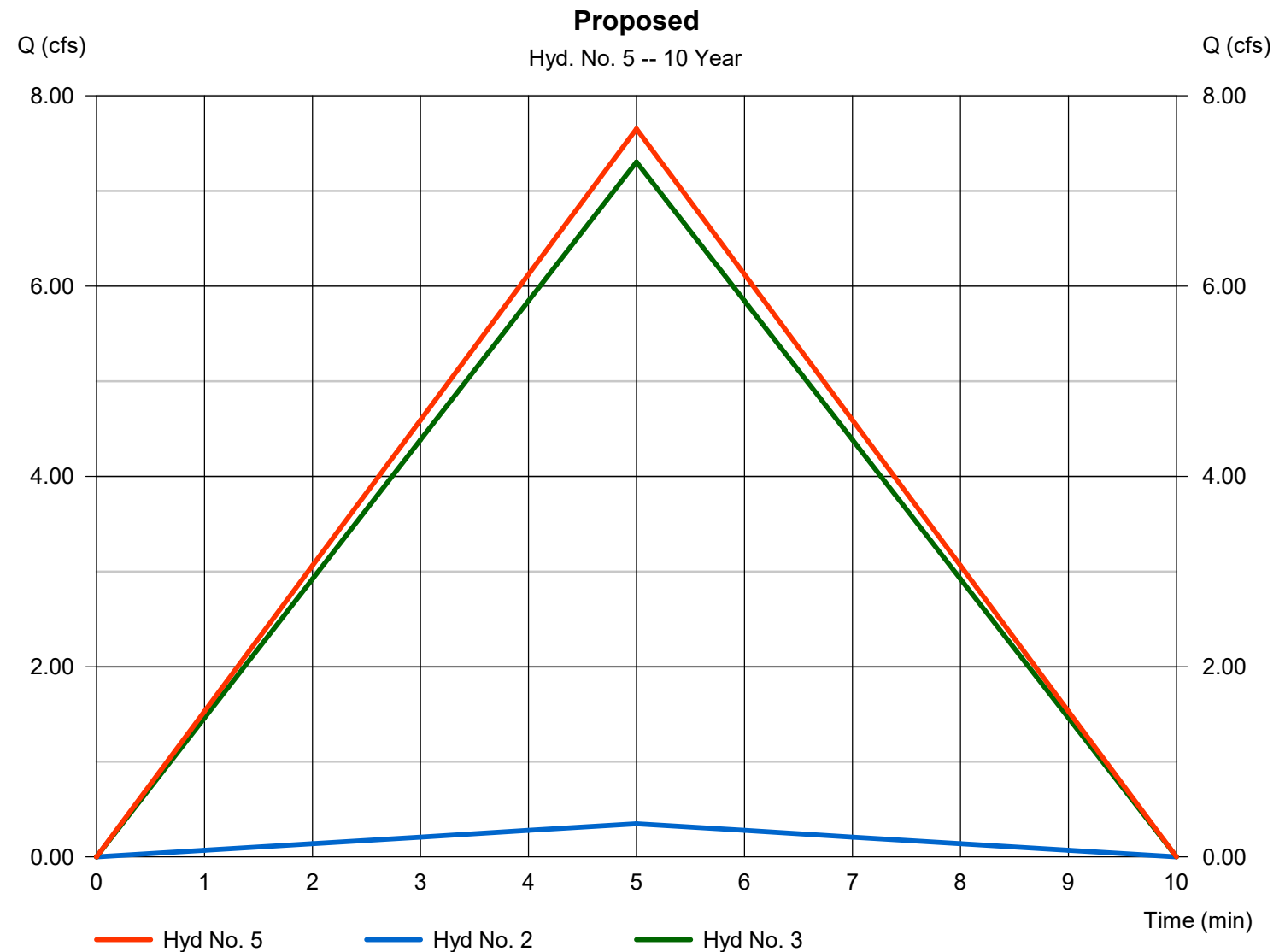
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 5

Proposed

Hydrograph type	= Combine	Peak discharge	= 7.654 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,296 cuft
Inflow hyds.	= 2, 3	Contrib. drain. area	= 1.420 ac



# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	6.753	1	5	2,026	----	----	----	Existing Site
2	Rational	0.396	1	5	119	----	----	----	Offsite
3	Rational	8.311	1	5	2,493	----	----	----	Proposed Site
4	Combine	7.149	1	5	2,145	1, 2,	----	----	Existing
5	Combine	8.707	1	5	2,612	2, 3,	----	----	Proposed

