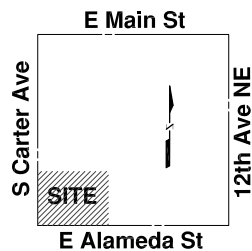




Application for Floodplain Permit

Norman Nature Park



Submitted for Review on
May 15, 2024



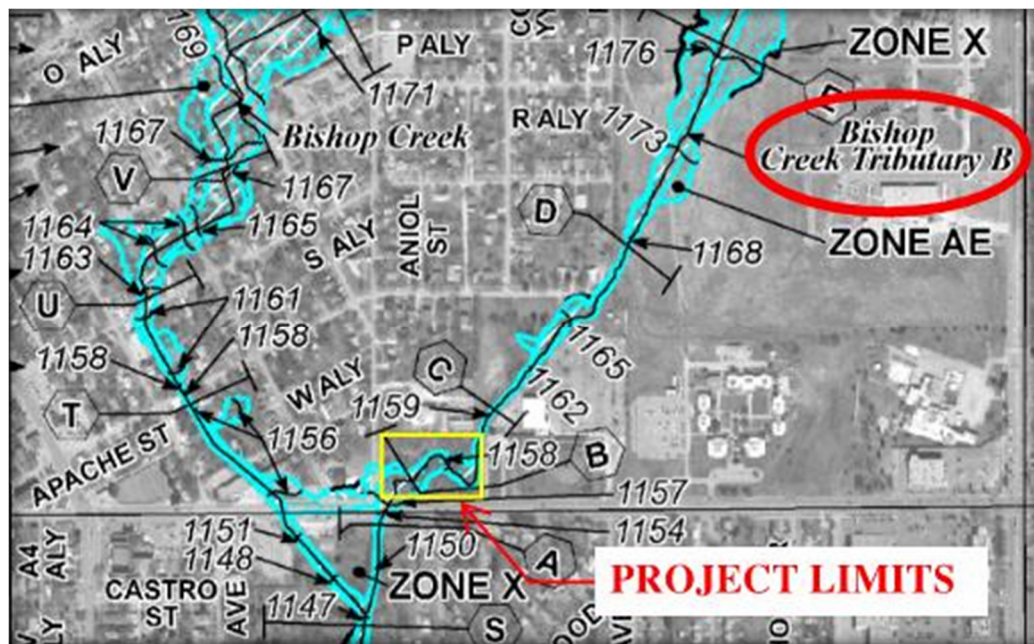
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I. Introduction

This project will provide a Nature Park in the heart of the City of Norman. The park features will include a play ground, walking trails, lookout station, and a raingarden. The park will allow the opportunity to provide compensatory storage for the stormwater to help with local flooding and its use of low impact development (LID) features such as pervious pavement at the proposed parking area provides a chance to improve the storwater quality for the overall watershed. The proposed rain garden and lookout station will be used for educational purposes to introduce the visitors to native vegetation and wetland functions.

The proposed park will be located on the northeast corner of the intersection of East Alameda Street and South Carter Avenue. It will have Alameda Church of Christ on the east and a commercial property on its north. The construction cost of the project is estimated at \$1,200,000. Tributary B of Bishop Creek is located within the limits of proposed park and the proposed improvement will impact that creek's floodplain area. The limits of regulatory floodplain as shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) is shown below. The proposed improvements will not adversely impact any of the neighboring properties. Included in this document are required documentation for a request for a Floodplain Permit for the project.



Limits of regulatory Floodplain as shown on FEMA FIRM Panel 40027C0285H

CITY OF NORMAN
FLOODPLAIN PERMIT APPLICATION

FOR

NORMAN NATURE PARK PROJECT



City of Norman

Floodplain Permit Application

Floodplain Permit No. _____

Building Permit No. _____

Date _____

FLOODPLAIN PERMIT APPLICATION (\$100.00 Application Fee Required)

SECTION 1: GENERAL PROVISIONS (APPLICANT to read and sign):

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Occupancy is issued.
5. The permit will expire if no work is commenced within 2 years of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements and must be included with this floodplain permit application.
7. Applicant hereby gives consent to the City of Norman or his/her representative to access the property to make reasonable inspections required to verify compliance.
8. The following floodplain modifications require approval by the City Council:
 - (a) A modification of the floodplain that results in a change of ten percent (10%) or more in the width of the floodplain.
 - (b) The construction of a pond with a water surface area of 5 acres or more.
 - (c) Any modifications of the stream banks or flow line within the area that would be regulatory floodway whether or not that channel has a regulatory floodplain, unless the work is being done by the City of Norman staff as part of a routine maintenance activity.
9. All supporting documentation required by this application is required along with the permit fee by the submittal deadline. Late or incomplete applications will not be accepted.
10. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT.)

APPLICANT: The City of Norman Parks & Recreation Department ADDRESS: 225 N. Webster Avenue, Norman, OK 73069

TELEPHONE: 405-366-5472 SIGNATURE: _____

BUILDER: _____ ADDRESS: _____

TELEPHONE: _____ SIGNATURE: _____

ENGINEER: LMRK Engineering ADDRESS: 7212 NW 129th Street, Oklahoma City, OK 73142

TELEPHONE: 405-394-6649 SIGNATURE: 

PROJECT LOCATION

To avoid delay in processing the application, please provide enough information to easily identify the project location. Provide the street address, subdivision addition, lot number or legal description (attach) and, outside urban areas, the distance to the nearest intersecting road or well known landmark. A sketch attached to this application showing the project location would be helpful.

The proposed Nature Park area is located on the northeast corner of the intersection of E. Alameda Street and S. Carter Avenue.

Alameda Street and Carter Avenue will be the south and west boundaries of the park and Alameda Church of Christ will be the on the east side of the park.

The park will be approximately 2.5 acres in size and will have Bishop Creek running through its limits.

DESCRIPTION OF WORK (Check all applicable boxes):

A. STRUCTURAL DEVELOPMENT

ACTIVITY

STRUCTURE TYPE

- | | |
|--|---|
| <input type="checkbox"/> New Structure | <input type="checkbox"/> Residential (1-4 Family) |
| <input type="checkbox"/> Addition | <input type="checkbox"/> Residential (More than 4 Family) |
| <input type="checkbox"/> Alteration | <input type="checkbox"/> Non-Residential (Flood proofing? <input type="checkbox"/> Yes) |
| <input type="checkbox"/> Relocation | <input type="checkbox"/> Combined Use (Residential & Commercial) |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Manufactured (Mobile) Home |
| <input type="checkbox"/> Replacement | <input type="checkbox"/> In Manufactured Home Park? <input type="checkbox"/> Yes |

ESTIMATED COST OF PROJECT \$ 1200000 Work that involves substantial damage/substantial improvement requires detailed cost estimates and an appraisal of the structure that is being improved.

B. OTHER DEVELOPMENT ACTIVITIES:

- ☒ Fill ☐ Mining ☐ Drilling ☒ Grading
- ☐ Excavation (Beyond the minimum for Structural Development)
- ☐ Watercourse Alteration (Including Dredging and Channel Modifications)
- ☐ Drainage Improvements (Including Culvert Work) ☐ Road, Street or Bridge Construction
- ☐ Subdivision (New or Expansion) ☐ Individual Water or Sewer System

In addition to items A. and B. provide a complete and detailed description of proposed work (failure to provide this item will be cause for the application to be rejected by staff). Attach additional sheets if necessary.

The park will include a parking lot and recreation/education area that will mainly be out of the floodplain area. The proposed rain garden area and trail system will encroach into the floodplain area however none of the proposed features that will be constructed

within the floodplain area will be permanent features that would significantly impede the movement of flow in the floodplain. The fill needed for the construction of the proposed parking lot will encroach into the floodplain area however the lowering of the floodplain in the

educational area on the south side of the creek provides compensatory storage to remediate the imp

C. ATTACHMENTS WHICH ARE REQUIRED WITH EVERY APPLICATION:

The applicant must submit the documents listed below before the application can be processed. If the requested document is not relevant to the project scope, please check the Not Applicable box and provide explanation.

- A. Plans drawn to scale showing the nature, location, dimensions, and elevation of the lot, existing or proposed structures, fill, storage of materials, flood proofing measures, and the relationship of the above to the location of the channel, floodway, and the regulatory flood-protection elevation.
- B. A typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high-water information.

☐ Not Applicable:

- C. Subdivision or other development plans (If the subdivision or other developments exceeds 50 lots or 5 acres, whichever is the lesser, the applicant **must** provide 100-year flood elevations if they are not otherwise available).

☒ Not Applicable:

- D. Plans (surface view) showing elevations or contours of the ground; pertinent structure, fill, or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses and vegetation upstream and downstream, soil types and other pertinent information.

☐ Not Applicable:

- E. A profile showing the slope of the bottom of the channel or flow line of the stream.

☐ Not Applicable:

- F. Elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures.

☒ Not Applicable:

- G. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.

☒ Not Applicable:

- H. For proposed development within any flood hazard area (except for those areas designated as regulatory floodways), certification that a rise of no more than five hundredths of a foot (0.05') will occur on any adjacent property in the base flood elevation as a result of the proposed work. For proposed development within a designated regulatory floodway, certification of no increase in flood levels within the community during the occurrence of the base flood discharge as a result of the proposed work. All certifications shall be signed and sealed by a Registered Professional Engineer licensed to practice in the State of Oklahoma.
- I. A certified list of names and addresses of all record property owners within a three hundred fifty (350) foot radius of the exterior boundary of the subject property not to exceed 100 feet laterally from the Special Flood Hazard Area. The radius to be extended by increments of one hundred (100) linear feet until the list of property owners includes not less than fifteen (15) individual property owners of separate parcels or until a maximum radius of one thousand (1,000) feet has been reached.
- J. A copy of all other applicable local, state, and federal permits (i.e. U.S. Army Corps of Engineers 404 permit, etc).

After completing SECTION 2, APPLICANT should submit form to Permit Staff for review.

SECTION 3: FLOODPLAIN DETERMINATION (To be completed by Permit Staff.)

The proposed development is located on FIRM Panel No.: _____, Dated: _____

The Proposed Development:

- ☐ Is NOT located in a Special Flood Hazard Area
(Notify the applicant that the application review is complete and NO FLOODPLAIN PERMIT IS REQUIRED).
- ☐ Is located in a Special Flood Hazard Area.
- ☐ The proposed development is located in a floodway.
- ☐ 100-Year flood elevation at the site is _____ Ft. NGVD (MSL) ☐ Unavailable

See Section 4 for additional instructions.

SIGNED: _____ DATE: _____

SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by Permit Staff.)

The applicant must also submit the documents checked below before the application can be processed.

- ☐ Flood proofing protection level (non-residential only) _____ Ft. NGVD (MSL). For flood proofed structures applicant must attach certification from registered engineer.
- ☐ Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted.
- ☐ Certification from a registered engineer that the proposed activity in a regulatory flood plain will result in an increase of no more than 0.05 feet in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted.
- ☐ All other applicable federal, state, and local permits have been obtained.

Other: _____

SECTION 5: PERMIT DETERMINATION (To be completed by Floodplain Chairman.)

The proposed activity: (A) ☐ **Is**; (B) ☐ **Is Not** in conformance with provisions of Norman's City Code Chapter 22, Section 429.1. The permit is issued subject to the conditions attached to and made part of this permit.

SIGNED: _____ DATE: _____

If BOX A is checked, the Floodplain committee chairman may issue a Floodplain Permit.

If BOX B is checked, the Floodplain committee chairman will provide a written summary of deficiencies. Applicant may revise and resubmit an application to the Floodplain committee or may request a hearing from the Board of Adjustment.

APPEALS: Appealed to Board of Adjustment: ☐ Yes ☐ No
Hearing date: _____

Board of Adjustment Decision - Approved: ☐ Yes ☐ No

Conditions:

SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Occupancy is issued.)

1. FEMA Elevation Certificate
and/or
2. FEMA Floodproofing Certificate

NOTE: The completed certificate will be reviewed by staff for completeness and accuracy. If any deficiencies are found it will be returned to the applicant for revision. A Certificate of Occupancy for the structure will not be issued until an Elevation and /or Floodproofing Certificate has been accepted by the City.

NO RISE CERTIFICATION LETTER

3/15/2024

Jason Murphy, CFM
Stormwater Program Manager
City of Norman Public Works
Stormwater Division
225 N. Webster
Norman, OK 73069

Subject: No rise certification for Norman Nature Park project

Dear Mr. Murphy,

LMRK has evaluated the proposed park development area located at the northwest corner of Alameda Street and Carter Avenue. The proposed park features impact Bishop Creek Tributary B however, the impacts on the floodplain of the creek is offset by providing compensatory storage for stormwater in the park.

This letter is to certify that the proposed park features are not predicted to increase the base flood elevation on any of the neighboring properties. This conclusion is based on hydraulic analysis of the existing and proposed conditions.

Sincerely,



Reza Khakpour, P.E.,
CFM, CPESC, DBIA



3/15/2024
exp: 5/31/2024

APPLICABLE LOCAL, STATE, AND FEDERAL PERMITS

1 - United States Army Corps of Engineers letter



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

March 20, 2024

Regulatory Office

Mr. Reza Khakpour
LMRK Engineering, LLC
7212 NW129th Street
Oklahoma City, OK 73142

Dear Mr. Khakpour:

This is in reference to the Norman Nature Park Project, located in Section 29, Township 9 North, Range 2 West, in Cleveland County, Oklahoma. We have reviewed the submitted data relative to Section 404 of the Clean Water Act (CWA).

The provided information does not indicate that a placement of dredged or fill material will be required, permanently or temporarily, into any potential "waters of the United States," including potential jurisdictional wetlands. Therefore, your proposal is not subject to regulation pursuant to Section 404 of the CWA, and a Department of the Army (DA) permit will not be required. Should your method of construction necessitate such a discharge into an aquatic area or tributary stream, we suggest that you resubmit that portion of your project so that we may determine whether an individual DA permit will be required.

This "No Permit Required" determination does not address nor includes any consideration for geographic jurisdiction on aquatic resources and shall not be interpreted as such.

Although Section 404 of the CWA authorization is not required, this does not preclude the possibility that a real estate interest or other Federal, State, or local permits may be required.

If you desire to complete a "Customer Service Survey" on your experience with the Corps Regulatory Program, visit <https://regulatory.ops.usace.army.mil/customer-service-survey/> on the internet at your convenience and submit your comments.

This case has been assigned Identification No. SWT-2024-00087. Please refer to this number during any future correspondence. If you have any questions, please contact Mr. Rob Hoffmann at 918-669-7481.

Sincerely,

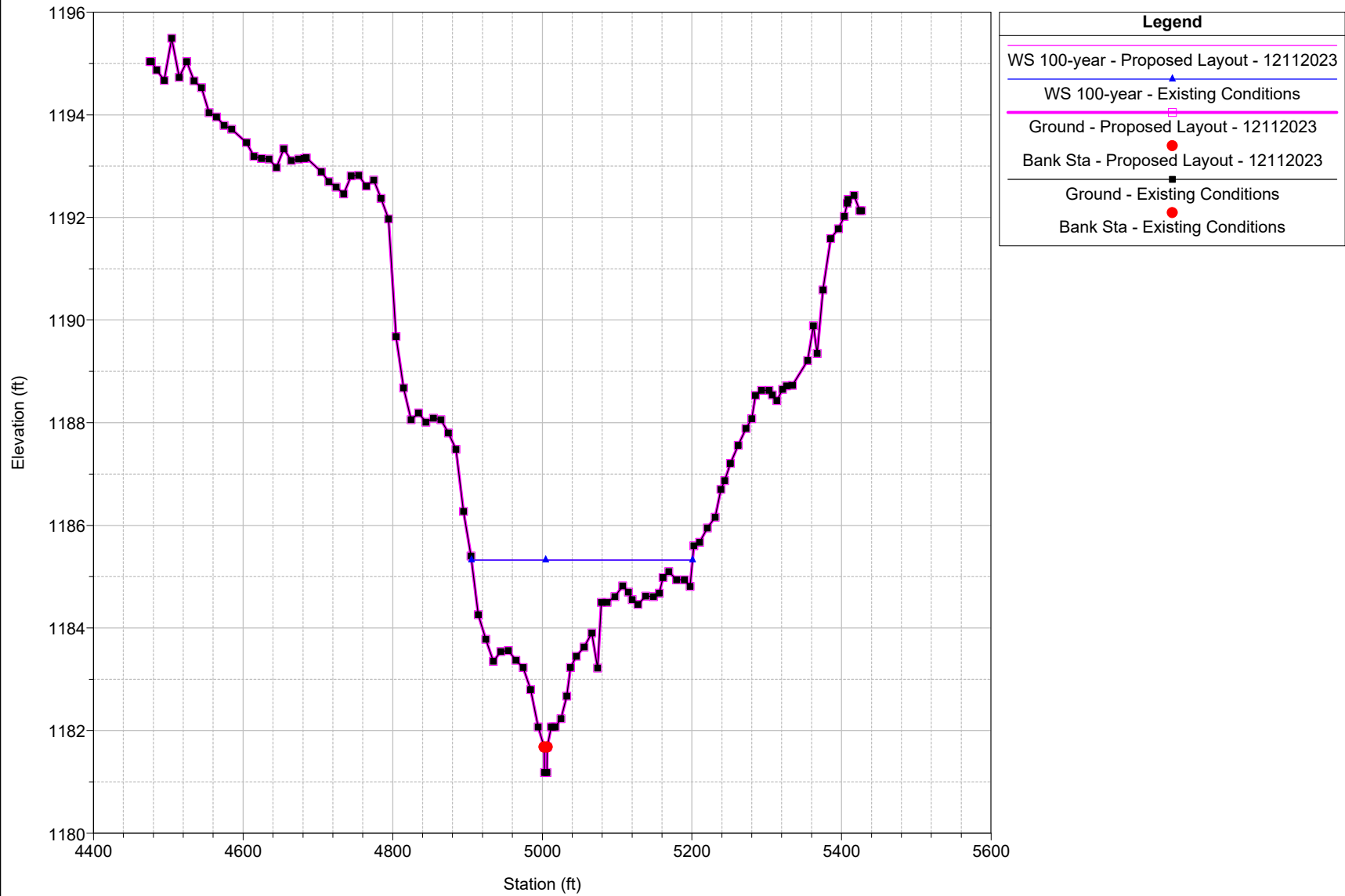
Rob Hoffmann

Andrew R. Commer
Chief, Regulatory Office

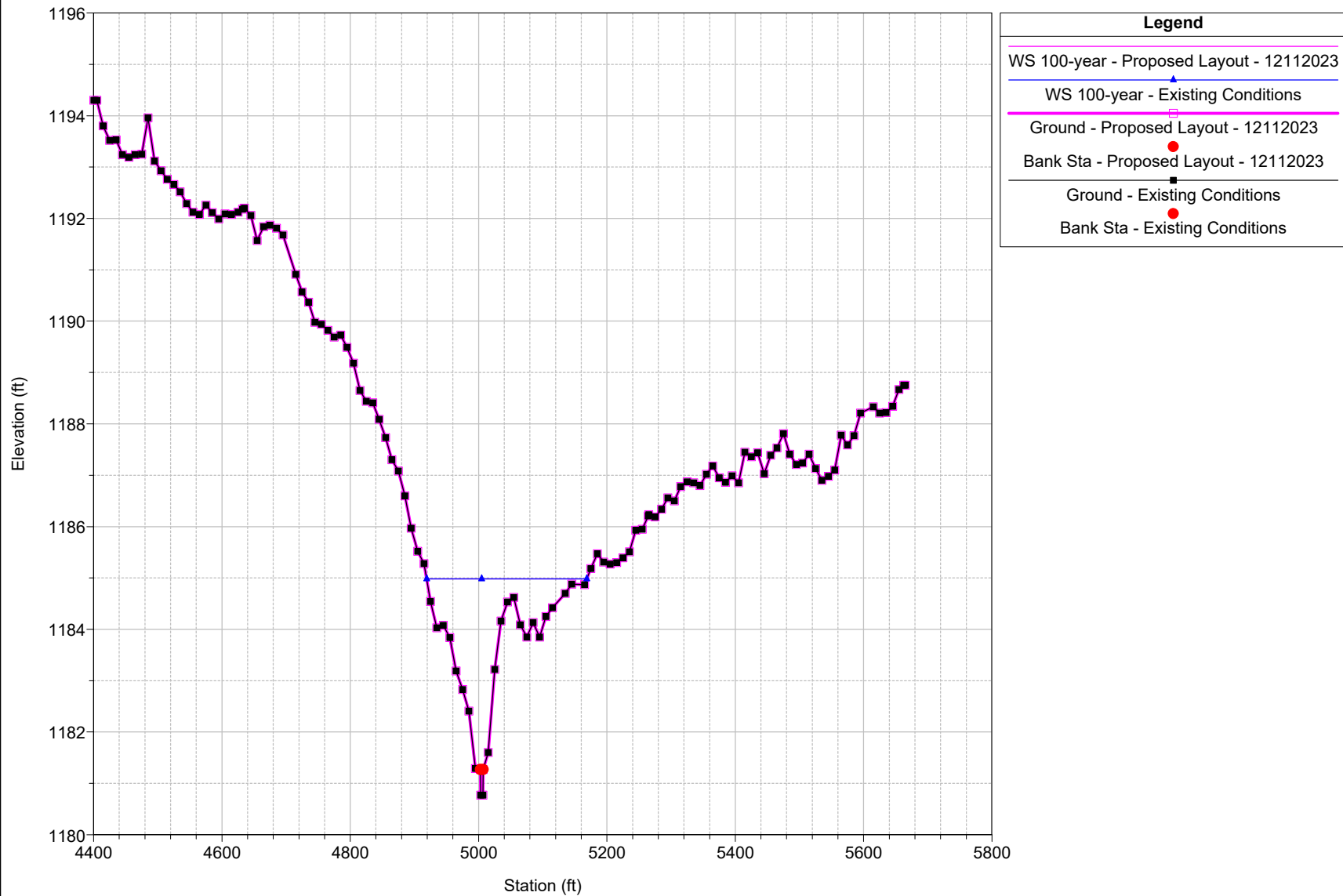
CHANNEL PROFILE AND CHANNEL CROSS SECTION

- 1 - Cross Section Location Map
- 2 - Channel Cross Sections
- 3 - Channel Profile

Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
 River = Bishop Creek Tri Reach = Reach-1 RS = 4174 Bishop Creek Tributary B 7.0

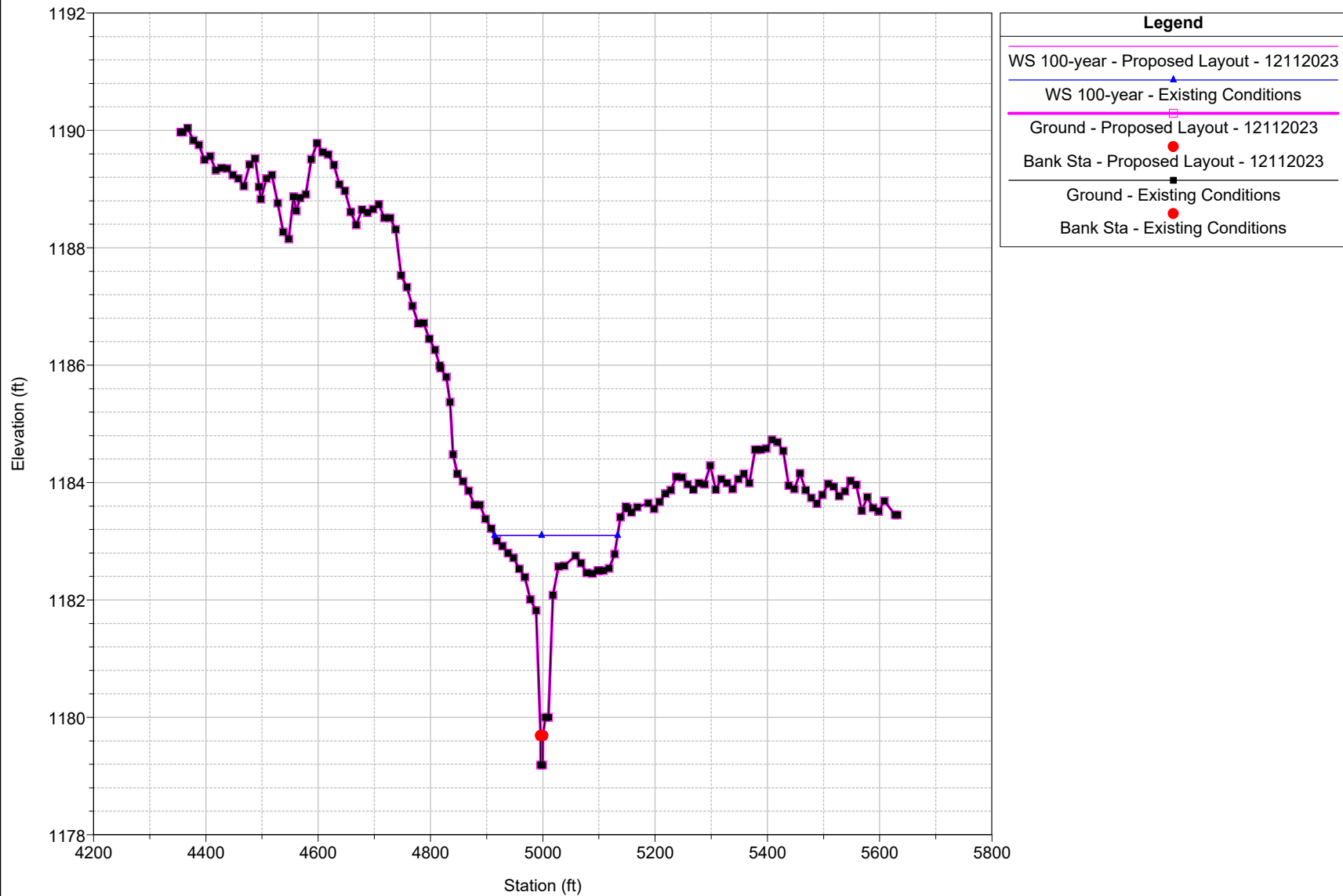


Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
River = Bishop Creek Tri Reach = Reach-1 RS = 4092 Mapping XS 37aa3eb9



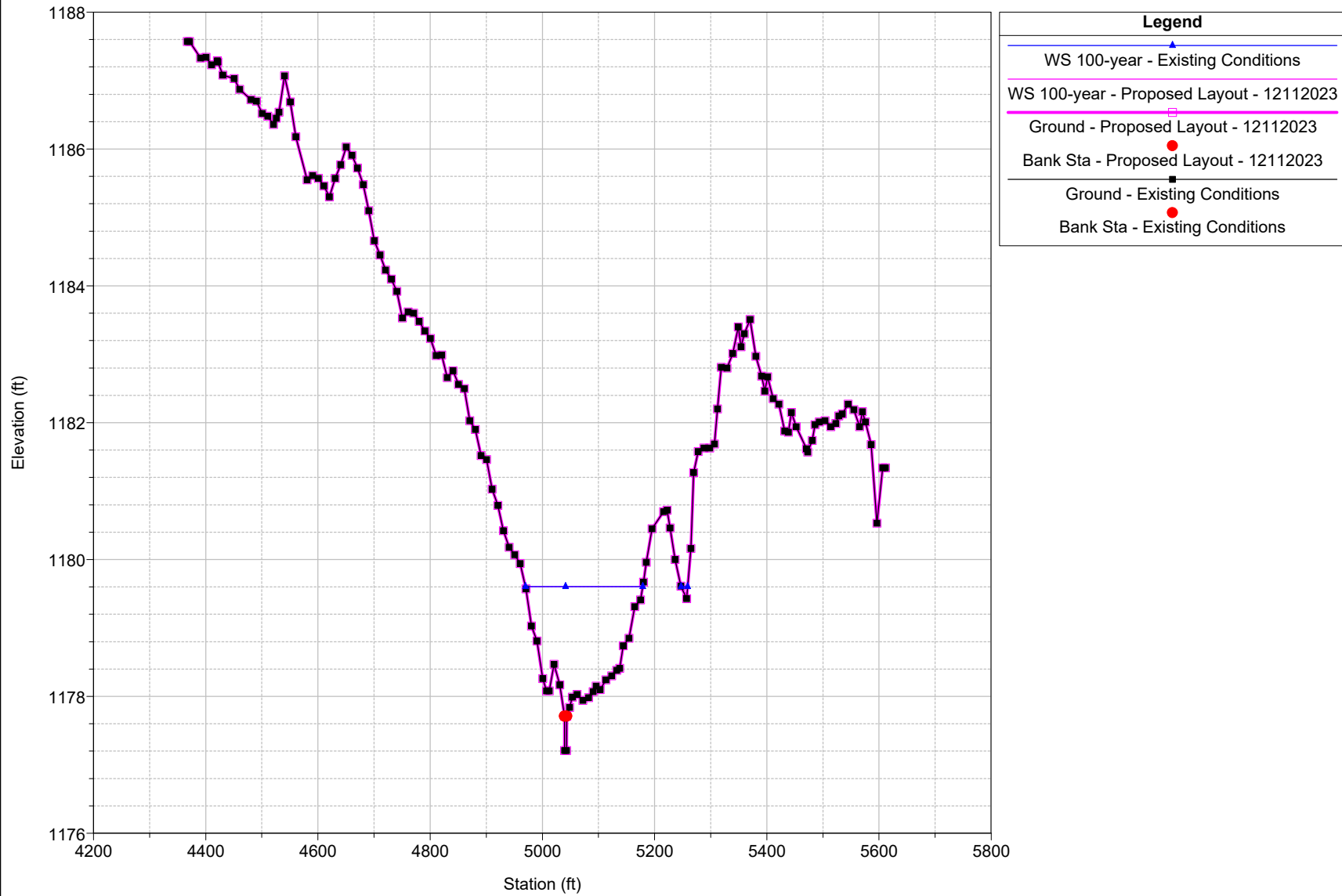
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River = Bishop Creek Tri Reach = Reach-1 RS = 3883 Mapping XS b9d529cf

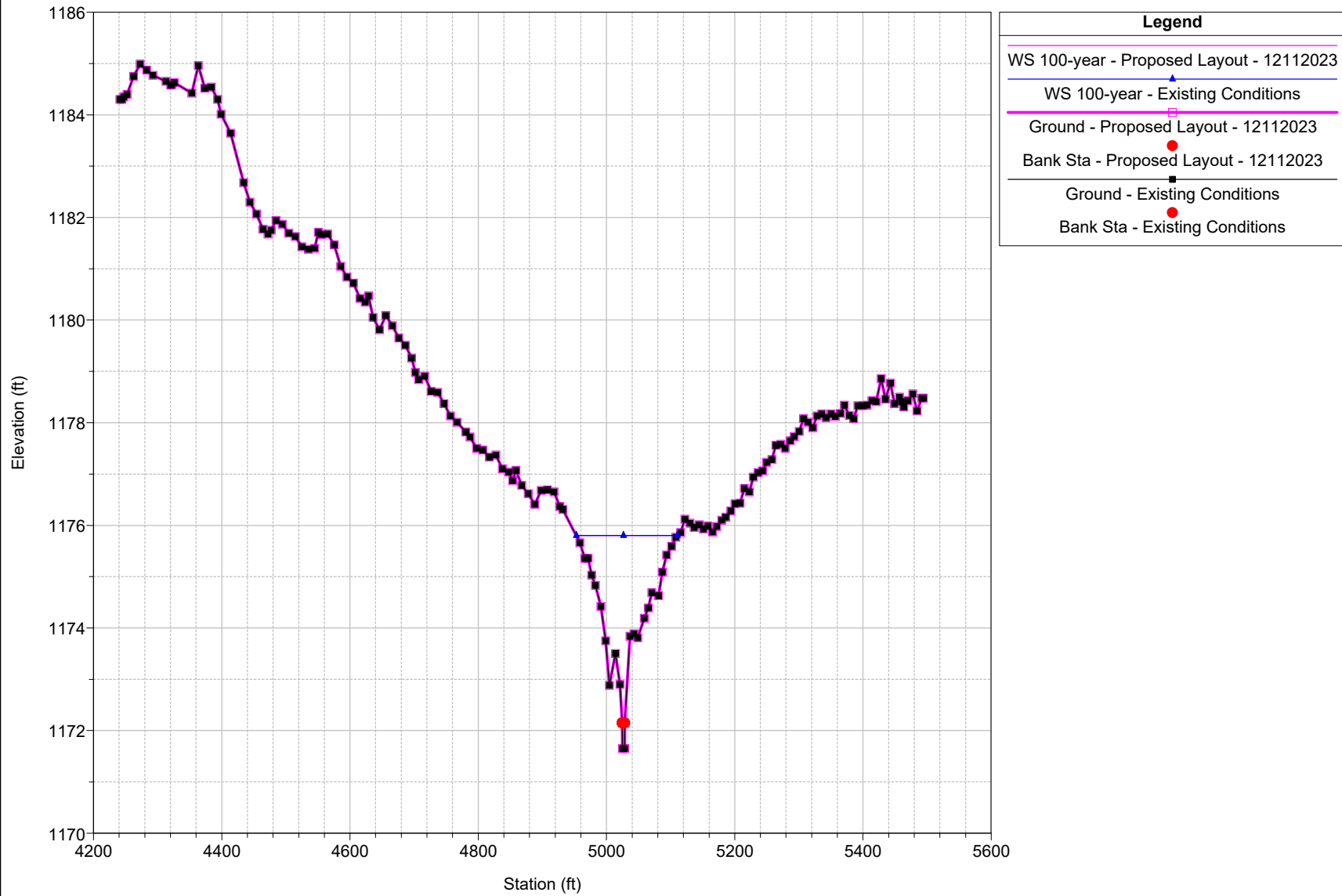


Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023

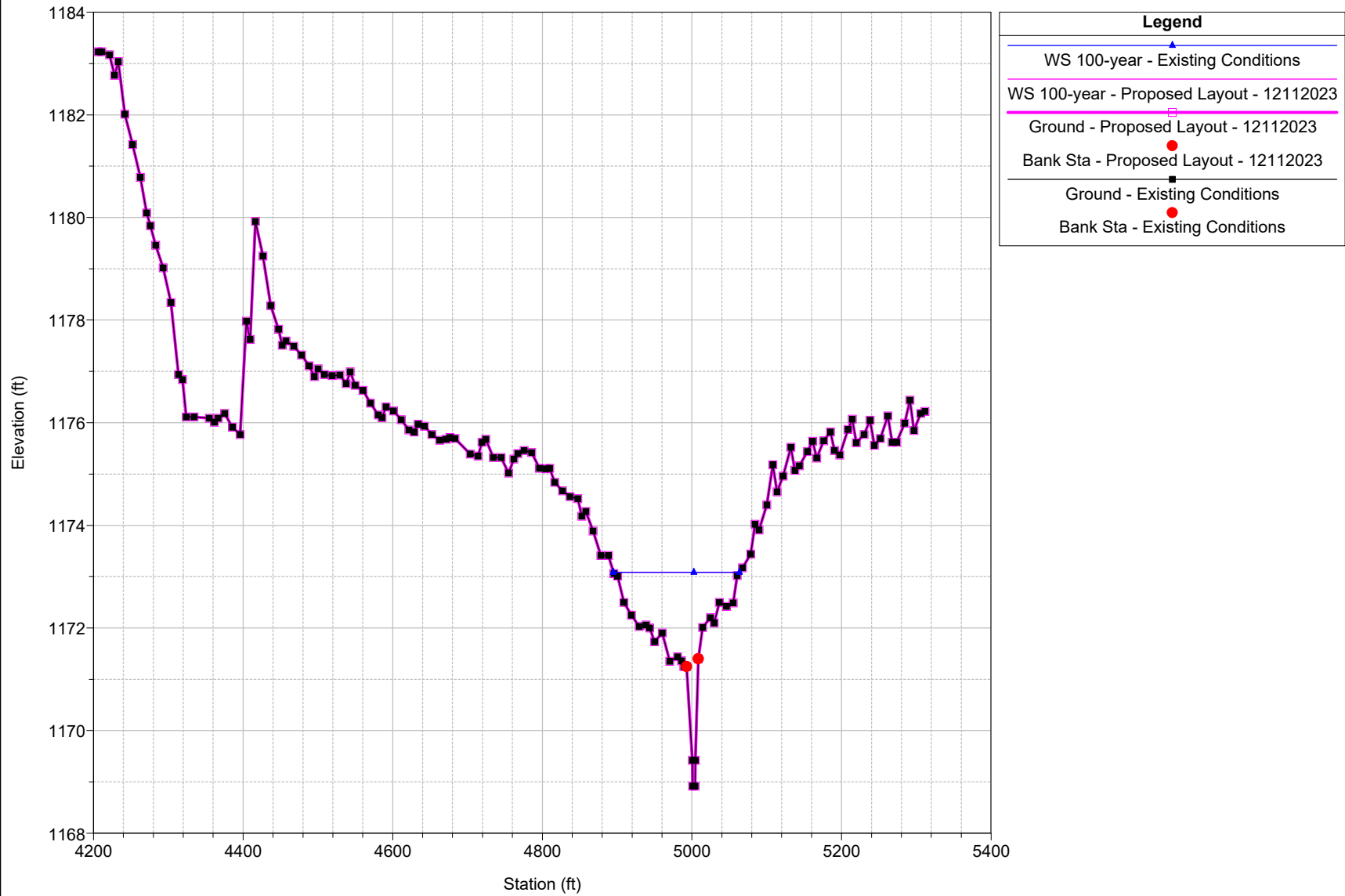
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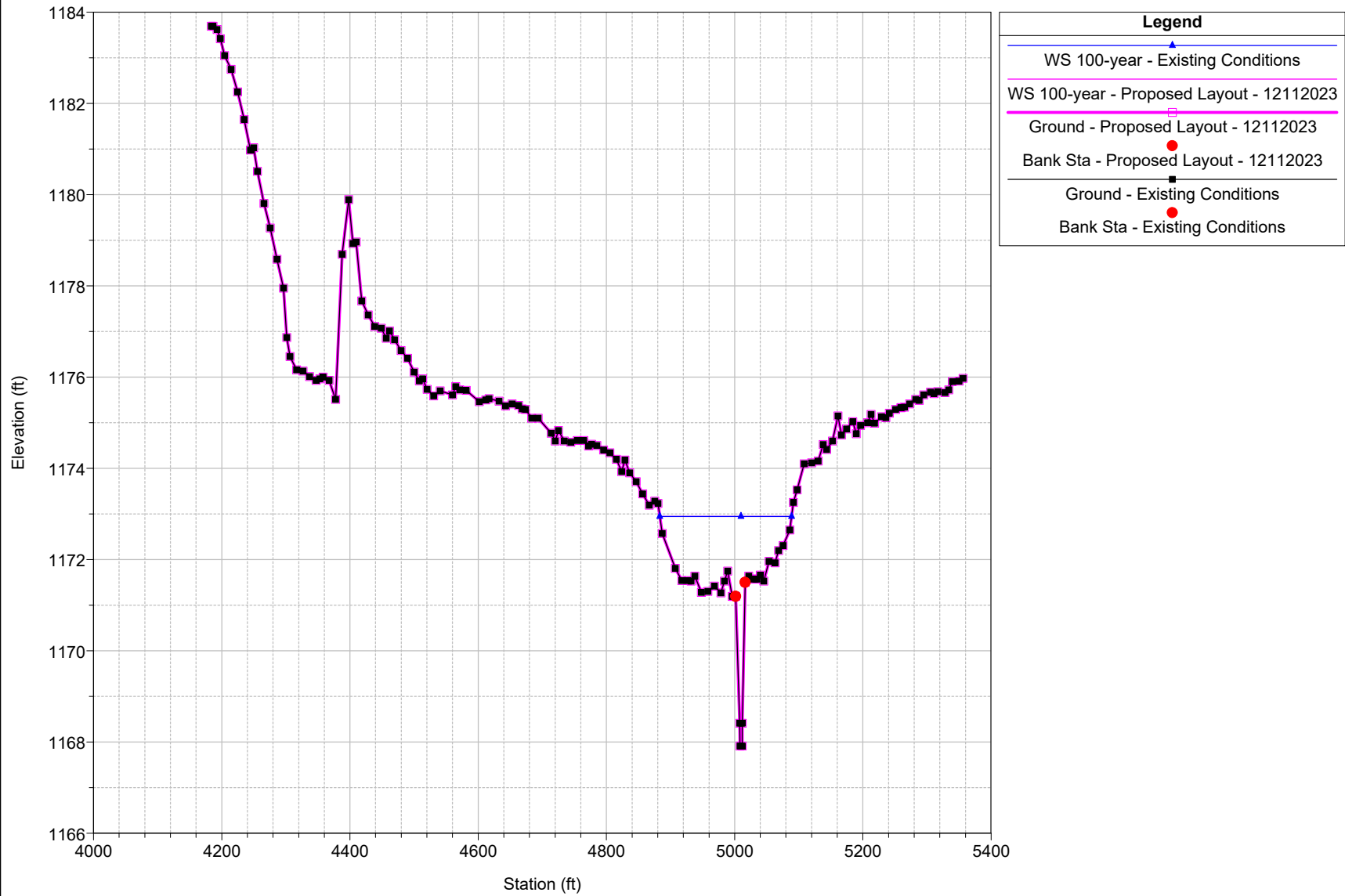
Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
 River = Bishop Creek Tri Reach = Reach-1 RS = 2913 Bishop Creek Tributary B 4.0



Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
 River = Bishop Creek Tri Reach = Reach-1 RS = 2609 Mapping XS 2049dd2e