# Hydrograph Report

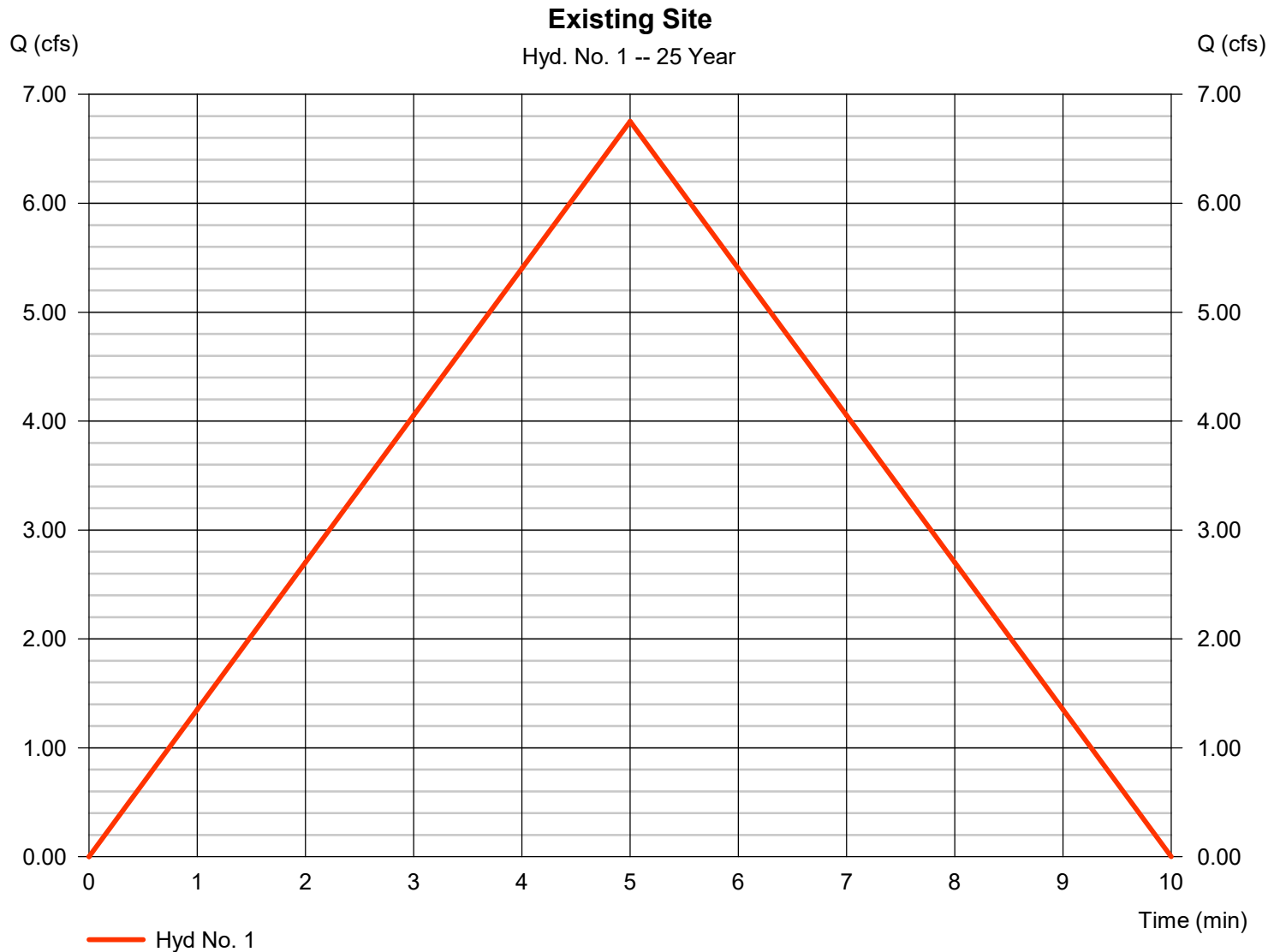
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 1

### Existing Site

Hydrograph type	= Rational	Peak discharge	= 6.753 cfs
Storm frequency	= 25 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,026 cuft
Drainage area	= 1.260 ac	Runoff coeff.	= 0.65
Intensity	= 8.245 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1





# Hydrograph Report

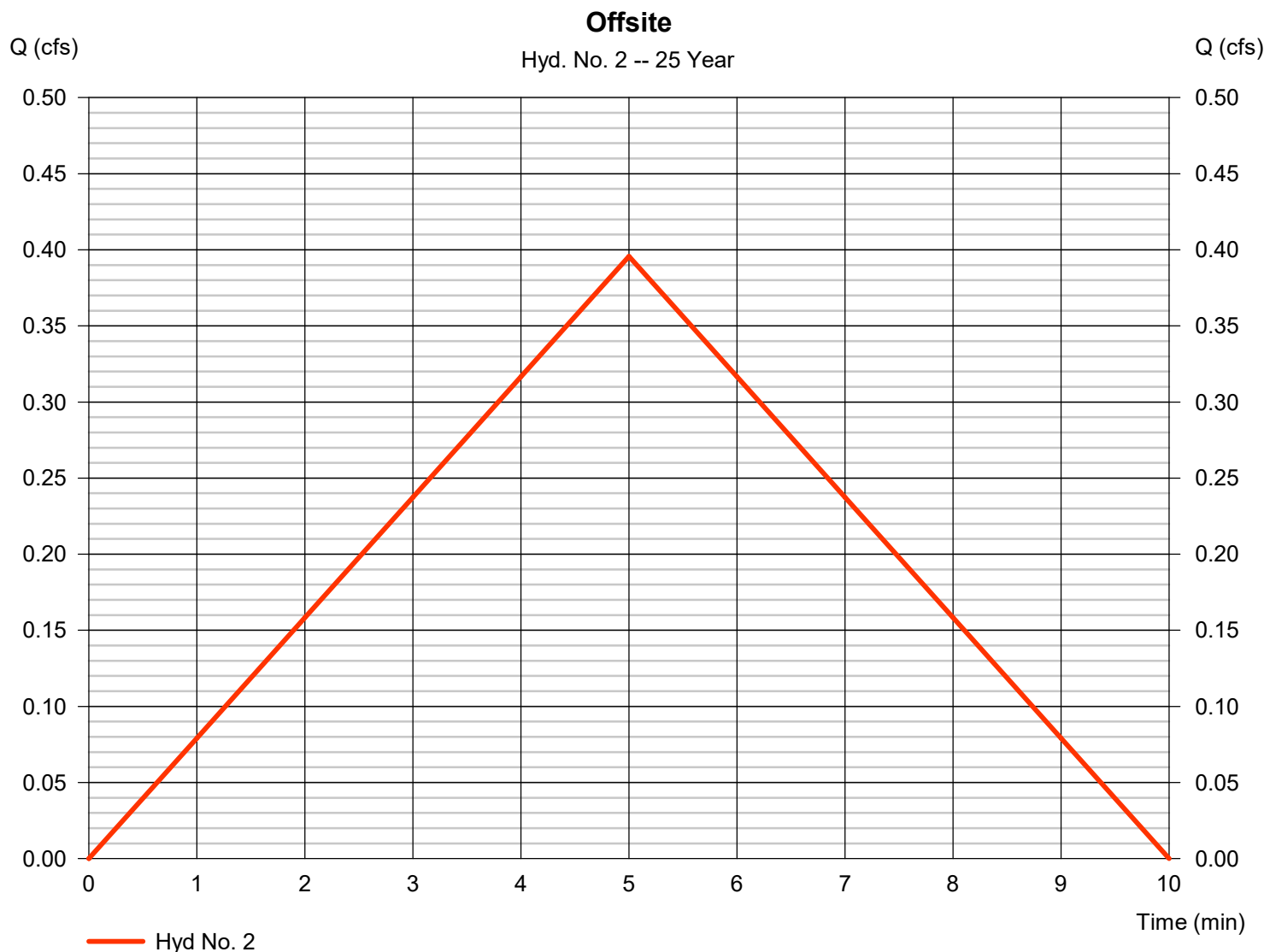
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 2

### Offsite

Hydrograph type	= Rational	Peak discharge	= 0.396 cfs
Storm frequency	= 25 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 119 cuft
Drainage area	= 0.160 ac	Runoff coeff.	= 0.3
Intensity	= 8.245 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

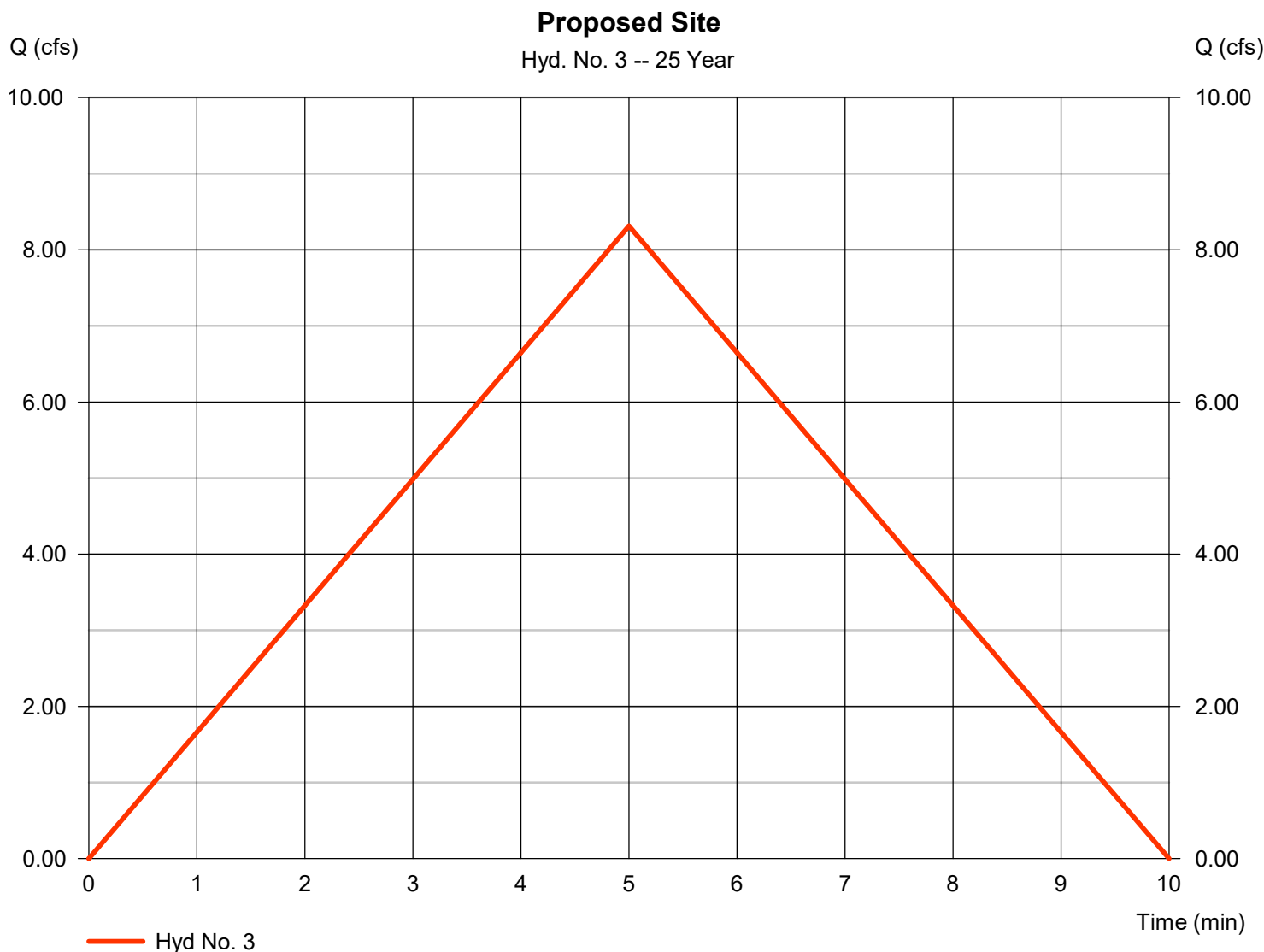
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 3

### Proposed Site

Hydrograph type	= Rational	Peak discharge	= 8.311 cfs
Storm frequency	= 25 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,493 cuft
Drainage area	= 1.260 ac	Runoff coeff.	= 0.8
Intensity	= 8.245 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