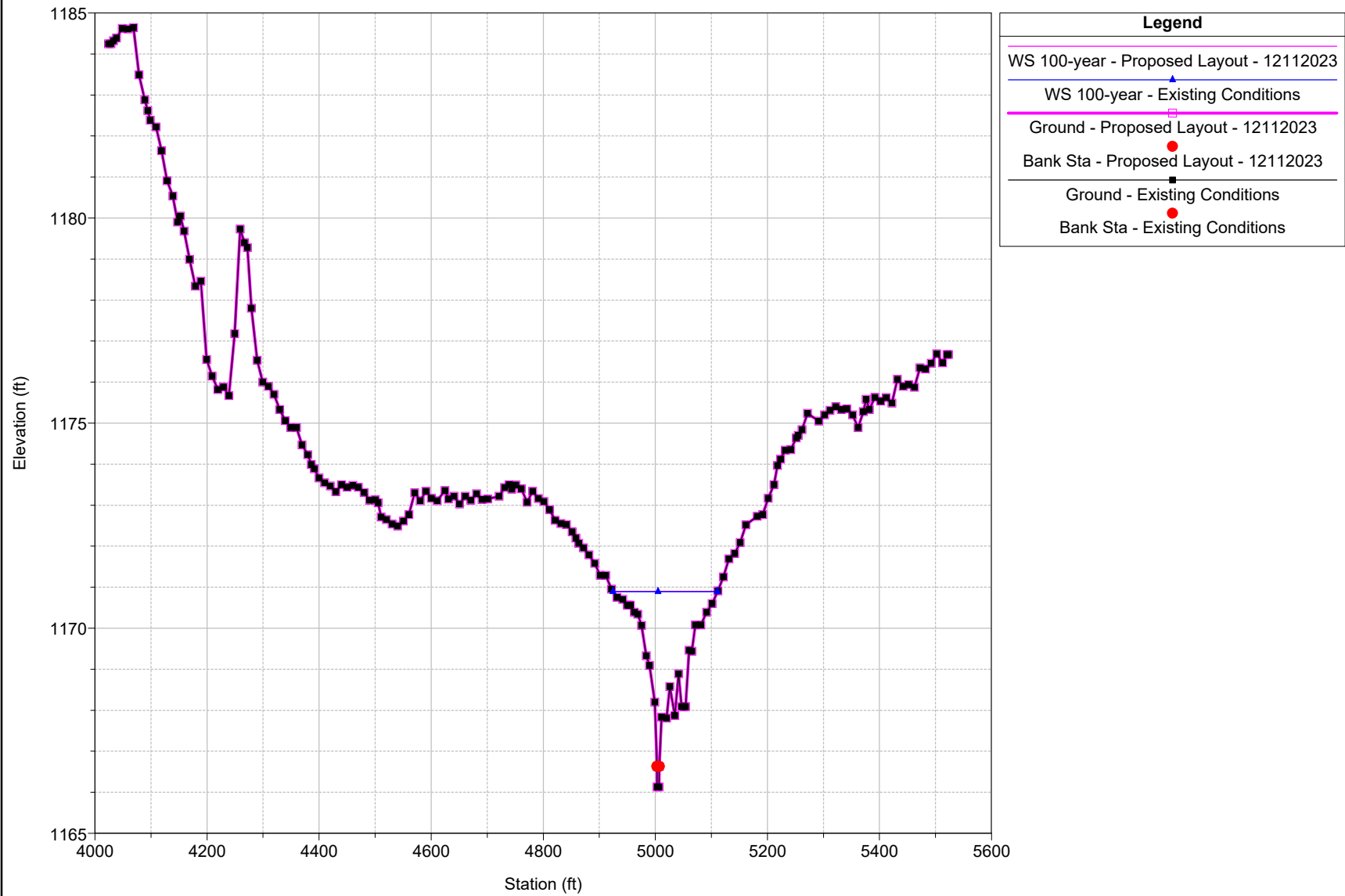


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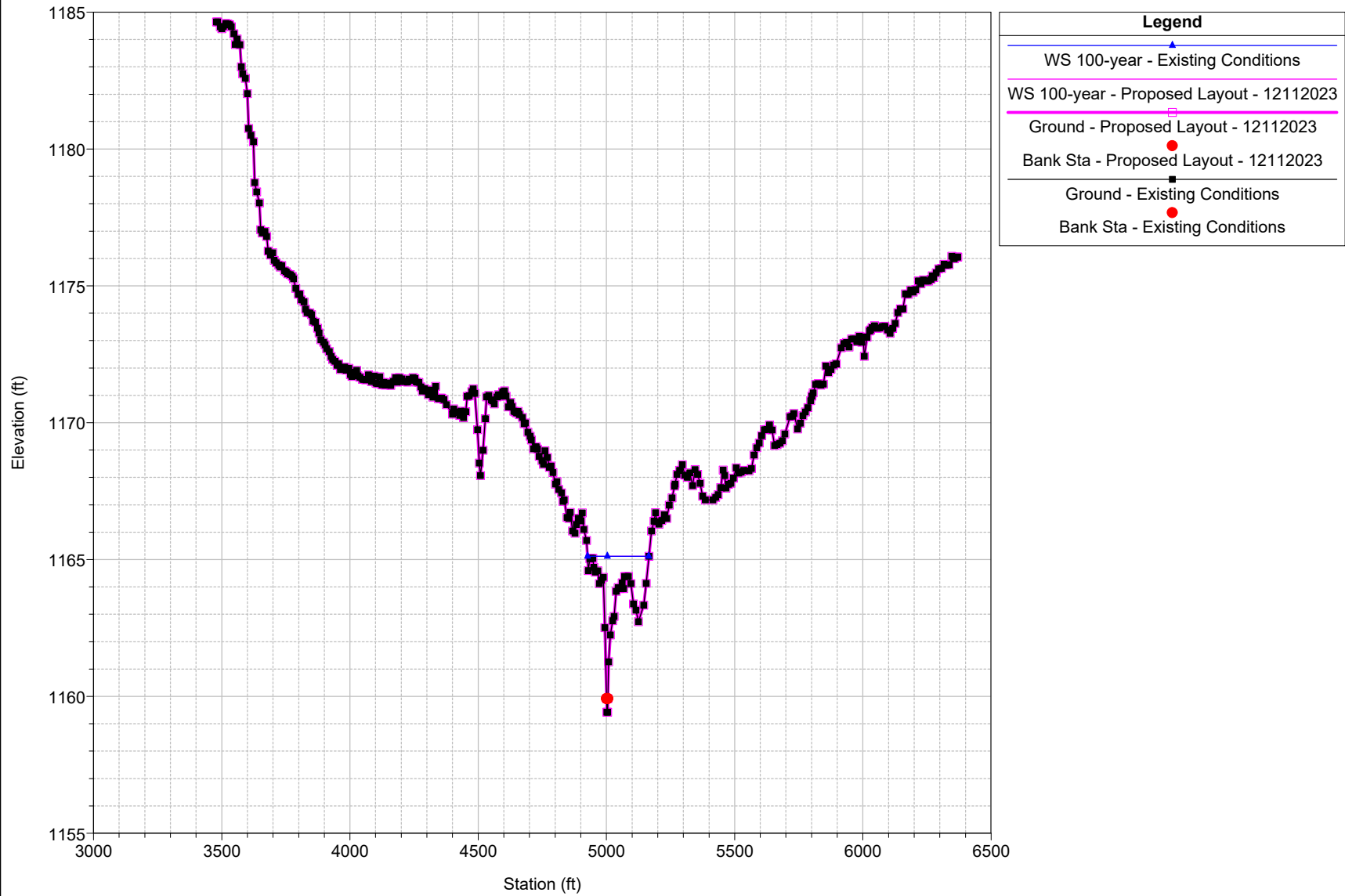


Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023

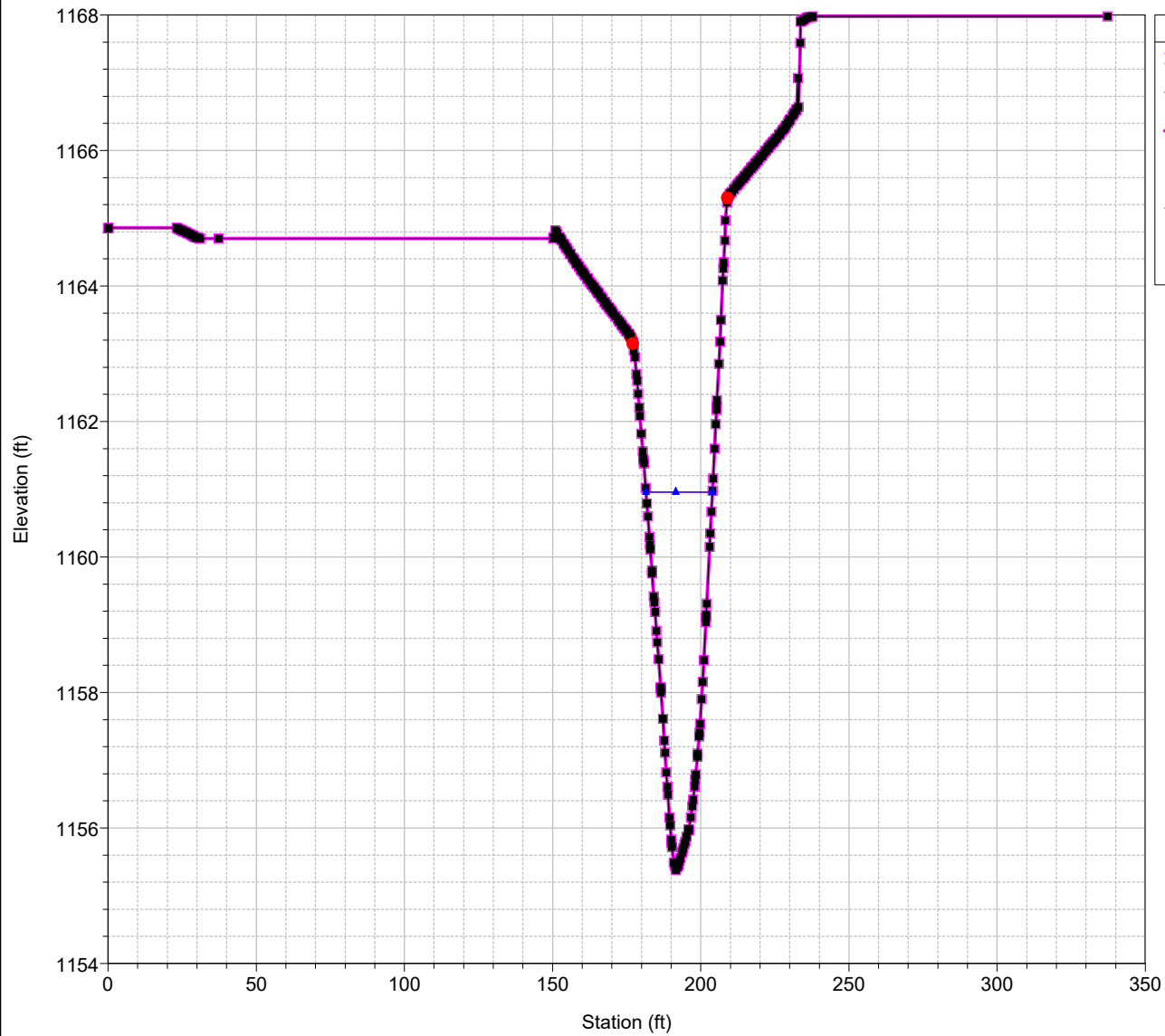
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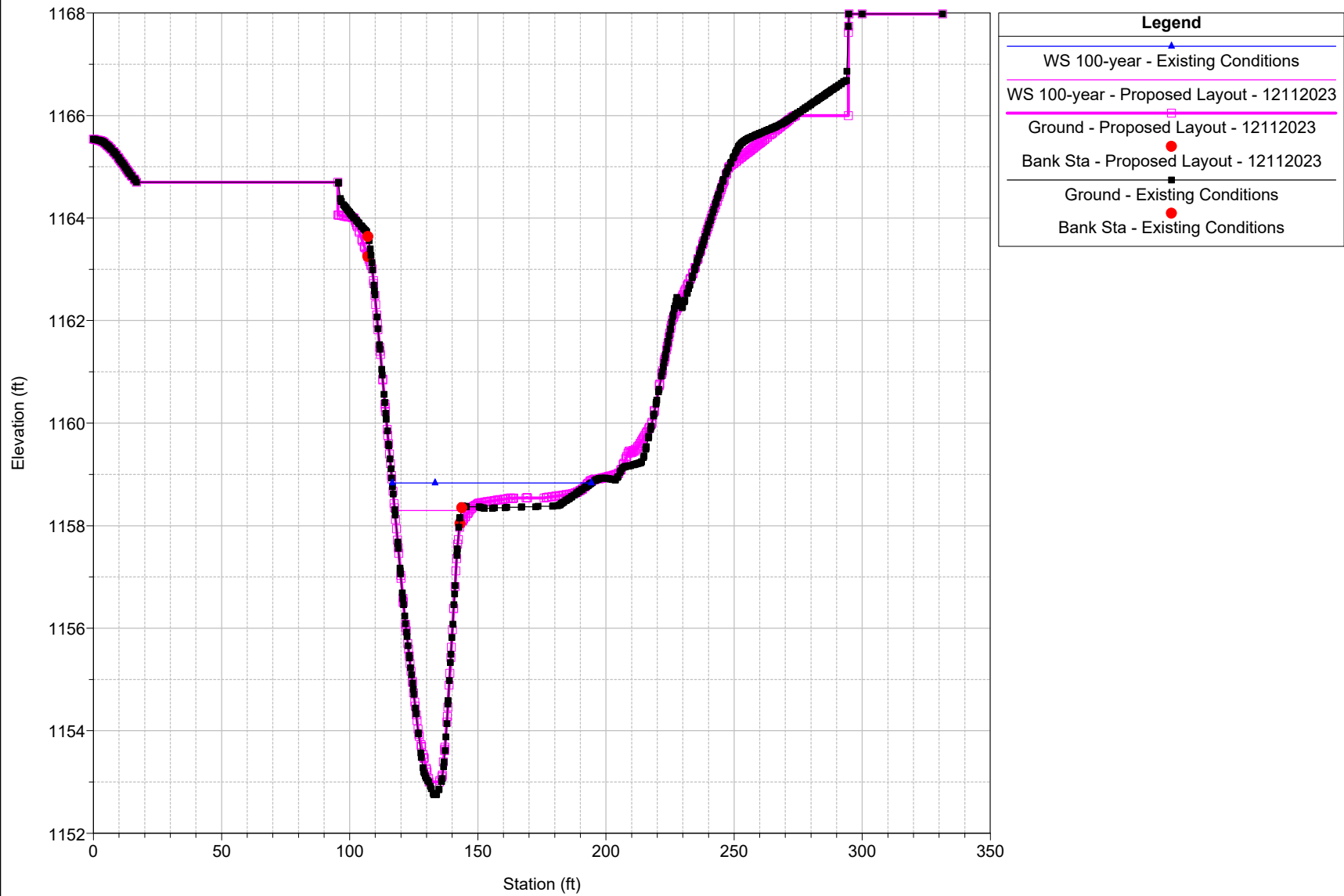
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 River = Bishop Creek Tri Reach = Reach-1 RS = 1523 Bishop Creek Tributary B 3.0



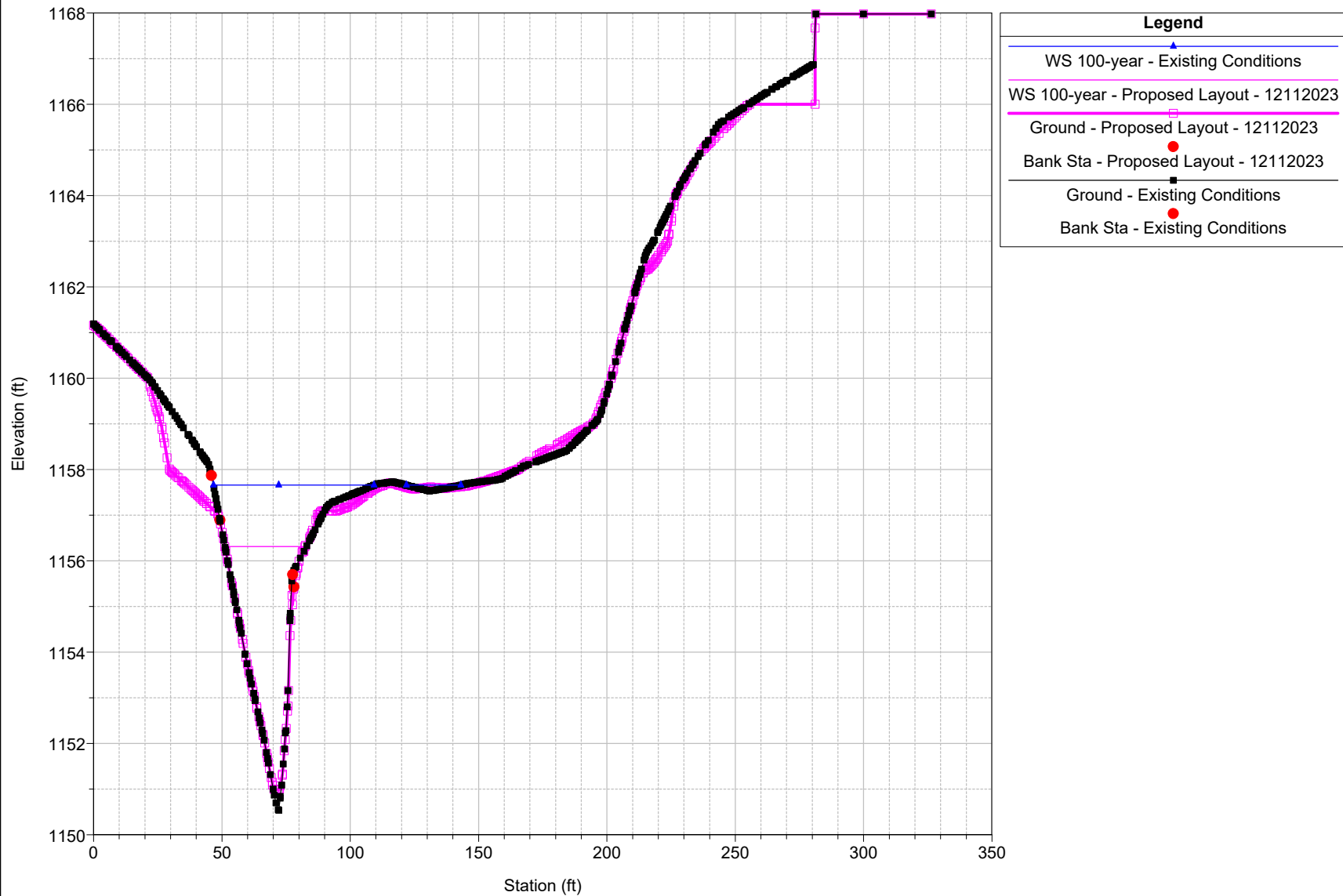
Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
River = Bishop Creek Tri Reach = Reach-1 RS = 535



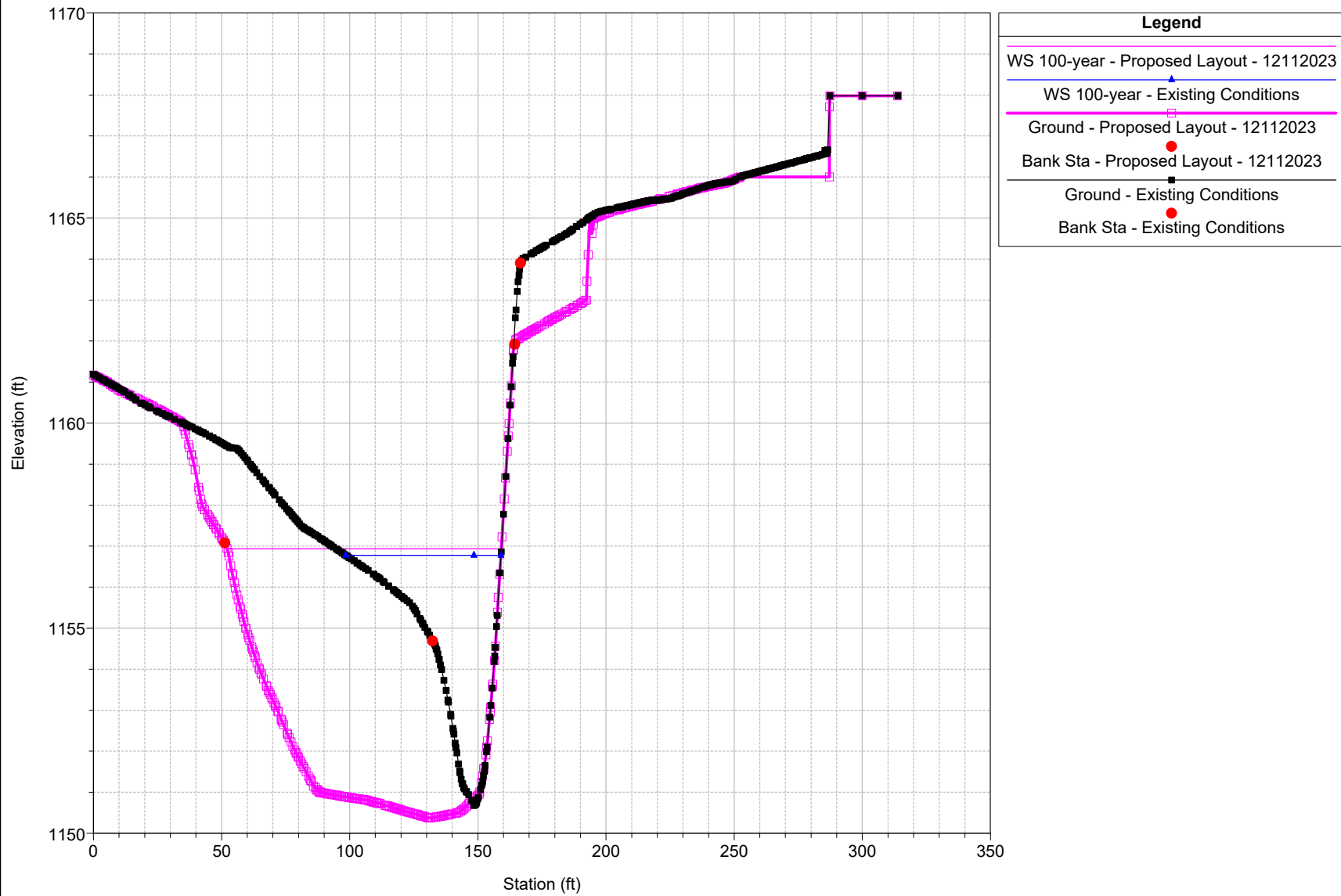
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River = Bishop Creek Tri Reach = Reach-1 RS = 534



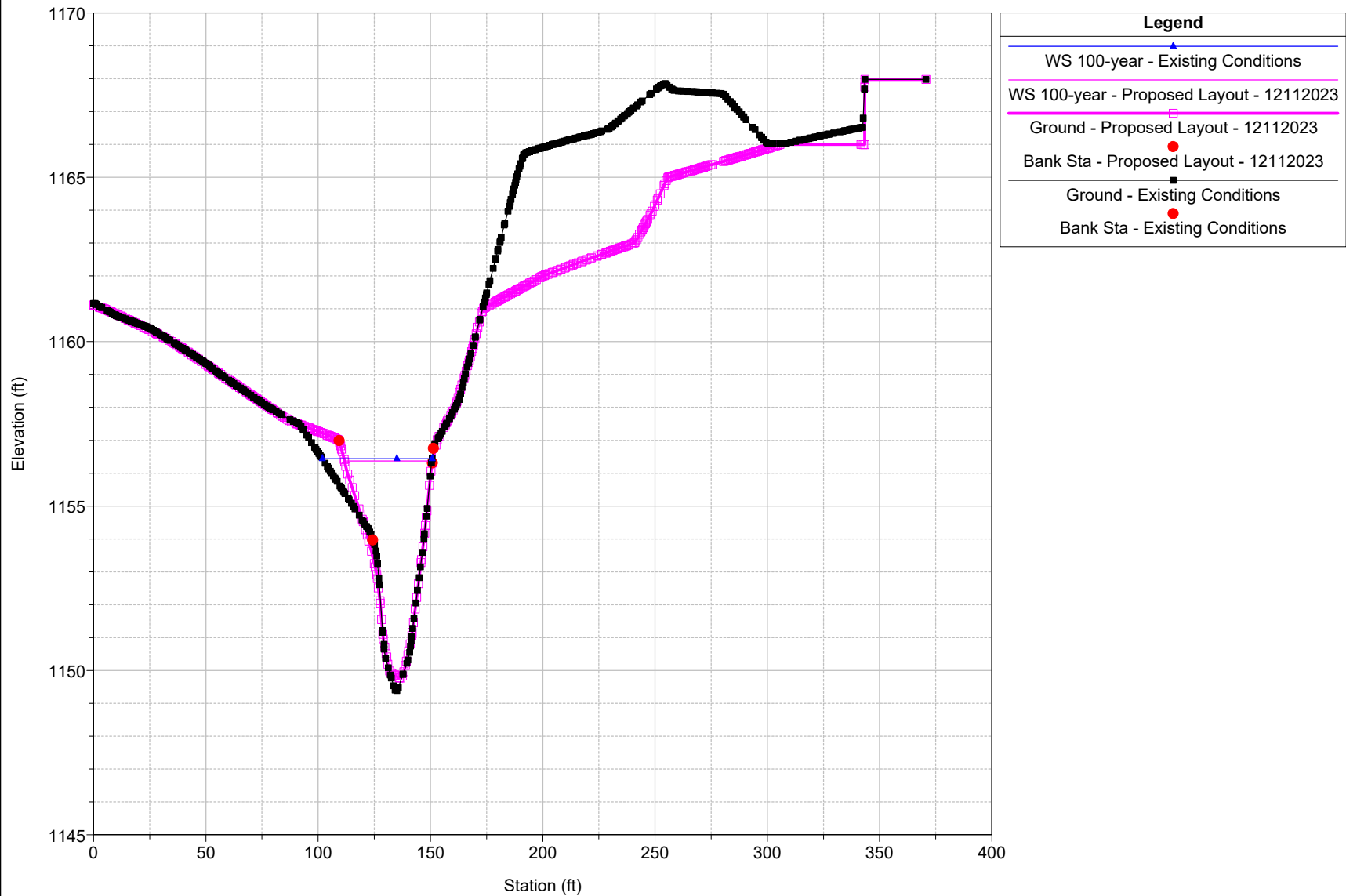
Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
River = Bishop Creek Tri Reach = Reach-1 RS = 533



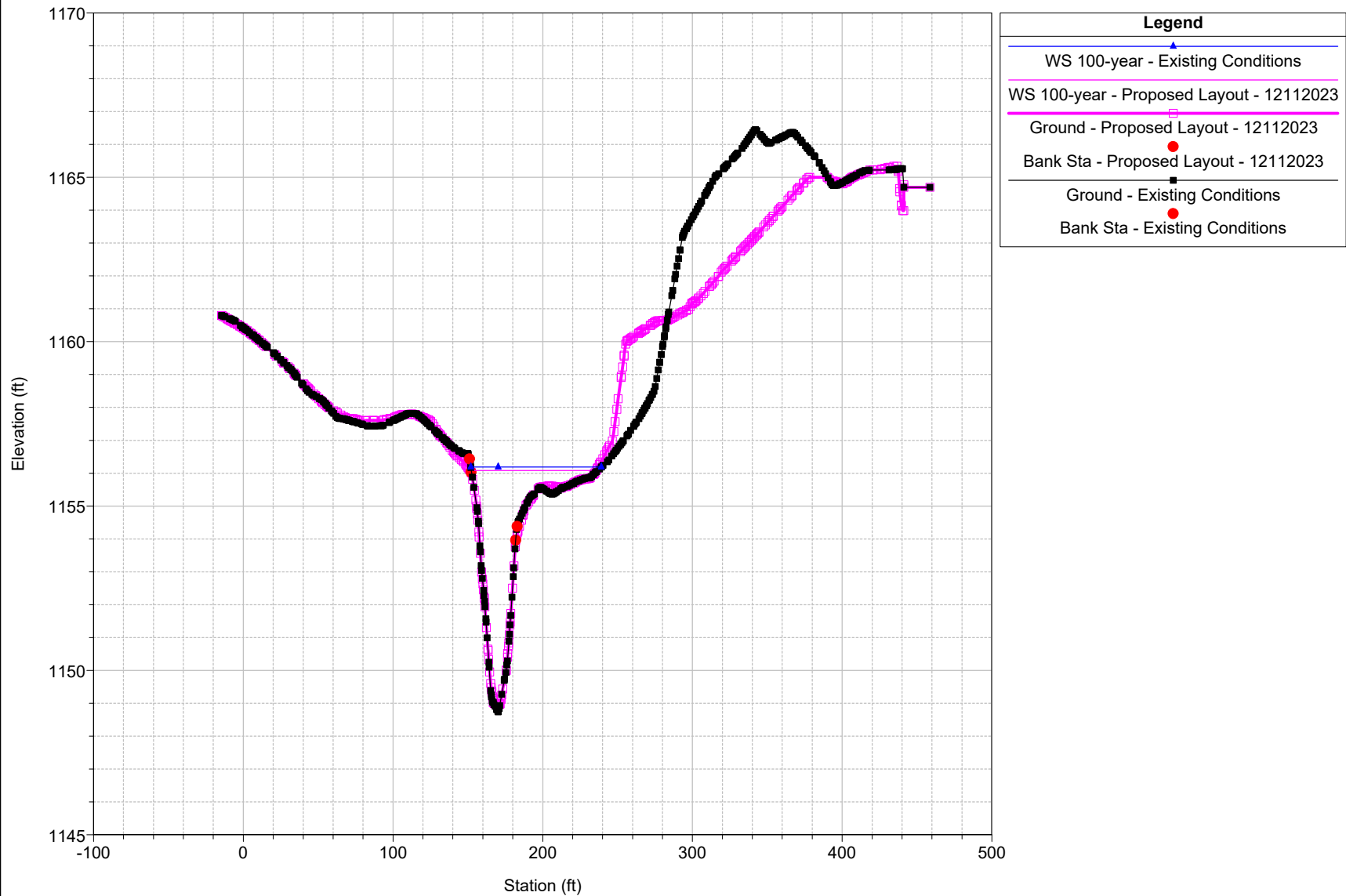
Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
 River = Bishop Creek Tri Reach = Reach-1 RS = 532



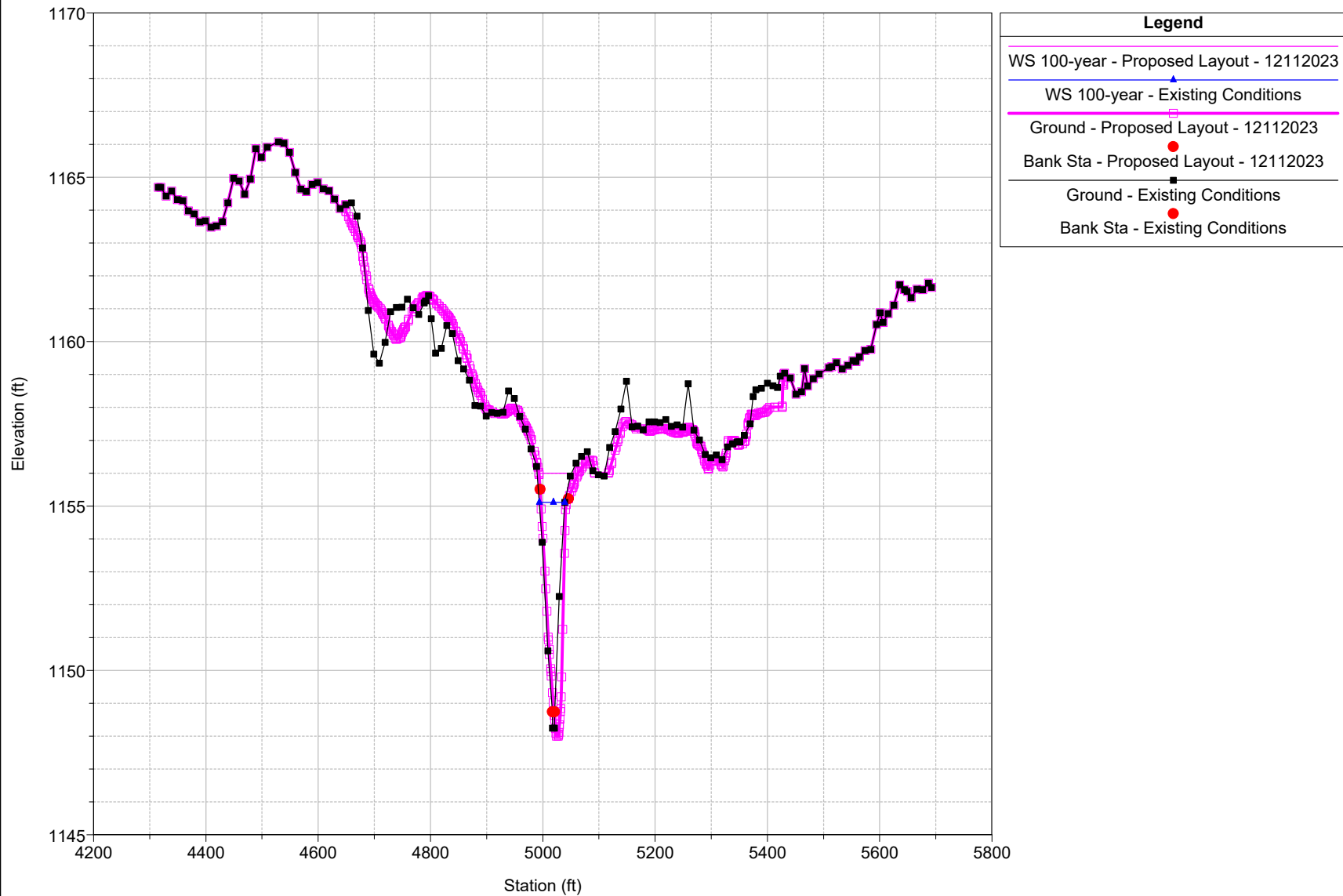
Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
River = Bishop Creek Tri Reach = Reach-1 RS = 531



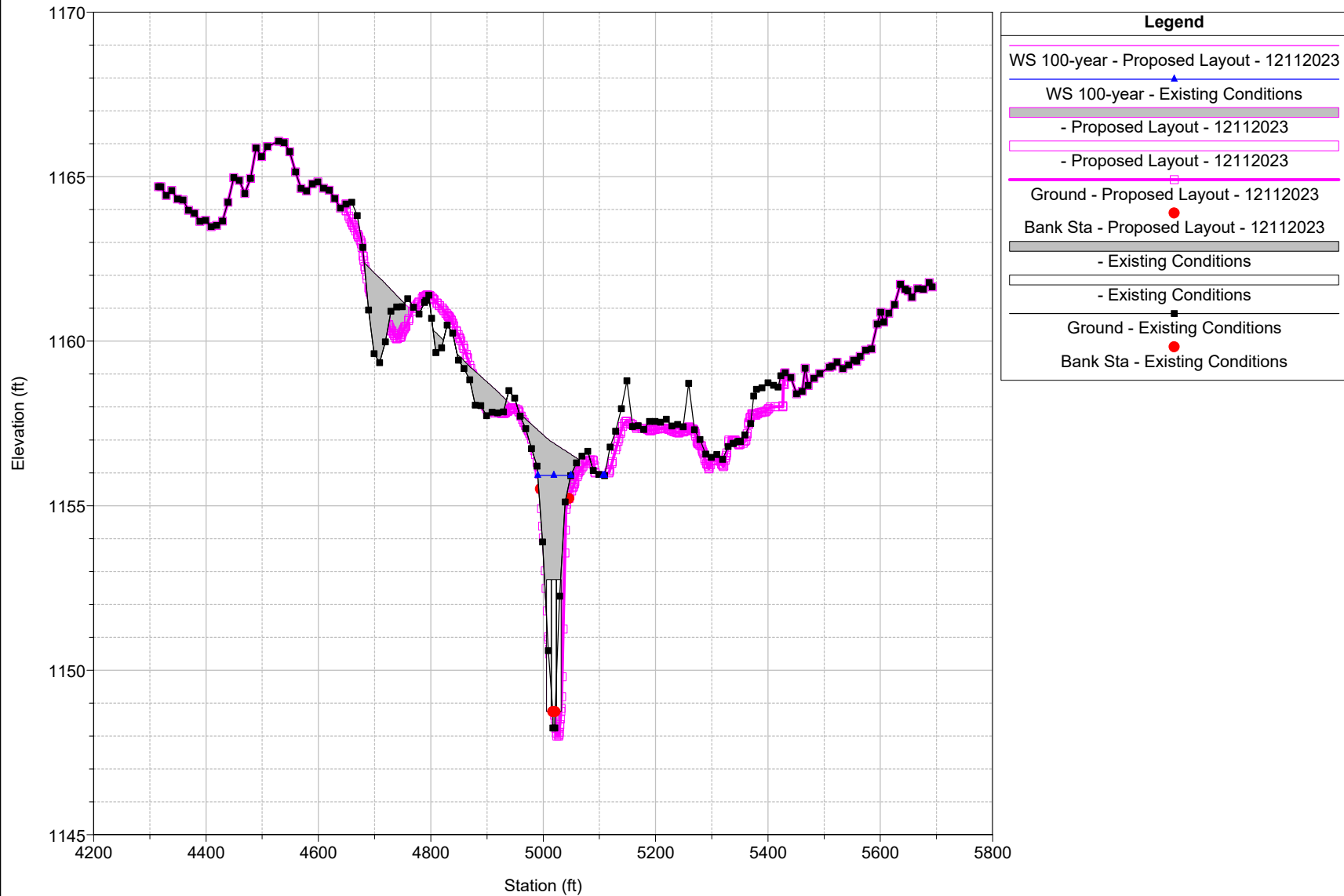
Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
 River = Bishop Creek Tri Reach = Reach-1 RS = 530.5



Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
River = Bishop Creek Tri Reach = Reach-1 RS = 530 Mapping XS 03672703

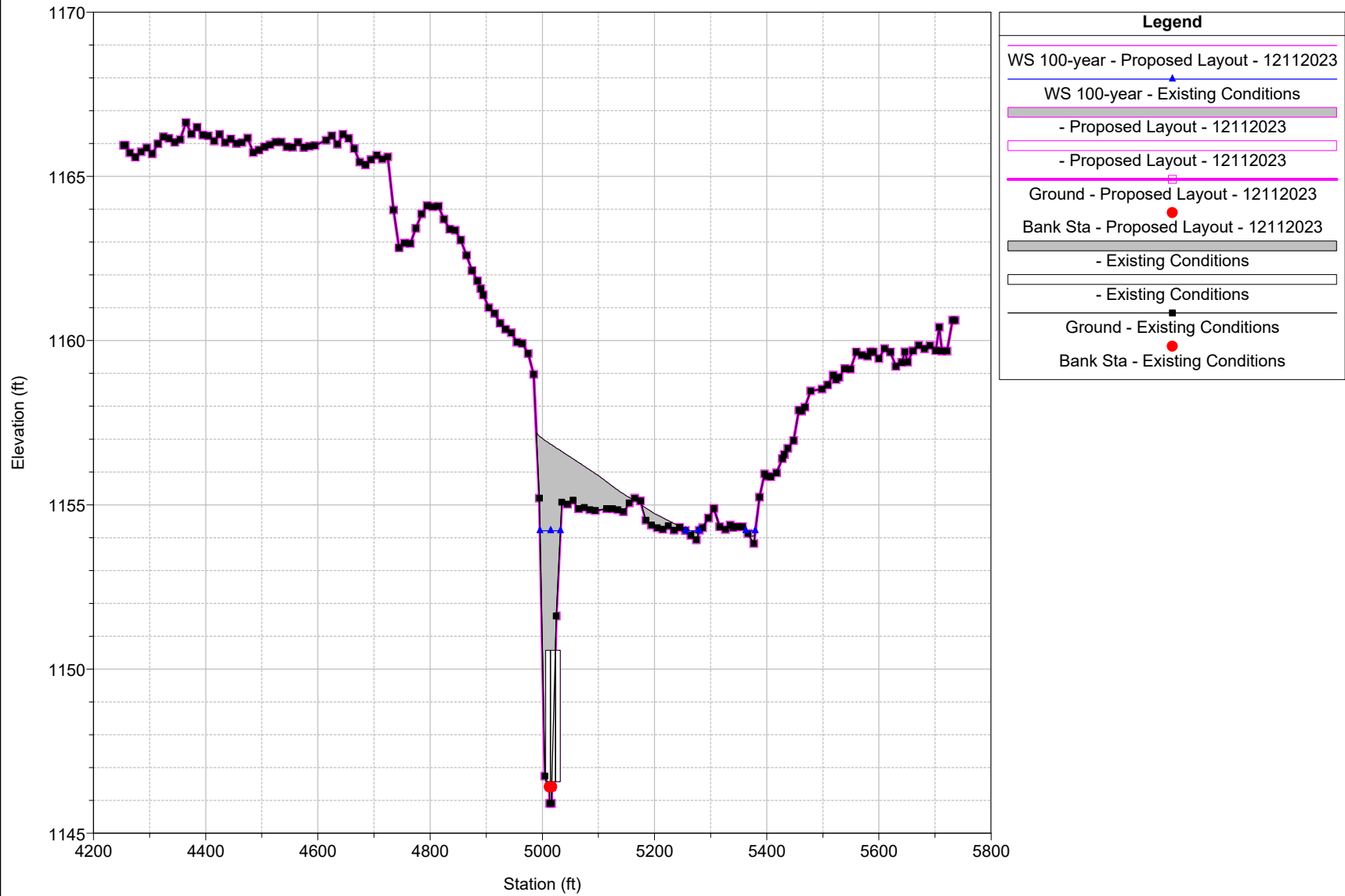


Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023
 River = Bishop Creek Tri Reach = Reach-1 RS = 453.26 Culv



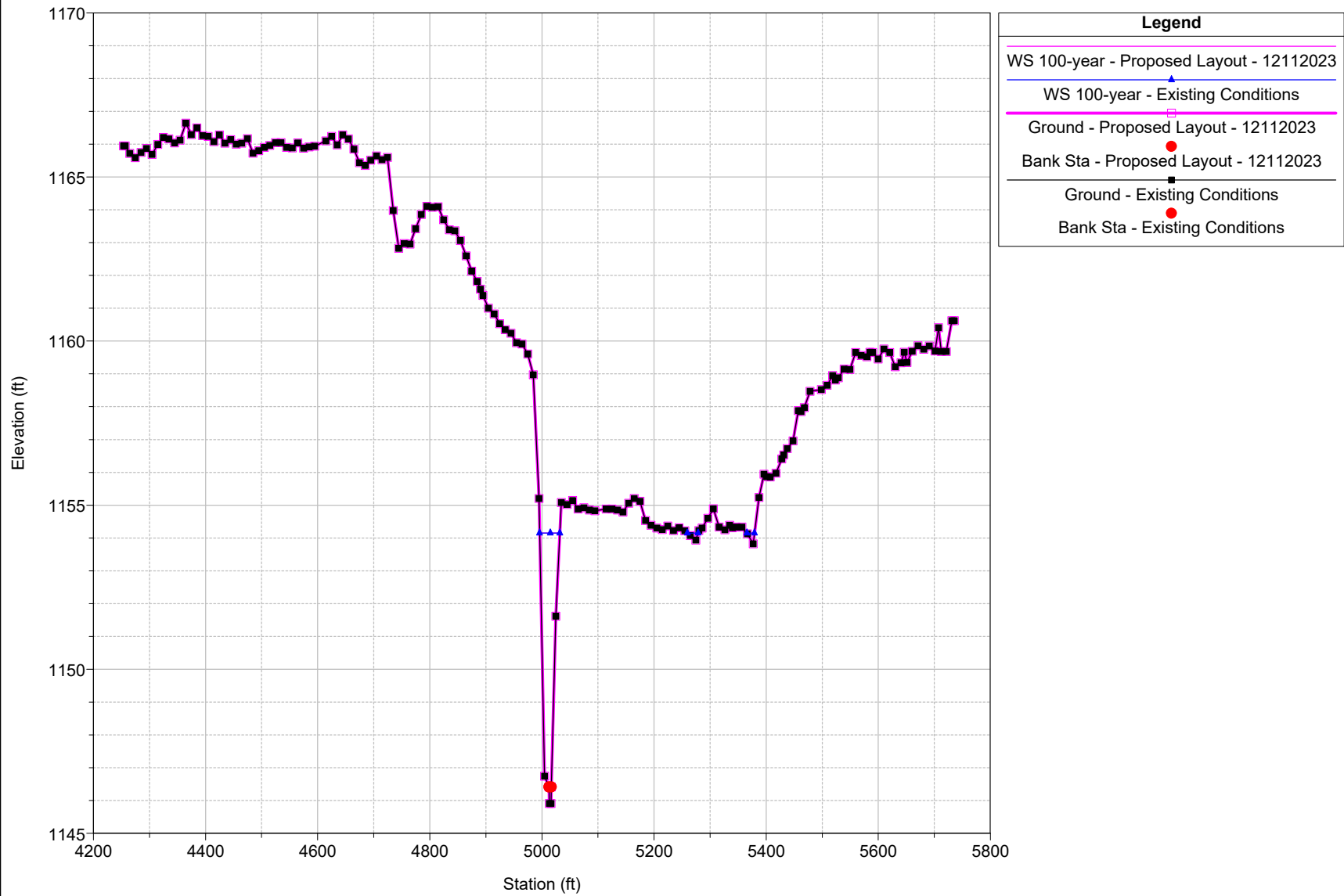
Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023

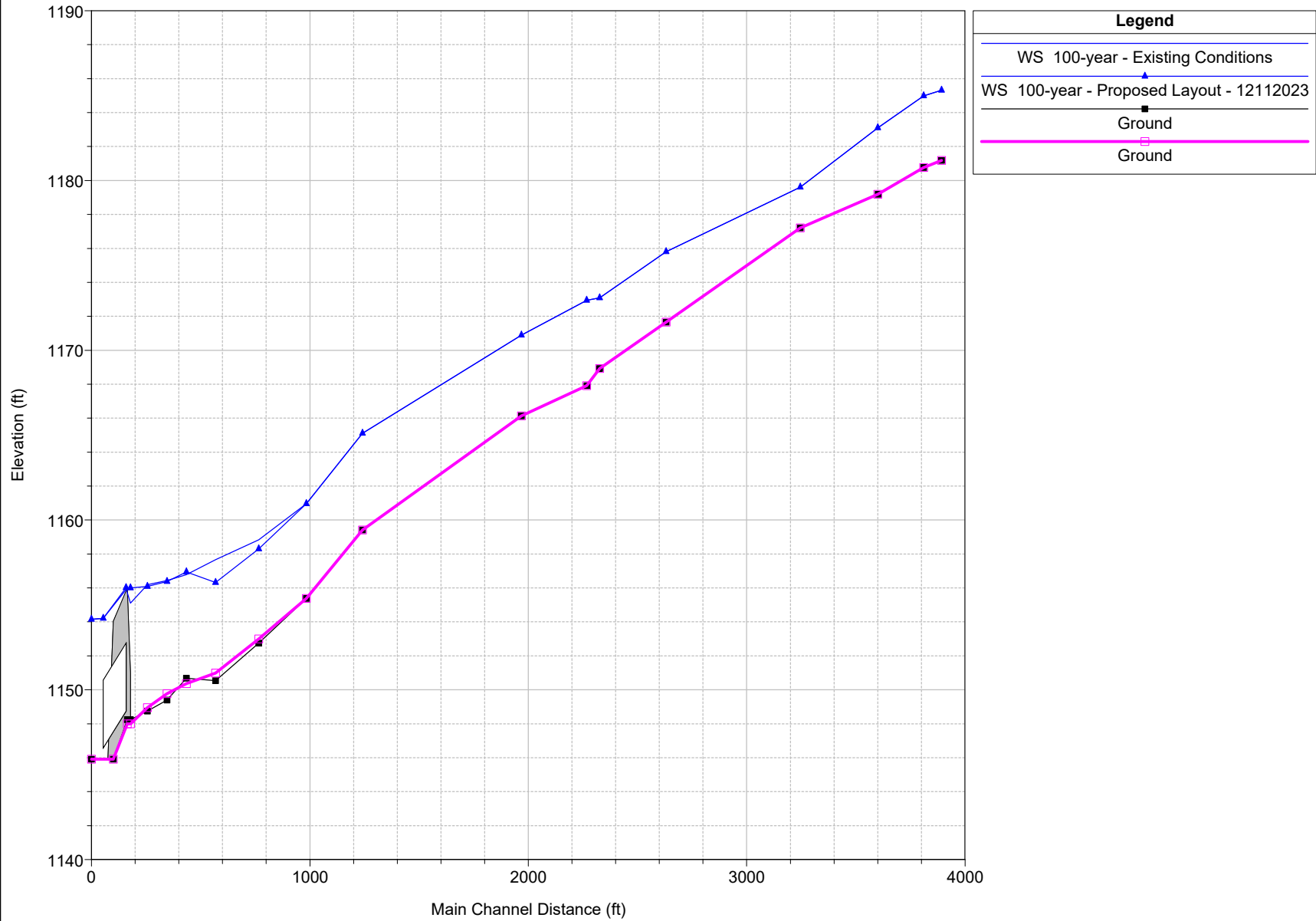
River = Bishop Creek Tri Reach = Reach-1 RS = 453.26 Culv



Bishop Creek Tributary B Base Level Engineering Plan: 1) Existing Conditions 2) Proposed Layout - 12112023

River = Bishop Creek Tri Reach = Reach-1 RS = 351 Mapping XS 4ecd22d4





PROPERTY OWNER LIST

List of property owners located within 350 foot radius of outer boundary of the project location provided by Cleveland County

Account #	Owner	Address	Market Value	Parcel ID	Website
23026	HYMER-HALL 4, LLC	601 S CARTER AVE	\$253,149	NC29 9 2W 29115	https://property.spatiallest.com/ok/cleveland/#/property/23026
23039	WALLS, CAROL LYNN	523 S CARTER AVE, Unit 529	\$68,610	NC29 9 2W 29130	https://property.spatiallest.com/ok/cleveland/#/property/23039
23040	CITY OF NORMAN	701 E APACHE ST	\$20,560	NC29 9 2W 29131	https://property.spatiallest.com/ok/cleveland/#/property/23040
23041	CITY OF NORMAN	1 ASSESSOR	\$1,000	NC29 9 2W 29132	https://property.spatiallest.com/ok/cleveland/#/property/23041
23222	LAWRENCE, TREVOR LANE & CATHERINE M	620 ALAMEDA ST	\$322,779	NC29 9 2W 32011	https://property.spatiallest.com/ok/cleveland/#/property/23222
24150	SEASON'S CAPITAL, LLC	515 ALAMEDA ST	\$1,030,000	NC29AAAO 44 9001	https://property.spatiallest.com/ok/cleveland/#/property/24150
24151	HUNTINGTON INVESTMENT CORP	600 S FINDLAY AVE	\$63,782	NC29AAAO 44 17001	https://property.spatiallest.com/ok/cleveland/#/property/24151
24152	SEASON'S CAPITAL, LLC	515 ALAMEDA ST	\$25,000	NC29AAAO 44 17001	https://property.spatiallest.com/ok/cleveland/#/property/24152
24156	620 E LINN ST	620 E LINN ST	\$66,250	NC29AAAO 45 5001	https://property.spatiallest.com/ok/cleveland/#/property/24156
24164	HOMER, DON A SR & JANIE	630 E APACHE ST	\$102,468	NC29AAAO 46 14001	https://property.spatiallest.com/ok/cleveland/#/property/24164
24165	KUEHNERT, CHRISTOPHER S	621 E LINN ST	\$79,762	NC29AAAO 46 17001	https://property.spatiallest.com/ok/cleveland/#/property/24165
24166	MILLER, CAROLYN S	605 E LINN ST	\$132,736	NC29AAAO 46 24001	https://property.spatiallest.com/ok/cleveland/#/property/24166
24167	SIEBER, AMANDA ELIZABETH	603 E LINN ST	\$185,000	NC29AAAO 46 29001	https://property.spatiallest.com/ok/cleveland/#/property/24167
38877	VALENTAS, CHRISTOPHER & KILEY-REV TRT	603 MORNINGSIDE DR	\$294,005	NC29MORNS 1 1001	https://property.spatiallest.com/ok/cleveland/#/property/38877
38902	WAGGONER, FRANK	810 ALAMEDA ST	\$134,923	NC29MORNS 1 26001	https://property.spatiallest.com/ok/cleveland/#/property/38902
38903	DAVENPORT, CARLA SUE	808 ALAMEDA ST	\$133,670	NC29MORNS 1 27001	https://property.spatiallest.com/ok/cleveland/#/property/38903
38904	DEHAVEN, JAMES K	806 ALAMEDA ST	\$116,216	NC29MORNS 1 28001	https://property.spatiallest.com/ok/cleveland/#/property/38904
38905	HAILEY, EDNA E	804 ALAMEDA ST	\$148,804	NC29MORNS 1 29001	https://property.spatiallest.com/ok/cleveland/#/property/38905
38906	CONCORD MISSIONARY BAPTIST CHURCH	602 MORNINGSIDE DR	\$157,039	NC29MORNS 2 1001	https://property.spatiallest.com/ok/cleveland/#/property/38906
38907	MUSSEY, MARCIA ANN	606 MORNINGSIDE DR	\$167,360	NC29MORNS 2 2001	https://property.spatiallest.com/ok/cleveland/#/property/38907
115423	CENTRAL CHURCH OF CHRIST	801 ALAMEDA ST	\$875,645	NC29ALMCC 1 1001	https://property.spatiallest.com/ok/cleveland/#/property/115423
115742	ALAMEDA CHURCH OF CHRIST	E APACHE ST	\$173,369	NC29 9 2W 29137	https://property.spatiallest.com/ok/cleveland/#/property/115742
132346	BIG BROTHERS ENTERPRISES, LLC	603 S FINDLAY AVE	\$75,600	NC29AAAO 45 1004	https://property.spatiallest.com/ok/cleveland/#/property/132346
132347	LITTLEJOHN, DANNY	601 S FINDLAY AVE	\$101,667	NC29AAAO 45 1003	https://property.spatiallest.com/ok/cleveland/#/property/132347
138699	SULLIVAN, MICHAEL W & PAULA KIM		\$45,163	NC29AAAO 45 25003	https://property.spatiallest.com/ok/cleveland/#/property/138699
138700	SULLIVAN, MICHAEL W & PAULA KIM	601 ALAMEDA ST	\$293,795	NC29AAAO 45 29002	https://property.spatiallest.com/ok/cleveland/#/property/138700
144545	MILLER, J C LLC	650 ALAMEDA ST	\$1,414,985	NC29MILRS 001	https://property.spatiallest.com/ok/cleveland/#/property/144545
149497	HAWN BROS CONSTRUCTION LLC	E LINN ST	\$0	NC29 9 2W 29139	https://property.spatiallest.com/ok/cleveland/#/property/149497
157793	MORRISON, ROY & Veva RANCH CORP	616 E APACHE ST	\$104,322	NC29AAAO 46 7002	https://property.spatiallest.com/ok/cleveland/#/property/157793
157794	RUVALCABA, ALEJANDRINA & JOSE M	618 E APACHE ST	\$97,765	NC29AAAO 46 9002	https://property.spatiallest.com/ok/cleveland/#/property/157794
157795	BAKER, ANNE L	620 E APACHE ST	\$99,310	NC29AAAO 46 11002	https://property.spatiallest.com/ok/cleveland/#/property/157795



I CERTIFY THAT THIS IS A TRUE
AND CORRECT COPY OF THE
RECORDS OF THE OFFICE OF THE
CLEVELAND COUNTY ASSESSOR

AS OF 4:16 AM/PM ON THIS
22nd DAY OF February 2024
DOUGLAS WARR, COUNTY ASSESSOR
BY [Signature]

HYMER-HALL 4, LLC
1217 Lindsey Plaza DR, 101
Norman OK 73071-1905

WALLS, CAROL LYNN
529 S Carter AVE
Norman OK 73071-5403

CITY OF NORMAN
201 W Gray ST
Norman OK 73069-7108

CITY OF NORMAN
201 W Gray ST, # C
Norman OK 73069-7108

LAWRENCE, TREVOR LANE &
CATHERINE M
2801 Summit Hill CT
Norman OK 73071-4102

SEASON'S CAPITAL, LLC
17934 Anthem Ridge RD
Owasso OK 74055-8268

HUNTINGTON INVESTMENT CORP
3113 MILLBURY RD
NORMAN OK 73071

SEASON'S CAPITAL, LLC
17934 Anthem Ridge RD
Owasso OK 74055-8268

620 EAST LINN, LLC
501 E Main ST
Norman OK 73071-5822

HOMER, DON A SR & JANIE
12701 Old Macgregor LN
Fort Worth TX 76244-4357

KUEHNERT, CHRISTOPHER S
17150 183rd ST
Lexington OK 73051-5403

MILLER, CAROLYN S
605 E Linn ST
Norman OK 73071-5409

SIEBER, AMANDA ELIZABETH
603 E LINN ST
NORMAN OK 73071

VALENTAS, CHRISTOPHER &
KILEY-REV TRT
603 MORNINGSIDE DR
NORMAN OK 73071

WAGGONER, FRANK
810 Alameda ST
Norman OK 73071-5228

DAVENPORT, CARLA SUE
3604 CHANTHAM COURT
NORMAN OK 73072

DEHAVEN, JAMES K
125 Lakeside DR
Norman OK 73026-0722

HAILEY, EDNA E
804 Alameda ST
Norman OK 73071-5228

CONCORD MISSIONARY BAPTIST
CHURCH
1500 Stubbeman AVE
Norman OK 73069-8724

MUSSER, MARCIA ANN
606 MORNINGSIDE DR
NORMAN OK 73071

CENTRAL CHURCH OF CHRIST
801 Alameda ST
Norman OK 73071-5227

ALAMEDA CHURCH OF CHRIST
801 Alameda ST
Norman OK 73071-5227

BIG BROTHERS ENTERPRISES, LLC
3651 48TH AVE SE
NOBLE OK 73068

LITTLEJOHN, DANNY
601 S Findlay AVE
Norman OK 73071-5425

SULLIVAN, MICHAEL W & PAULA KIM
800 Belmar BLVD
Norman OK 73071-8001

SULLIVAN, MICHAEL W & PAULA KIM
800 Belmar BLVD
Norman OK 73071-8001

MILLER, J C LLC
PO Box 925
Norman OK 73070-0925

HAWN BROS CONSTRUCTION LLC
3700 Sooner DR
Oklahoma City OK 73165-6305

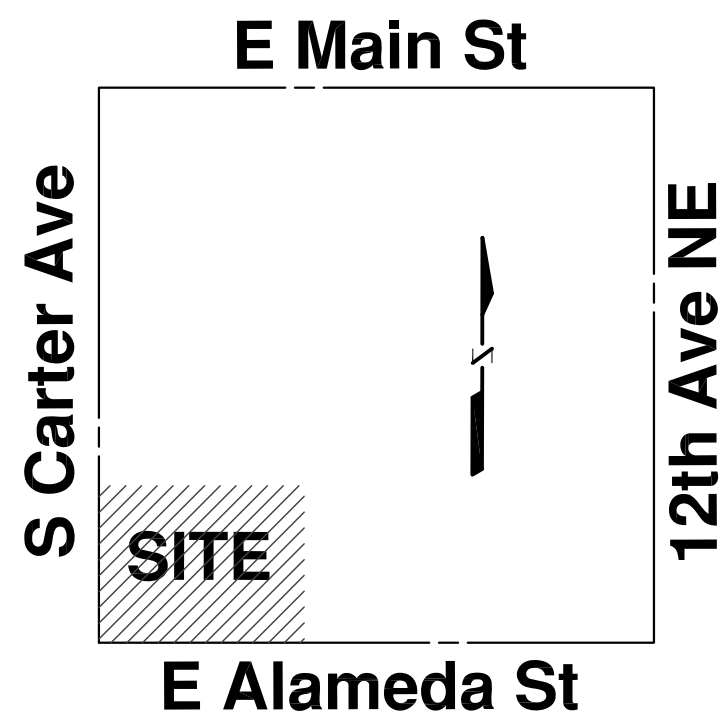
MORRISON, ROY & VEVA RANCH
CORP
11714 CR 1690
ROFF OK 74865

RUVALCABA, ALEJANDRINA & JOSE M
618 E Apache ST
Norman OK 73071-5418



CONSTRUCTION PLANS

CONSTRUCTION PLANS FOR NORMAN NATURE PARK



ADA NOTES

CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SIDEWALKS AND ACCESS RAMPS COMPLY WITH THE CITY OF NORMAN ADA STANDARD REQUIREMENTS. CONTRACTOR SHALL NOTIFY THE ENGINEER OR ENGINEER'S DESIGNEE FOR ANY DISCREPANCIES BETWEEN DESIGN INFORMATION AND THE CITY OF NORMAN STANDARD REQUIREMENTS PRIOR TO CONSTRUCTION.

EROSION CONTROL NOTES

A COPY OF THE EROSION CONTROL SITE PLAN MUST BE ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE INSPECTOR UPON REQUEST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ALL EROSION CONTROL DEVICES DAMAGED DUE TO CONSTRUCTION. INDICATE PROCEDURES FOR RE-VEGETATION OF DISTURBED AREAS FOR PERMANENT STABILIZATION.

NOTES

A STORM WATER DISCHARGE PERMIT IS REQUIRED BEFORE ANY LAND DISTURBING ACTIVITIES CAN BEGIN. THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REPLACEMENT AND/OR REPAIR OF ALL TRAFFIC CONTROL DEVICES AND APPURTENANCES DAMAGED OR DISTURBED DUE TO CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO OBTAIN STORMWATER QUALITY PERMIT, SWPPP, AND FILE N.O.I.

NOTES

CONSTRUCTION ACTIVITIES THAT RESULT IN LAND DISTURBANCE OF EQUAL TO OR GREATER THAN ONE(1) ACRE, OR LESS THAN ONE(1) ACRE IF THEY ARE PART OF A LARGER COMMON PLAN OF DEVELOPMENT OF SALE THAT TOTALS AT LEAST ONE(1) ACRE MUST OBTAIN A PERMIT FROM ODEQ (FORM 605-002A) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. THIS MEANS THAT LAND DISTURBING OF ONE ACRE OR MORE MUST PERMIT WITH ODEQ AND THE CITY OF NORMAN, STORM WATER QUALITY.



The City of NORMAN, OK

LARRY HEIKKILA	MAYOR
<u>COUNCIL MEMBERS</u>	
AUSTIN BALL	Ward 1
LAUREN SCHUELER	Ward 2
BREE MONTOYA	Ward 3
HELEN GRANT	Ward 4
MICHAEL NASH	Ward 5
ELIZABETH FOREMAN	Ward 6
STEPHEN HOLMAN	Ward 7
MATTHEW PEACOCK	Ward 8
DARREL PYLE	CITY MANAGER

PDG
PLANNING DESIGN GROUP

LANDSCAPE ARCHITECTURE •
RECREATIONAL DESIGN • LAND PLANNING
5314 S. YALE AVE., SUITE 510, TULSA, OK 74135
PHONE: 918.628.1255
WWW.PLANNINGDESIGNGROUP.COM

RECOMMENDED FOR APPROVAL

JAMES C. CROSBY,
REGISTERED PROFESSIONAL
LANDSCAPE ARCHITECT, NO. 121

DATE

JASON OLSEN, PARKS AND
RECREATION DIRECTOR

DATE

APPROVED AS FINAL PLANS

MAYOR

DATE

CITY CLERK

DATE

SHEET INDEX		
SHEET #	SHEET NAME	DESCRIPTION
1	C	COVER
2	IN-1	INDEX SHEET
3	C-0.1	NOTES AND LEGEND
4	C-1.0	OVERALL EXISTING SITE PLAN
5	C-1.1	EXISTING SITE PLAN
6	C-2.0	OVERALL DEMOLITION PLAN
7	C-2.1	DEMOLITION PLAN
8	C-3.0	OVERALL SITE AND UTILITY PLAN
9	C-3.1	SITE AND UTILITY PLAN
10	C-4.0	OVERALL GRADING PLAN
11	C-4.1	GRADING PLAN
12	C-5.0	EROSION CONTROL PLAN
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15	SP-1	OVERALL SITE PLAN
16	L-1	PLAYGROUND LAYOUT PLAN
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21	E-001	ELECTRICAL COVER SHEET
22	E-101	ELECTRICAL SITE PLAN
23	PL-1	OVERALL GRASSING PLAN
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26	D-1	CONSTRUCTION DETAILS
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28	D-3	CONSTRUCTION DETAILS
29	D-4	CONSTRUCTION DETAILS
30	S-1	GENERAL NOTES
31	S-2	FOUNDATIONS

PROJECT INFORMATION	
PROJECT ADDRESS:	
801 E Alameda St. Norman, OK 73069	
PROJECT NO.	
DATE	11-02-23
DRAWN BY AB	CHECKED BY GE

NORMAN NATURE PARK NORMAN, OKLAHOMA
--

ISSUE/ REVISIONS	
05/13/24	65% Review Set

OWNER:
CITY OF NORMAN
201 W Gray St, Norman, OK 73069

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL MAINTAIN AND REPAIR ANY DAMAGE TO STORM WATER POLLUTION CONTROL DEVICES AS SOON AS PRACTICAL AFTER THE DISCOVERY OF THE DAMAGE.
2. THE CONTRACTOR SHALL USE WHATEVER MEASURES NECESSARY TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. THIS CAN BE ACCOMPLISHED BY TEMPORARY SEDIMENT PONDS, SILT FENCES, WIRE AND BURLAP FENCES, OR BARRIERS OF CEDAR TREES AND/OR BALES OF STRAW.
3. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL EROSION, CONSERVATION, AND SILTRATION REQUIREMENTS.
4. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMP'S) AS REQUIRED. ADDITIONAL BMP'S SHALL BE IMPLEMENTED AS DICTATED BY FIELD CONDITIONS, AT NO ADDITIONAL COST TO OWNER, THROUGHOUT ALL PHASES OF CONSTRUCTION.
5. THE CONTRACTOR SHALL KEEP PAVEMENT AREAS FREE OF ANY MUD OR EXCAVATION WASTE FROM TRUCKS OR OTHER EQUIPMENT.
6. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL STRUCTURES UPON COMPLETION OF CONSTRUCTION AND THE ESTABLISHMENT OF SUFFICIENT PERMANENT STABILIZATION TO PREVENT EROSION.
7. THE CONTRACTOR SHALL INSTALL SOLID SLAB SOD, UNLESS OTHERWISE NOTED, TO OBTAIN STABILIZATION OF DISTURBED AREAS AS REQUIRED BY THE CONTRACT DOCUMENTS AND IN ACCORDANCE WITH THE CONSTRUCTION AND EROSION CONTROL SCHEDULES.
8. THE CONSTRUCTION AND PLACEMENT OF EROSION AND SEDIMENT CONTROL DEVICES SHALL BE TIMED IN CONJUNCTION WITH THE PROGRESS OF GENERAL CONSTRUCTION. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSPECTED AND MAINTAINED, AS PREVIOUSLY SET FORTH HEREIN, UNTIL ALL AREAS OF CONSTRUCTION HAVE BEEN STABILIZED.
9. THE CONTRACTOR SHALL BEGIN PERMANENT STABILIZATION OF COMPLETED AREAS OF CONSTRUCTION AS SOON AS IS PRACTICAL.
10. STABILIZED CONSTRUCTION ENTRANCES SHALL BE REQUIRED AT ALL POINTS WHERE CONSTRUCTION OR EMPLOYEE VEHICLES ENTER OR LEAVE THE CONSTRUCTION OR STAGING AREAS. THE STABILIZED CONSTRUCTION ENTRANCES ARE INTENDED TO PREVENT THE TRACKING OF MUD ONTO PUBLIC STREETS OUTSIDE THE CONTROLLED CONSTRUCTION AREAS.
11. THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE CONSTRUCTED OF TWO INCH (2") STONE, OR RECLAIMED/RECYCLED CONCRETE OF SIMILAR SIZE, A MINIMUM (6") THICK PLACED ON FILTER CLOTH.
12. THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE A MINIMUM OF TWENTY FEET (20') IN WIDTH (BUT NOT LESS THAN FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR) AND AT LEAST FIFTY FEET (50') IN LENGTH.
13. ALL SURFACE WATER FLOWING OR DIVERTED TOWARD STABILIZED CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL THEN A MOUNTED BERM WITH FIVE TO ONE (5:1) SLOPES WILL BE PERMITTED.
14. THE WHEELS OF VEHICLES LEAVING THE CONSTRUCTION AREAS SHALL BE CLEANED OF MUD PRIOR TO LEAVING THE CONSTRUCTION OR STAGING AREAS. WHEN WHEEL WASHING IS REQUIRED IT SHALL BE PERFORMED IN AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
15. ANY MUD, SEDIMENT, EXCAVATION WASTE, ETC., DROPPED, WASHED, SPILLED, OR TRACKED FROM THE CONSTRUCTION OR STAGING AREAS ONTO STREETS OUTSIDE OF THE CONSTRUCTION AREAS SHALL BE REMOVED IMMEDIATELY.
16. PERIODIC INSPECTION AND INSPECTION AFTER SIGNIFICANT RAINFALL SHALL BE MADE OF THE CONSTRUCTION ENTRANCES AS PREVIOUSLY SET FORTH HEREIN.
17. SILT FENCE SHALL BE USED TO CONTROL SEDIMENTATION FROM SURFACE RUNOFF AROUND THE PERIMETER OF THE WORK AREA AS NECESSARY.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING THE SILT FENCE BARRIER AROUND THE LIMITS OF CONSTRUCTION AND AS SHOWN ON THE EROSION PLAN, DURING CONSTRUCTION, UNTIL ALL WORK IS COMPLETE AND VEGETATION IS REESTABLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND SUBJECT TO FREQUENT INSPECTION OF ALL METHODS AND MATERIALS FOR EROSION PROTECTION, AND SHALL REPLACE ANY ITEM CONSIDERED DEFECTIVE BY THE ENGINEER IN A TIMELY MANNER.
19. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 14 DAYS SHALL BE TEMPORARILY SEEDDED, SODDED, OR OTHERWISE STABILIZED UNTIL CONSTRUCTION RECOMMENCES.
20. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SODDED, UNLESS OTHERWISE NOTED. THESE AREAS SHALL BE SODDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING.
21. ONSITE AND OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BMP'S.
22. CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF TEMPORARY OR FINAL DRIVING SURFACES.

SITE DEMOLITION NOTES:

1. SCOPE OF WORK SHALL INCLUDE REMOVAL OF ALL EXISTING OBJECTS REQUIRED FOR PROJECT CONSTRUCTION. REMOVED ITEMS THAT ARE NOT DEVOTED FOR SALVAGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN AN APPROVED MANNER, UNLESS OTHERWISE SPECIFIED. ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
2. UNLESS NOTED FOR REMOVAL, EXISTING TREES SHALL NOT BE DISTURBED. ALL TREE REMOVALS SHALL BE APPROVED BY THE OWNER PRIOR TO DEMOLITION.
3. EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATED BASED ON RECORD DRAWINGS OR HORIZONTAL LOCATIONS FLAGGED IN THE FIELD. ALL VERTICAL LOCATIONS ARE APPROXIMATE DEPTH ONLY. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF UTILITIES INFORMATION. FIELD VERIFY THE PRESENCE, TYPE, SIZE, LOCATION AND DEPTH OF ALL EXISTING UTILITIES IN THE PROJECT AREA PRIOR TO CONSTRUCTION. NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING THE SITE. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OFF-SITE.
5. THE REMOVAL OF ANY UTILITY LINE, SERVICE, APPURTENANCE, AND STRUCTURE SHALL BE COORDINATED WITH THE OWNER OF THE RESPECTIVE UTILITY.
6. ALL PAVEMENT REMOVAL SHALL BE FULL DEPTH. PAVEMENT REMOVAL ADJACENT TO EXISTING PAVEMENT, TO REMAIN, SHALL BE SAW-CUT IN STRAIGHT LINES, FULL DEPTH.
7. SIDEWALK REMOVALS SHOULD OCCUR TOWARDS THE END OF DEMOLITION. NEW SIDEWALK SHALL BE INSTALLED AS SOON AS POSSIBLE AFTER THE REMOVAL OF OLD SIDEWALK IN ORDER TO MAINTAIN OPERATIONS WITH MINIMAL INTERRUPTION IN SERVICE.
8. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS SHALL NOT BE PERMITTED.
9. CONTRACTOR SHALL BACKFILL ANY VOIDS RESULTING FROM STRUCTURES, VEGETATION, AND OBJECTS REMOVED. FILL SHALL BE PLACED IN ACCORDANCE WITH GEOTECHNICAL REPORT RECOMMENDATIONS FOR THIS SITE (SEE SITE GRADING NOTES).
10. ALL EXISTING STRUCTURES, PAVEMENTS AND UTILITIES DESIGNATED TO REMAIN SHALL BE ADEQUATELY PROTECTED FROM DAMAGE THAT MIGHT OTHERWISE OCCUR DUE TO CONSTRUCTION OPERATIONS. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY STRUCTURES, UTILITIES OR PAVEMENTS RESULTING FROM THE CONTRACTOR'S OPERATIONS. CONTRACTOR SHALL TAKE PHOTOS OF EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
11. DURING CONSTRUCTION, ALL FIRE HYDRANTS, VALVE BOXES, FIRE OR POLICE CALL BOXES AND OTHER EXISTING UTILITY CONTROLS SHALL BE LEFT INTACT, UNOBSERVED AND ACCESSIBLE UNLESS NOTED ON THE PLAN.
12. THE CONTRACTOR MUST FILE A "NOTICE OF INTENT" WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AND THE AUTHORITY HAVING JURISDICTION, PRIOR TO COMMENCING EARTHWORK, CLEARING OR DEMOLITION OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF STORMWATER POLLUTION PREVENTION PLAN, IF REQUIRED.
13. EXISTING DRAINAGE STRUCTURES & PIPES, TO REMAIN, SHALL BE CLEANED OF SILT & DEBRIS AND INSPECTED FOR ANY STRUCTURAL DEFICIENCIES.
14. ABIDE BY ALL FEDERAL, STATE AND LOCAL CODES FOR THE DEMOLITION AND DISPOSAL OF ALL MATERIALS. CEC SHALL NOT BE LIABLE FOR ANY DEMOLITION PROCEDURES, SCHEDULING, OR DISPOSAL OF ANY MATERIALS.
15. THE SAFETY OF THE PROJECT SITE IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL CONSTRUCTION SIGNING, SAFETY FENCE, OR OTHER ITEMS NEEDED FOR PROTECTION OF THE GENERAL PUBLIC SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.

SITE CONSTRUCTION NOTES:

1. ALL WORK PERFORMED AND MATERIALS SUPPLIED SHALL CONFORM TO THE AUTHORITY HAVING JURISDICTION'S STANDARD SPECIFICATIONS. IF AHJ STANDARDS AND SPECIFICATIONS DO NOT APPLY, ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE OKLAHOMA DEPARTMENT OF TRANSPORTATION 2019 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND SPECIAL PROVISIONS. PROJECT SPECIFICATIONS GOVERN OVER STANDARD SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MIGHT HAVE UTILITY LINES ON OR ABOUT THE PREMISES, OR WHO MIGHT BE AFFECTED BY THE CONSTRUCTION. THE CONTRACTOR SHALL ALSO COORDINATE HIS ACTIVITIES WITH THE UTILITY COMPANIES TO ENSURE COMPLIANCE WITH THE PROJECT SCHEDULE. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO LOCATE AND PROTECT EXISTING UTILITY LINES, AND SHALL REPAIR ANY DAMAGES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN CONSTRUCTION STAKING. CONTRACTOR TO OBTAIN CAD DRAWING FILE FROM ENGINEER FOR SITE CONSTRUCTION STAKING.
4. ALL CURB DIMENSIONS, RADIUS CALLOUTS AND ELEVATIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
6. ALL PAVEMENT STRIPING SHALL BE APPLIED IN TWO COATS, FOUR (4) INCHES WIDE, WHITE, AND ARE DIMENSIONED AS CENTER-TO-CENTER OF EACH STRIPE UNLESS SHOWN OTHERWISE ON PLANS.
7. ASSURE A SMOOTH FIT AND CONTINUOUS GRADE WITH EXISTING PAVEMENT. WHERE NEW CONCRETE PAVING IS TO ABUT EXISTING PAVEMENT, THE CONTRACTOR SHALL CONSTRUCT A THICKENED EDGE.
8. UNLESS OTHERWISE STATED IN THE GENERAL CONDITIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FAILED TESTS. THE RESULTS OF THE TESTS SHALL BE FORWARDED TO THE PROJECT ENGINEER FOR HIS REVIEW AND APPROVAL.
9. UNLESS OTHERWISE DIRECTED THE CONTRACTOR SHALL PROVIDE A MEDIUM TO FINE BROOM FINISH ON ALL CONCRETE WALKS, RAMPS, STAIRS AND PAVED SURFACES (REFER TO ARCHITECTURAL PLANS & SPECS. FOR SIDEWALK FINISH AROUND BUILDING).
10. REFER TO ARCHITECTURAL PLANS AND SPECS. FOR CONSTRUCTION INFORMATION AND DETAILS FOR BUILDING ERECTION.
11. CONTRACTOR TO NOTIFY DESIGN ENGINEER IF ANY PLAN DISCREPANCIES ARISE IN THE FIELD DURING CONSTRUCTION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY WORK ORDERS AND PERMITS FROM THE LOCAL AHJ AND/OR THE STATE OF OKLAHOMA, INCLUDING PROVISIONS OF BONDS AND INSURANCE AS REQUIRED.
13. THE PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING PUBLIC OR PRIVATE ROADWAYS, DRIVEWAYS, OR SIDEWALKS TO LOCAL OR THROUGH TRAFFIC. IF ROAD CLOSURE IS REQUIRED IT SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION AND THE OWNER.
14. PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED PAVED SURFACES (INCLUDING CURBS) SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, AND OTHER DISFIGUREMENT.
15. CONTRACTOR IS RESPONSIBLE FOR ALL FIRE LANE STRIPING & SIGNAGE, AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
16. SIDEWALK RAMPS AND ACCESSIBLE PARKING AREAS SHALL BE CONSTRUCTED TO MEET THE ADA ACCESSIBILITY GUIDELINES. GRADES IN ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2% IN ANY DIRECTION. CROSS SLOPE ON SIDEWALK SHALL NOT EXCEED 2%. LONGITUDINAL SLOPE ON SIDEWALK SHALL NOT EXCEED 5% EXCEPT AS SPECIFICALLY SHOWN IN PLANS.
17. CONDUCT AS-BUILT MEASUREMENTS AND SUBMIT DOCUMENTATION TO THE OWNER PRIOR TO FINAL ACCEPTANCE.

SITE GRADING NOTES:

1. PROPOSED CONTOURS DEPICT FINAL PAVING ELEVATION. ADJUST SUBGRADE AS NECESSARY FOR PAVEMENT THICKNESS.
2. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL ENGINEERING REPORT PROVIDED BY HINDERLITER GEOTECHNICAL ENGINEERING, INC DATED JULY 13, 2023 FOR SITE AND SUBSURFACE CONDITIONS, SITE AND BUILDING PAD PREPARATION, AND PAVEMENT RECOMMENDATIONS AND CONSTRUCTION SPECIFICATIONS. ANY INCONSISTENCIES BETWEEN THE GEOTECHNICAL ENGINEERING REPORT AND THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF ENGINEER FOR RESOLUTION.
3. AFTER PERFORMING ANY REQUIRED CUTS AND PRIOR TO PLACEMENT OF FILL, THE SITE SHALL BE PROOFROLLED WITH A 20 TO 25 TON PNEUMATIC-TIRED VEHICLE TO LOCATE ANY ZONES THAT ARE SOFT OR UNSTABLE. WHERE RUTTING OR PUMPING IS OBSERVED DURING PROOFROLLING, THE UNSTABLE SOILS SHALL BE OVER-EXCAVATED AND REPLACED WITH FILL IF THE SOILS CAN NOT BE MOISTURE CONDITIONED AND EFFECTIVELY COMPACTED IN PLACE.
4. THE BUILDING AREA SUBGRADE SOILS AND ANY AREA THAT WILL RECEIVE FILL SHALL BE SCARIFIED AND COMPACTED TO A DEPTH OF 8 INCHES. THE MOISTURE CONTENT OF THE SCARIFIED SOIL SHALL BE ADJUSTED TO WITHIN 2% OF ITS OPTIMUM VALUE, AS DETERMINED BY THE STANDARD PROCTOR TEST METHOD (ASTM D-698), PRIOR TO BEING COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY.
5. STRUCTURAL FILL SHALL BE FREE OF ORGANIC MATTER AND DEBRIS, AND BE LOW VOLUME CHANGE SOIL CONSISTING OF COHESIVE MATERIALS HAVING A LIQUID LIMIT LESS THAN 40 AND A PLASTICITY INDEX BETWEEN 5 AND 18. FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 6 INCHES IN LOOSE THICKNESS, AND COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AND AT OR ABOVE THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR TEST METHOD (ASTM D-698).
6. UNLESS OTHERWISE STATED, THE CONTRACTOR SHALL COORDINATE AND ORDER ALL TESTING IN CONJUNCTION WITH EARTHWORK OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FAILED TESTS. THE RESULTS OF THE TESTS SHALL BE FORWARDED TO ENGINEER FOR REVIEW AND APPROVAL. THE SOILS LABORATORY SHALL DETERMINE THE SUITABILITY OF EXISTING SITE MATERIAL PRIOR TO BEGINNING FILL OPERATIONS.
7. CONTRACTOR SHALL TAKE ALL PREVENTIVE MEASURES NECESSARY TO ELIMINATE, REDUCE, OR ALLEVIATE ANY DUST NUISANCE IN THE WORK AREA.
8. EXISTING CONTOURS AND SPOT ELEVATIONS ARE CORRECT PER SURVEY DATED AUGUST 25, 2023. CONTRACTOR SHALL VERIFY ELEVATIONS PRIOR TO COMMENCING CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
9. CONTRACTOR SHALL ADJUST THE GRADES OF ALL EXISTING VALVE BOXES AND COVERS, FIRE HYDRANTS, MANHOLES, METER BOXES, TRAFFIC BOXES, AND OTHER UTILITIES TO MEET THE SPECIFICATIONS OF EACH UTILITY COMPANY.
10. ALL TOPSOIL SHALL BE REMOVED AND STOCKPILED IN AN AREA DESIGNATED BY OWNER. UPON COMPLETION OF CONSTRUCTION, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE SPREAD OVER AREAS DISTURBED DURING CONSTRUCTION. CONTRACTOR SHALL SOD THESE AREAS, UNLESS OTHERWISE NOTED. SODDED AREAS SHALL BE MAINTAINED BY PROVIDING THE NECESSARY FERTILIZER AND WATER UNTIL THE VEGETATION AND ROOT GROWTH IS SUBSTANTIALLY ESTABLISHED.
11. CUT OR FILL SLOPES SHALL BE 4:1 MAX UNLESS NOTED OTHERWISE.
12. ENSURE POSITIVE DRAINAGE AWAY FROM ALL SIDES OF ALL BUILDINGS (EXISTING & PROPOSED) THROUGHOUT ALL PHASES OF CONSTRUCTION.

SITE UTILITY NOTES:

1. THOSE UTILITIES WHICH ARE PUBLIC SHALL BE INSTALLED BY A PROPERLY LICENSED CONTRACTOR APPROVED BY THE AUTHORITY HAVING JURISDICTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPROVED PLANS, WORK ORDERS, AND PERMITS REQUIRED.
2. CONTRACTOR SHALL CONTACT OKIE (1-800-522-6543) FOR LOCATING EXISTING UTILITIES PRIOR TO ANY REMOVALS OR EXCAVATION. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MAY HAVE UTILITY LINES ON OR ABOUT THE PREMISES OR WHO MAY BE AFFECTED BY THE CONSTRUCTION.
3. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILLING AND COMPACTING ALL TRENCHES AND EXCAVATION AREAS ASSOCIATED WITH UTILITY CONSTRUCTION. FILL SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT COMPLETED FOR THIS SITE (SEE SITE GRADING NOTES).
4. ALL UTILITIES SHALL TERMINATE FIVE (5) FEET OUTSIDE THE BUILDING UNLESS OTHERWISE NOTED. THE END OF ALL SERVICE LINES SHALL BE TIGHTLY CAPPED OR PLUGGED AND MARKED UNTIL SUCH TIME AS CONNECTIONS ARE MADE INSIDE THE BUILDING. ALL SERVICE LINES SHALL BE STUBBED UP TO A MINIMUM OF 1' ABOVE FINISHED GRADE. CONTRACTOR SHALL VERIFY ALL UTILITY STUBS TO THE BUILDING(S) WITH THE M.E.P. PLANS.
5. ALL VALVES, MANHOLE LIDS, AND SEWER CLEAN-OUTS LOCATED IN PAVED AREAS, SHALL BE RATED FOR H-20 TRAFFIC LOADING.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ELEVATIONS AND ADJUSTING ALL COVERS AND LIDS IN PAVED AREAS TO FINISHED GRADE. ALL FIELD ADJUSTMENTS SHALL BE NOTED AND BROUGHT TO ENGINEER'S ATTENTION FOR APPROVAL.
7. CONTRACTOR SHALL RAISE OR LOWER ALL EXISTING VALVE BOXES AND COVERS, FIRE HYDRANTS, MANHOLES, METER BOXES, TRAFFIC BOXES, AND OTHER UTILITIES TO MEET THE SPECIFICATIONS OF EACH UTILITY COMPANY RESPECTIVELY.
8. ALL SANITARY SEWER SERVICE LINES SHALL HAVE A MINIMUM 1% SLOPE W/ CLEANOUTS SET AT 100' O.C. AND BE CONSTRUCTED TO THE AUTHORITY HAVING JURISDICTION'S PLUMBING CODES.
9. CONTRACTOR SHALL PROVIDE ELECTRICAL CONDUIT AS NEEDED. REFER TO ARCHITECTURAL PLANS.
10. UNLESS OTHERWISE STATED IN THE GENERAL CONDITIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FAILED TESTS. THE RESULTS OF THE TESTS SHALL BE FORWARDED TO THE PROJECT ENGINEER FOR REVIEW AND ACCEPTANCE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING BARRICADES AND OTHER TRAFFIC WARNING DEVICES AS NECESSARY AROUND THE PERIMETER OF CONSTRUCTION AND ADJACENT TO ANY OPEN TRENCHES.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH STATE LAWS AND FEDERAL REGULATIONS RELATING TO TRENCH SAFETY, INCLUDING THOSE WHICH MAY BE ENACTED DURING THE PERFORMANCE UNDER THIS CONTRACT. CONTRACTOR IS ADVISED THAT FEDERAL REGULATIONS 29 C.F.R. 1926.650-1926.652 HAVE BEEN, IN THEIR MOST RECENT VERSION AS AMENDED, IN EFFECT SINCE JANUARY 2, 1990. CONTRACTOR SHALL FULLY COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS PERTAINING TO EXCAVATIONS, TRENCHING, AND SHORING AND SHALL PROVIDE AND FAMILIARIZE ITS EMPLOYEES INVOLVED IN EXCAVATION AND TRENCHING WITH THE PROVISIONS IN OSHA PAMPHLET NUMBER 2226, EXCAVATING AND TRENCHING OPERATIONS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY UTILITIES REQUIRED FOR CONSTRUCTION.
14. CONTRACTOR SHALL KEEP OPEN TRENCH DRAINED AT ALL TIMES.
15. CONTRACTOR TO PROVIDE AS-BUILT FIELD DRAWINGS FOR ALL EXISTING AND PROPOSED UTILITIES ON SITE, PRIOR TO FINAL ACCEPTANCE.

SITE DETAIL NOTES:

1. DETAILS SHOWN ARE DESIGNED BASED ON INFORMATION FROM THE GEOTECHNICAL REPORT COMPLETED FOR THIS SITE (SEE SITE GRADING NOTES).
2. DETAILS SHOWN SHALL SUPERCEDE SPECIFICATIONS UNLESS OTHERWISE NOTED BY ENGINEER.
3. NO REVISIONS SHALL BE MADE TO DETAILS UNLESS AUTHORIZED BY ENGINEER. CONTRACTOR SHALL SUBMIT ANY CHANGES TO PROJECT ENGINEER FOR APPROVAL.