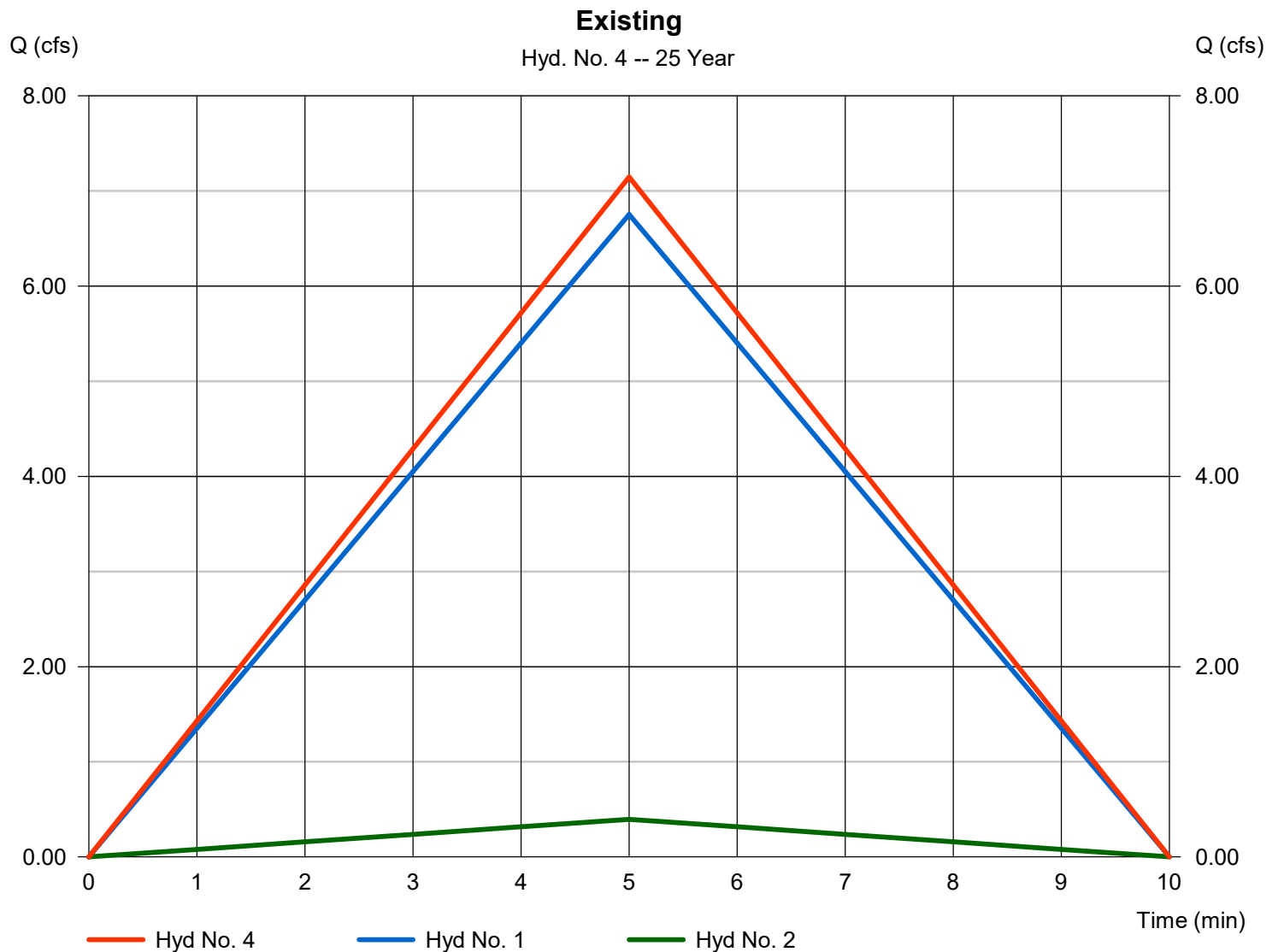
Thursday, 05 / 12 / 2022

## Hyd. No. 4

Existing

Hydrograph type = Combine  
 Storm frequency = 25 yrs  
 Time interval = 1 min  
 Inflow hyds. = 1, 2

Peak discharge = 7.149 cfs  
 Time to peak = 5 min  
 Hyd. volume = 2,145 cuft  
 Contrib. drain. area = 1.420 ac



# Hydrograph Report

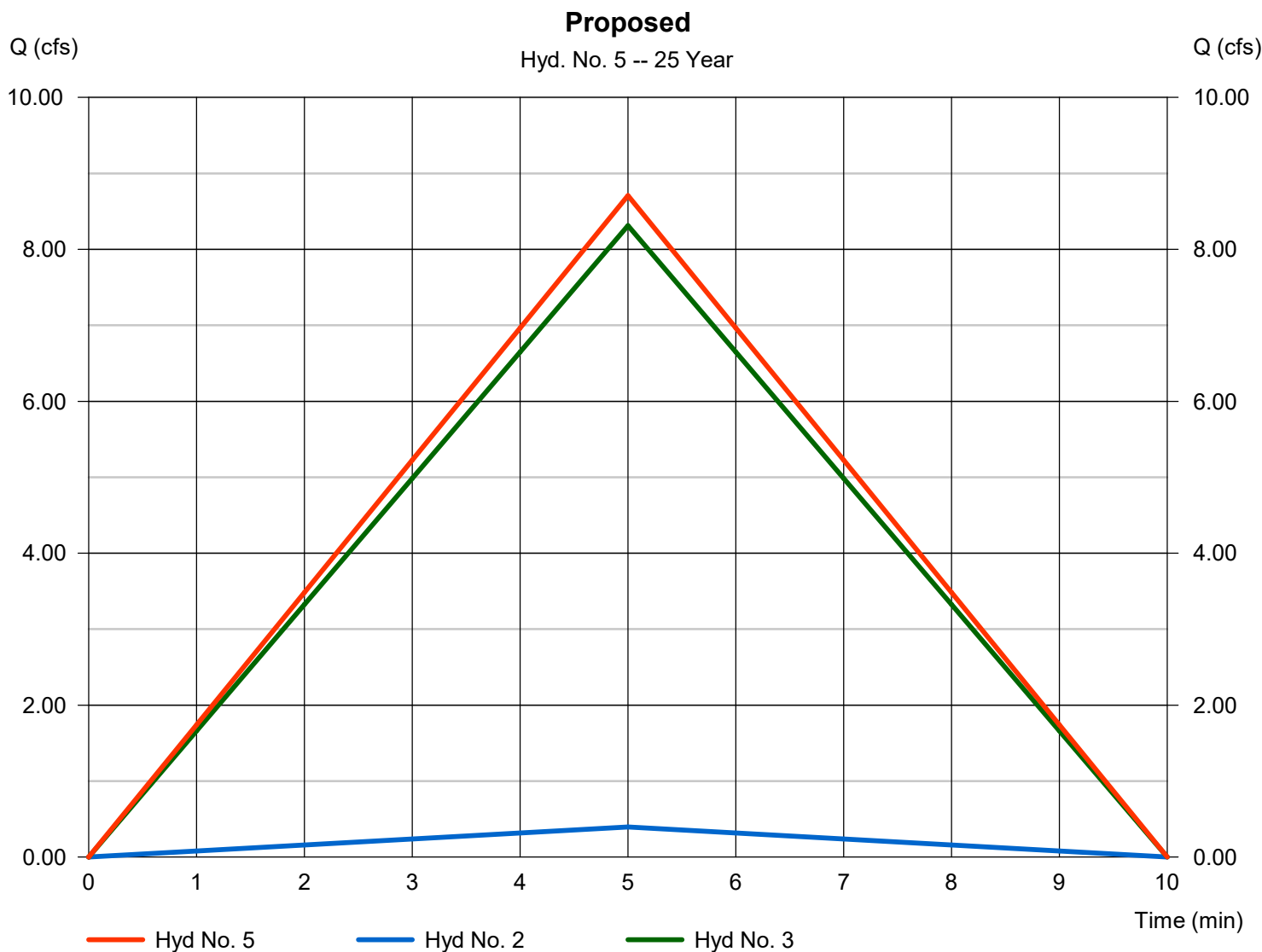
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 5

Proposed

Hydrograph type	= Combine	Peak discharge	= 8.707 cfs
Storm frequency	= 25 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,612 cuft
Inflow hyds.	= 2, 3	Contrib. drain. area	= 1.420 ac



# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	8.052	1	5	2,416	----	----	----	Existing Site
2	Rational	0.472	1	5	142	----	----	----	Offsite
3	Rational	9.910	1	5	2,973	----	----	----	Proposed Site
4	Combine	8.524	1	5	2,557	1, 2,	----	----	Existing
5	Combine	10.38	1	5	3,115	2, 3,	----	----	Proposed

# Hydrograph Report

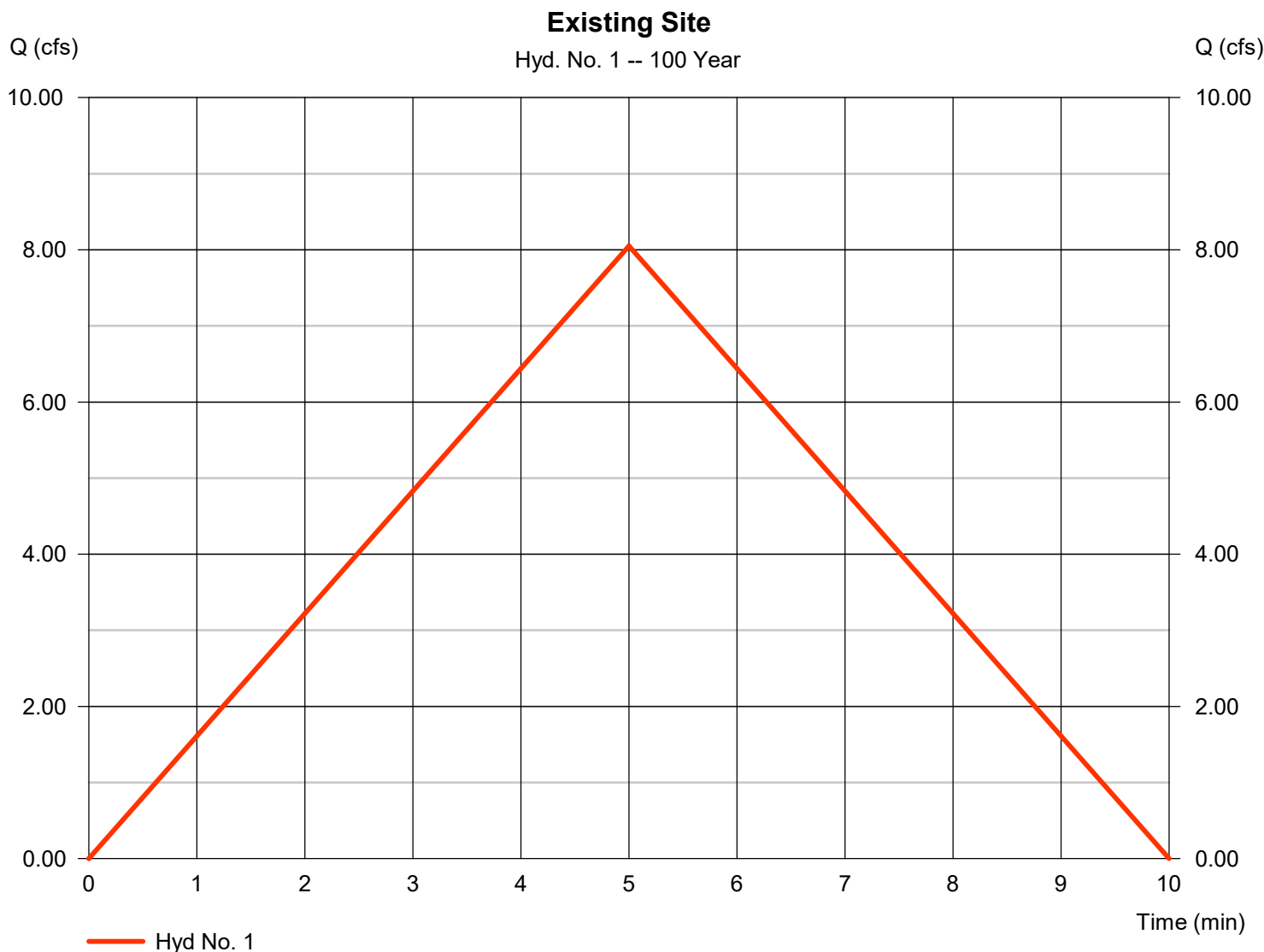
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 1

### Existing Site

Hydrograph type	= Rational	Peak discharge	= 8.052 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,416 cuft
Drainage area	= 1.260 ac	Runoff coeff.	= 0.65
Intensity	= 9.832 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