PROJECT INFORMATION	
PROJECT ADDRESS:	
801 E Alameda St. Norman, OK 73069	
PROJECT NO.	
DATE	05-10-24
DRAWN BY	CHECKED BY
JLP	ACB

ISSUE/ REVISIONS	
05/13/24	65% Review Set

OWNER:

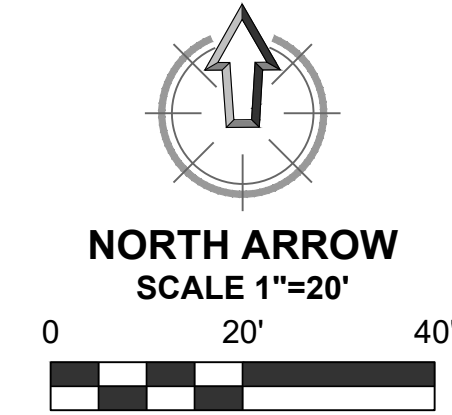
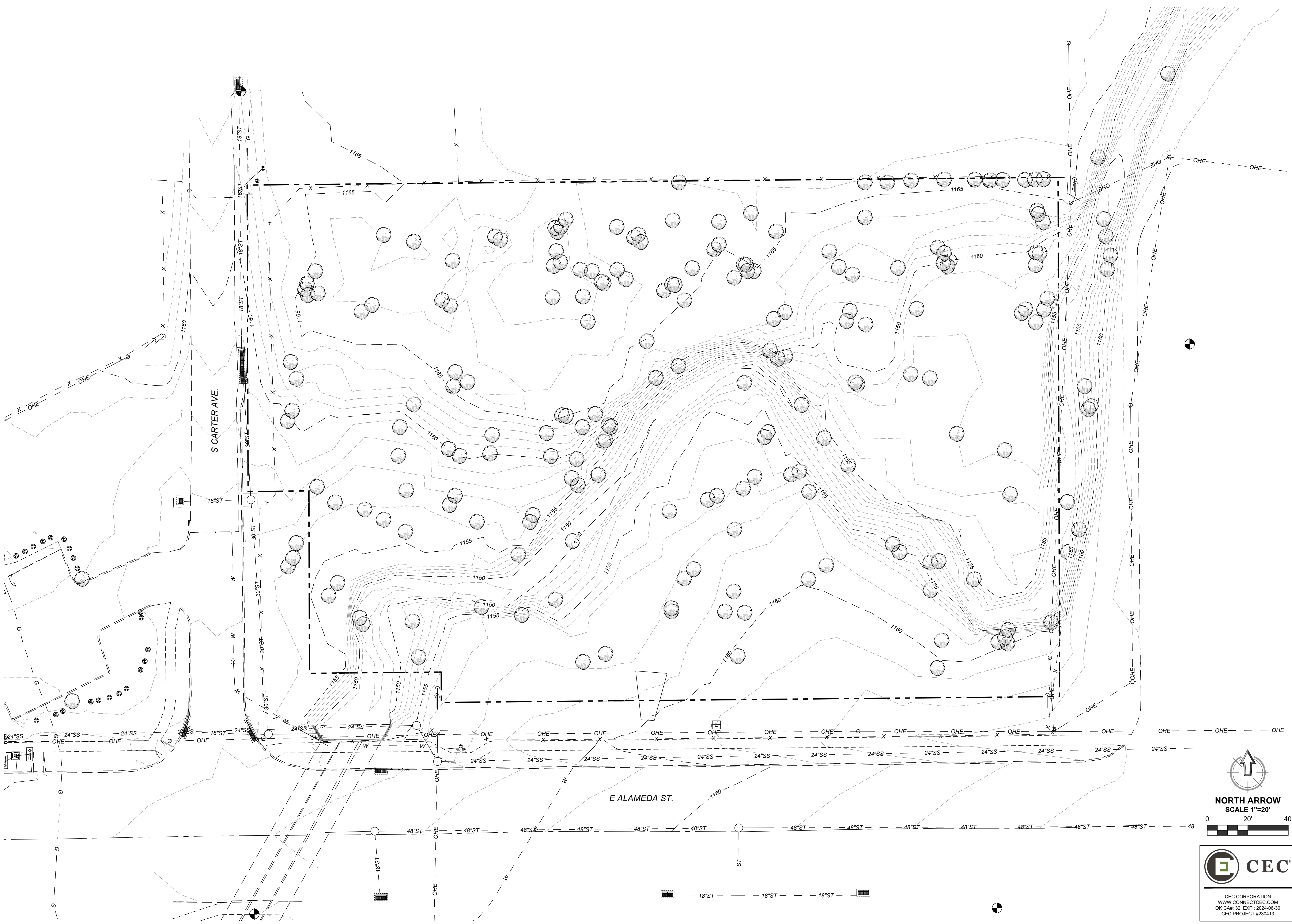
CITY OF NORMAN

201 W Gray St, Norman, OK 73069

NOTES & LEGEND

LEGEND											
EXISTING			PROPOSED			EXISTING			PROPOSED		
PROPERTY LINE	---	---	---	---	---	WATER SPIGOT	⊗	⊗	POWER POLE	∅	∅
EASEMENT	---	---	---	---	---	WATER METER	⊗	⊗	GUY WIRE	→	→
RIGHT-OF-WAY	---	---	---	---	---	WATER VALVE	⊖	⊖	ELECTRIC SERVICE CONNECTION	SVC	
ROADWAY CENTERLINE	---	---	---	---	---	SPRINKLER CONTROL VALVE	⊗	⊗	ELECTRIC PEDESTAL	E	
ROADWAY C&G	==	==	==	==	==	SPRINKLER HEAD	💡	💡	LIGHT POLE	💡	💡
WATERLINE	---	---	W	---	---	FIRE HYDRANT	💡	💡	PULL BOX	PB	PB
WATERLINE FIRE	---	---	FIR	---	---	FIRE DEPARTMENT CONNECTION	💡	💡	TELEPHONE PEDESTAL	T	
WATERLINE SERVICE	---	---	SVC	---	---	GAS METER	⊖	⊖	FIBER OPTIC PEDESTAL	FO	
SAN. SWR. LINE	---	---	SS	---	---	GAS VALVE	⊖	⊖	BENCHMARK	⊖	
SAN. SWR. FORCE MAIN	---	---	FM	---	---	UTILITY CLEANOUT	⊗	⊗	CONTROL POINT	CP	
STORM SEWER LINE	---	---	ST	---	---	UTILITY MANHOLE	⊖	⊖	WHEELSTOP	—	
TELE. UNDERGROUND	---	---	TUG	---	---	UTILITY MARKER	⊖	⊖	ADA SIGN	⊖	
FIBER OPTIC CABLE	---	---	FOC	---	---	DOWNSPOUT/ROOF DRAIN	⊗	⊗	ADA SYMBOL	⊖	
POWER UNDERGROUND	---	---	PUG	---	---				BOLLARD	⊖	
POWER OVERHEAD	---	---	OHE	---	---						
GAS LINE	---	---	G	---	---						
UTILITY LINE (BY ATLAS)	---	---	X"U-A	---	---						
FENCE LINE	---	---	X	---	---						
5' CONTOURS	---	---	XXXX	---	---						
1' CONTOURS	---	---	XXXX	---	---						
TOP OF BANK	---	---	---	---	---						
TOE OF SLOPE	---	---	---	---	---						
FLOWLINE	---	---	---	---	---						
HP BREAK LINE	---	---	---	---	---						





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NORMAN NATURE PARK
NORMAN, OKLAHOMA

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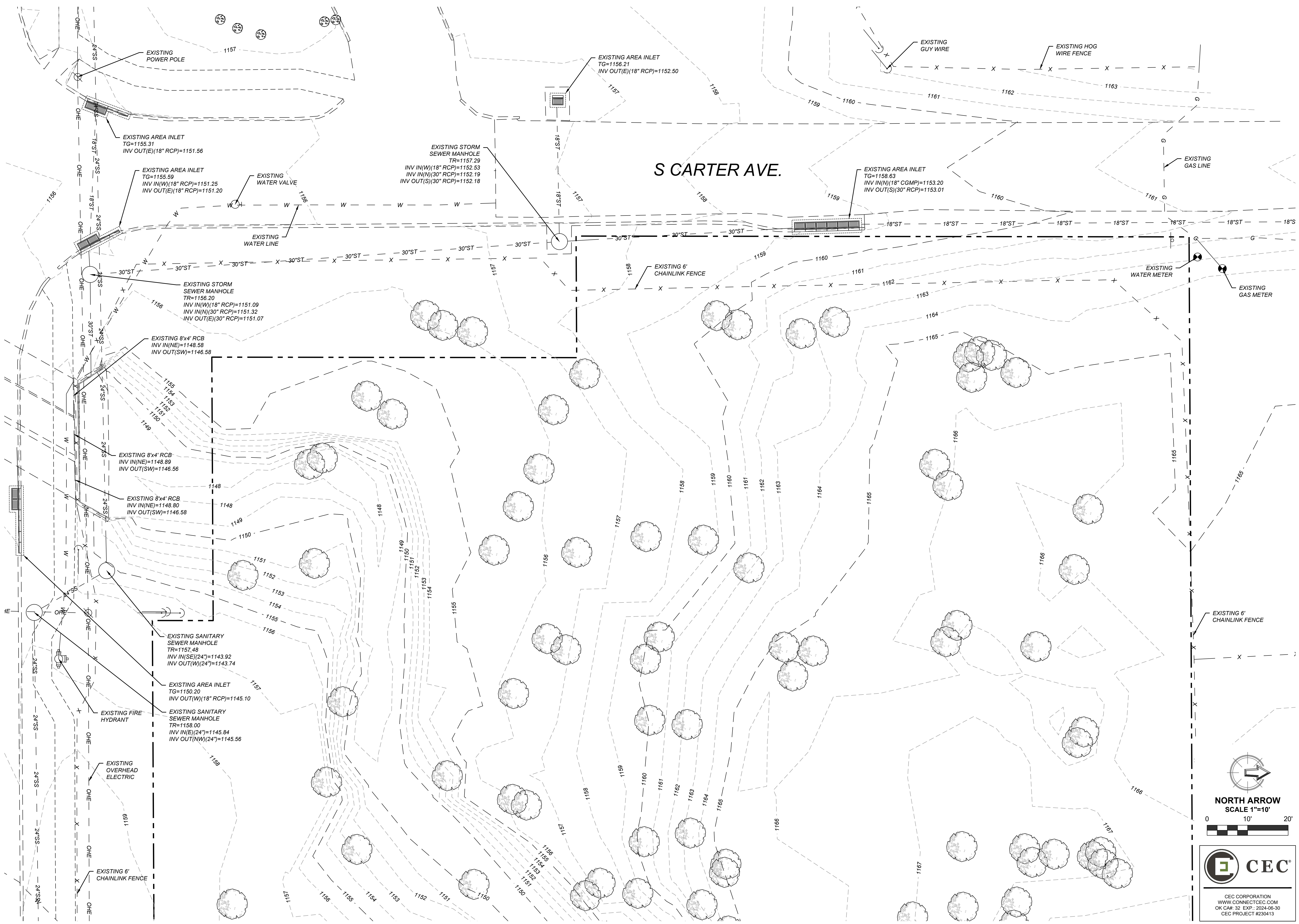
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C-1.0

OVERALL EXISTING
SITE PLAN

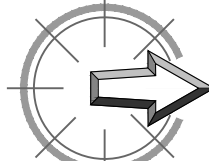


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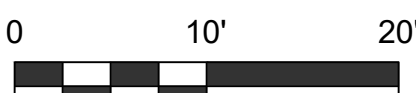
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NORMAN, OKLAHOMA**


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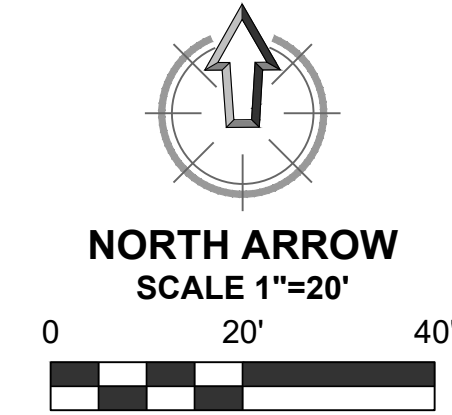
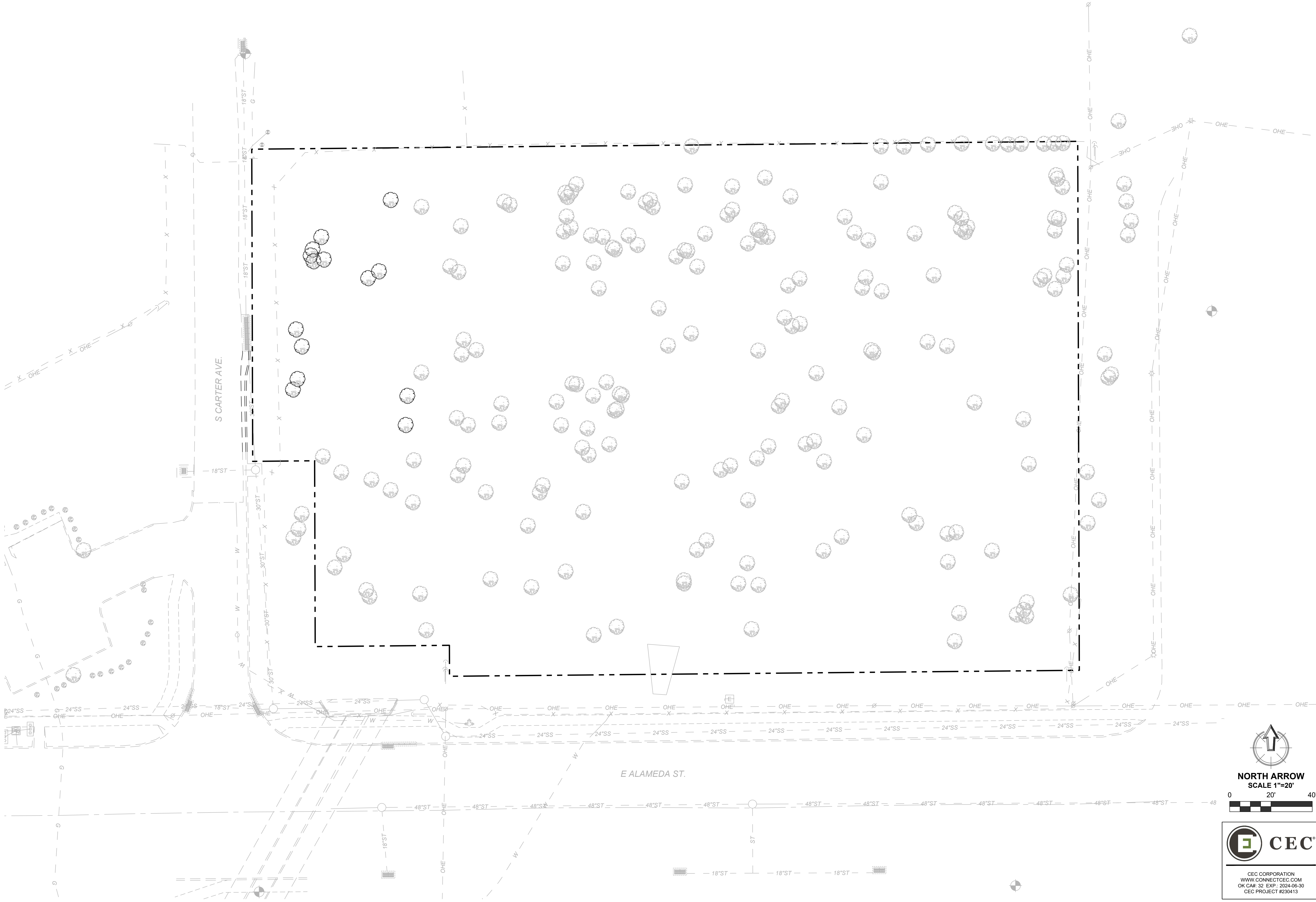


NORTH ARROW
SCALE 1"=10'





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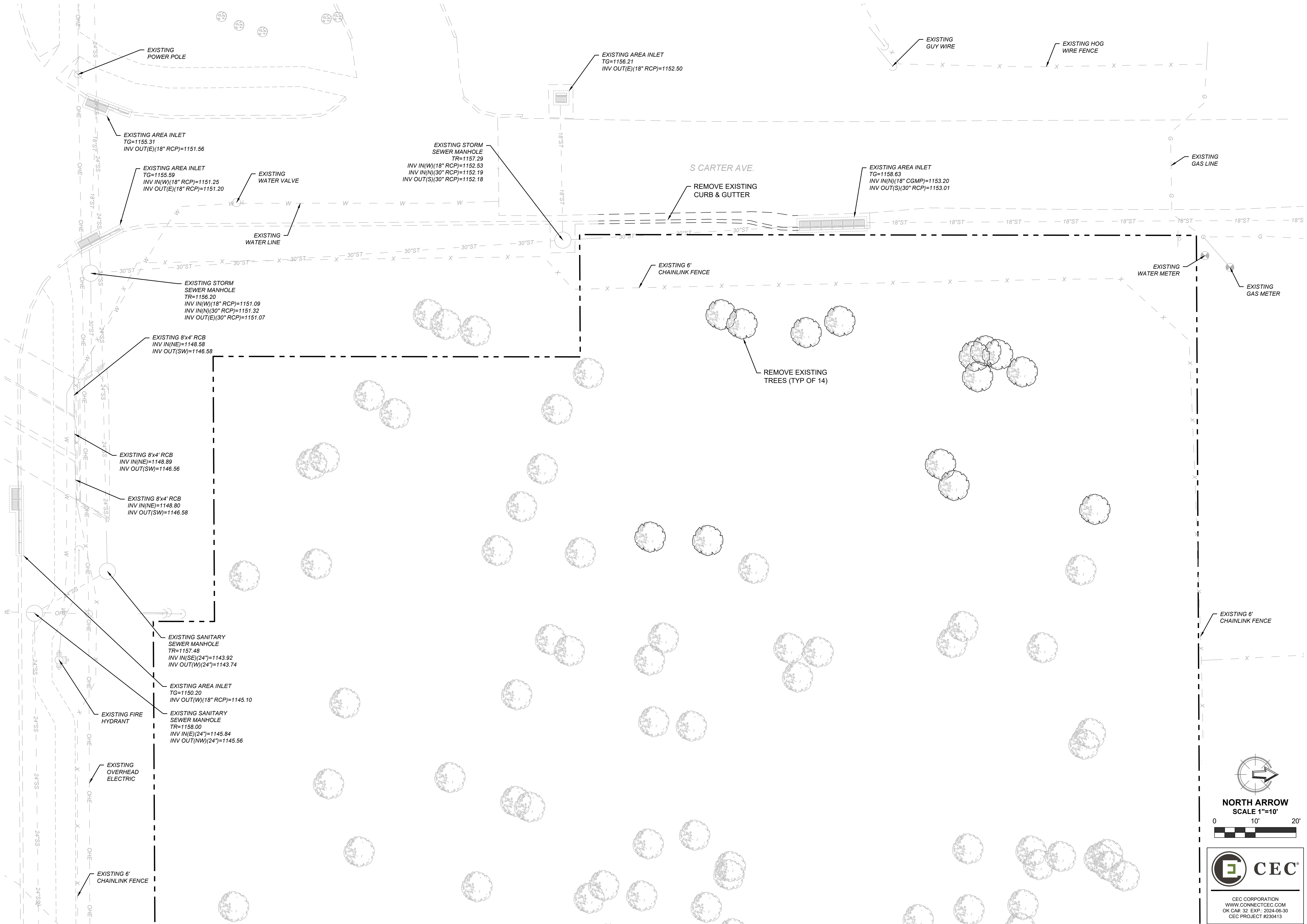
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C-2.0

**OVERALL DEMOLITION
PLAN**

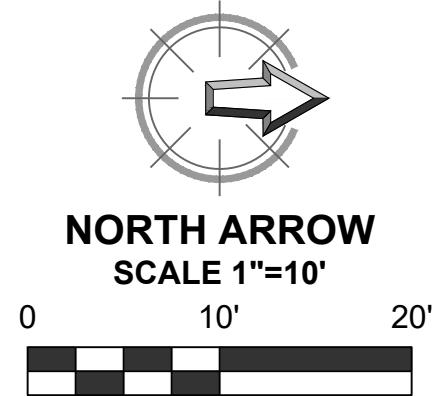


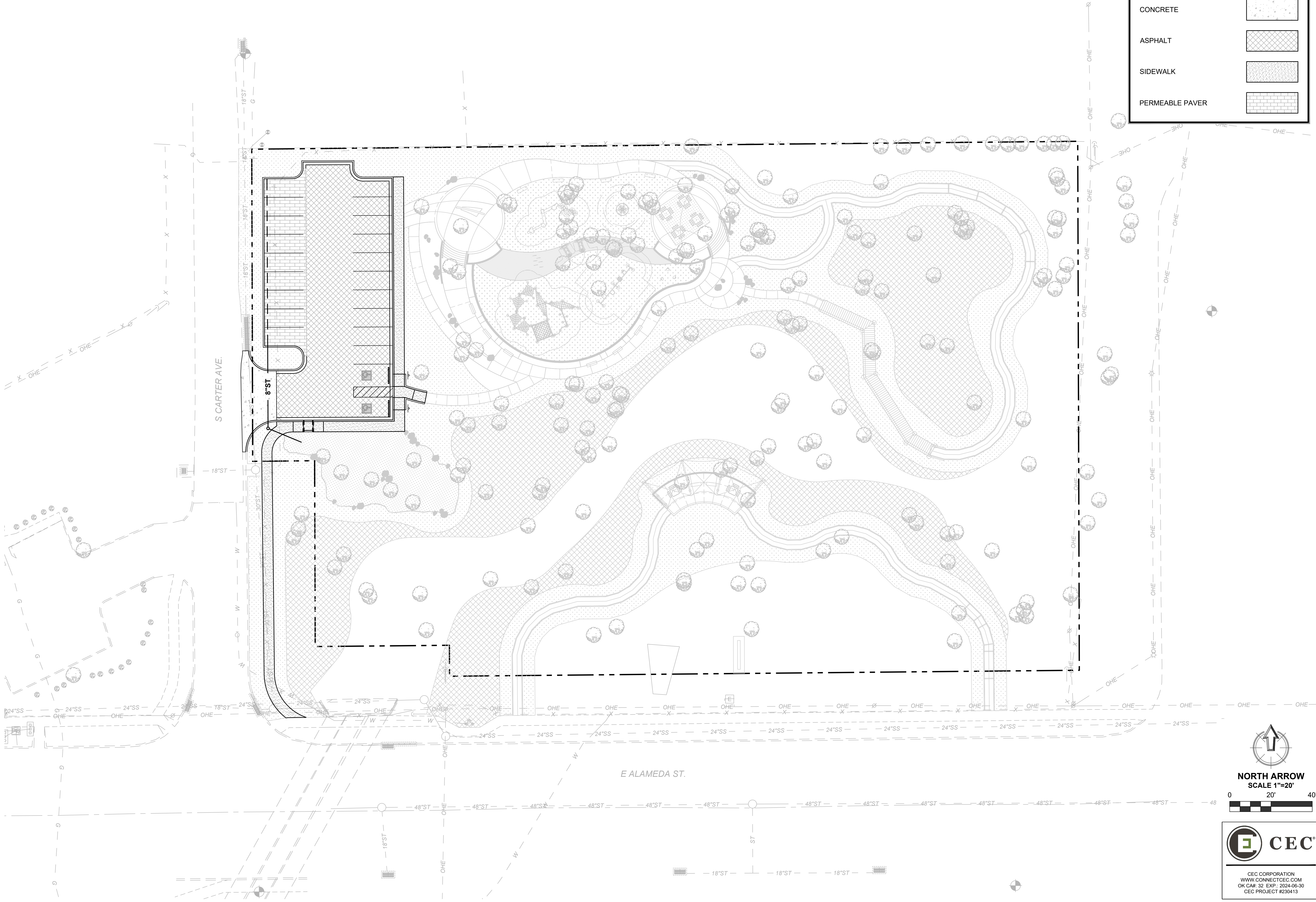
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NORMAN, OKLAHOMA**

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LEGEND

CONCRETE

ASPHALT

SIDEWALK

PERMEABLE PAVER

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NORMAN, OKLAHOMA

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OVERALL SITE & UTILITY PLAN

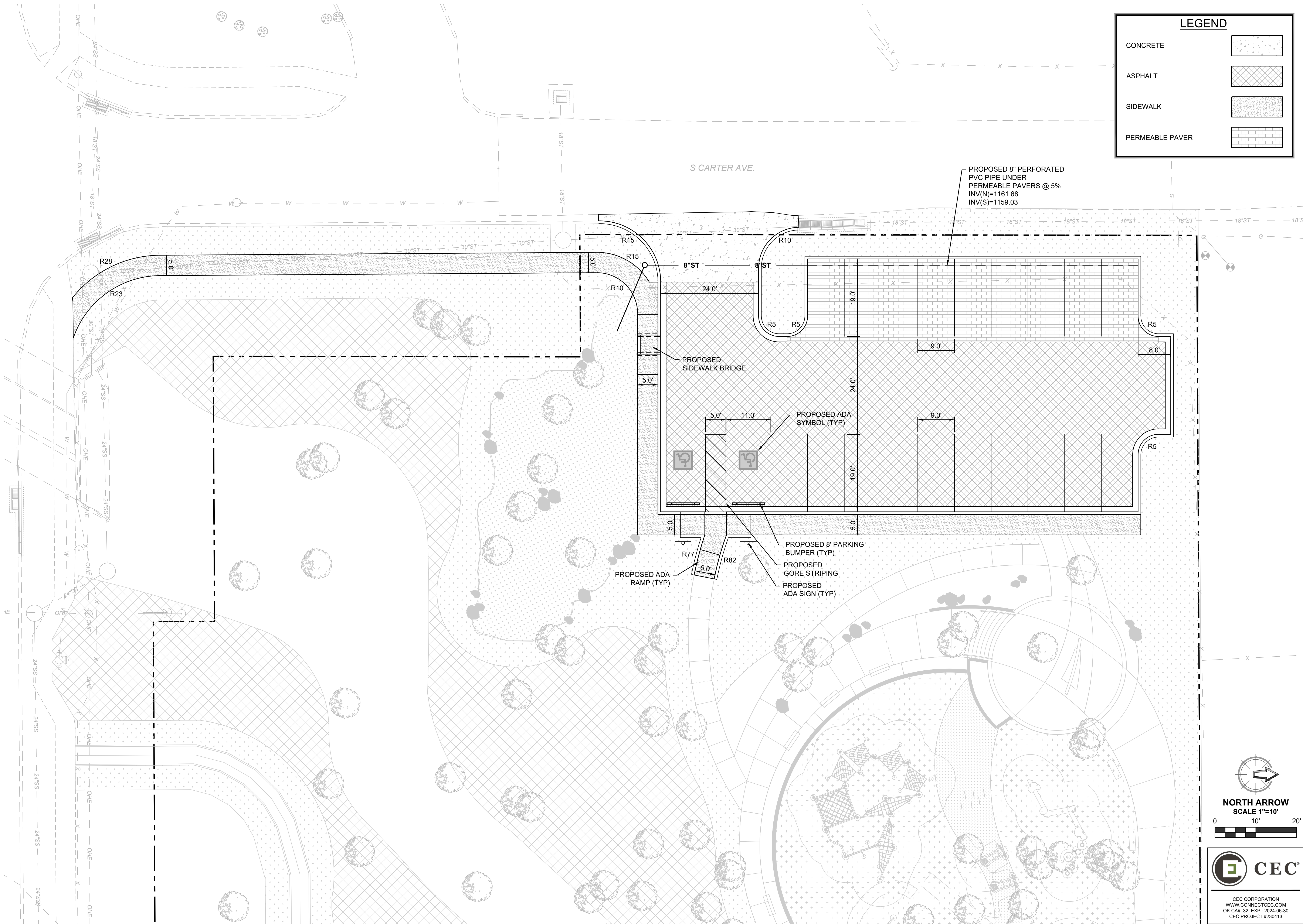
NORTH ARROW

SCALE 1"=20'

0 20' 40'

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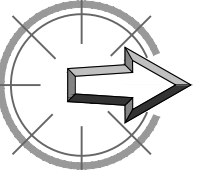
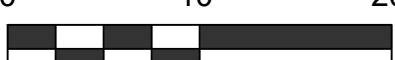



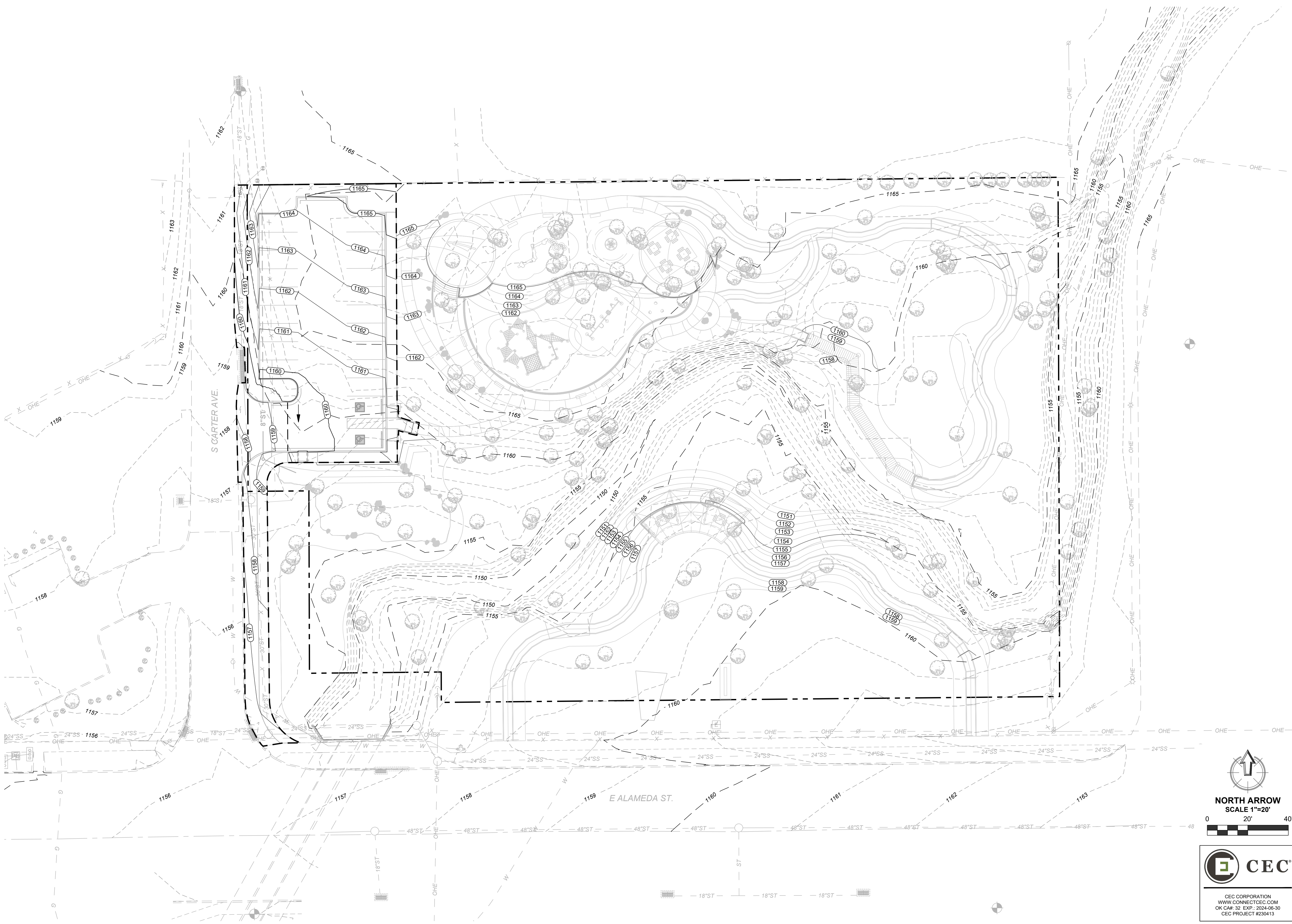
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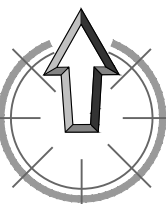
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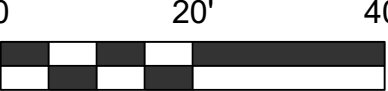
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NORTH ARROW
SCALE 1"=10'
0 10' 20'


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NORTH ARROW
SCALE 1"=20'





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**NORMAN NATURE PARK
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C-4.0

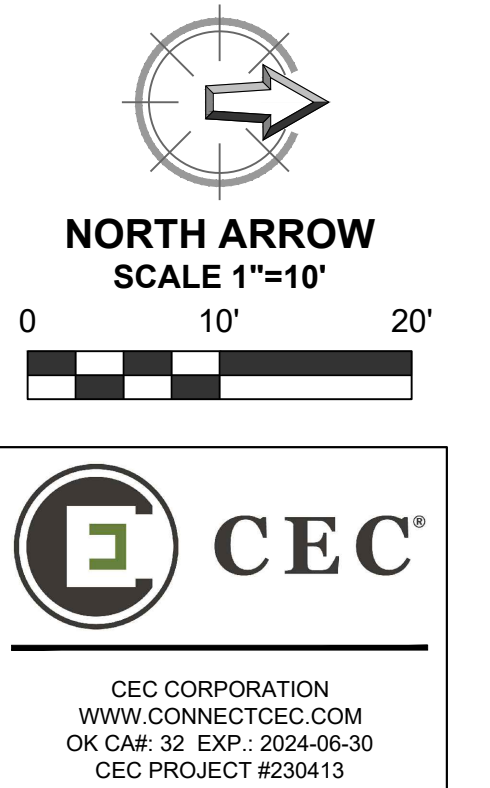
**OVERALL GRADING
PLAN**

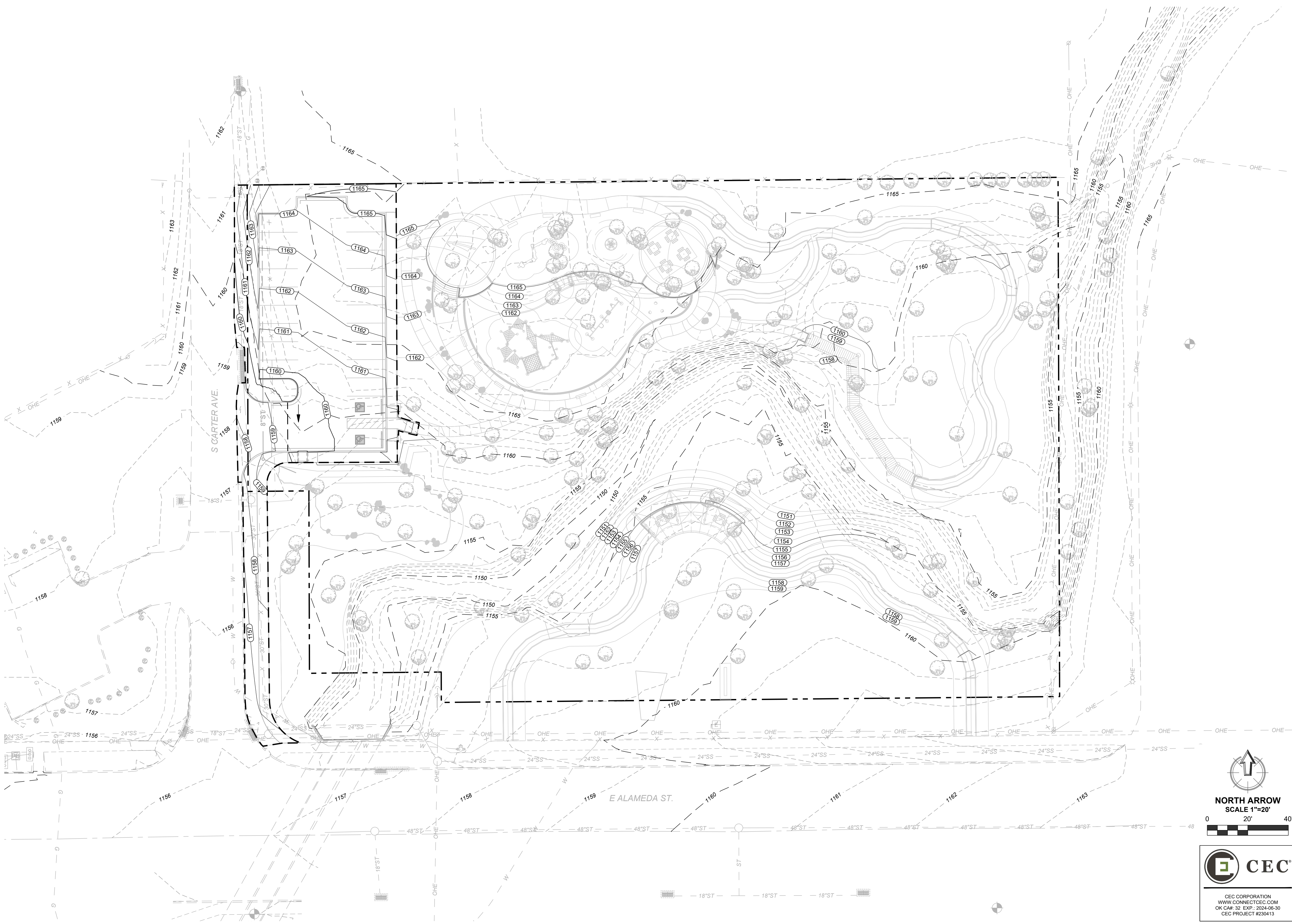
**NORMAN NATURE PARK
NORMAN, OKLAHOMA**

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GRADING PLAN





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**NORMAN NATURE PARK
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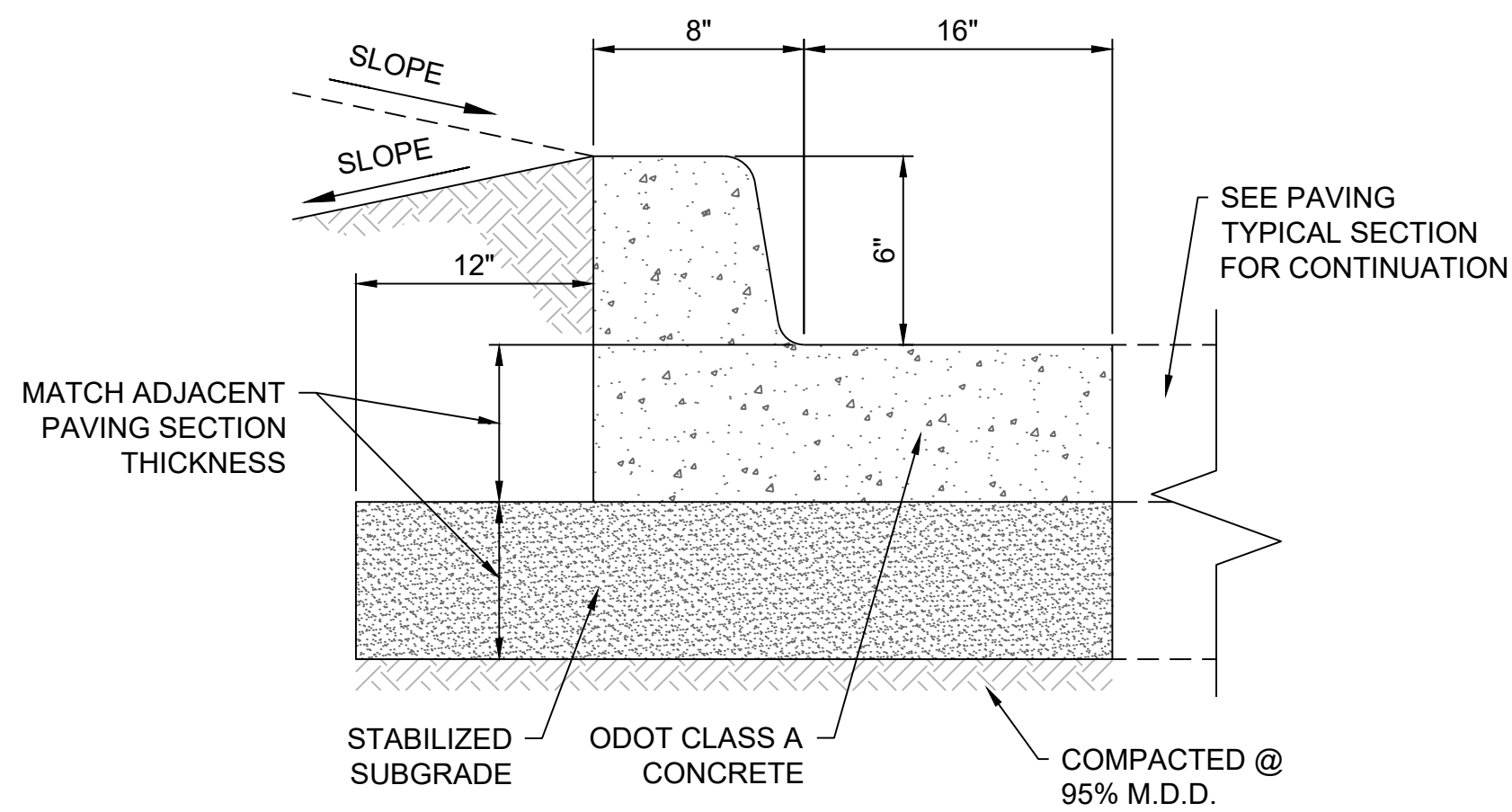
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NORTH ARROW
SCALE 1"=20'
0 20' 40'

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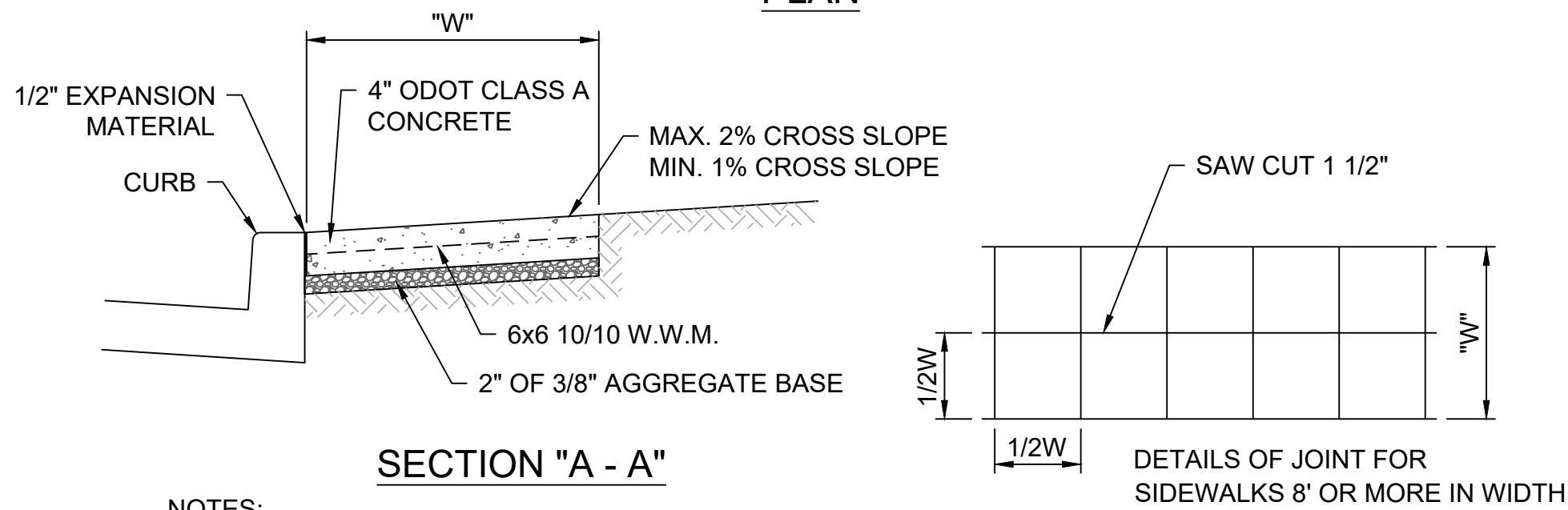
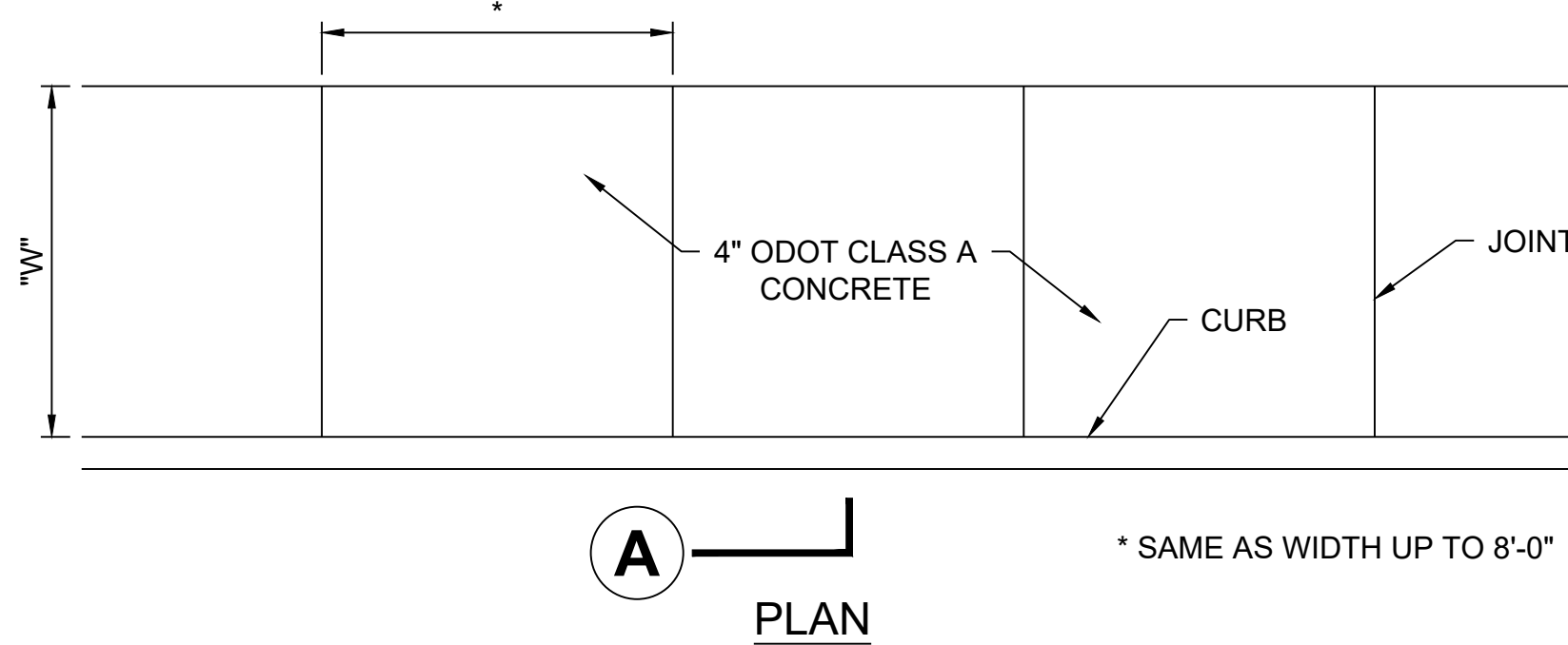
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**EROSION CONTROL
PLAN**



NOTES:

- SEE CIVIL SPECIFICATIONS FOR JOINT INFORMATION.