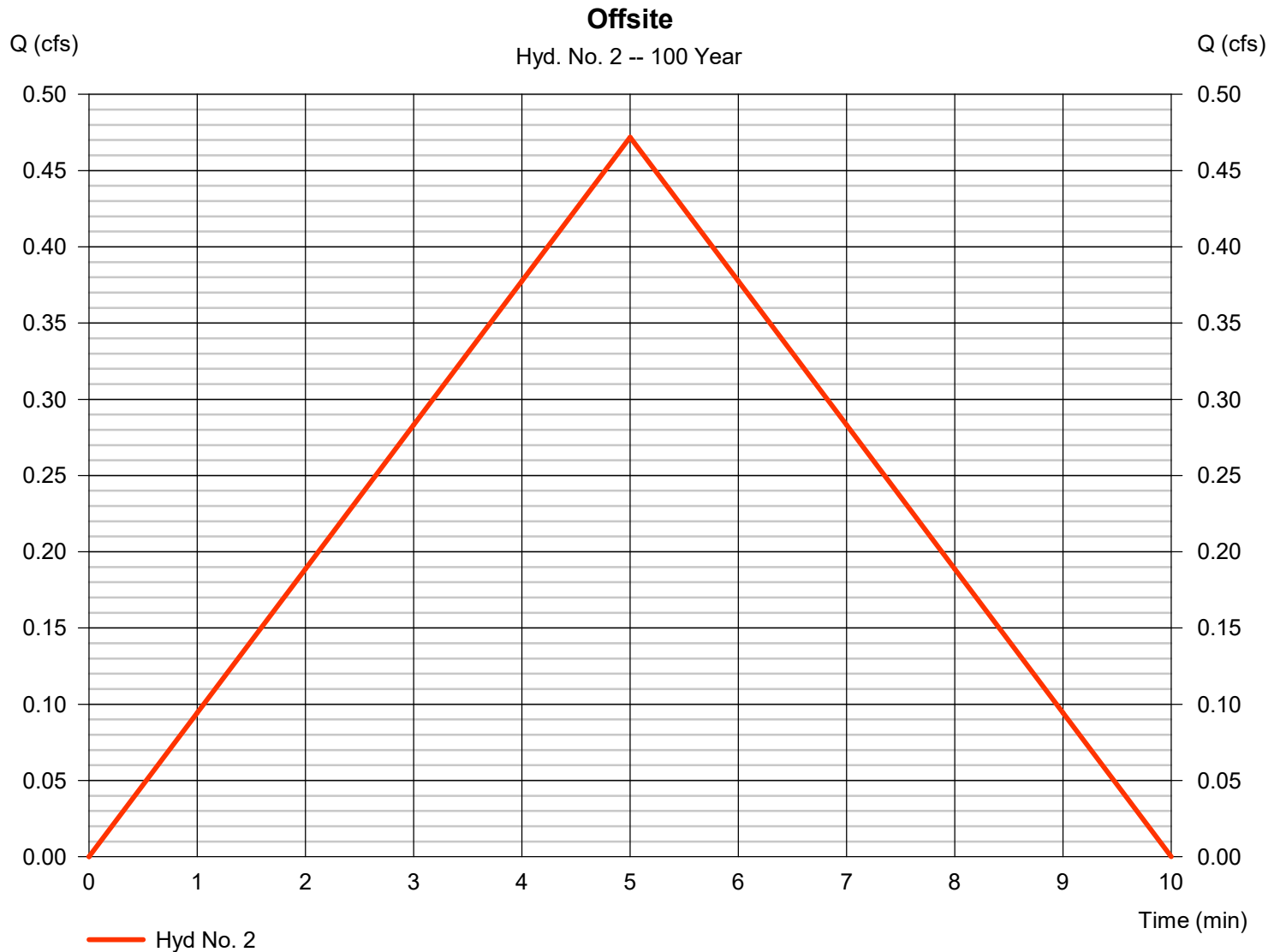
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 2

### Offsite

Hydrograph type	= Rational	Peak discharge	= 0.472 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 142 cuft
Drainage area	= 0.160 ac	Runoff coeff.	= 0.3
Intensity	= 9.832 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

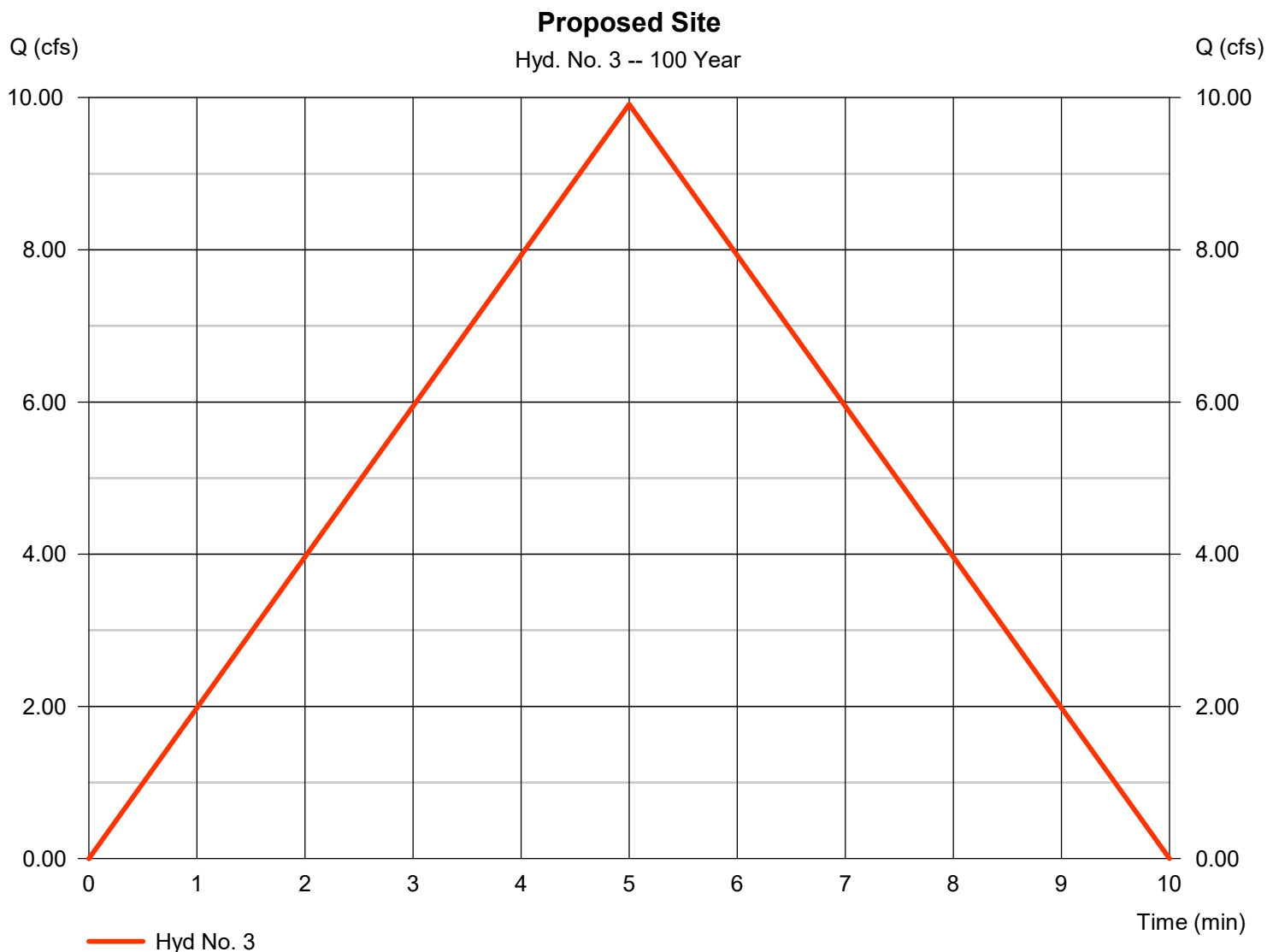
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