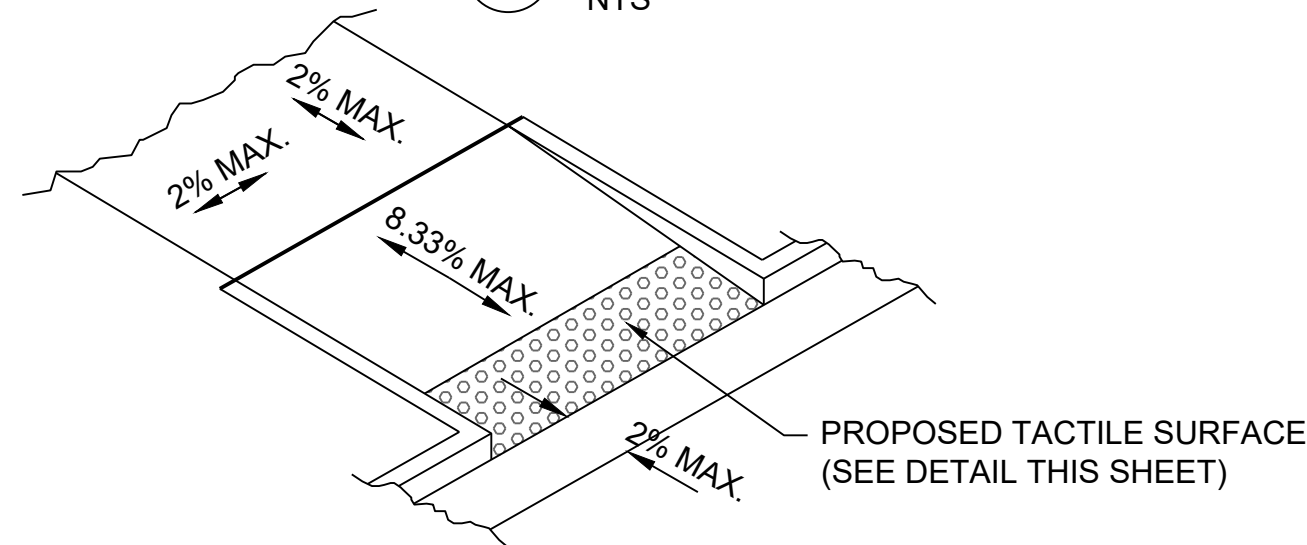
CONCRETE CURB DETAIL



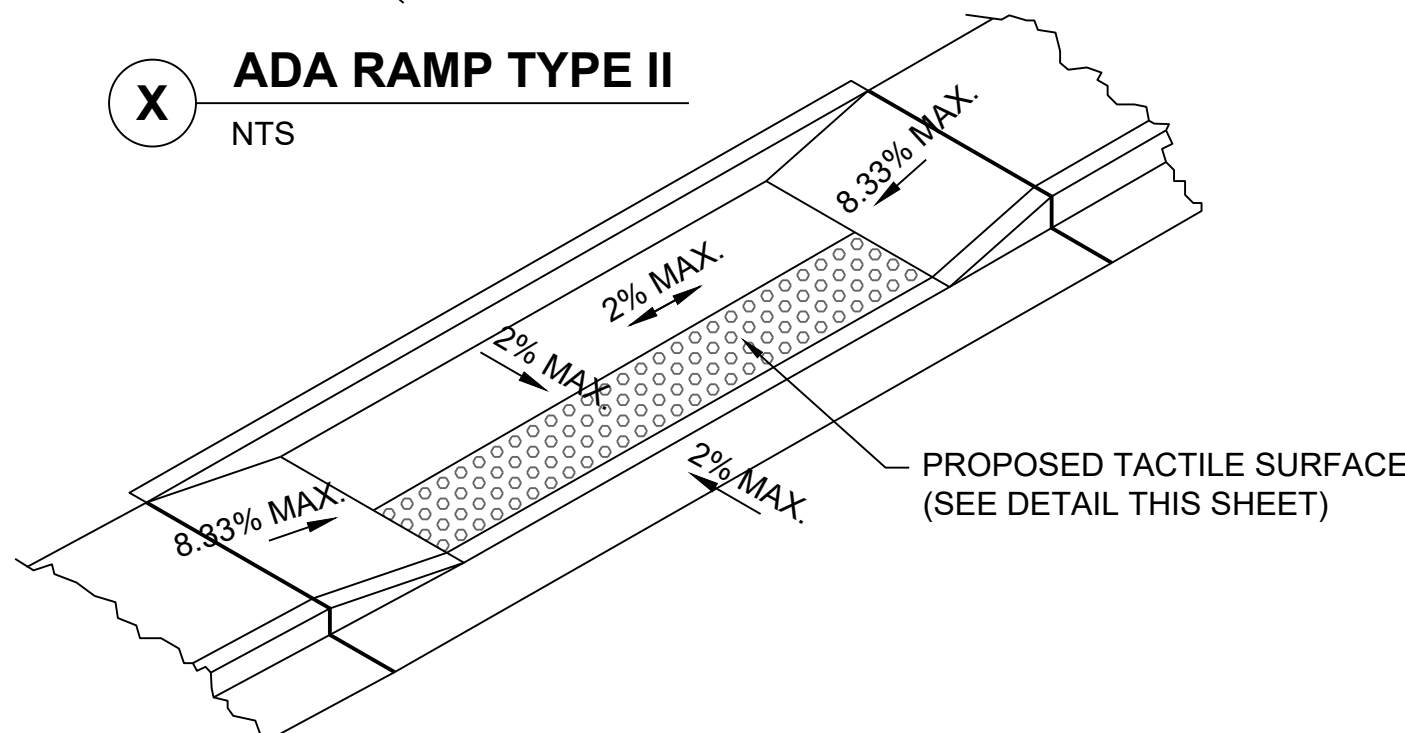
NOTES:

- 1/2" X 4" PREMOLDED EXPANSION MATERIAL AROUND STRUCTURES IN WALK.
- EXPANSION JOINTS MAXIMUM DISTANCE = 100', USE 1/2" X 4" PREMOLDED EXPANSION MATERIAL.
- CONTRACTION JOINTS MAXIMUM DISTANCE = 8', SAW CUT 1-1/2" DEEP
- SAW CUT JOINTS WITHIN 24 HOURS.
- USE 1/2" X 4" PREMOLDED EXPANSION JOINT AT CURB.

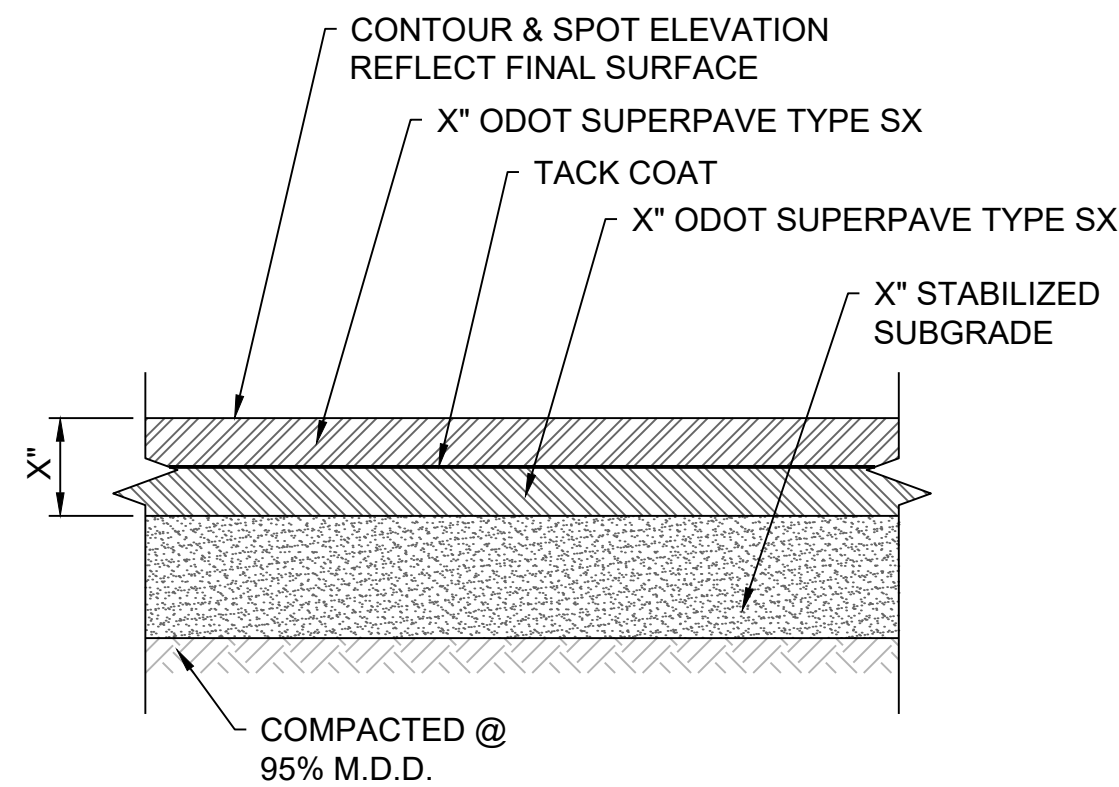
SIDEWALK DETAILS



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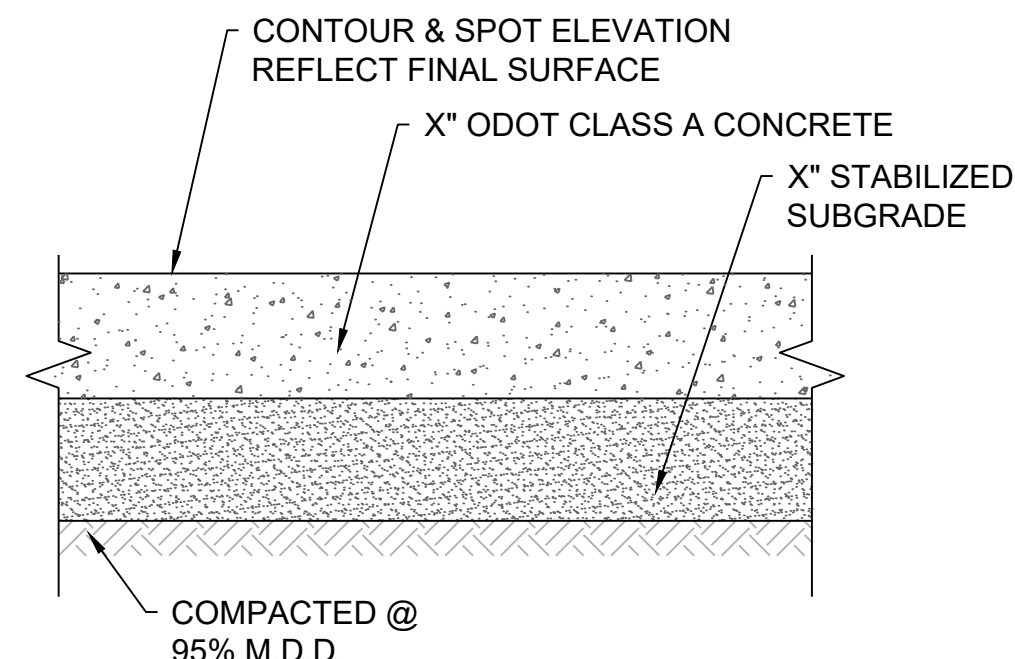


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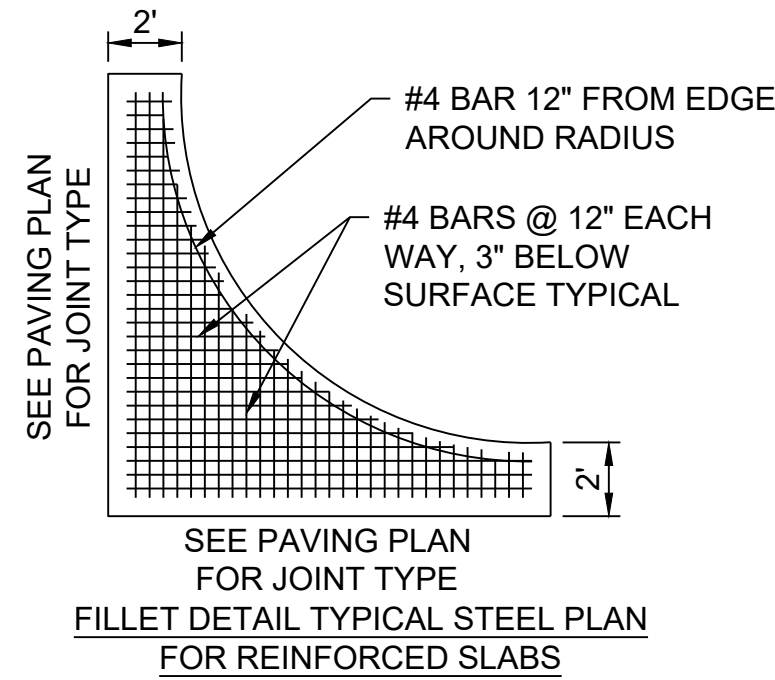
LIGHT-DUTY ASPHALT PAVEMENT

NTS - REFERENCE GEOTECH REPORT



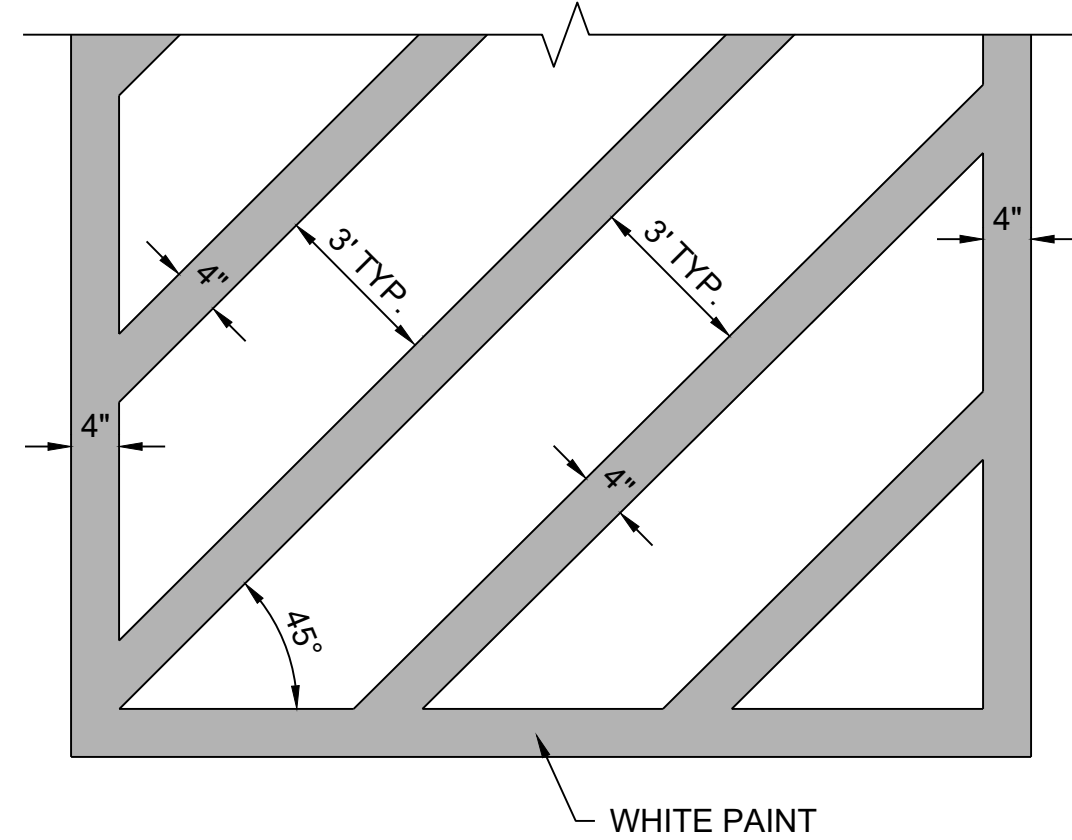
HEAVY-DUTY CONCRETE PAVEMENT

NTS - REFERENCE GEOTECH REPORT



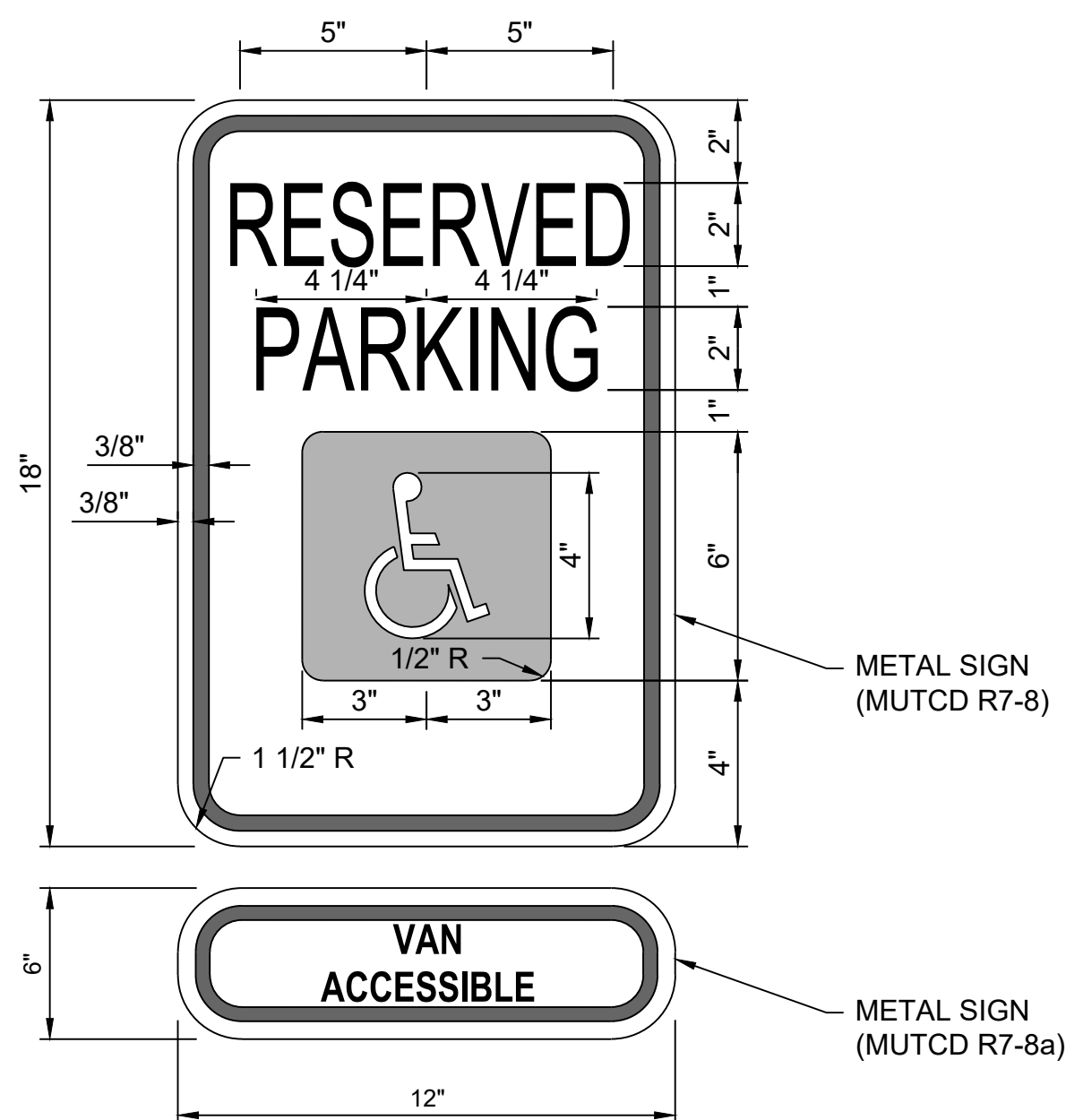
FILLET DETAIL

NTS



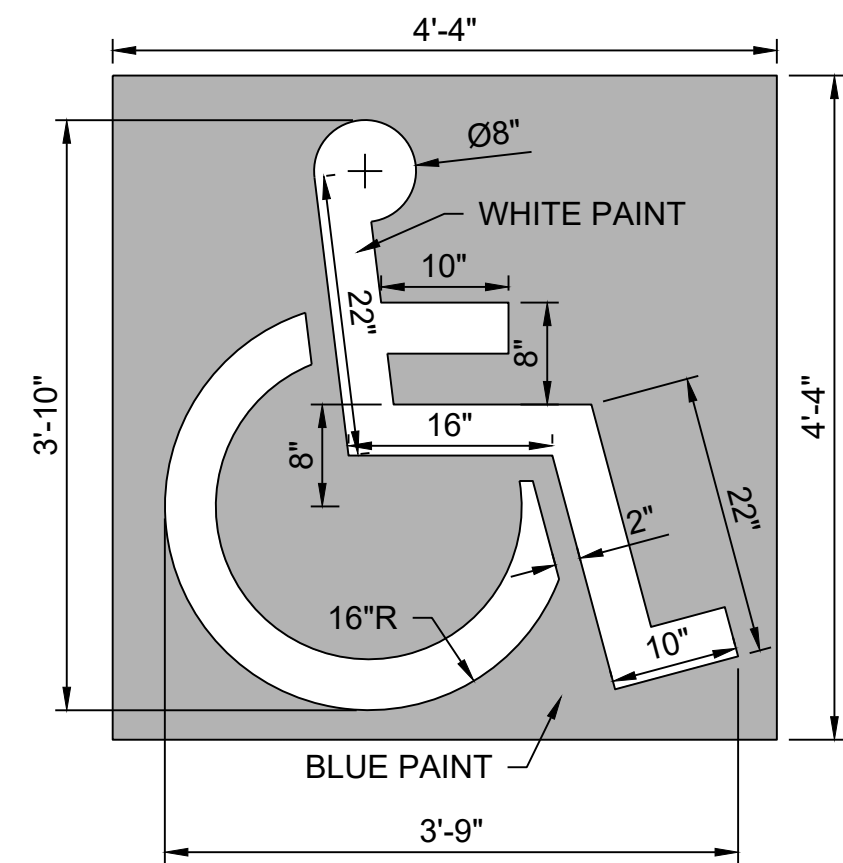
ADA GORE STRIPING DETAIL

NTS



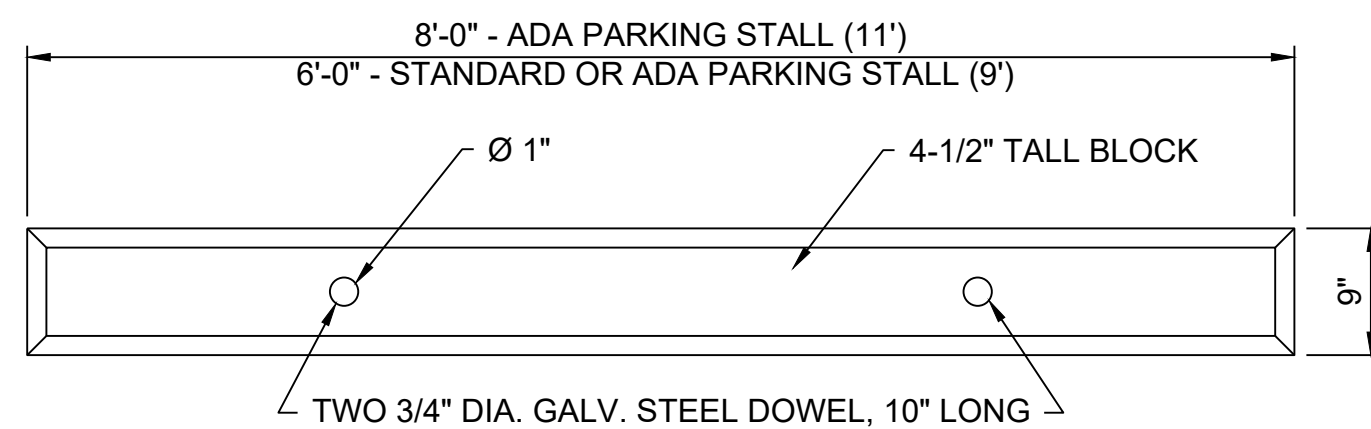
ADA SIGN DETAIL

NTS



ADA PAVEMENT MARKING

NTS

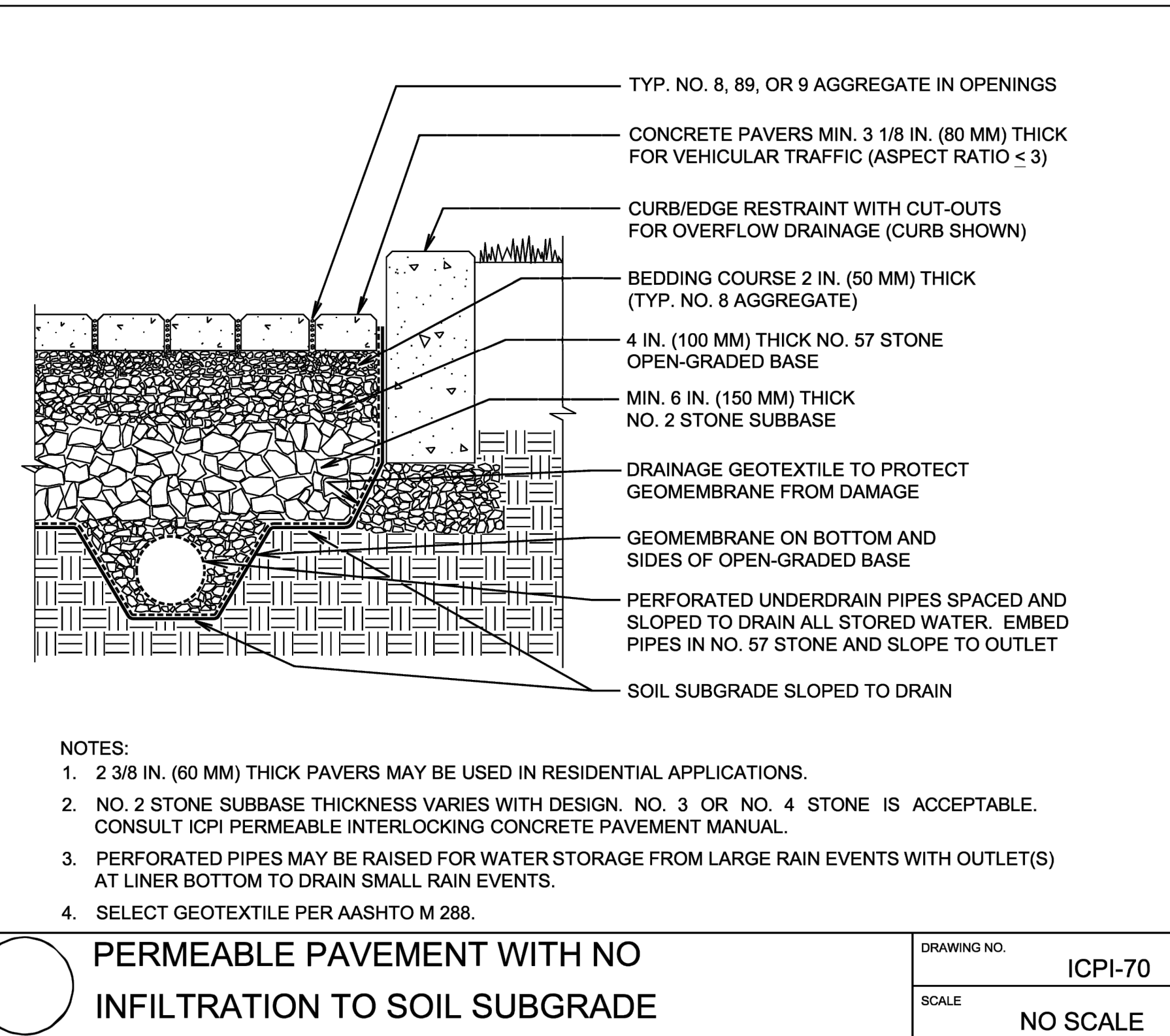


NOTE:

- WHEELSTOP SHALL BE INSTALLED 2'-0" FROM CENTER OF WHEELSTOP TO FACE OF CURB.
- CONCRETE TO BE ODOT CLASS A.

PRE-CAST CONCRETE PARKING BUMPER

NTS

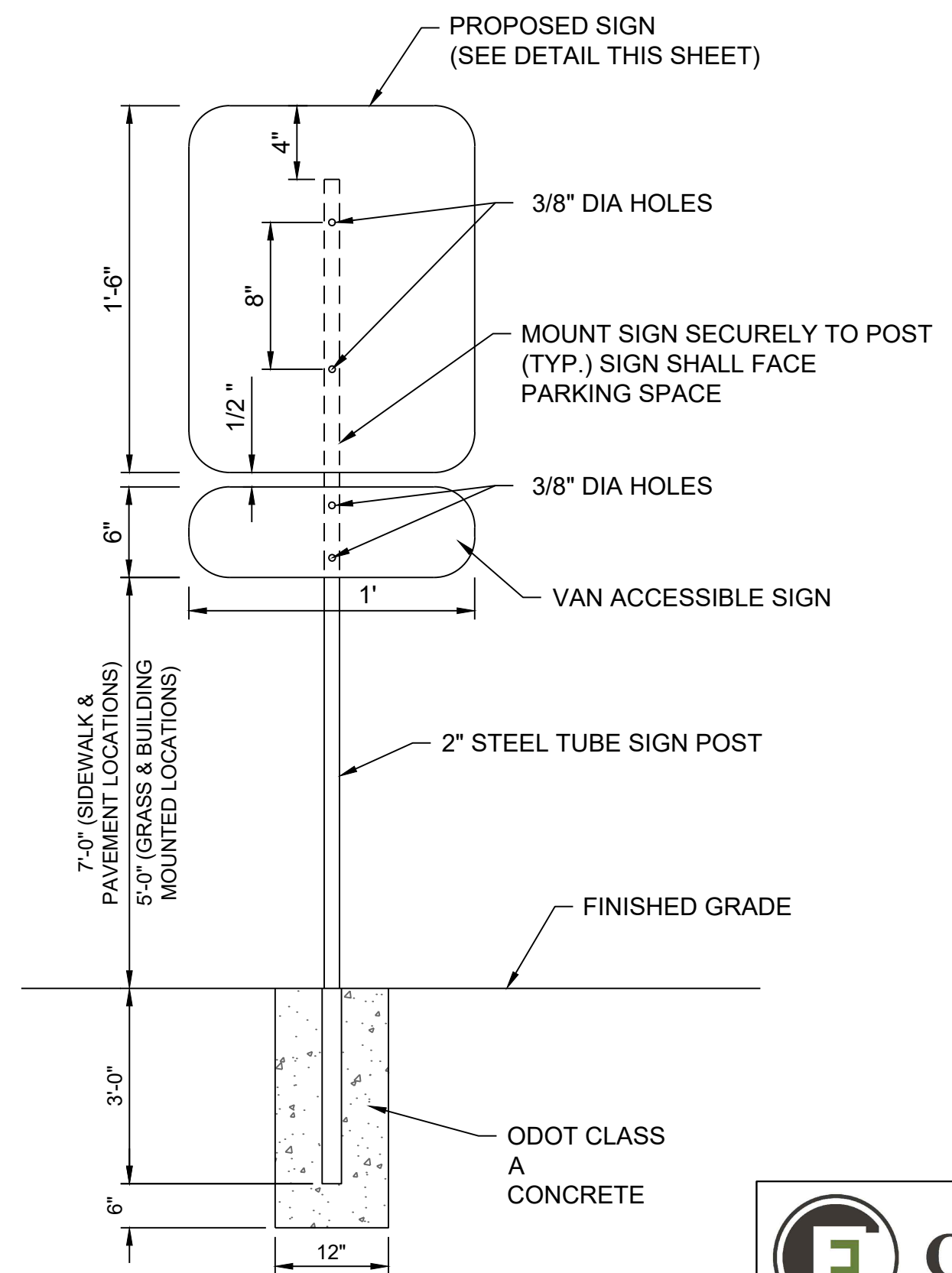


NOTES:

- 2 3/8 IN. (60 MM) THICK PAVERS MAY BE USED IN RESIDENTIAL APPLICATIONS.
- NO. 2 STONE SUBBASE THICKNESS VARIES WITH DESIGN. NO. 3 OR NO. 4 STONE IS ACCEPTABLE. CONSULT ICPI PERMEABLE INTERLOCKING CONCRETE PAVEMENT MANUAL.
- PERFORATED PIPES MAY BE RAISED FOR WATER STORAGE FROM LARGE RAIN EVENTS WITH OUTLET(S) AT LINER BOTTOM TO DRAIN SMALL RAIN EVENTS.
- SELECT GEOTEXTILE PER AASHTO M 288.

PERMEABLE PAVEMENT WITH NO INFILTRATION TO SOIL SUBGRADE

DRAWING NO. ICPI-70
SCALE NO SCALE



ADA SIGN POST DETAIL

NTS



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NORMAN NATURE PARK NORMAN, OKLAHOMA

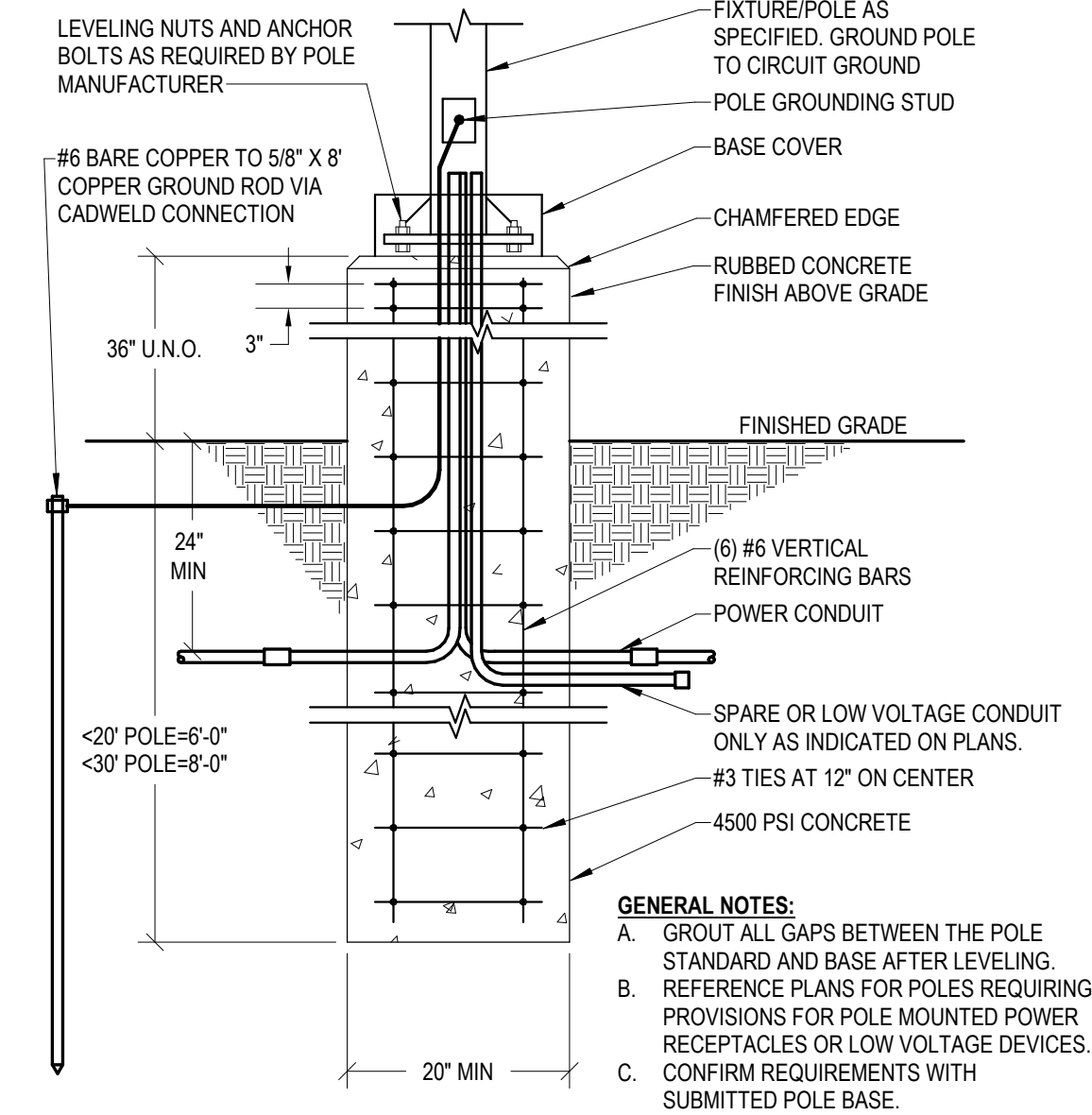
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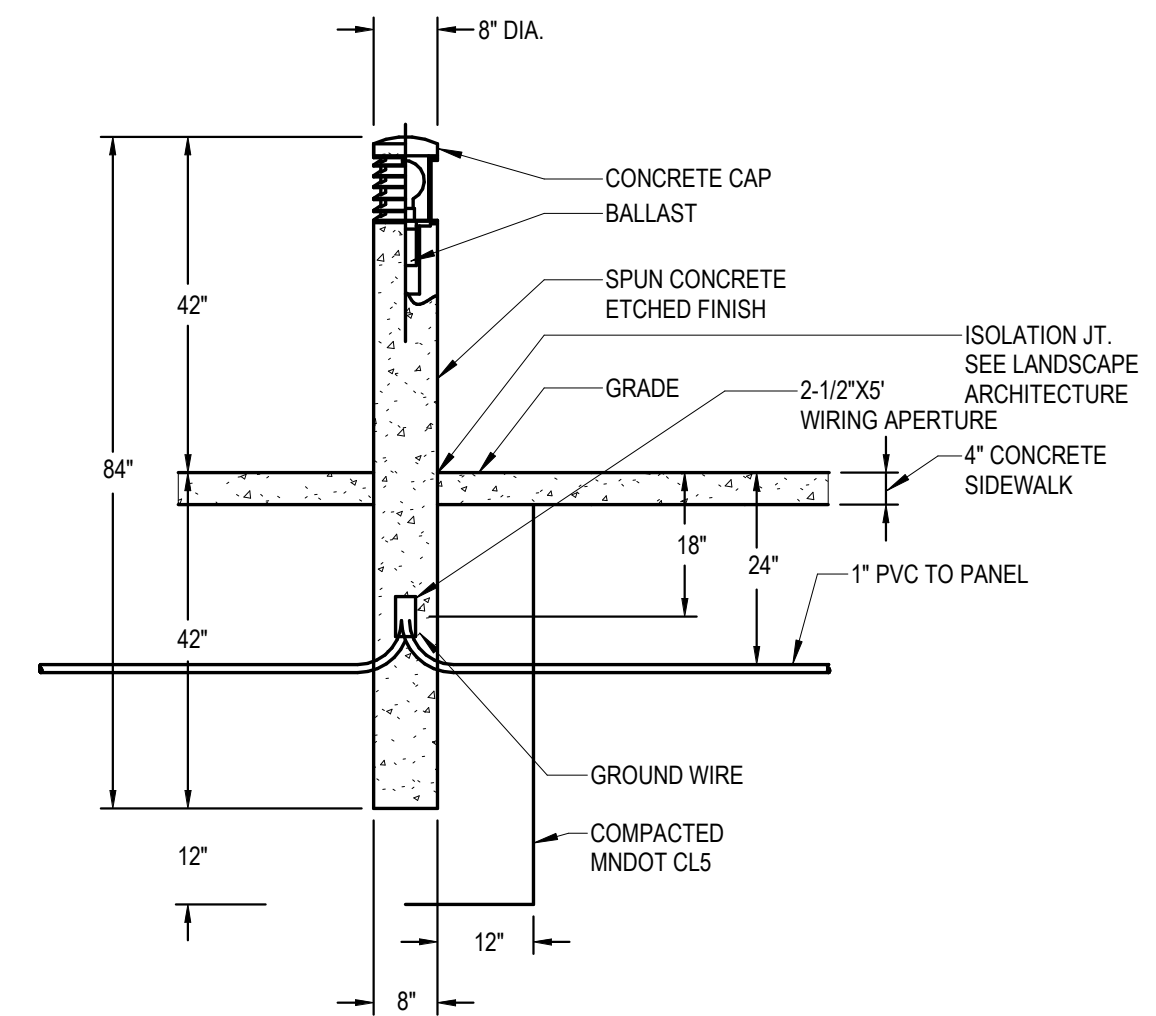
ELECTRICAL SYMBOLS AND ABBREVIATIONS					
MARK	DESCRIPTION	MARK	DESCRIPTION	MARK	DESCRIPTION
A	ABOVE COUNTER, REFER DETAIL 9/E-501	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	OC	OVERCURRENT PROTECTION
AFF/AG	ABOVE FINISHED FLOOR/GRADE	GND	GROUND	RCPT	RECEPTACLE
ALT	ALTERNATE	HOA	HAND OFF AUTOMATIC	SM	SURFACE MOUNTED
AMP	AMPERE	IN	INCHES	SPD	SURGE PROTECTION DEVICE
APPROX	APPROXIMATE	KW	KILOWATTS	SPEC	SPECIFICATION(S)
ARCH	ARCHITECT/ARCHITECTURAL	MCC	MOTOR CONTROL CENTER	TV	TELEVISION
ATS	AUTOMATIC TRANSFER SWITCH	MDP	MAIN DISTRIBUTION PANEL	TYP	TYPICAL
C	CONDUIT	MECH	MECHANICAL	UG	UNDERGROUND
CLG	CEILING	MTS	MANUAL TRANSFER SWITCH	UNO	UNLESS NOTED OTHERWISE
DISC	DISCONNECT SWITCH	NC	NORMALLY CLOSED	V	VOLTS
EC	ELECTRICAL CONTRACTOR	NEC	NATIONAL ELECTRIC CODE, NFPA 70	W	WITH
EXIST	EXISTING	NIC	NOT IN CONTRACT	W/O	WITHOUT
EP	EXPLOSION PROOF	NL	NIGHT LIGHT	WP	WEATHERPROOF (DEVICE AND WHILE-IN-USE ENCLOSURE)
FT	FEET	NO	NORMALLY OPEN	WR	WEATHER RESISTANT (DEVICE AND FLIP ENCLOSURE)
GC	GENERAL CONTRACTOR	NTS	NOT TO SCALE	XFMR	TRANSFORMER
				1/E2	DETAIL 1 ON SHEET E2
	HALFTONE SYMBOL INDICATES EXISTING		NEMA 5-20R DUPLEX RECEPTACLE		SURFACE MOUNTED RACEWAY WITH POWER/ DATA ASSEMBLIES
	DASHED SYMBOL INDICATES DEMOLITION		NEMA 5-20R QUADPLEX RECEPTACLE, (2 DUPLEX RECEPTS IN A 2-GANG BOX)		TELEPHONE OUTLET
	ELECTRICAL 480V PANELBOARD		NEMA 5-20R DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER		WALL TELEPHONE OUTLET
	ELECTRICAL 208V PANELBOARD		NEMA 5-20R DUPLEX RECEPTACLE MOUNTED IN CEILING		DATA OUTLET
	DISCONNECT SWITCH FUSIBLE UNLESS OTHERWISE NOTED, NUMBERS INDICATE FRAME/FUSE/POLE		TAMPER RESISTANT NEMA 5-20R DUPLEX RECEPTACLE, GROUND FAULT CIRCUIT INTERRUPTER TYPE		TELEDATA COMBINATION OUTLET
	DISCONNECT SWITCH NON FUSIBLE UNLESS OTHERWISE NOTED, NUMBERS INDICATE FRAME, FUSE, POLE		WEATHER AND TAMPER RESISTANT NEMA 5-20R DUPLEX RECEPTACLE OR SAME IN WEATHERPROOF ENCLOSURE		WIRELESS ACCESS POINT
	CONTACTORMAGNETIC MOTOR STARTER OR COMBINATION TYPE		NEMA 5-20R DUPLEX RECEPTACLE, ISOLATED GROUND TYPE		CARD READER
	VFD W/ DISCONNECTING MEANS		NEMA 5-20R ISOLATED GROUND QUADPLEX, RECEPTACLE, ORANGE COLOR		KEYPAD
	FIRE ALARM CONTROL PANEL		TAMPER RESISTANT SPLIT DUPLEX, NEMA 5-20R DUPLEX RECEPTACLE MOUNTED AT 18" WITH TWO CIRCUITS.		CCTV CAMERA
	FIRE ALARM ANNUCIATOR PANEL		20A TAMPER RESISTANT DUPLEX RECEPTACLE (LEVITON T5825 OR EQUAL)		LIGHT FIXTURE ON (EM) LIFE SAFETY BRANCH, INVERTER, OR INTEGRAL 90 MINUTE BATTERY
	SIGNAL POWER EXTENDER		TAMPER RESISTANT USB A/C TYPE RECEPTACLE (LEVITON T5833 OR EQUAL)		LIGHT SWITCH, SPST, 20A. NUMBER INDICATES DPST, 3-WAY, 4-WAY
	GENERATOR ANNUCIATOR PANELBOARD		ELECTRIC WATER COOLER, NEMA 5-20R DUPLEX RECEPT. MOUNT PER MANUFACTURER'S REQUIREMENTS. PROVIDE GFCI BREAKER.		LIGHT SWITCH, SPST, 20A. LETTER INDICATES CONTROL ZONE
	MOTOR OUTLET/CONNECTION - SEE SCHEDULE		SPECIAL OUTLET - SEE DEVICE SCHEDULE		LIGHT SWITCH, PILOT LIGHT "ON", 20A
	EQUIPMENT CONNECTION - SEE SCHEDULE		SPECIAL OUTLET - POKE THRU - SEE SCHEDULE		LIGHT SWITCH, KEY-OPERATED, 20A
	MECHANICAL EQUIPMENT TAG		FURNITURE FEED - FLOOR BOX - TRIM COLOR TBD		MANUAL MOTOR STARTER SWITCH W/ OVERLOAD
	OWNER EQUIPMENT TAG		FURNITURE FEED - POKE THRU - TRIM COLOR TBD		VOLUME CONTROL
	RISER OR CONDUIT TURNED DOWN		FLOOR BOX - DUPLEX WITH METALLIC FLIP COVER		WEATHER PROOF SWITCH
	RISER OR CONDUIT TURNED UP		FLOOR BOX - QUAD WITH METALLIC FLIP COVER		LOW VOLTAGE OVERRIDE SWITCH
	CAP ON PIPE		JUNCTION BOX (J-BOX OR JB)		OCCUPANCY SENSOR SWITCH- WALL MOUNTED
	OPEN CONDUIT END		INFRARED PLUMBING MOTION SENSOR		WALLBOX DIMMER SWITCH
	TEST PORT		POWER POLE		FAN SWITCH/CONTROLLER
	HOMERUN WITH BRANCH CIRCUIT(S) AS INDICATED		PULL BOX		OCCUPANCY SENSOR - CEILING MOUNTED - SEE LIGHTING CONTROL SCHEDULE
	PARTIAL HOMERUN WITH BRANCH CIRCUIT(S) AS INDICATED		SPEAKER (WALL OR CEILING MOUNTED)		OCCUPANCY SENSOR - WALL MOUNTED - SEE LIGHTING CONTROL SCHEDULE
	EMERGENCY CIRCUIT		PUSH BUTTON		OUTDOOR PHOTOELECTRIC CELL - SEE SENSOR SCHEDULE
	LOW VOLTAGE CIRCUIT		START STOP		INDOOR DAYLIGHT SENSOR - SEE SENSOR SCHEDULE
	NORMAL CIRCUIT				
	UNDERGROUND CIRCUIT				