## Hyd. No. 3

### Proposed Site

Hydrograph type	= Rational	Peak discharge	= 9.910 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,973 cuft
Drainage area	= 1.260 ac	Runoff coeff.	= 0.8
Intensity	= 9.832 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCMO.IDF	Asc/Rec limb fact	= 1/1





# Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

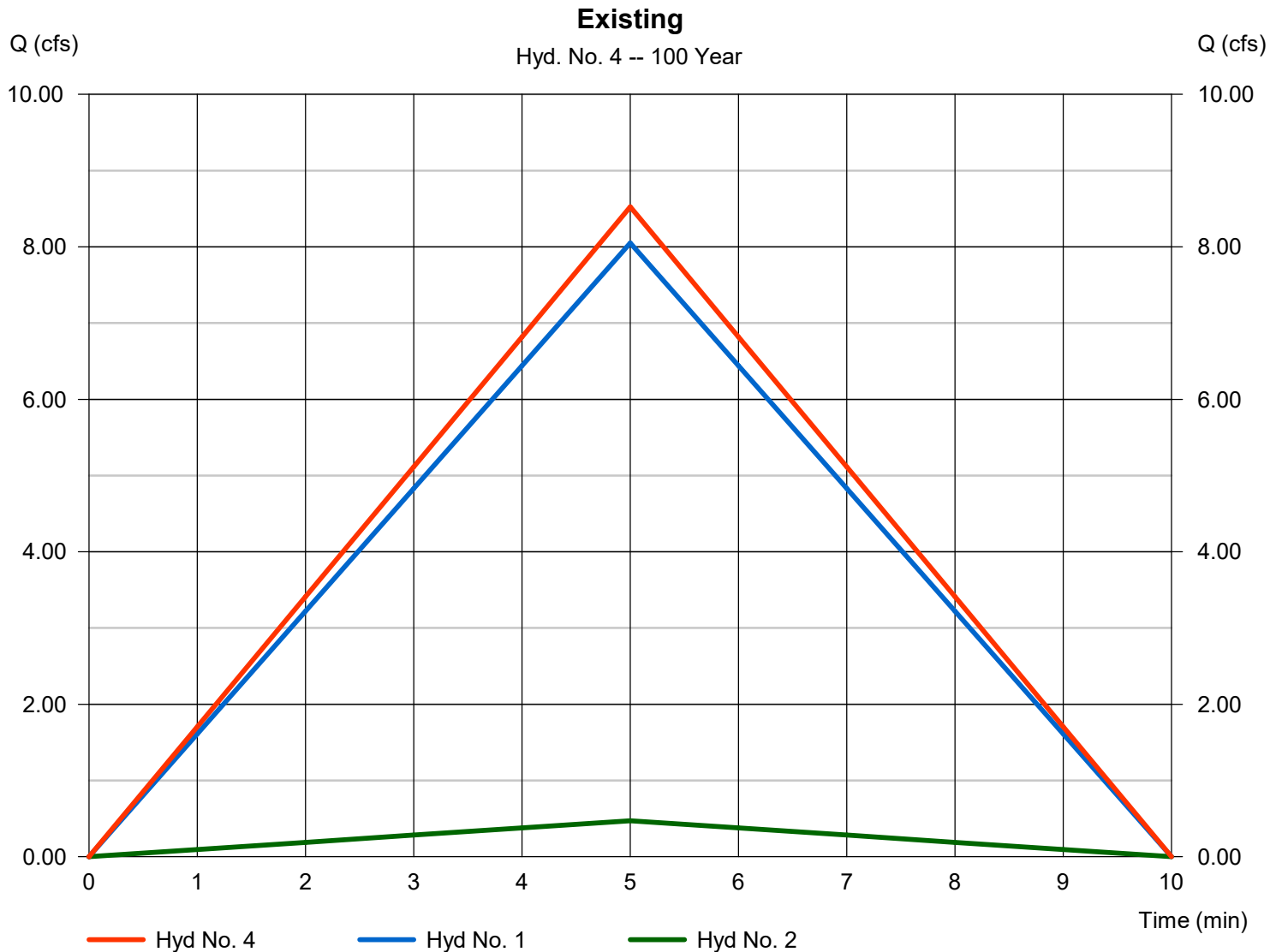
Thursday, 05 / 12 / 2022

## Hyd. No. 4

Existing

Hydrograph type = Combine  
 Storm frequency = 100 yrs  
 Time interval = 1 min  
 Inflow hyds. = 1, 2