GENERAL ELECTRICAL REQUIREMENTS:

- ELECTRICAL WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE ADOPTED EDITIONS OF THE INTERNATIONAL BUILDING (IBC), ELECTRICAL (NEC), AND FIRE (IFC) CODES, NFPA 13, 70, 72, 90A, 101 AND ALL LOCAL AMENDMENTS AND REGULATIONS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE DRAWINGS AND SHALL BE PERFORMED WITH THE LATEST INDUSTRY ACCEPTED STANDARDS. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND APPLICABLE CODES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE MORE STRINGENT OF THE TWO SHALL BE FOLLOWED. ALL WORK SHALL BE CONDUCTED IN A SAFE MANNER WITH ADEQUATE PROTECTION FOR THE NEW WORK, EXISTING PROPERTY, AND THE GENERAL PUBLIC.
- CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXTENT OF EXISTING CONDITIONS, NEW WORK, PATCHING, ETC., REQUIRED BY THE PROJECT, AND TO BECOME FAMILIAR WITH THE WORK CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR WORK INDICATED OR REQUIRED; FOR WORK PROVIDED DURING NON-STANDARD HOURS; FOR WORK REQUIRED TO MAINTAIN BUILDING SAFETY AND FUNCTION; FOR WORK TO PATCH/REPAIR BUILDING SYSTEMS AND FINISHES; OR ANY OTHER WORK RESULTING FROM REQUIRED NEW WORK, RECONNECTION, AND/OR DEMOLITION OPERATIONS.
- ELECTRICAL SYSTEM PENETRATIONS THROUGH NEW & EXISTING WALLS, FLOOR/CEILING, OR ROOF CONSTRUCTION SHALL BE THOROUGHLY FILLED WITH FIRE RESISTANT MATERIAL (STUFFING FIBRE-FLAX DURA BLANKET IN CAVITIES) AND SEALED WITH 3M BRAND FIRE BARRIER CAULK, CP25. ALL FIRE STOPPING SHALL BE EQUAL TO OR BETTER THAN ASSEMBLY PENETRATED. PENETRATION OF ALL FIRE BARRIERS SHALL NOT IMPAIR THE INTEGRITY OF THE BARRIER. ALL SLEEVED OPENINGS SHALL BE FINISHED IN SUCH A MANNER THAT MAINTAINS THE FIRE RESISTANCE.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL WIRING AND CONDUIT, AND OTHER SYSTEMS SPECIFIED AND REQUIRED IN THE PROJECT. CONTRACTOR SHALL MAINTAIN PROPER CLEARANCES BETWEEN MECHANICAL AND ELECTRICAL EQUIPMENT. DUCTS, PIPES, OR EQUIPMENT SHALL NOT INTRUDE ON ELECTRICAL CLEARANCE SPACE AS DEFINED IN THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE.
- ALL NECESSARY PERMITS, LICENSES, CERTIFICATES, TESTS, ETC., SHALL BE OBTAINED BY THE CONTRACTOR, INCLUDED IN THE PROJECT COST AND BID, WITHOUT ADDITIONAL COST TO THE OWNER OR ENGINEER.
- THE CONTRACTOR SHALL UPDATE RECORD DRAWINGS DAILY. ANNOTATE "AS INSTALLED" CONDITIONS IN RED INK ON HARD COPIES, INDICATING ALL CHANGES FROM THE ORIGINAL DRAWINGS MADE DURING THE INSTALLATION OF THE WORK. AT COMPLETION OF THE PROJECT, THE RECORD DRAWINGS SHALL BE DELIVERED TO THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM ONE YEAR WARRANTY ON ALL MATERIALS AND LABOR, UNLESS NOTED OTHERWISE.
- CONDITIONS MAY OCCUR THAT WILL REQUIRE MINOR REVISIONS IN ARRANGEMENT OF DUCTWORK, ATTACHMENTS, CONDUIT, ETC., ON VARIOUS SYSTEMS. SUCH MODIFICATIONS ARE DEEMED A PART OF THIS CONTRACT, AND SHALL BE SUBMITTED FOR REVIEW PRIOR TO COMMENCEMENT OF WORK.
- ALL NEW WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (A.D.A.) AND ALL STATE REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE ALL CONNECTION REQUIREMENTS OF OWNER- FURNISHED EQUIPMENT & EQUIPMENT FURNISHED BY OTHERS. PROVIDE NECESSARY MATERIAL AND LABOR FOR A COMPLETE INSTALLATION.
- ALL PATCHING AND PAINTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE PATCHING AND PAINTING AS A RESULT OF MECHANICAL AND ELECTRICAL ALTERATIONS, CHANGES, AND ADDITIONS. COORDINATE WITH ARCHITECT.
- REFER TO ARCHITECTURAL, CIVIL, STRUCTURAL & LANDSCAPE DRAWINGS FOR ADDITIONAL REQUIREMENTS. SEE SEPARATE PROJECT MANUAL FOR GENERAL CONDITIONS AND SPECIFICATIONS, IF APPLICABLE. WHERE DISCREPANCIES OCCUR BETWEEN THESE DRAWINGS AND THE PROJECT MANUAL, THE LATTER SHALL BE FOLLOWED, COORDINATE WITH ENGINEER.
- CONCEAL ALL PIPING AND CONDUIT IN FINISHED AREAS UNLESS OTHERWISE NOTED. ALL PIPING, DEVICES, APPARATUS, EQUIPMENT, ETC., SHALL BE PROPERLY SUPPORTED AND BRACED VERTICALLY AND HORIZONTALLY IN ACCORDANCE WITH CODES AND AS REQUIRED TO PREVENT EXCESSIVE MOVEMENT.
- IN THE EVENT OF SUBSTITUTION OF EQUIPMENT, IT SHALL BE THE RESPONSIBILITY OF THE SUBSTITUTING CONTRACTORS TO COORDINATE ADDITIONAL REQUIREMENTS FOR THESE ALTERATIONS. THE SUBSTITUTING CONTRACTORS SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL EQUIPMENT, CONDUCTORS, BOXES, CONDUIT, ADJUST OVER-CURRENT PROTECTION DEVICES, PROVIDE ADDITIONAL OCPD, LABOR, ADJUST CONDUCTOR SIZES, ADJUST CONDUCTOR QUANTITIES, AND OTHER NECESSARY APPURTENANCES AS REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM PER THE MANUFACTURER'S RECOMMENDATIONS. INCLUDE ALL COSTS IN BASE BID.
- THESE DRAWINGS DIAGRAMMATICALLY INDICATE THE INTENT OF THE PROPOSED CONSTRUCTION. SLIGHT VARIATIONS IN TENANT'S FURNITURE AND SITE CONDITIONS MAY REQUIRE OUTLETS TO BE RELOCATED TO ACCOMMODATE THE ACTUAL FURNITURE AND/OR OUTLETS. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL OUTLETS WITH OWNER'S REPRESENTATIVE, PERFORMING ADJUSTMENTS TO OUTLET LOCATIONS AS REQUIRED FOR A FINISHED AND FUNCTIONAL SYSTEM.



1 LIGHTING POLE BASE DETAIL
SCALE : NOT TO SCALE



2 BOLLARD INSTALLATION DETAIL
SCALE : NOT TO SCALE

THIS DOCUMENT IS
PRELIMINARY IN
NATURE AND IS NOT
A FINAL, SIGNED
AND SEALED
DOCUMENT

PROJECT INFORMATION

PROJECT ADDRESS:

801 E Alameda St.
Norman, OK 73069

PROJECT NO.
DATE 05-10-24

DRAWN BY LKN
CHECKED BY AJP

NORMAN NATURE PARK
NORMAN, OKLAHOMA

ISSUE/ REVISIONS

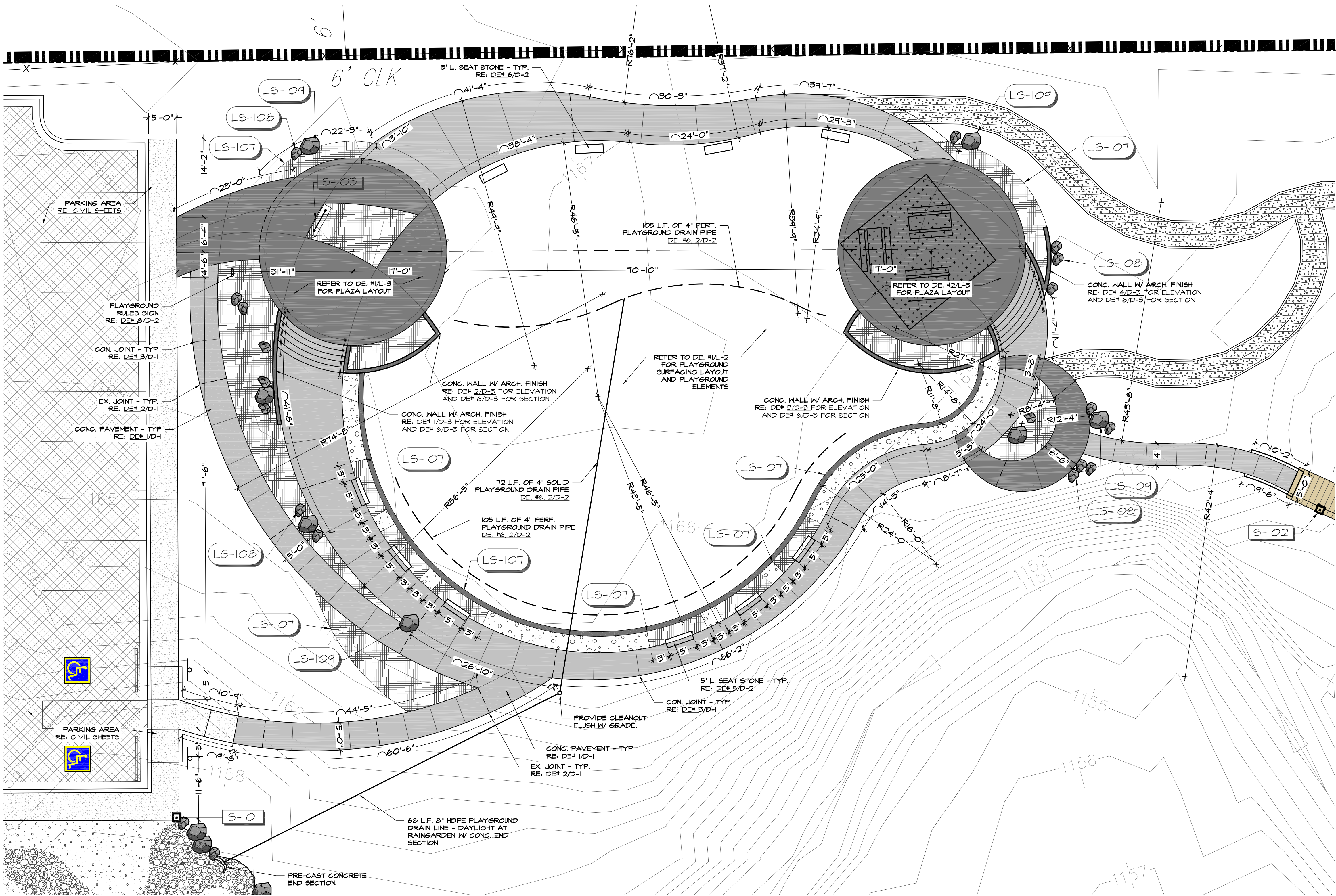
05/10/24	65% Review Set

OWNER:

CITY OF NORMAN

201 W Gray St, Norman, OK 73069

E-001
ELECTRICAL COVER
SHEET



1 **PLAYGROUND LAYOUT - PLAN VIEW**
SCALE: 1" = 10'-0"

REFERENCE NOTE SCHEDULE

SYMBOL	LANDSCAPE QUANTITIES DESCRIPTION	QTY	DETAIL
LS-107	PRO-STEEL BED EDGING - 3/16"x4"	114 LF	1
LS-108	SMALL LIMESTONE BOULDER 200LBS-400LBS	21	
LS-109	MEDIUM LIMESTONE BOULDER 300LBS-1,200LBS	15	
P-109	18" W. PLAYGROUND CURB	162 LF	1/D-2
P-110	ARCHITECTURAL CONCRETE WALLS	205 LF	6/D-3
S-101	24" X 18" SINGLE POST EDUCATIONAL SIGN	2	9/D-2
S-102	24" X 18" RAIL ATTACHED EDUCATIONAL SIGN	2	
S-103	12" X 18" DOUBLE POST EDUCATIONAL SIGN	1	
	BUFFALO GRASS SEED RE: GRASSING NOTES	22,583 SF	
	NATIVE SEED MIX RE: NATIVE SEED NOTES	19,361 SF	
	CONCRETE PAVING (4" WITH THICKENED EDGE)	3,708 SF	1/D-1
	CONCRETE PAVING (WITH DAVIS COLOR)	2,111 SF	1/D-1
	ARTIFICIAL TURF (FLAT)	5,844 SF	1/D-2
	POURED IN PLACE RUBERIZED SURFACE	811 SF	3/D-2
	BOARDWALK	583 SF	
	DECOMPOSED GRANITE LANDSCAPE	401 SF	9/D-1
	DECOMPOSED GRANITE TRAIL	3,133 SF	4/D-1

LANDSCAPE MATERIALS INFO

DECOMPOSED GRANITE AND LANDSCAPE BOULDERS

MINICK MATERIALS OR EQUAL
6665 NORTH INTERSTATE DRIVE
NORMAN, OK 73069
PHONE: 405/323-2458
CONTACT: TIM SHANAHAN

LANDSCAPE SEAT STONE
18"W X 24"H X 60"L SEAT STONES

SILVERDALE STONE
30934 141ST RD
ARKANSAS CITY, KS 67105
PH: (620) 442-5150
WWW.SILVERDALESTONE.COM

SITE FURNISHINGS INFO

PICNIC TABLES
SOLID SERIES
92" L 61" W 18"/31" H

STREETLIFE OR EQUAL
PH: 484 436 8280
WWW.STREETLIFE.COM
HERENGCRACHT 36, 2312LD LEIDEN, THE NETHERLANDS
CONTACT: SONNO WITJES

INFO GRAPHIC SIGNS INFO

SINGLE POST W/ 24"W X 18"H T. NP9 PANEL
-(2) TOTAL
-NP9 STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NP9-1824-FRP1212

RAIL MOUNT W/ 24"W X 18"H T. NP9 PANEL
-(2) TOTAL
-NP9 STYLE SINGLE PEDESTAL (45 DEGREE)
-FLAT RAIL MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NP9-1824-FRP1212

DOUBLE POST W/ 12"W X 18"H T. NP9 PANEL
-(1) TOTAL
-NP9 STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 12"W. BLACK POWDER COATED ALUMINUM
-NP9-1812-DPG1212

FOSSIL INDUSTRIES, INC. OR APPROVED EQUAL
44 JEFFRYN BOULEVARD
DEER PARK, NY 11729
PHONE: (631) 254-4112
WEB: WWW.FOSSILGRAPHICS.COM

PROJECT INFORMATION

PROJECT ADDRESS:	
801 E Alameda St. Norman, OK 73069	
PROJECT NO.	
DATE	11-02-23
DRAWN BY	CHECKED BY
AB	GE

NORMAN NATURE PARK
NORMAN, OKLAHOMA

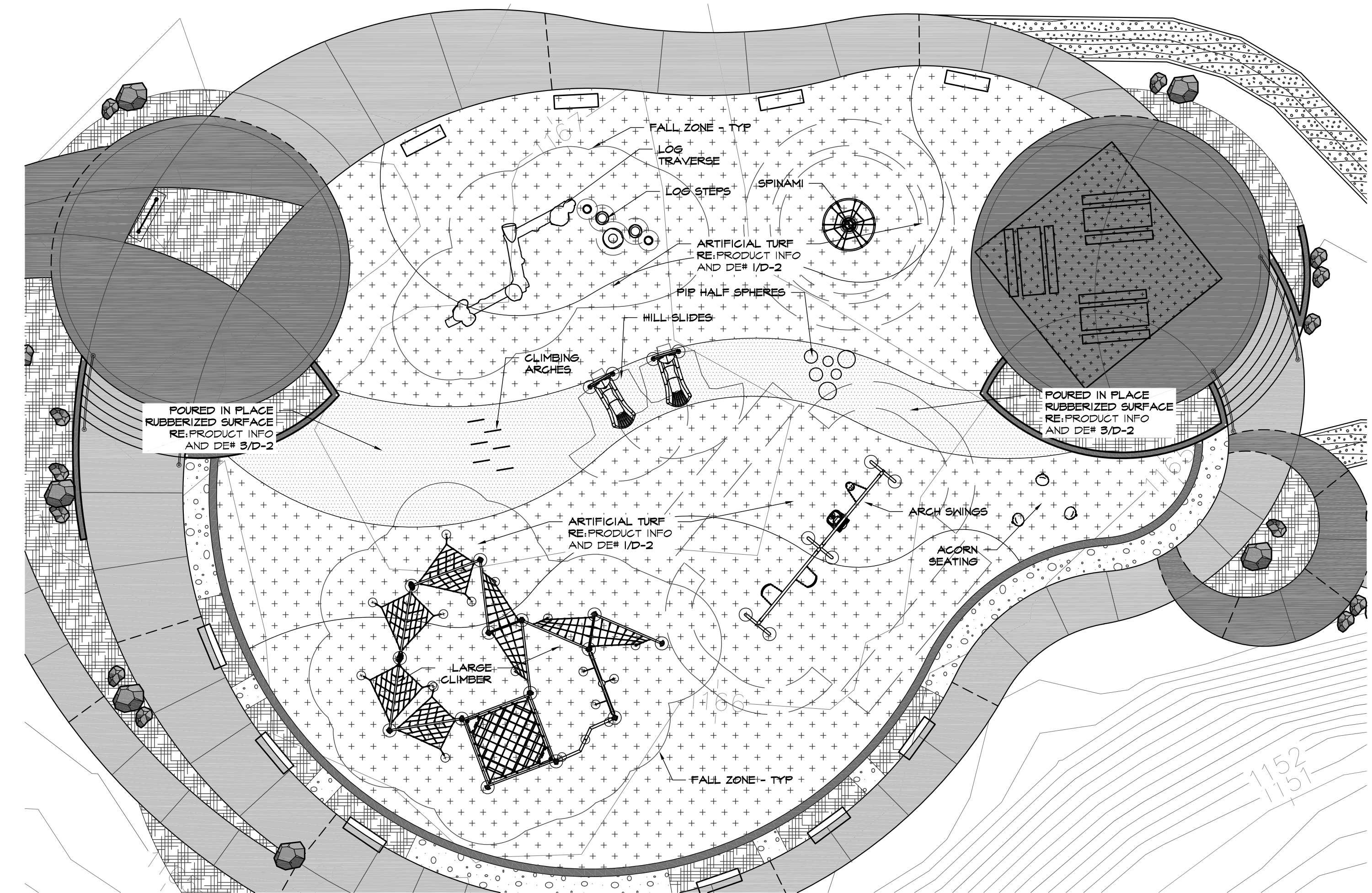
ISSUE/ REVISIONS

05/13/24	65% Review Set

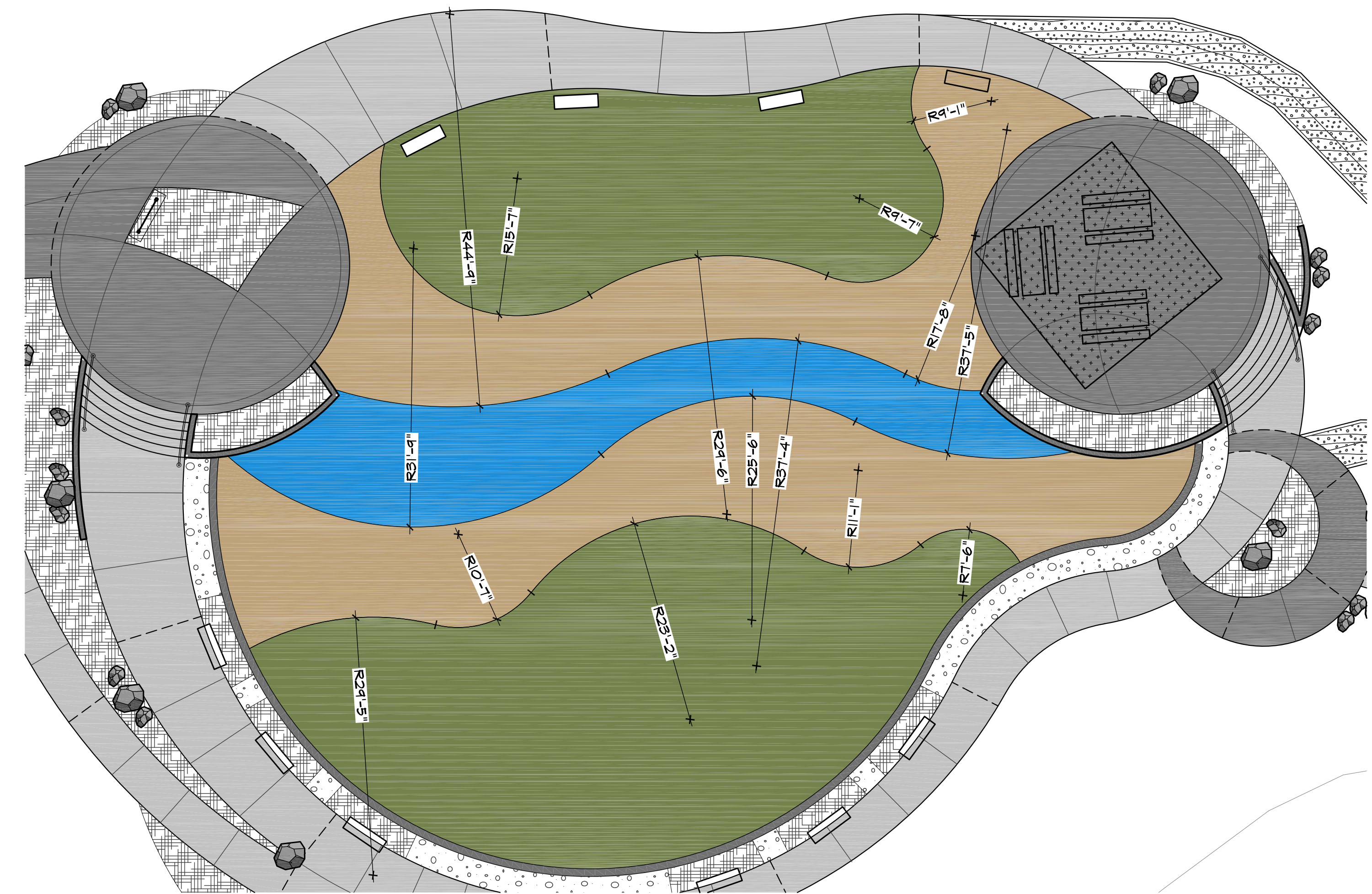
OWNER:

CITY OF NORMAN

201 W Gray St, Norman, OK 73069



1 PLAYGROUND EQUIPMENT AND SURFACING LAYOUT - PLAN VIEW
SCALE: 1"= 10'-0"



2 PLAYGROUND SURFACING GRAPHICS LAYOUT - PLAN VIEW
SCALE: 1"= 10'-0"

PLAYGROUND EQUIPMENT

ITEM DESCRIPTION	MFG	PRODUCT #
ROPE CLIMBER	PLAYWORLD	TIANZI CUSTOM
SPINAM	PLAYWORLD	ZZXX0151
2-BAY ARCH SWING	PLAYWORLD	350-ARCH-2
HILL SLIDES	PLAYWORLD	ZZCH2805/3206/3207
ACORN SEAT	CREBPLAY	1000262
LOG TRAVERSE	ID SCULPTURE	AP015
STEPPING FORMS-LG	ID SCULPTURE	9F002-LLG
STEPPING FORMS-MD	ID SCULPTURE	9F002-LMD
STEPPING FORMS-SM	ID SCULPTURE	9F002-LSM
HILL HUMPS	MYTCOAT	BKW13-238-16-1M
SPHERES	AQUASEAL	3D HALF-14/10/24

PLAYGROUND EQUIPMENT INFO

HAPPY PLAYGROUNDS
8601 S. OXFORD AVE.,
TULSA, OK 74131
PHONE: (918) 691-8245
CONTACT: DANIEL COLLINS
WWW.HAPPYPLAYGROUNDS.COM

PLAYGROUND SURFACING INFO

SYNTHETIC TURF = PLAYGROUND GRASS ULTRA

FOREVERLAWN TULSA OR EQUAL
5122 E. 110TH ST.
TULSA, OK 74131
PHONE: 918/811-8619
CONTACT: ROSS SPENCER

POURED-IN-PLACE RUBBERIZED SURFACING

HAPPY PLAYGROUNDS
8601 S. OXFORD AVE.,
TULSA, OK 74131
PHONE: (918) 691-8245
CONTACT: DANIEL COLLINS
WWW.HAPPYPLAYGROUNDS.COM

*ALL COLORS FOR PLAYGROUND ITEMS AND SURFACING TO BE
SELECTED DURING THE SUBMITTAL PROCESS.

REFERENCE NOTE SCHEDULE

SYMBOL	LANDSCAPE QUANTITIES DESCRIPTION	QTY	DETAIL
LS-101	PRO-STEEL BED EDGING - 3/16"x4"	114 LF	1
LS-102	SMALL LIMESTONE BOULDER 200LBS-400LBS	21	
LS-103	MEDIUM LIMESTONE BOULDER 300LBS-1,200LBS	15	
P-101	10" W. PLAYGROUND CURB	162 LF	1/D-2
P-102	ARCHITECTURAL CONCRETE WALLS	205 LF	6/D-3
S-101	24" X 18" SINGLE POST EDUCATIONAL SIGN	2	9/D-2
S-102	24" X 18" RAIL ATTACHED EDUCATIONAL SIGN	2	
S-103	12" X 18" DOUBLE POST EDUCATIONAL SIGN	1	
	BUFFALO GRASS SEED RE: GRASSING NOTES	22,589 SF	
	NATIVE SEED MIX RE: NATIVE SEED NOTES	19,961 SF	
	CONCRETE PAVING (4" WITH THICKENED EDGE)	3,108 SF	1/D-1
	CONCRETE PAVING (WITH DAVIS COLOR)	2,111 SF	1/D-1
	ARTIFICIAL TURF (FLAT)	5,844 SF	1/D-2
	POURED IN PLACE RUBBERIZED SURFACE	811 SF	3/D-2
	BOARDWALK	583 SF	
	DECOMPOSED GRANITE LANDSCAPE	401 SF	9/D-1
	DECOMPOSED GRANITE TRAIL	3,133 SF	4/D-1

LANDSCAPE MATERIALS INFO

DECOMPOSED GRANITE AND LANDSCAPE BOULDERS

MINICK MATERIALS OR EQUAL
6665 NORTH INTERSTATE DRIVE
NORMAN, OK 73063
PHONE: 405/323-2458
CONTACT: TIM SHANAHAN

LANDSCAPE SEAT STONE
18"W X 24"H X 60"L SEAT STONES

SILVERDALE STONE
30934 141ST RD
ARKANSAS CITY, KS 67105
PH: (620) 442-5150
WWW.SILVERDALESTONE.COM

SITE FURNISHINGS INFO

PICNIC TABLES
SOLID SERIES
92" L 61" W 18"/31" H.

STREETLIFE OR EQUAL
PH: 484 436 8280
WWW.STREETLIFE.COM
HERENGRACHT 56, 2312LD LEIDEN, THE NETHERLANDS
CONTACT: SONNO WITJES

INFO GRAPHIC SIGNS INFO

SINGLE POST W/ 24"W X 18" T. NP9 PANEL
-(2) TOTAL
-NP9 STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NP9-1024-SPG1212

RAIL MOUNT W/ 24"W X 18" T. NP9 PANEL
-(2) TOTAL
-NP9 STYLE SINGLE PEDESTAL (45 DEGREE)
-FLAT RAIL MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NP9-1024-FRP1212

DOUBLE POST W/ 12"W X 18" T. NP9 PANEL
-(1) TOTAL
-NP9 STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 12"W. BLACK POWDER COATED ALUMINUM
-NP9-1012-DPG1212

FOSSIL INDUSTRIES, INC. OR APPROVED EQUAL
44 JEFFRYN BOULEVARD
DEER PARK, NY 11729
PHONE: (631) 254-4112
WEB: WWW.FOSSILGRAPHICS.COM

PROJECT INFORMATION

PROJECT ADDRESS:

801 E Alameda St.
Norman, OK 73069

PROJECT NO.	
DATE	11-02-23
DRAWN BY	CHECKED BY
AB	GE

NORMAN NATURE PARK
NORMAN, OKLAHOMA

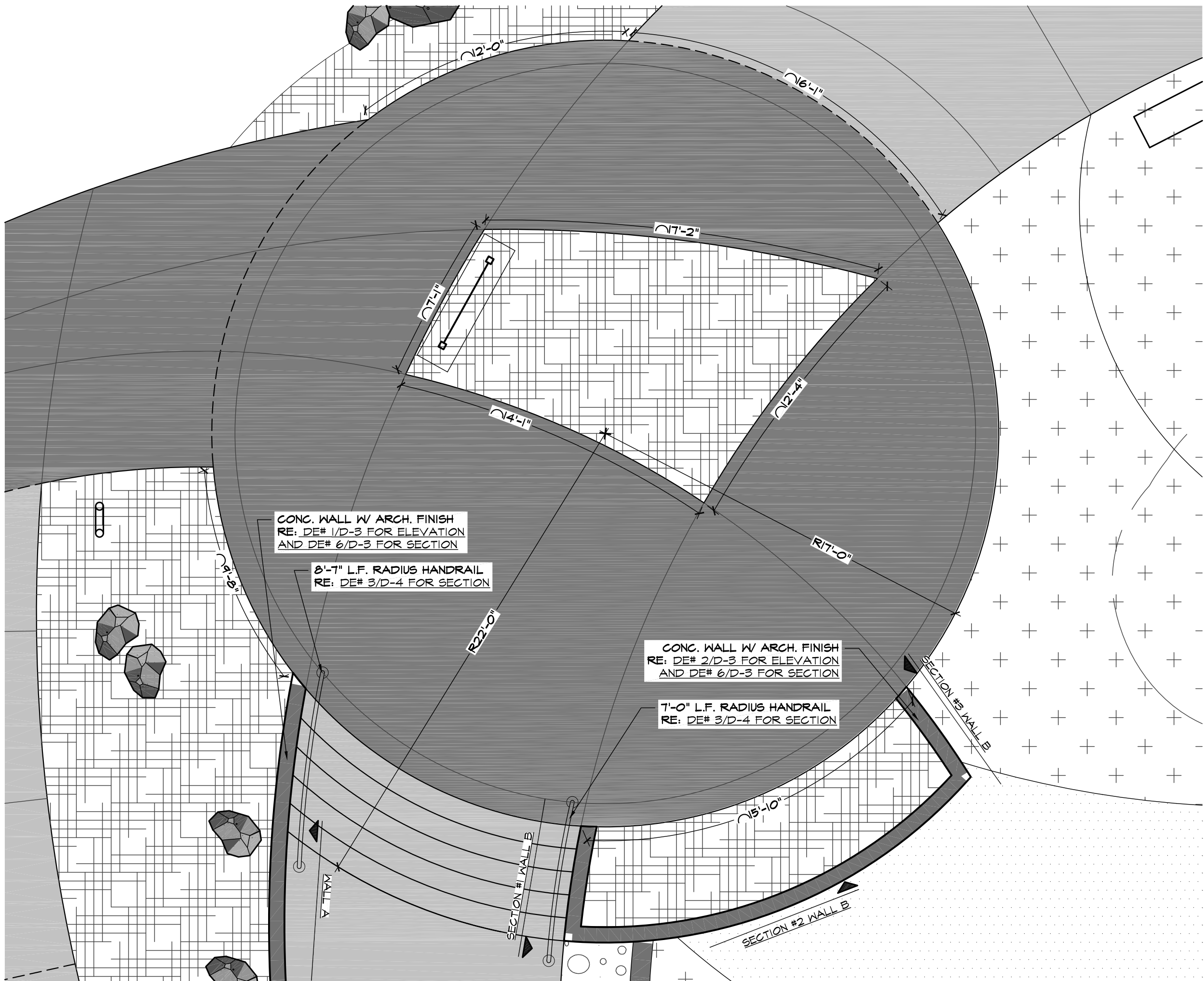
ISSUE/ REVISIONS

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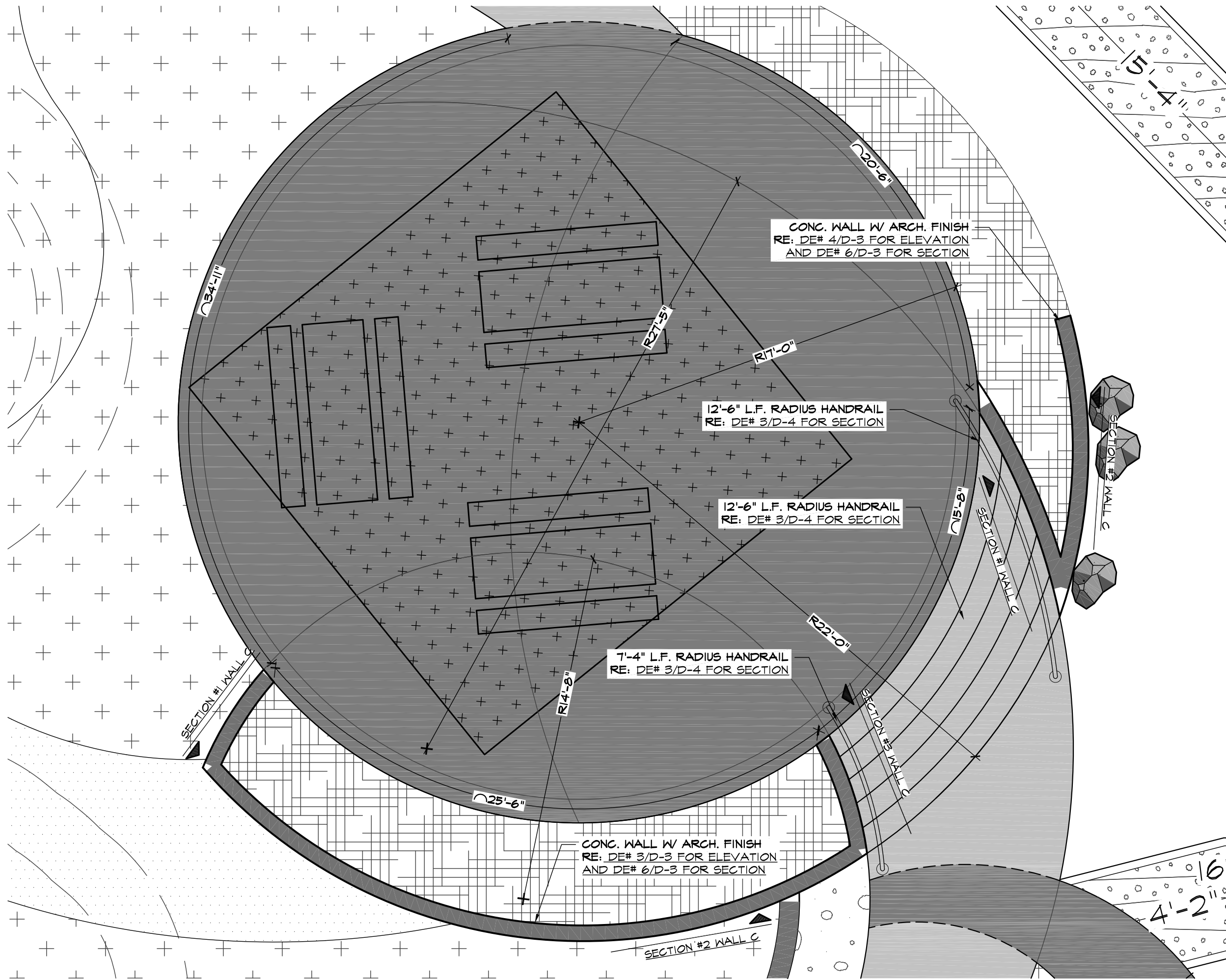
OWNER:

CITY OF NORMAN

201 W Gray St, Norman, OK 73069



1 WEST PLAZA - PLAN VIEW
SCALE: 1/4" = 1'-0"



2 WEST PLAZA - PLAN VIEW
SCALE: 1/4" = 1'-0"

REFERENCE NOTE SCHEDULE

SYMBOL	LANDSCAPE QUANTITIES DESCRIPTION	QTY	DETAIL
LS-107	FRO-STEEL BED EDGING - 3/16"x4"	114 LF	/
LS-108	SMALL LIMESTONE BOULDER 200LBS-400LBS	21	
LS-109	MEDIUM LIMESTONE BOULDER 900LBS-1,200LBS	15	
P-109	18" W. PLAYGROUND CURB	162 LF	1/D-2
P-110	ARCHITECTURAL CONCRETE WALLS	205 LF	6/D-3
S-101	24" X 18" SINGLE POST EDUCATIONAL SIGN	2	3/D-2
S-102	24" X 18" RAIL ATTACHEDT EDUCATIONAL SIGN	2	
S-103	12" X 18" DOUBLE POST EDUCATIONAL SIGN	1	
	BUFFALO GRASS SEED RE: GRASSING NOTES	22,589 SF	
	NATIVE SEED MIX RE: NATIVE SEED NOTES	19,961 SF	
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	CONCRETE PAVING (WITH DAVIS COLOR)	2,111 SF	1/D-1
	ARTIFICIAL TURF (FLAT)	5,844 SF	1/D-2
	POURED IN PLACE RUBERIZED SURFACE	811 SF	3/D-2
	BOARDWALK	583 SF	
	DECOMPOSED GRANITE LANDSCAPE	401 SF	3/D-1
	DECOMPOSED GRANITE TRAIL	3,133 SF	4/D-1

LANDSCAPE MATERIALS INFO

DECOMPOSED GRANITE AND LANDSCAPE BOULDERS

MINICK MATERIALS OR EQUAL
6665 NORTH INTERSTATE DRIVE
NORMAN, OK 73069
PHONE: 405/329-2458
CONTACT: TIM SHANAHAN

LANDSCAPE SEAT STONE
18"W X 24"H X 60"L SEAT STONES

SILVERDALE STONE
30994 141ST RD
ARKANSAS CITY, KS 67108
PH: (620) 442-5150
WWW.SILVERDALESTONE.COM

SITE FURNISHINGS INFO

PICNIC TABLES
SOLID SERIES
92" L 61" W 18"/31" H

STREETLIFE OR EQUAL
PH: 484 496 8280
WWW.STREETLIFE.COM
HERENGRACHT 36, 2312LD LEIDEN, THE NETHERLANDS
CONTACT: SONNO WITJES

INFO GRAPHIC SIGNS INFO

SINGLE POST W/ 24"W.X18"T. NPS PANEL
-(2) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NPS-1824-SFG1212

RAIL MOUNT W/ 24"W.X18"T. NPS PANEL
-(2) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-FLAT RAIL MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NPS-1824-FRP1212

DOUBLE POST W/ 12"W.X18"T. NPS PANEL
-(1) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 12"W. BLACK POWDER COATED ALUMINUM
-NPS-1812-DPG1212

FOSSIL INDUSTRIES, INC. OR APPROVED EQUAL
44 JEFFRYN BOULEVARD
DEER PARK, NY 11729
PHONE: (631) 254-4112
WEB: WWW.FOSSILGRAPHICS.COM

PROJECT INFORMATION

PROJECT ADDRESS:

801 E Alameda St.
Norman, OK 73069

PROJECT NO.	
DATE	11-02-23
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NORMAN NATURE PARK
NORMAN, OKLAHOMA

ISSUE/ REVISIONS

05/13/24	65% Review Set

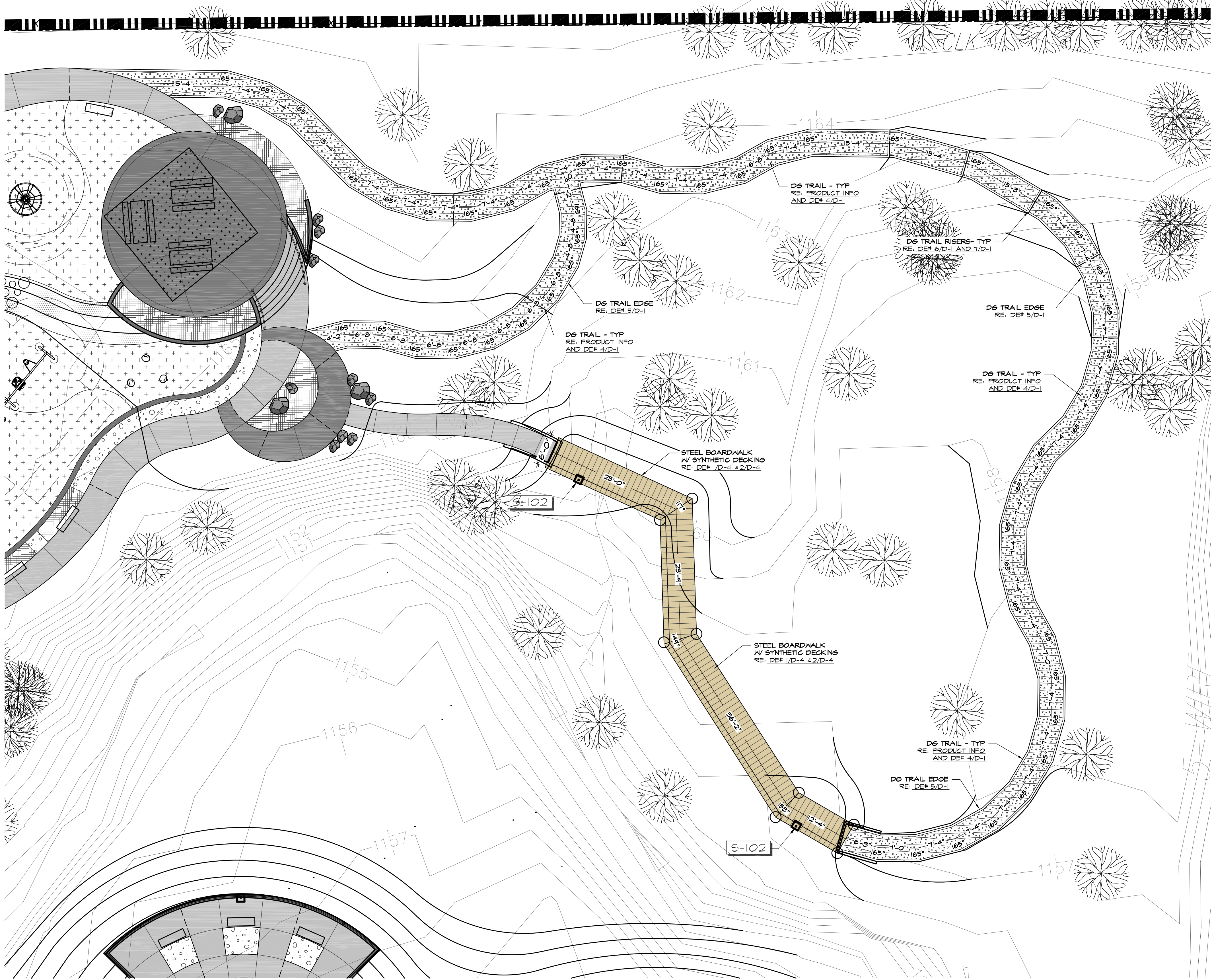
OWNER:

CITY OF NORMAN

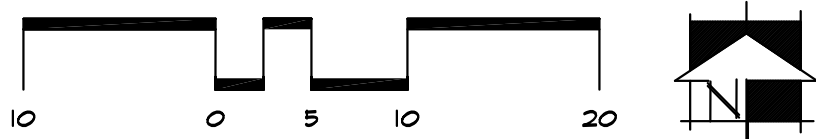
201 W Gray St, Norman, OK 73069

L-3

PLAYGROUND
PLAZAS LAYOUT



1 BOARDWALK AND TRAIL LAYOUT (NORTH)- PLAN VIEW
SCALE: 1"= 10'-0"



REFERENCE NOTE SCHEDULE

SYMBOL	LANDSCAPE QUANTITIES DESCRIPTION	QTY	DETAIL
LS-107	FRO-STEEL BED EDGING - 3/16"x4"	114 LF	/
LS-108	SMALL LIMESTONE BOULDER 200LBS-400LBS	21	
LS-109	MEDIUM LIMESTONE BOULDER 900LBS-1,200LBS	15	
P-109	18" W. PLAYGROUND CURB	162 LF	1/D-2
P-110	ARCHITECTURAL CONCRETE WALLS	205 LF	6/D-3
S-101	24" X 18" SINGLE POST EDUCATIONAL SIGN	2	3/D-2
S-102	24" X 18" RAIL ATTACHEDT EDUCATIONAL SIGN	2	
S-103	12" X 18" DOUBLE POST EDUCATIONAL SIGN	1	
	BUFFALO GRASS SEED RE: GRASSING NOTES	22,589 SF	
	NATIVE SEED MIX RE: NATIVE SEED NOTES	19,961 SF	
	CONCRETE PAVING (4" WITH THICKENED EDGE)	3,108 SF	1/D-1
	CONCRETE PAVING (WITH DAVIS COLOR)	2,111 SF	1/D-1
	ARTIFICIAL TURF (FLAT)	5,844 SF	1/D-2
	POURED IN PLACE RUBERIZED SURFACE	811 SF	3/D-2
	BOARDWALK	583 SF	
	DECOMPOSED GRANITE LANDSCAPE	407 SF	3/D-1
	DECOMPOSED GRANITE TRAIL	3,133 SF	4/D-1

LANDSCAPE MATERIALS INFO

DECOMPOSED GRANITE AND LANDSCAPE BOULDERS

MINICK MATERIALS OR EQUAL
6665 NORTH INTERSTATE DRIVE
NORMAN, OK 73069
PHONE: 405/329-2458
CONTACT: TIM SHANAHAN

LANDSCAPE SEAT STONE
18"W X 24"H X 60"L SEAT STONES

SILVERDALE STONE
30934 141ST RD
ARKANSAS CITY, KS 67105
PH: (620) 442-5150
WWW.SILVERDALESTONE.COM

SITE FURNISHINGS INFO

PICNIC TABLES
SOLID SERIES
92" L 61" W 18"/31" H

STREETLIFE OR EQUAL
PH: 484 496 8280
WWW.STREETLIFE.COM
HERENGRACHT 36, 2312LD LEIDEN, THE NETHERLANDS
CONTACT: SONNO WITJES

INFO GRAPHIC SIGNS INFO

SINGLE POST W/ 24"W.X18"T. NPS PANEL
-(2) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NPS-1824-SFG1212

RAIL MOUNT W/ 24"W.X18"T. NPS PANEL
-(2) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-FLAT RAIL MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NPS-1824-FRP1212

DOUBLE POST W/ 12"W.X18"T. NPS PANEL
-(1) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 12"W. BLACK POWDER COATED ALUMINUM
-NPS-1812-DPG1212

FOSSIL INDUSTRIES, INC. OR APPROVED EQUAL
44 JEFFRYN BOULEVARD
DEER PARK, NY 11729
PHONE: (631) 254-4172
WEB: WWW.FOSSILGRAPHICS.COM

PROJECT INFORMATION

PROJECT ADDRESS:

801 E Alameda St.
Norman, OK 73069

PROJECT NO.	
DATE	11-02-23
DRAWN BY	CHECKED BY
AB	GE

NORMAN NATURE PARK
NORMAN, OKLAHOMA

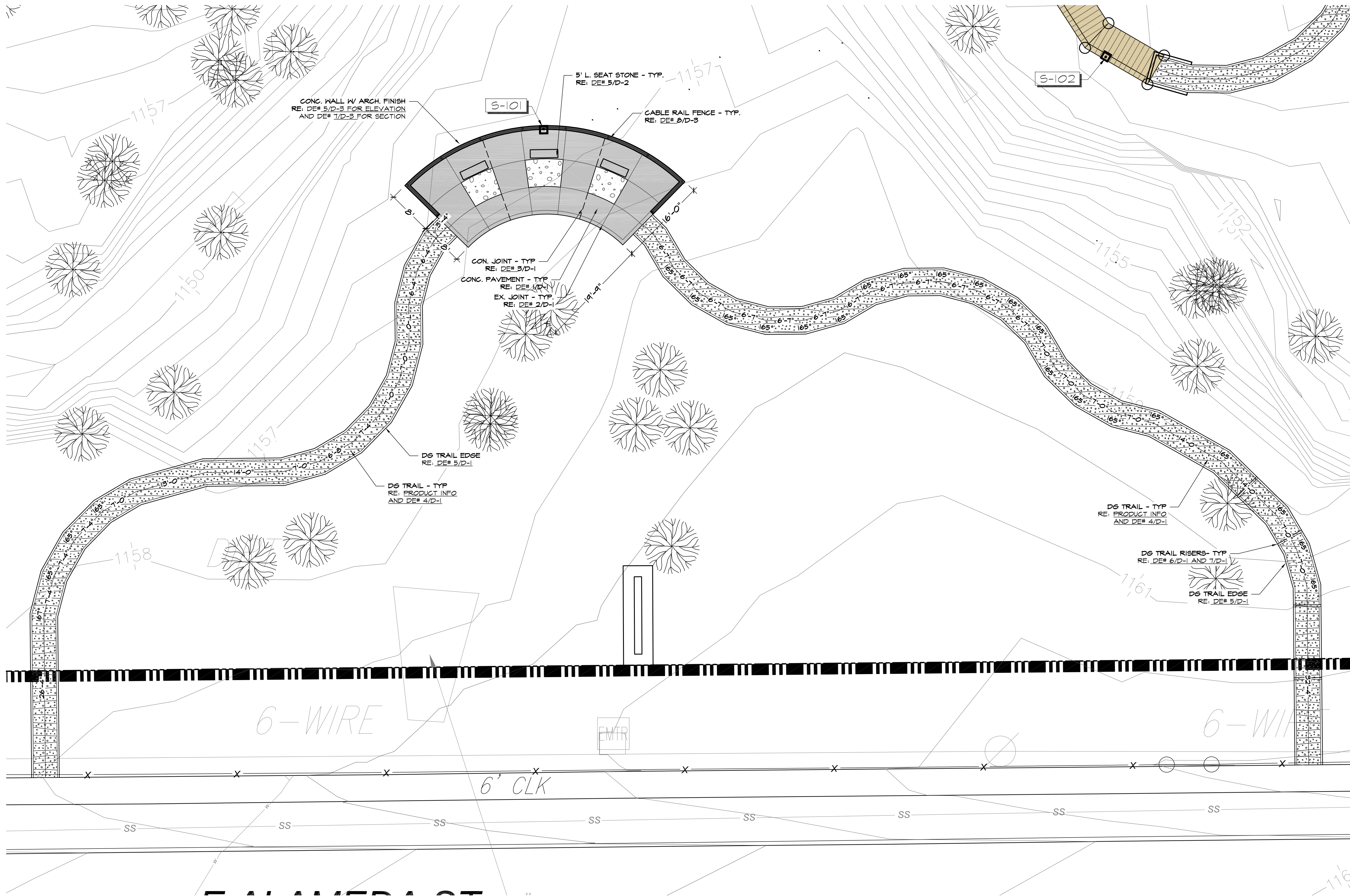
ISSUE/ REVISIONS

DATE	REVISION
05/13/24	65% Review Set

OWNER:

CITY OF NORMAN

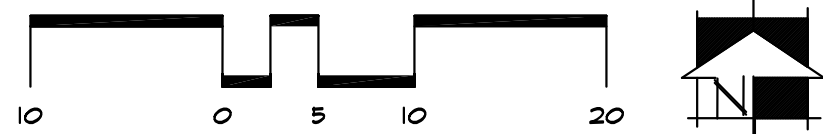
201 W Gray St, Norman, OK 73069



1

DG TRAIL LAYOUT (SOUTH)- PLAN VIEW

SCALE: 1"= 10'-0"



REFERENCE NOTE SCHEDULE

SYMBOL	LANDSCAPE QUANTITIES DESCRIPTION	QTY	DETAIL
	FRO-STEEL BED EDGING - 3/16"x4"	114 LF	/
	SMALL LIMESTONE BOULDER 200LBS-400LBS	21	
	MEDIUM LIMESTONE BOULDER 900LBS-1,200LBS	15	
	18" W. PLAYGROUND CURB	162 LF	1/D-2
	ARCHITECTURAL CONCRETE WALLS	205 LF	6/D-3
	24" X 18" SINGLE POST EDUCATIONAL SIGN	2	9/D-2
	24" X 18" RAIL ATTACHED EDUCATIONAL SIGN	2	
	12" X 18" DOUBLE POST EDUCATIONAL SIGN	1	
	BUFFALO GRASS SEED RE: GRASSING NOTES	22,589 SF	
	NATIVE SEED MIX RE: NATIVE SEED NOTES	19,961 SF	
	CONCRETE PAVING (4" WITH THICKENED EDGE)	3,708 SF	1/D-1
	CONCRETE PAVING (WITH DAVIS COLOR)	2,111 SF	1/D-1
	ARTIFICIAL TURF (FLAT)	5,844 SF	1/D-2
	POURED IN PLACE RUBERIZED SURFACE	811 SF	3/D-2
	BOARDWALK	583 SF	
	DECOMPOSED GRANITE LANDSCAPE	407 SF	9/D-1
	DECOMPOSED GRANITE TRAIL	3,133 SF	4/D-1

LANDSCAPE MATERIALS INFO

DECOMPOSED GRANITE AND LANDSCAPE BOULDERS

MINICK MATERIALS OR EQUAL
6665 NORTH INTERSTATE DRIVE
NORMAN, OK 73069
PHONE: 405/329-2458
CONTACT: TIM SHANAHAN

LANDSCAPE SEAT STONE
18" W X 24" H X 60" L SEAT STONES

SILVERDALE STONE
30994 141ST RD
ARKANSAS CITY, KS 67108
PH: (620) 442-5150
WWW.SILVERDALESTONE.COM

SITE FURNISHINGS INFO

PICNIC TABLES
SOLID SERIES
92" L 61" W 18"/31" H

STREETLIFE OR EQUAL
PH: 484 496 8280
WWW.STREETLIFE.COM
HERENGRACHT 36, 2312LD LEIDEN, THE NETHERLANDS
CONTACT: SONNO WITJES

INFO GRAPHIC SIGNS INFO

SINGLE POST W/ 24"W X 18" T. NPS PANEL
-(2) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NPS-1824-SFG1212

RAIL MOUNT W/ 24"W X 18" T. NPS PANEL
-(2) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-FLAT RAIL MOUNT
-GRAPHIC: 18"H X 24"W. BLACK POWDER COATED ALUMINUM
-NPS-1824-FRP1212

DOUBLE POST W/ 12"W X 18" T. NPS PANEL
-(1) TOTAL
-NPS STYLE SINGLE PEDESTAL (45 DEGREE)
-IN-GROUND MOUNT
-GRAPHIC: 18"H X 12"W. BLACK POWDER COATED ALUMINUM
-NPS-1812-DPG1212

FOSSIL INDUSTRIES, INC. OR APPROVED EQUAL
44 JEFFRYN BOULEVARD
DEER PARK, NY 11729
PHONE: (631) 254-4112
WEB: WWW.FOSSILGRAPHICS.COM

PDG

PLANNING DESIGN GROUP

LANDSCAPE ARCHITECTURE • LAND PLANNING
RECREATIONAL DESIGN
5314 S. YALE AVE., SUITE 710, TULSA, OK 74135
918/628-1225 918/628-1226 FAX
WWW.PLANNINGDESIGNGROUP.COM

PROJECT INFORMATION

PROJECT ADDRESS:

801 E Alameda St.
Norman, OK 73069

PROJECT NO. _____
DATE 11-02-23

DRAWN BY AB
CHECKED BY GE

NORMAN NATURE PARK NORMAN, OKLAHOMA

ISSUE/ REVISIONS

DATE	REVISION
05/13/24	65% Review Set

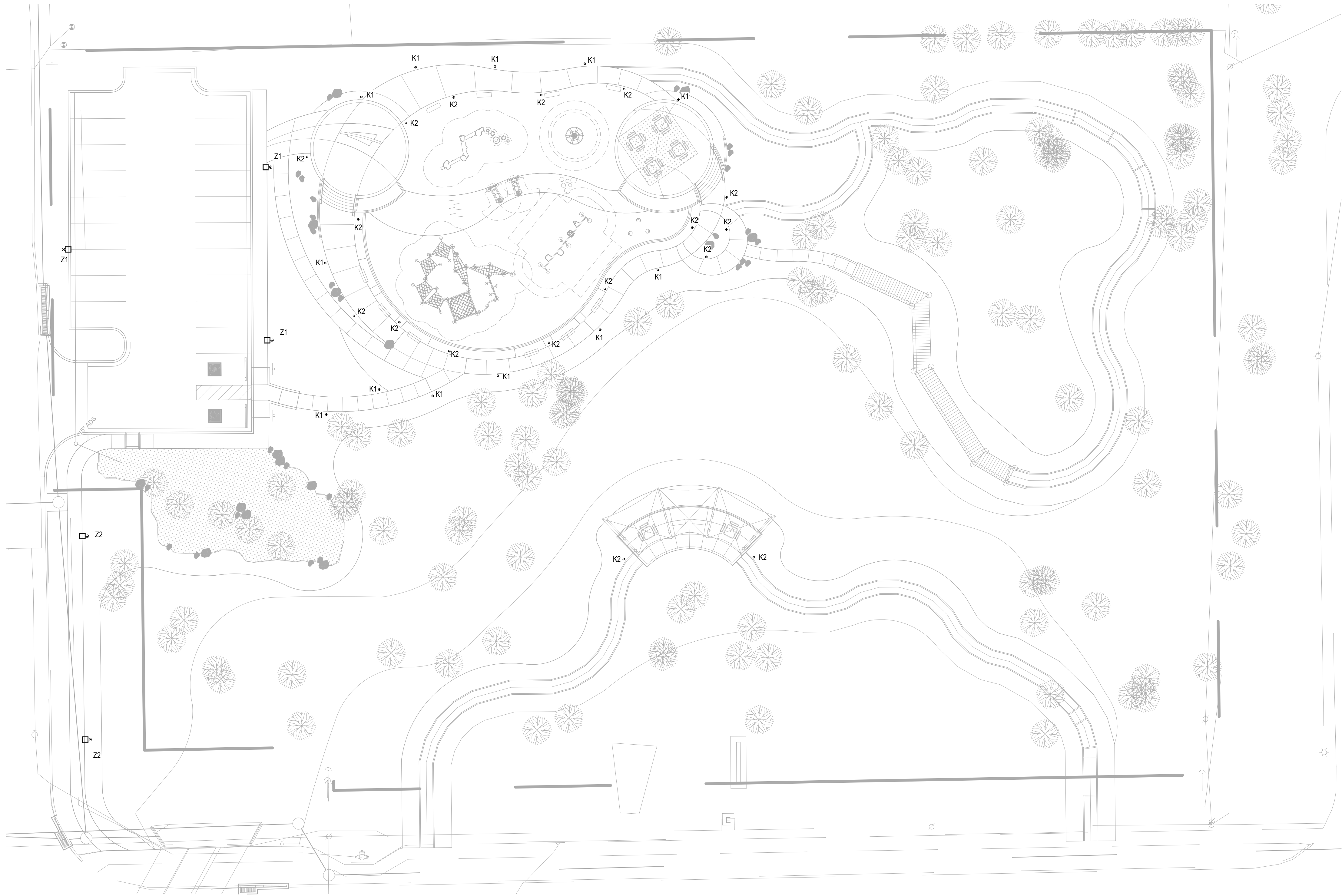
OWNER:

CITY OF NORMAN

201 W Gray St, Norman, OK 73069

L-5

SOUTH BANK LAYOUT PLAN



1 ELECTRICAL SITE PLAN
SCALE : 1" = 20'-0"

LIGHTING FIXTURE SCHEDULE								
CALL OUT	LIGHT SOURCE				DESCRIPTION	MOUNTING	MANUFACTURER	CATALOG NUMBER
	LUMENS	CCT	CRI	WATT				
K1	1260LM	3000K	90CRI	7 W	BOLLARD SOLAR LIGHT FIXTURE WITH TYPE 2 DISTRIBUTION.	BOLLARD MOUNTED	GRID SHIFT SOLAR LIGHTING	CS-BOL-SEN-6R-II-36"
K2	1260LM	3000K	90CRI	7 W	BOLLARD SOLAR LIGHT FIXTURE WITH TYPE 5 DISTRIBUTION	BOLLARD MOUNTED	GRID SHIFT SOLAR LIGHTING	CS-BOL-SEN-6R-V-36"
Z1	8100LM	3000K	70CRI	45 W	SINGLE POLE SOLAR FIXTURE WITH TYPE 4 DISTRIBUTION.	POLE MOUNTED	GRID SHIFT SOLAR LIGHTING	CS-SIE-2731-45-8100-IV-30K-MB1-BRZ-Y-1
Z2	8100LM	3000K	70CRI	45 W	SINGLE POLE SOLAR FIXTURE WITH TYPE 2 DISTRIBUTION.	POLE MOUNTED	GRID SHIFT SOLAR LIGHTING	CS-SIE-2731-45-8100-II-30K-MB1-BRZ-Y-1

- LIGHTING FIXTURE NOTES**
- SPECIFIED FIXTURES INDICATE DESIGN INTENT. SUBSTITUTIONS SOLICITED FROM OWNER, LANDSCAPE ARCHITECT, ENGINEER OR GENERAL CONTRACTOR SHALL ONLY BE CONSIDERED IF THEY MEET THE FOLLOWING CRITERIA:
 - ARE SUBMITTED 7 DAYS PRIOR TO BID DAY.
 - SUBMITTING AGENT SHALL PROVIDE ALL REQUESTED COLOR SAMPLES, WORKING FIXTURE SAMPLES AND OR PHOTOMETRIC CALCULATIONS WITHIN 10 DAYS IF REQUESTED FROM THE DESIGN TEAM.
 - THE DESIGN TEAM SHALL RESERVE THE RIGHT TO APPROVE OR REJECT ANY SUBSTITUTED FIXTURE BASED ON ANY OF THE FOLLOWING: AESTHETICS, PERFORMANCE, FEATURES, QUALITY, COST, AND LEAD TIMES.
 - SEE LANDSCAPE ARCHITECTURAL PLANS FOR ADDITIONAL LIGHTING INFORMATION - ELEVATIONS, DETAILS, ETC.

SITE PLAN NOTES

A. REFERENCE CIVIL UTILITY PLAN AND LANDSCAPE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.



THIS DOCUMENT IS
PRELIMINARY IN
NATURE AND IS NOT
A FINAL, SIGNED
AND SEALED
DOCUMENT

PROJECT INFORMATION	
PROJECT ADDRESS:	
801 E Alameda St. Norman, OK 73069	
PROJECT NO.	
DATE	05-10-24
DRAWN BY	CHECKED BY
LKN	AJP

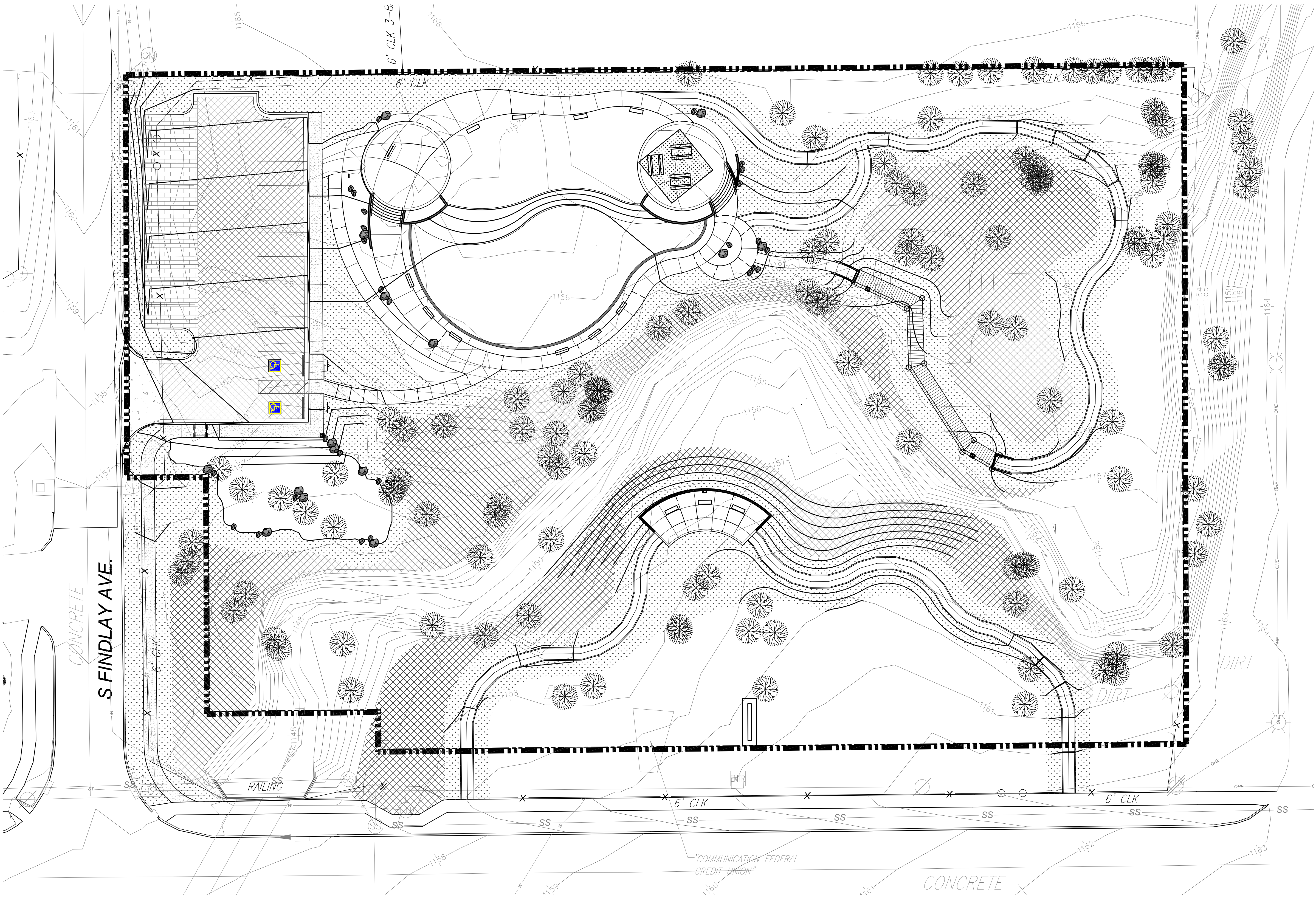
NORMAN NATURE PARK
NORMAN, OKLAHOMA

ISSUE/ REVISIONS	
05/10/24	65% Review Set

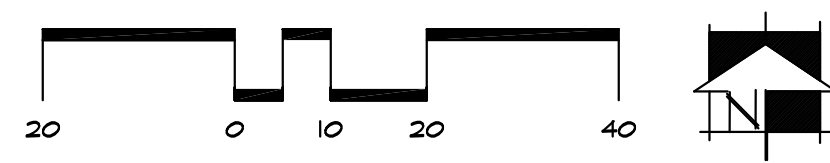
OWNER:

CITY OF NORMAN

201 W Gray St, Norman, OK 73069



1 SITE GRASSING PLAN - PLAN VIEW
SCALE: 1"= 20'-0"



LANDSCAPE QUANTITIES

SYMBOL	DESCRIPTION	QTY	DETAIL
LS-107	PRO-STEEL BED EDGING - 3/16"x4'	114 LF	/
LS-108	SMALL LIMESTONE BOULDER 200LBS-400LBS	21	
LS-109	MEDIUM LIMESTONE BOULDER 300LBS-1,200LBS	15	

SYMBOL	DESCRIPTION	QTY	DETAIL
	BUFFALO GRASS SEED RE: GRASSING NOTES	22,601 SF	
	NATIVE SEED MIX RE: NATIVE SEED NOTES	19,361 SF	

SYMBOL	DESCRIPTION	QTY	DETAIL
	PLANTING BED RE: PLANTING NOTES	14.52 CY	/

GENERAL LANDSCAPE NOTES

1. HEIGHT, 5-SPREAD CAL-GALIFER, G.C.: ON CENTER, B4B,BALLED 4 BURLAPPED, GAL-GALLON, ASH, AT BREAST HEIGHT
THE MATERIAL LIST IS PROVIDED FOR THE CONTRACTOR'S CONVENIENCE. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FIGURING ALL QUANTITIES FROM THE PLANTING PLAN AND COVERAGES FOR ALL BED AREAS. WHEN DISCREPANCIES OCCUR BETWEEN THE MATERIAL LIST AND THE PLANTING PLAN, THE PLANTING PLAN SUPERSEDES THE MATERIAL LIST IN ALL CASES. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR ALL PLANTS AND COVERAGES OF BED AREAS ON THE PLANTING PLAN. TREES IN THE LANDSCAPE MATERIAL LIST ARE TO BE OBTAINED FROM SPECIFIC VENDORS OR APPROVED EQUAL, REFER TO APPROVED VENDOR LIST BELOW.

TREE NOTES

1. ALL TREES TO BE WATERED WITH SLOW DRIP 20 GALLON WATERING BAG. CONTRACTOR TO INCLUDE WATERING BAGS IN BID. CONTRACTOR RESPONSIBLE FOR INSTALLING WATERING BAGS.

PLANTING NOTES

1. OUTLINE ALL PLANTING BEDS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO COMMENCING WITH BED PREPARATION.
2. STAKE ALL TREE LOCATIONS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO DIGGING TREE PITS.
3. REMOVE ALL WEEDS AND GRASSES FROM PLANTING BEDS. IF BERMUDA GRASS IS PRESENT, IT SHALL BE ERADICATED BY APPROVED MEANS.
4. STEEL EDGING SHALL BE 3/16" X 4" STEEL LANDSCAPE EDGING WITH STEEL STAKES AS MANUFACTURED BY PRO STEEL, FORT WORTH, TEXAS.
5. WITHIN APPROVED BED AREAS, PREPARE SOIL BY ROTO-TILLING THREE INCHES (3") OF COMPOST (BACK TO NATURE SOIL CONDITIONER) OVER THE ENTIRE BED AREA TO A DEPTH OF SIX INCHES (6").
6. SPREAD AN EVEN THREE INCHES (3") LAYER OF MULCH WITHIN ALL TREE WELLS.
7. ON ALL TREES TOP SIX INCHES (6") OF BACKFILL SHALL CONSIST OF A 1:1 MIXTURE OF COMPOST TO SOIL.
8. AROUND ALL TREES FORM A CIRCULAR RING FREE OF VEGETATION. CIRCLE SHALL BE TRUE IN FORM AND CENTERED ON TREE.
9. ALL TREES SHALL BE STAKED WITH TWO (2) GREEN METAL SPLIT TEE FENCE POSTS AND TIED WITH WIRE THROUGH THE HOSE AS PER DETAIL.
10. APPLY OSMOCOTE AT A RATE OF 1/2 POUND PER TREE AND 1 POUND PER 100 SQUARE FEET TO SHRUB AND GROUND COVER PLANTING BEDS.

SODDING NOTES

1. REFER TO PROJECT MANUAL FOR FURTHER SPECIFICATIONS.
2. ALL NETTING TO BE REMOVED FROM SOD DURING INSTALLATION.
3. FINE GRADE LAWN AREAS TO SMOOTH, EVEN SURFACE WITH A LOOSE, UNIFORM FINE TEXTURE. FLOAT SMOOTH TO REMOVE RIDGES AND FILL DEPRESSIONS AS REQUIRED TO REMOVE RIDGES AND FILL DEPRESSIONS AS REQUIRED TO DRAIN.
4. APPLY APPROVED FERTILIZER ON FINISH GRADE PRIOR TO SOD INSTALLATION AT A RATE OF ONE (1) POUND OF ACTUAL NITROGEN PER 1000 SQUARE FEET.
5. ON 8:1 SLOPES OR GREATER SOD SHALL BE INSTALLED PERPENDICULAR TO SLOPE AND SECURED WITH APPROVED WOOD STAKES AS NEEDED TO PREVENT SOD FROM SLOUGHING OFF SLOPES.
6. THE SITE IS TO BE KEPT CLEAN AND ORDERLY. ALL TRASH, INCLUDING DEBRIS FROM REMOVING WEEDS OR ROCKS FROM SODDED AREAS, SHALL BE REMOVED FROM THE SITE AS WORK PROGRESSES. ALL PAVED AREAS SHALL BE KEPT CLEAN BY HOISING AND/OR SWEEPING.
7. CONTRACTOR IS RESPONSIBLE FOR SOLID SODDING ALL AREAS DISTURBED DURING CONSTRUCTION OPERATIONS.
8. LAY SOD TO FORM A SOLID MASS. TIGHTLY-FITTED JOINTS. DO NOT OVERLAY EDGES. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES.
9. WATER SOD LIGHTLY AND THEN ROLL WITH A WATER FILLED LAWN ROLLER TO ENSURE CONTACT WITH SUBGRADE AND TO INSURE A SMOOTH SURFACE FREE OF CLUMPS AND DEPRESSIONS.

NATIVE SEED NOTES

1. BEFORE PLANTING, CONTRACTOR MUST COMPACT TOPSOIL TO 85% AND REMOVE ALL OTHER VEGETATION THAT MAY BE PRESENT, AS WELL AS OTHER GRASSES OR BROADLEAVED WEEDS.
2. SEED INSTALLATION IS TO OCCUR FROM FALL TO EARLY SPRING OR AS RECOMMENDED BY SUPPLIER.
3. SEED IS TO BE INSTALLED USING THE NO-TILL DRILL METHOD IN ALL AREAS.
4. SEED IS TO BE INSTALLED PER RATE BELOW.
5. FOR ANY ADDITIONAL INFORMATION ON NATIVE GRASS INSTALLATION, CONTRACTOR IS TO REFER TO THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS). ESTABLISHING NATIVE GRASSES RECOMMENDATIONS.

NATIVE SEED PRODUCT INFO

NATIVE TRAIL MIX @ 1LBS/1,000S.F. • BIG BLUE @ 4LBS/ACRE, INDIAN GRASS @ 3LBS/ACRE, PRAIRIE DROPSEED @ 1/4LBS/ACRE, SWITCH GRASS @ 1/2LBS/ACRE.

PROVIDED BY NATIVE AMERICAN SEED, OR APPROVED EQUAL
JUNCTION, TX
PH: (800)728-4045
WEB: WWW.SEEDSOURCE.COM
EMAIL: INFO@SEEDSOURCE.COM

LANDSCAPE MATERIALS INFO

DECOMPOSED GRANITE AND LANDSCAPE BOULDERS

MINICK MATERIALS OR EQUAL
6665 NORTH INTERSTATE DRIVE
NORMAN, OK 73069
PHONE: 405/329-2458
CONTACT: TIM SHANAHAN

SYNTHETIC TURF = PLAYGROUND GRASS ULTRA

FOREVERLAWN TULSA OR EQUAL
5122 E. 110TH ST.
TULSA, OK 74131
PHONE: 918/811-8619
CONTACT: ROSS SPENCER

POURED-IN-PLACE RUBBERIZED SURFACING

HAPPY PLAYGROUNDS
8601 S. OXFORD AVE.
TULSA, OK 74131
PHONE: (918) 691-8245
CONTACT: DANIEL COLLINS
WWW.HAPPYPLAYGROUNDS.COM

*ALL COLORS FOR PRODUCTS TO BE SELECTED DURING THE SUBMITTAL PROCESS.

PROJECT INFORMATION

PROJECT ADDRESS:

801 E Alameda St.
Norman, OK 73069

PROJECT NO.	
DATE	11-02-23
DRAWN BY	CHECKED BY
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NORMAN NATURE PARK
NORMAN, OKLAHOMA

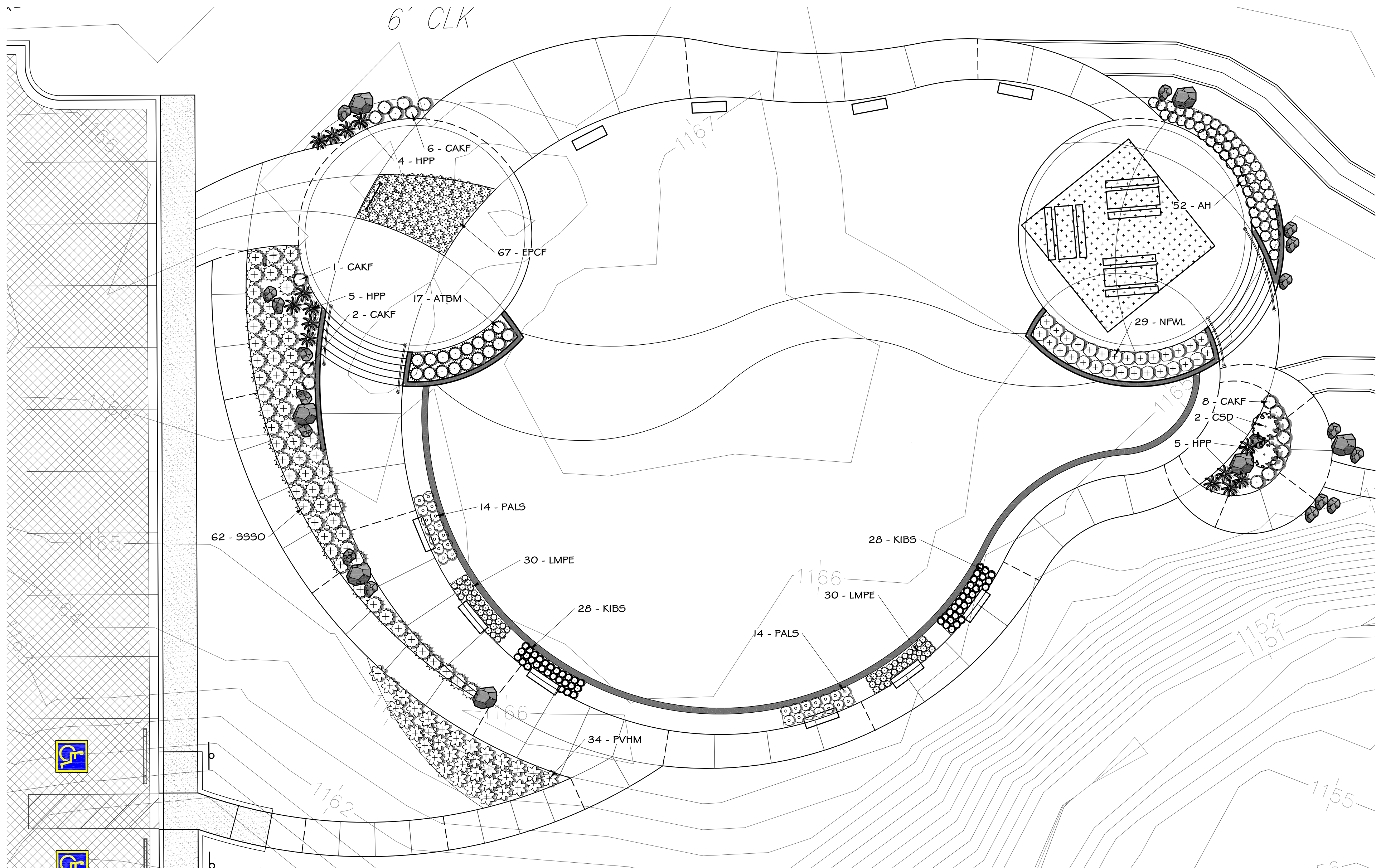
ISSUE/ REVISIONS

DATE	REVISION
02/09/24	65% Review Set

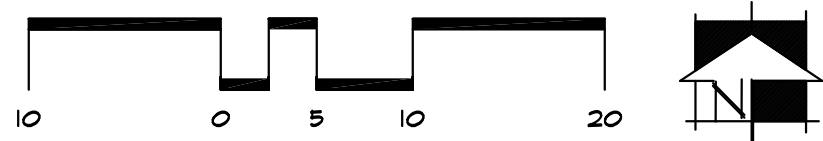
OWNER:

CITY OF NORMAN

201 W Gray St, Norman, OK 73069



1 PLAYGROUND PLANTING - PLAN VIEW
SCALE: 1"= 10'-0"



LANDSCAPE QUANTITIES

SYMBOL	DESCRIPTION	QTY	DETAIL
LS-107	PRO-STEEL BED EDGING - 3/16"x4"	114 LF	11/L8-3
SYMBOL	DESCRIPTION	QTY	DETAIL
	CEDAR MULCH 4" DEPTH IN BEDS 1/2 BAG PER TREE	14.52 CY	
	BACK TO NATURE 4" DEPTH IN BEDS 1/2 BAG PER TREE	14.52 CY	

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
TREES						
UC	3	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL	B&B	
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
SHRUBS						
AH	52	AMSONIA HUBRICHTII	ARKANSAS BLUESTAR	1 GAL	POT	18" O.C.
ATBM	17	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	1 GAL	POT	24" O.C.
CAKF	17	CALAMAGROSTIS X ACUTIFLORA 'KARL FORESTER'	KARL FORESTER GRASS	3 GAL	POT	24" O.C.
CTTV	14	CAMPBELL'S X TAGLIABUANA 'HOMR' TM	MADAME ROSTY TRUMPET VINE	1 GAL	POT	18" O.C.
CMR	23	COREOPSIS X 'MERCURY RISING'	MERCURY RISING TICKSEED	1 GAL	POT	12" O.C.
CSD	2	CORNUS STOLONIFERA	ARCTIC FIRE RED TWIG DOGWOOD	5 GAL	POT	48" O.C.
EFKK	31	ECHINACEA PURPUREA 'KIM'S KNEE HIGH'	KIM'S KNEE HIGH CONEFLOWER	1 GAL	POT	24" O.C.
EPCF	61	ECHINACEA PURPUREA 'FAS10291' TM	FOUJOU WILD BERRY CONEFLOWER	1 GAL	POT	18" O.C.
EHHR	53	EQUISETUM HYEMALE	HORSETAIL REED	1 GAL	POT	18" O.C.
GASC	32	GAILLARDIA ARISTATA 'SPINTOP COPPER SUN'	SPINTOP COPPER SUN BLANKET FLOWER	1 GAL	POT	12" O.C.
GLWB	40	GAURA LINDHEIMERI 'WHIRLING BUTTERFLIES'	WHIRLING BUTTERFLIES GAURA	1 GAL	POT	18" O.C.
HPP	14	HESPERALOE PARVIFLORA 'PERFA' PP #21129	BRAKELIGHTS RED YUCA	5 GAL	POT	30" O.C.
KIBS	56	KALIMERIS INCISA 'BLUE STAR'	BLUE STAR JAPANESE ASTER	1 GAL	POT	12" O.C.
KTRP	51	KNIPHOFIA TRIANGULARIS	DWARF RED HOT POKER	1 GAL	POT	12" O.C.
LMPE	60	LIRIOPE MUSCARI 'EXC 051' TM	PURPLE EXPLOSION LILYTURF	1 GAL	POT	12" O.C.
NFWL	29	NEPETA X FAASSENII 'WALKER'S LOW'	WALKER'S LOW CATMINT	3 GAL	POT	24" O.C.
PVHM	34	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	3 GAL	POT	30" O.C.
PALS	20	PEROVSKIA ATRIPICIFOLIA 'LITTLE SPIRE'	LITTLE SPIRE RUSSIAN SAGE	1 GAL	POT	18" O.C.
SSSO	62	SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION'	LITTLE BLUESTEM	3 GAL	POT	30" O.C.
SHPD	47	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSSEED	1 GAL	POT	24" O.C.

GENERAL LANDSCAPE NOTES

H=HEIGHT, S=SPREAD CAL=CALIFER, O.C.= ON CENTER, B&B=BALLED & BURLAPPED, GAL=GALLON, ASH= AT BREAST HEIGHT
THE MATERIAL LIST IS PROVIDED FOR THE CONTRACTOR'S CONVENIENCE. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PURCHASING ALL QUANTITIES FROM THE PLANTING PLAN AND COVERAGES FOR ALL BED AREAS. WHEN DISCREPANCIES OCCUR BETWEEN THE MATERIAL LIST AND THE PLANTING PLAN, THE PLANTING PLAN SUPERSEDES THE MATERIAL LIST IN ALL CASES. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR ALL PLANTS AND COVERAGE OF BED AREAS ON THE PLANTING PLAN. TREES IN THE LANDSCAPE MATERIAL LIST ARE TO BE OBTAINED FROM SPECIFIC VENDORS OR APPROVED EQUAL; REFER TO APPROVED VENDER LIST BELOW.