Peak discharge = 8.524 cfs  
 Time to peak = 5 min  
 Hyd. volume = 2,557 cuft  
 Contrib. drain. area = 1.420 ac



# Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

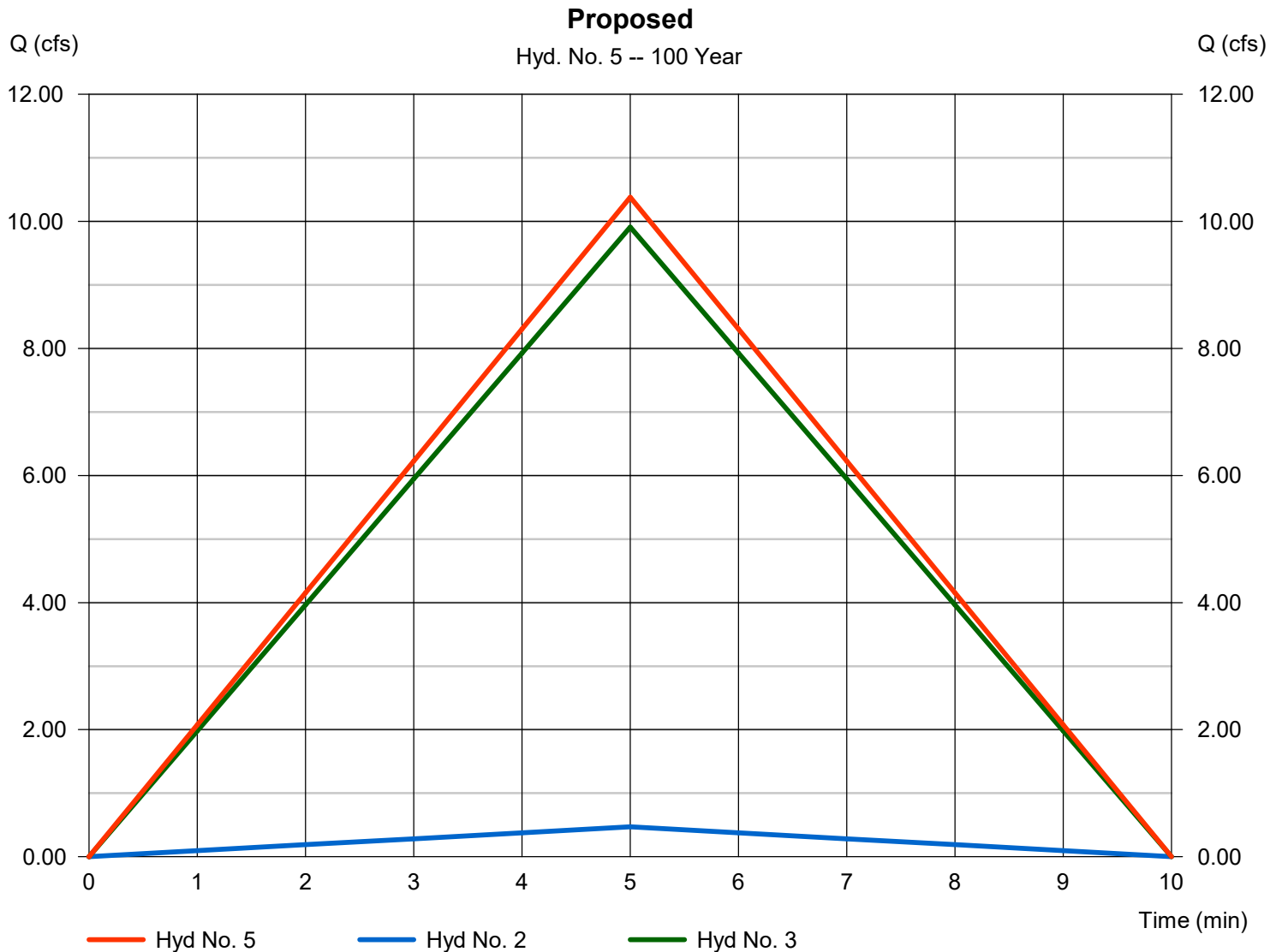
Thursday, 05 / 12 / 2022

## Hyd. No. 5

Proposed

Hydrograph type = Combine  
 Storm frequency = 100 yrs  
 Time interval = 1 min  
 Inflow hyds. = 2, 3

Peak discharge = 10.38 cfs  
 Time to peak = 5 min  
 Hyd. volume = 3,115 cuft  
 Contrib. drain. area = 1.420 ac



# Hydraflow Rainfall Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Thursday, 05 / 12 / 2022

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	47.7559	11.1000	0.8294	-----
2	71.8477	13.3000	0.8718	-----
3	0.0000	0.0000	0.0000	-----
5	75.7517	14.2000	0.8271	-----
10	86.7192	15.3000	0.8244	-----
25	103.3028	16.6000	0.8227	-----
50	116.5747	17.3000	0.8234	-----
100	124.5734	17.6000	0.8144	-----

File name: KCMO.IDF

**Intensity = B / (Tc + D)^E**

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	4.76	3.81	3.19	2.76	2.44	2.19	1.99	1.83	1.69	1.58	1.48	1.39
2	5.70	4.62	3.90	3.38	2.99	2.69	2.45	2.24	2.08	1.93	1.81	1.70
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.58	5.43	4.65	4.08	3.64	3.30	3.02	2.79	2.59	2.42	2.28	2.15
10	7.25	6.05	5.21	4.59	4.12	3.74	3.43	3.17	2.95	2.77	2.60	2.46
25	8.25	6.95	6.03	5.34	4.81	4.38	4.03	3.73	3.48	3.26	3.08	2.91
50	9.05	7.66	6.67	5.92	5.34	4.87	4.48	4.16	3.88	3.64	3.43	3.25
100	9.83	8.35	7.30	6.49	5.87	5.36	4.94	4.59	4.29	4.03	3.80	3.60

Tc = time in minutes. Values may exceed 60.

Precip. file name: G:\KCS\Teams\LDVP\Reference - Other\IDF Information\KCMO 24.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	3.00	3.60	0.00	4.60	5.40	6.30	7.00	7.90
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff Indp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00