TREE NOTES

1. ALL TREES TO BE WATERED WITH SLOW DRIP 20 GALLON WATERING BAGS. CONTRACTOR TO INCLUDE WATERING BAGS IN BID. CONTRACTOR RESPONSIBLE FOR INSTALLING WATERING BAGS.

PLANTING NOTES

1. OUTLINE ALL PLANTING BEDS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO COMMENCING WITH BED PREPARATION.
2. STAKE ALL TREE LOCATIONS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO DIGGING TREE PITS.
3. REMOVE ALL WEEDS AND GRASSES FROM PLANTING BEDS. IF BERMUDA GRASS IS PRESENT, IT SHALL BE ERADICATED BY APPROVED MEANS.
4. STEEL EDGING SHALL BE 3/16" X 4" STEEL LANDSCAPE EDGING WITH STEEL STAKES AS MANUFACTURED BY PRO STEEL, FORT WORTH, TEXAS.
5. WITHIN APPROVED BED AREAS, PREPARE SOIL BY ROTO-TILLING THREE INCHES (3") OF COMPOST (BACK TO NATURE SOIL CONDITIONS) OVER THE ENTIRE BED AREA TO A DEPTH OF SIX INCHES (6").
6. SPREAD AN EVEN THREE INCHES (3") LAYER OF MULCH WITHIN ALL TREE WELLS.
7. ON ALL TREES TOP SIX INCHES (6") OF BACKFILL SHALL CONSIST OF A 1:1 MIXTURE OF COMPOST TO SOIL.
8. AROUND ALL TREES FORM A CIRCULAR RING FREE OF VEGETATION. CIRCLE SHALL BE TRUE IN FORM AND CENTERED ON TREE.
9. ALL TREES SHALL BE STAKED WITH TWO (2) GREEN METAL SPLIT TEE FENCE POSTS AND TIED WITH WIRE THROUGH THE HOSE AS PER DETAIL.
10. APPLY COMPOST AT A RATE OF 1/2 POUND PER TREE AND 1 POUND PER 100 SQUARE FEET TO SHRUB AND GROUND COVER PLANTING BEDS.

SODDING NOTES

1. REFER TO PROJECT MANUAL FOR FURTHER SPECIFICATIONS.
2. ALL NETTING TO BE REMOVED FROM SOD DURING INSTALLATION.
3. FINE GRADE LAWN AREAS TO SMOOTH, EVEN SURFACE WITH A LOOSE, UNIFORM FINE TEXTURE. FLOAT SMOOTH TO REMOVE RIDGES AND FILL DEPRESSIONS AS REQUIRED TO REMOVE RIDGES AND FILL DEPRESSIONS AS REQUIRED TO DRAIN.
4. APPLY APPROVED FERTILIZER ON FINISH GRADE PRIOR TO SOD INSTALLATION AT A RATE OF ONE (1) POUND OF ACTUAL NITROGEN PER 1000 SQUARE FEET.
5. ON 3:1 SLOPES OR GREATER SOD SHALL BE INSTALLED PERPENDICULAR TO SLOPE AND SECURED WITH APPROVED WOOD STAKES AS NEEDED TO PREVENT SOD FROM SLOUGHING OFF SLOPES.
6. THE SITE IS TO BE KEPT CLEAN AND ORDERLY. ALL TRASH, INCLUDING DEBRIS FROM REMOVING TREES OR ROCKS FROM SODDED AREAS, SHALL BE REMOVED FROM THE SITE AS WORK PROGRESSES. ALL PAVED AREAS SHALL BE KEPT CLEAN BY HOISING AND/OR SWEEPING.
7. CONTRACTOR IS RESPONSIBLE FOR SOLID SODDING ALL AREAS DISTURBED DURING CONSTRUCTION OPERATIONS.
8. LAY SOD TO FORM A SOLID MASS. TIGHTLY-FITTED JOINTS. DO NOT OVERLAY EDGES. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES.
9. WATER SOD LIGHTLY AND THEN ROLL WITH A WATER FILLED LAWN ROLLER TO ENSURE CONTACT WITH SUBGRADE AND TO INSURE A SMOOTH SURFACE FREE OF CLUMPS AND DEPRESSIONS.

LANDSCAPE MATERIALS INFO

DECOMPOSED GRANITE AND LANDSCAPE BOULDERS

MINICK MATERIALS OR EQUAL
6665 NORTH INTERSTATE DRIVE
NORMAN, OK 73069
PHONE: 405/329-2458
CONTACT: TIM SHANAHAN

SYNTHETIC TURF = PLAYGROUND GRASS ULTRA

FOREVERLAWN TULSA OR EQUAL
5122 E. 110TH ST.
TULSA, OK 74131
PHONE: 918/811-8613
CONTACT: ROSS SPENCER

POURED-IN-PLACE RUBBERIZED SURFACING

HAPPY PLAYGROUNDS
8601 S. OXFORD AVE.,
TULSA, OK 74131
PHONE: (918) 691-8245
CONTACT: DANIEL COLLINS
WWW.HAPPYPLAYGROUNDS.COM

*ALL COLORS FOR PRODUCTS TO BE
SELECTED DURING THE SUBMITTAL PROCESS.

PROJECT INFORMATION

PROJECT ADDRESS:

801 E Alameda St.
Norman, OK 73069

PROJECT NO.	
DATE	11-02-23
DRAWN BY	CHECKED BY
AB	GE

NORMAN NATURE PARK
NORMAN, OKLAHOMA

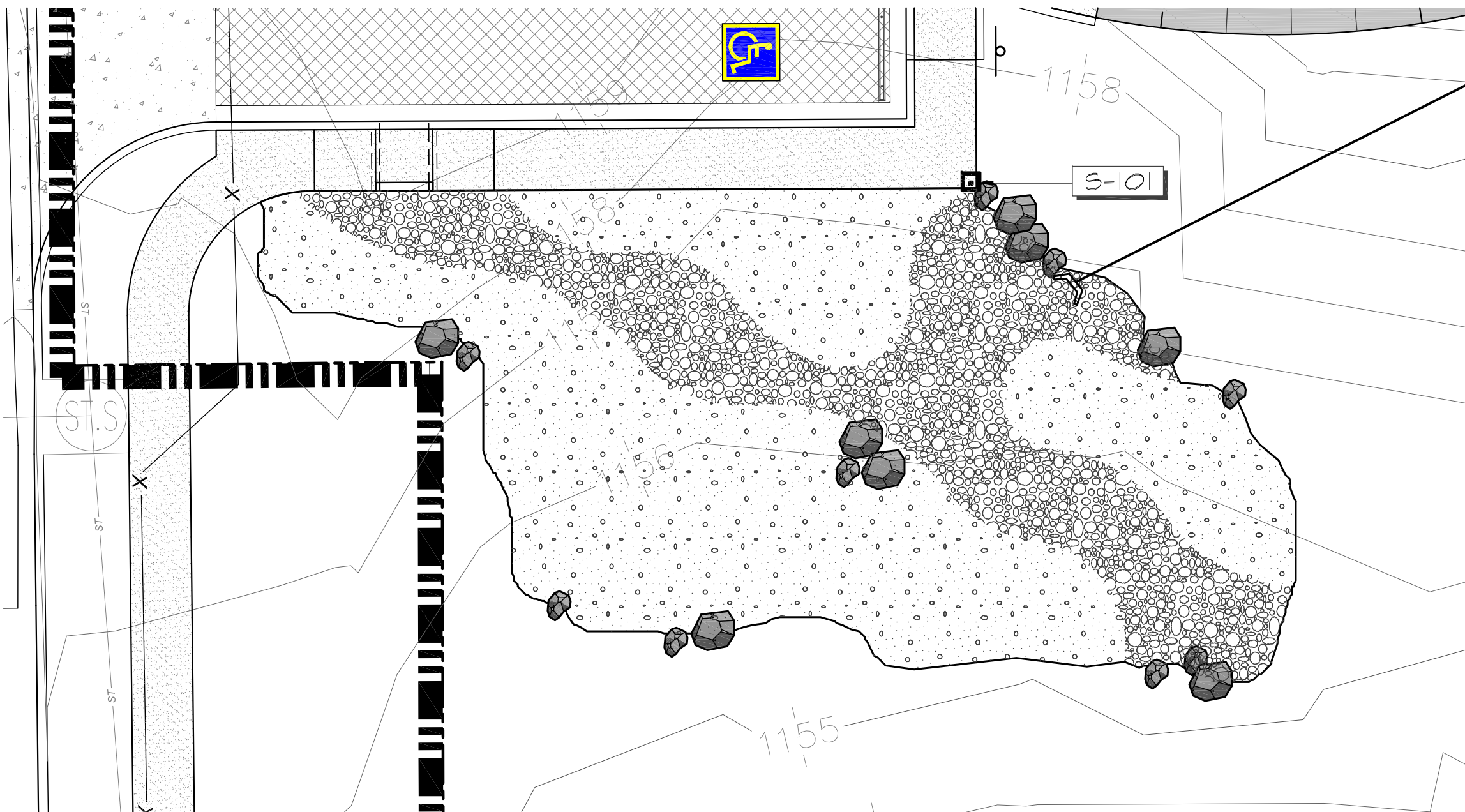
ISSUE/ REVISIONS

02/09/24	65% Review Set

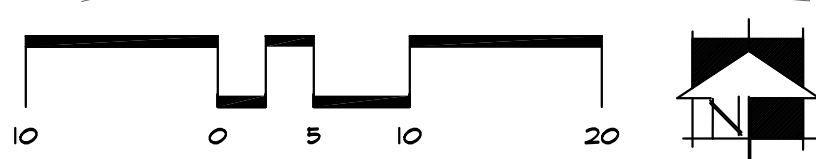
OWNER:

CITY OF NORMAN






201 W Gray St, Norman, OK 73069

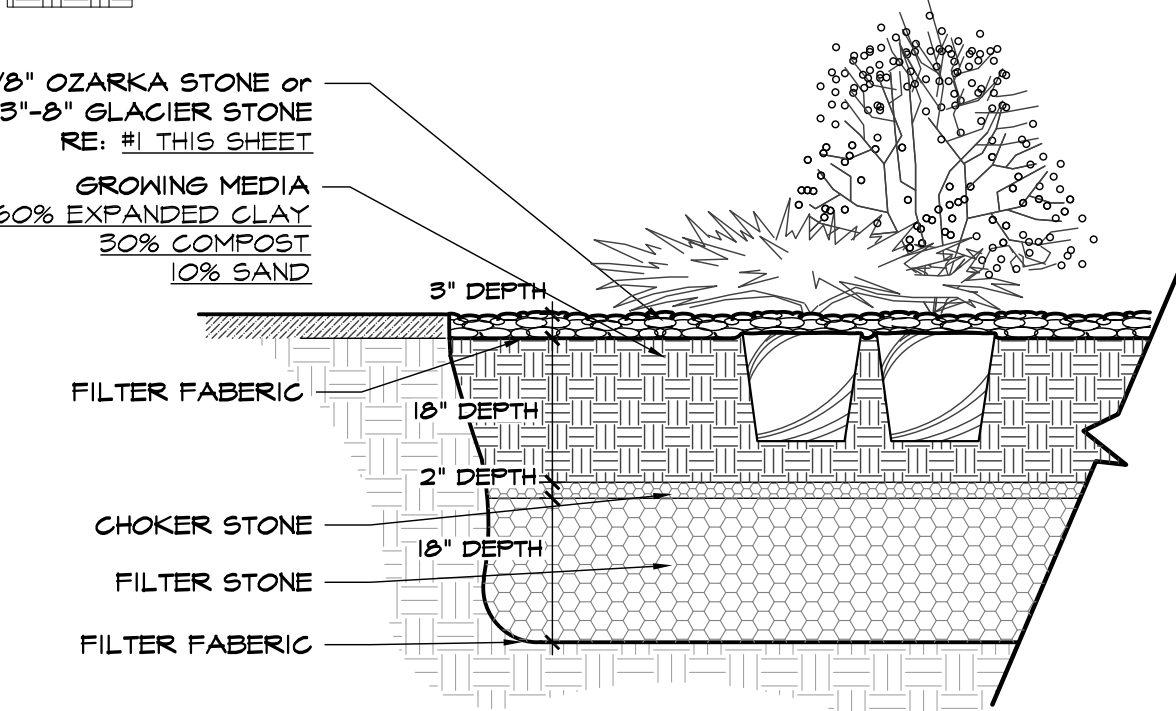


1 RAIN GARDEN LAYOUT - PLAN VIEW
SCALE: 1"= 10'-0"

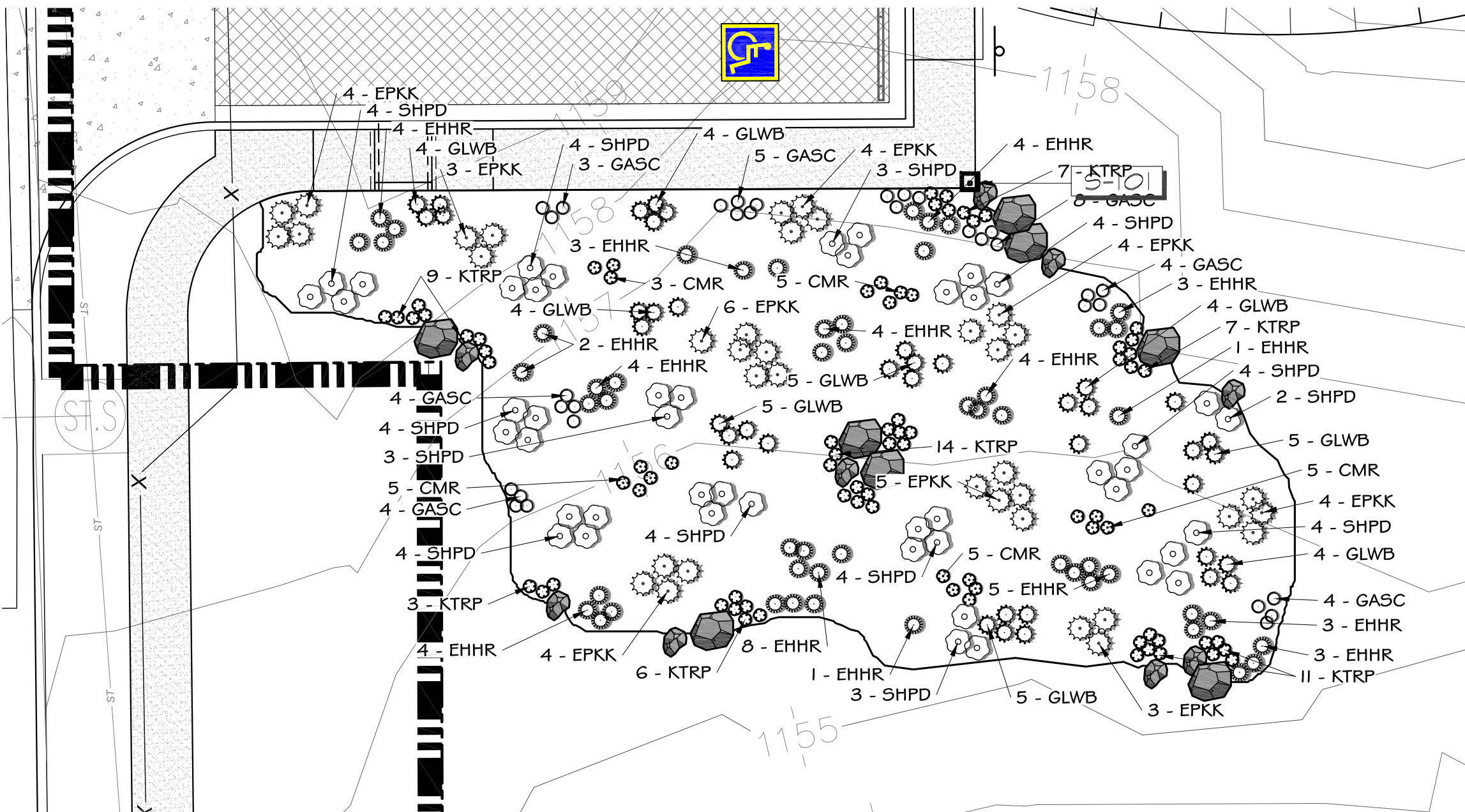


RAIN GARDEN MATERIALS INFO

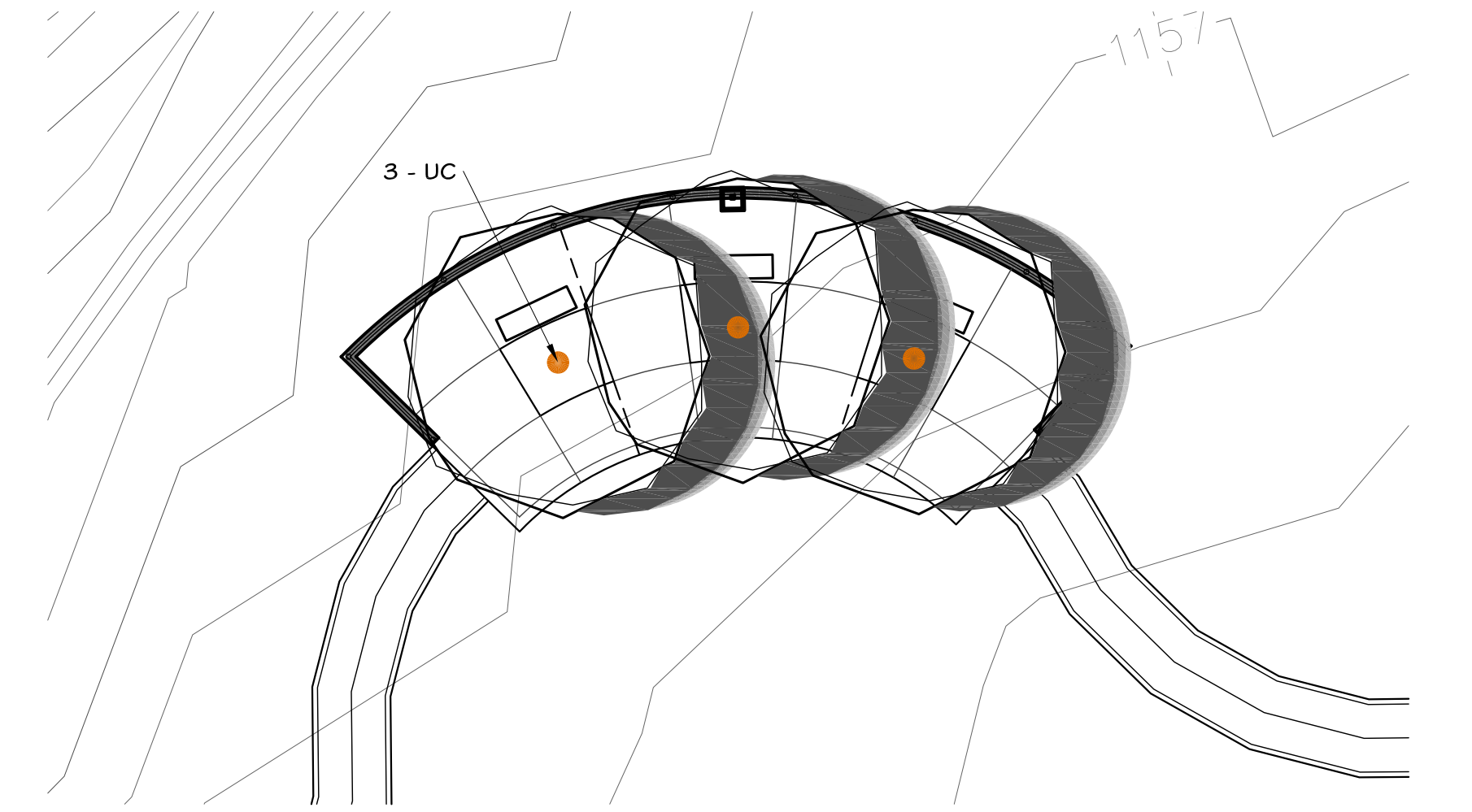
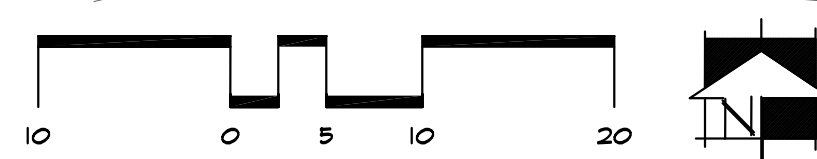
SYMBOL	DESCRIPTION	QTY	DETAIL
	3'-8" DECORATIVE GRAVEL 4" DEPTH	9.12 CY	#2 THIS SHEET
	7/8" DECORATIVE GRAVEL 4" DEPTH	19.09 CY	#2 THIS SHEET
	CHOKER STONE 2" DEPTH	14.4 CY	#2 THIS SHEET
	FILTER STONE 18" DEPTH	129.64 CY	#2 THIS SHEET
	BACK TO NATURE 4" DEPTH	28.81 CY	#2 THIS SHEET



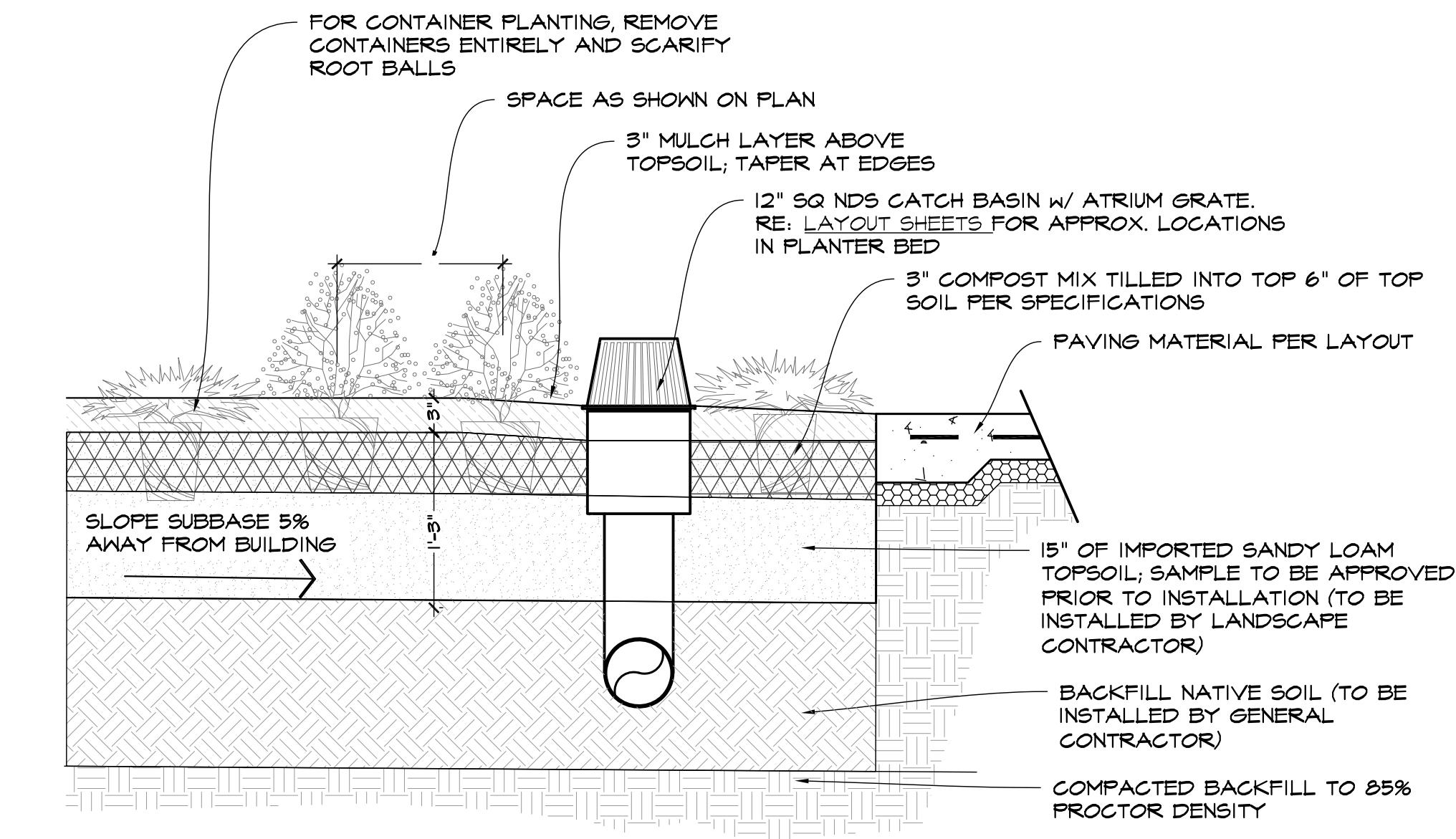
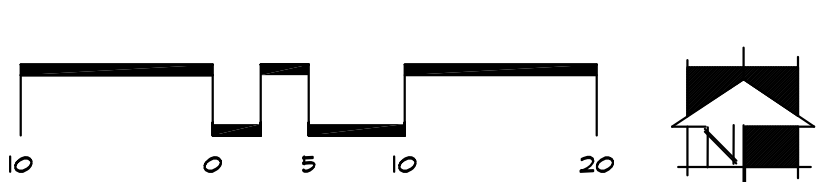
2 RAIN GARDEN DETAIL - SECTION
SCALE: 2"= 1'-0"



3 RAIN GARDEN PLANTING - PLAN VIEW
SCALE: 1"= 10'-0"

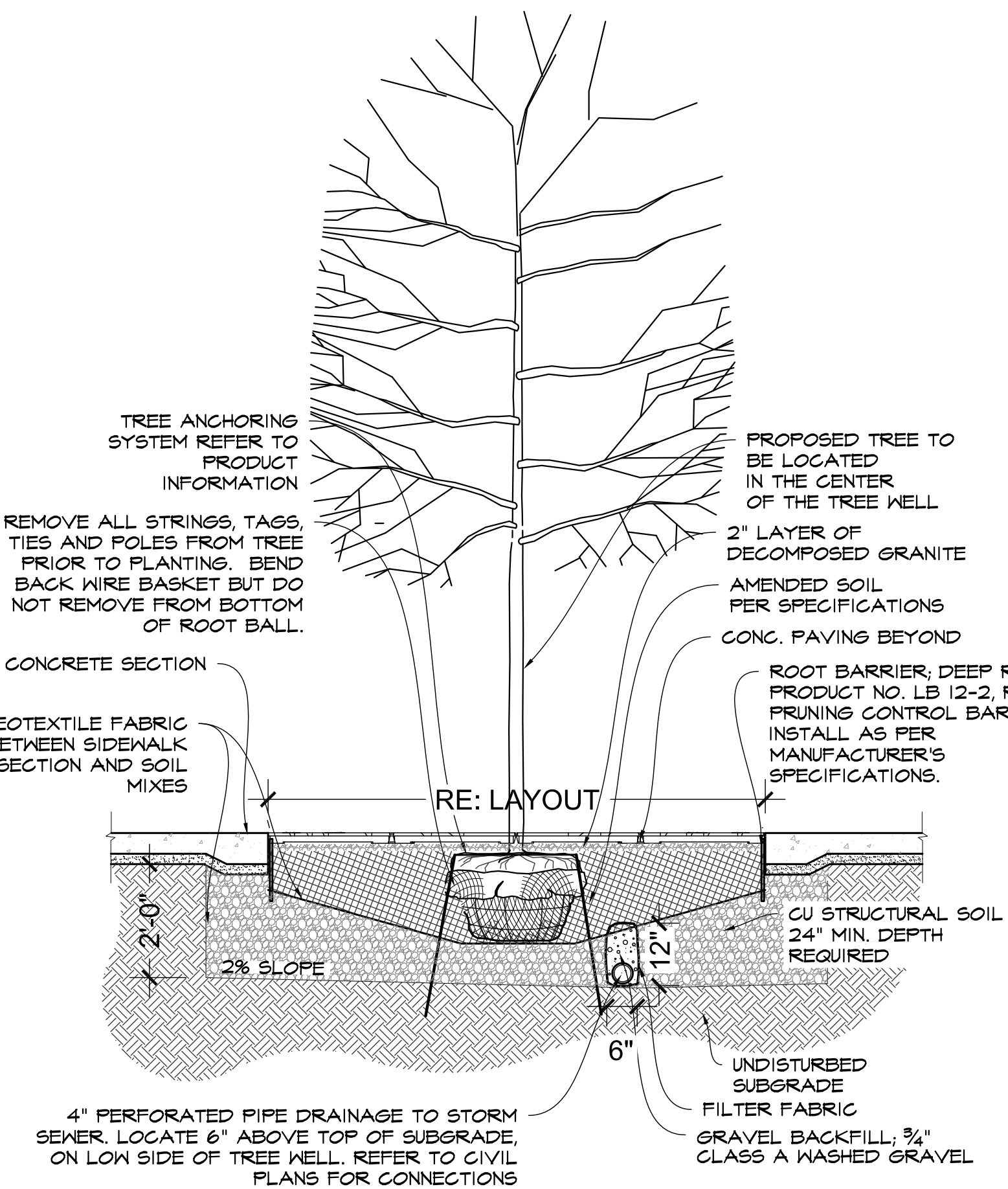


4 SOUTH PLAZA PLANTING
SCALE: 1"= 10'-0"



4 TYPICAL PLANTING BED
1" = 1'-0"

P-CO-MUL-PLAN-52



5 TREE WELL - DETAIL
1" = 1'-0"

P-PDG-PLA-46

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
TREES						
UC	3	ULMUS CRASSIFOLIA	CEDAR ELM	4" CAL	B&B	
SHRUBS						
AH	52	AMSONIA HUBRICHTII	ARKANSAS BLUESTAR	1 GAL	POT	18" O.C.
ATBM	11	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	1 GAL	POT	24" O.C.
CAKF	11	CALAMAGROSTIS X ACUTIFLORA 'KARL FORESTER'	KARL FORESTER GRASS	3 GAL	POT	24" O.C.
CTTV	14	CAMPIDIS X TAGLIABUANA 'HOMR' TM	MADAME ROSY TRUMPET VINE	1 GAL	POT	18" O.C.
CMR	23	COREOPSIS X 'MERCURY RISING'	MERCURY RISING TICKSEED	1 GAL	POT	12" O.C.
CSD	2	CORNUS STOLONIFERA	ARCTIC FIRE RED TWIG DOGWOOD	5 GAL	POT	48" O.C.
EPKK	31	ECHINACEA PURPUREA 'KIM'S KNEE HIGH'	KIM'S KNEE HIGH CONEFLOWER	1 GAL	POT	24" O.C.
EFCE	61	ECHINACEA PURPUREA 'FAS10291' TM	POWOW WILD BERRY CONEFLOWER	1 GAL	POT	18" O.C.
EHHR	53	EQUISETUM HYEMALE	HORSETAIL REED	1 GAL	POT	18" O.C.
GASC	32	GAILLARDIA ARISTATA 'SPINTOP COPPER SUN'	SPINTOP COPPER SUN BLANKET FLOWER	1 GAL	POT	12" O.C.
GLWB	40	GAURA UNDEIMERI 'WHIRLING BUTTERFLIES'	WHIRLING BUTTERFLIES GAURA	1 GAL	POT	18" O.C.
HPP	14	HESPERALOE PARVIFLORA 'FERPA' PP #2173	BRAKELIGHTS RED YUCA	5 GAL	POT	30" O.C.
KIBS	56	KALIMERIS INCISA 'BLUE STAR'	BLUE STAR JAPANESE ASTER	1 GAL	POT	12" O.C.
KTRP	51	KNIPHOFIA TRIANGULARIS	DWARF RED HOT POKER	1 GAL	POT	12" O.C.
LMPE	60	LIRIOPE MUSCARI 'EXC 051' TM	PURPLE EXPLOSION ULTYTURF	1 GAL	POT	12" O.C.
NFUL	29	NEPETA X FAASSENII 'WALKER'S LOW'	WALKER'S LOW CATMINT	3 GAL	POT	24" O.C.
PVHM	34	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	3 GAL	POT	30" O.C.
PALS	20	PEROVSKIA ATRIFOLIOLATA 'LITTLE SPIRE'	LITTLE SPIRE RUSSIAN SAGE	1 GAL	POT	18" O.C.
SBSO	62	SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION'	LITTLE BLUESTEM	3 GAL	POT	30" O.C.
SHPD	41	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSSEED	1 GAL	POT	24" O.C.

LANDSCAPE MATERIALS INFO

DECOMPOSED GRANITE, BOULDERS AND RAIN GARDEN ROCK

MINICK MATERIALS OR EQUAL
6665 NORTH INTERSTATE DRIVE
NORMAN, OK 73069
PHONE: 409/323-2458
CONTACT: TIM SHANAHAN

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WWW.HAPPYPLAYGROUNDS.COM

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LANDSCAPE QUANTITIES

SYMBOL	DESCRIPTION	QTY
	PRO-STEEL BED EDGING - 3/16"x4"	114 LF
	CEDAR MULCH 4" DEPTH IN BEDS 1/2 BAG PER TREE	14.52 CY
	BACK TO NATURE 4" DEPTH IN BEDS 1/2 BAG PER TREE	14.52 CY

GENERAL LANDSCAPE NOTES

H:HEIGHT, S:SPREAD GAL:GALLON, O.C.: ON CENTER, B&B:BALLED & BURLAPPED, GAL:GALLON, ASH: AT BREAK HEIGHT
THE MATERIAL LIST IS PROVIDED FOR THE CONTRACTOR'S CONVENIENCE. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FIGURING ALL QUANTITIES FROM THE PLANTING PLAN AND COVERAGES FOR ALL BED AREAS. WHEN DISCREPANCIES OCCUR BETWEEN THE MATERIAL LIST AND THE PLANTING PLAN, THE PLANTING PLAN SUPERSEDES THE MATERIAL LIST IN ALL CASES. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR ALL PLANTS AND COVERAGES OF BED AREAS ON THE PLANTING PLAN. TREES IN THE LANDSCAPE MATERIAL LIST ARE TO BE OBTAINED FROM SPECIFIC VENDORS OR APPROVED EQUAL; REFER TO APPROVED VENDOR LIST BELOW.

TREE NOTES

1. ALL TREES TO BE WATERED WITH SLOW DRIP 20 GALLON WATERING BAG. CONTRACTOR TO INCLUDE WATERING BAGS IN BID. CONTRACTOR RESPONSIBLE FOR INSTALLING WATERING BAGS.

PLANTING NOTES

1. OUTLINE ALL PLANTING BEDS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO COMMENCING WITH BED PREPARATION.
2. STAKE ALL TREE LOCATIONS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO DIGGING TREE PITS.
3. REMOVE ALL WEEDS AND GRASSES FROM PLANTING BEDS. IF BERMUDA GRASS IS PRESENT, IT SHALL BE ERADICATED BY APPROVED MEANS.
4. STEEL EDGING SHALL BE 3/16" X 4" STEEL. LANDSCAPE EDGING WITH STEEL STAKES AS MANUFACTURED BY PRO STEEL, FORT WORTH, TEXAS.
5. WITHIN APPROVED BED AREAS, PREPARE SOIL BY ROTO-TILLING THREE INCHES (3") OF COMPOST (BACK TO NATURE SOIL CONDITIONER) OVER THE ENTIRE BED AREA TO A DEPTH OF SIX INCHES (6").
6. SPREAD AN EVEN THREE INCHES (3") LAYER OF MULCH WITHIN ALL TREE WELLS.
7. ON ALL TREES TOP SIX INCHES (6") OF BACKFILL SHALL CONSIST OF A 1:1 MIXTURE OF COMPOST TO SOIL.
8. AROUND ALL TREES FORM A CIRCULAR RING FREE OF VEGETATION. CIRCLE SHALL BE TRUE IN FORM AND CENTERED ON TREE.
9. ALL TREES SHALL BE STAKED WITH TWO (2) GREEN METAL SPLIT TEE FENCE POSTS AND TIED WITH NIRE THROUGH THE HOSE AS PER DETAIL.
10. APPLY COMPOST AT A RATE OF 1/2 POUND PER TREE AND 1 POUND PER 100 SQUARE FEET TO SHRUB AND GROUND COVER PLANTING BEDS.

SODDING NOTES

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PROJECT INFORMATION

PROJECT ADDRESS:

801 E Alameda St.
Norman, OK 73069

PROJECT NO.

DATE 11-02-23

DRAWN BY

CHECKED BY

AB GE

NORMAN NATURE PARK
NORMAN, OKLAHOMA

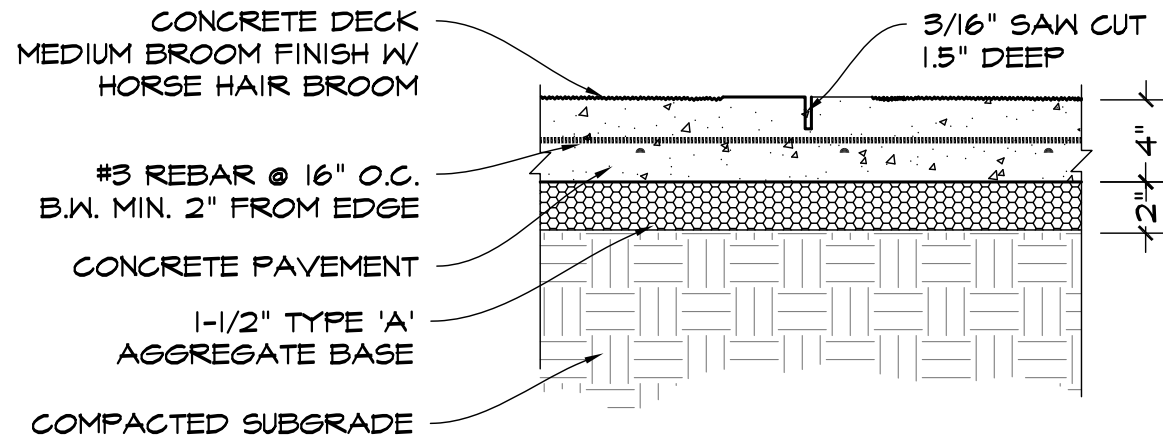
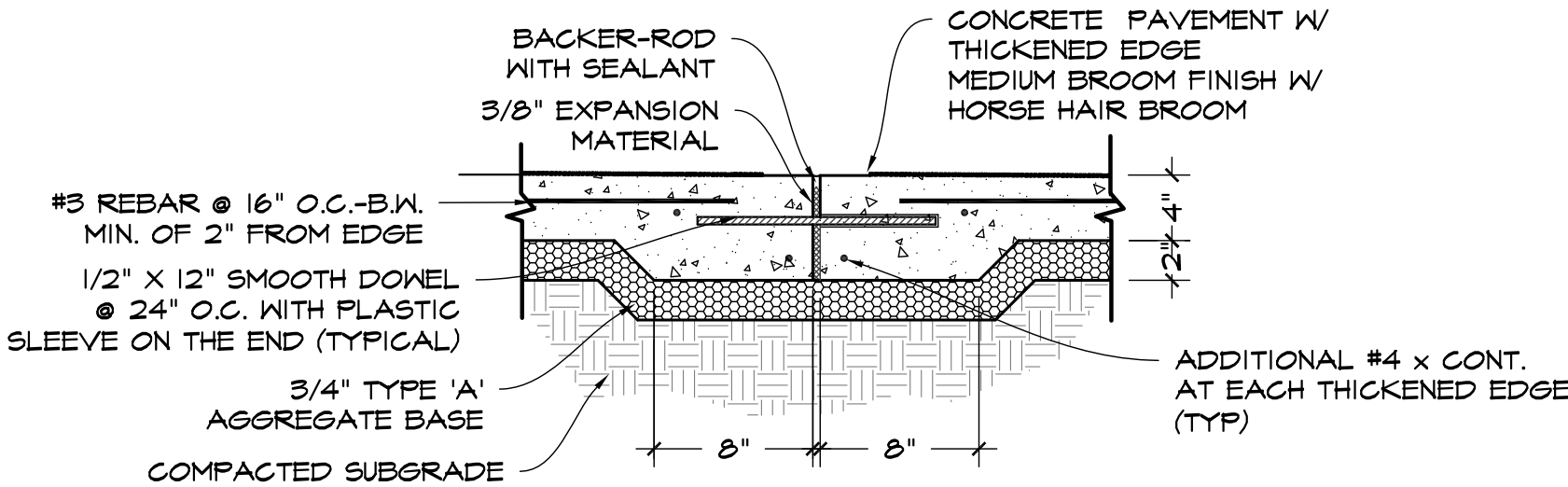
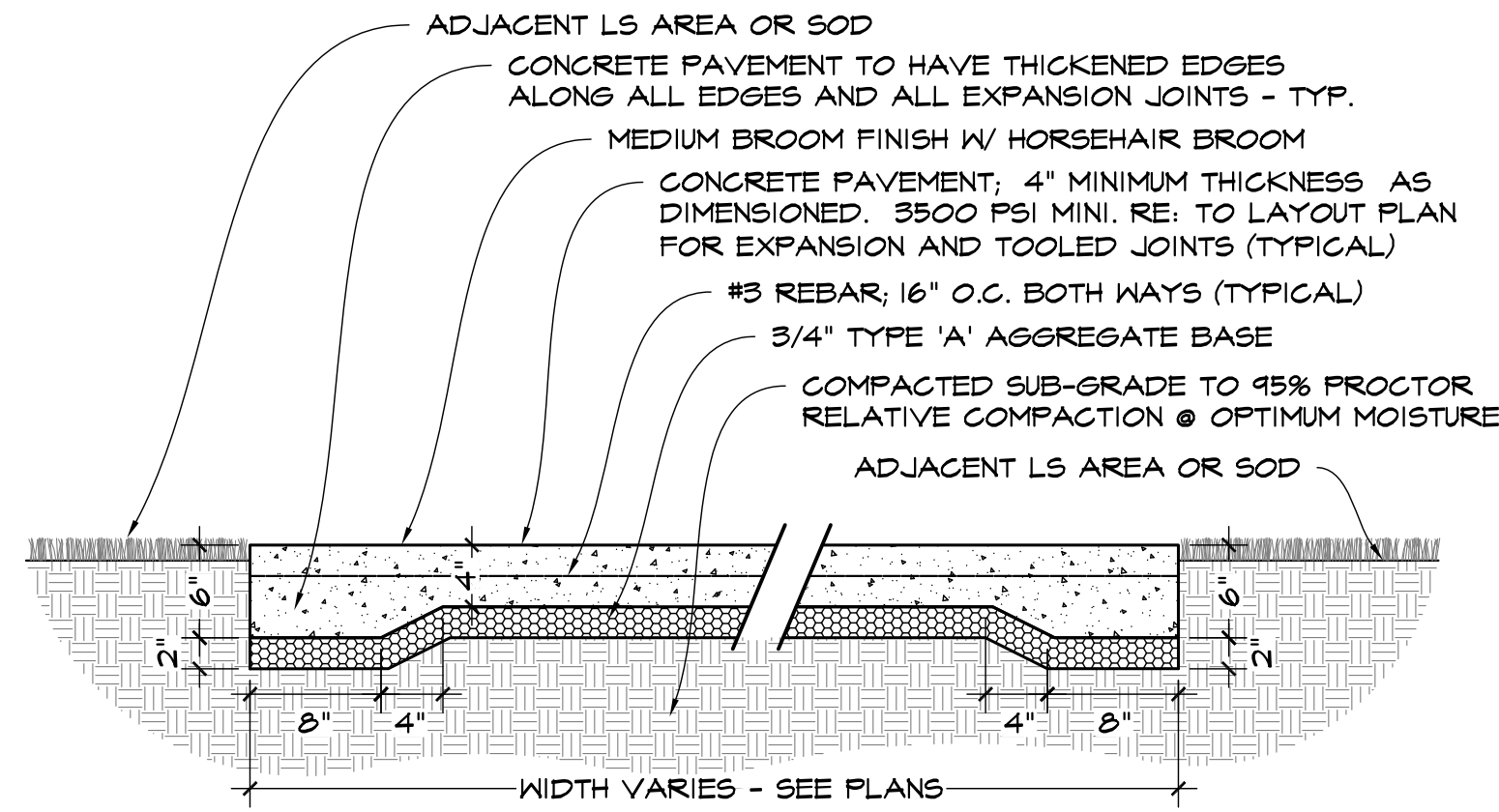
ISSUE/ REVISIONS

DATE	REVISION
02/09/24	65% Review Set

OWNER:

CITY OF NORMAN

201 W Gray St, Norman, OK 73069

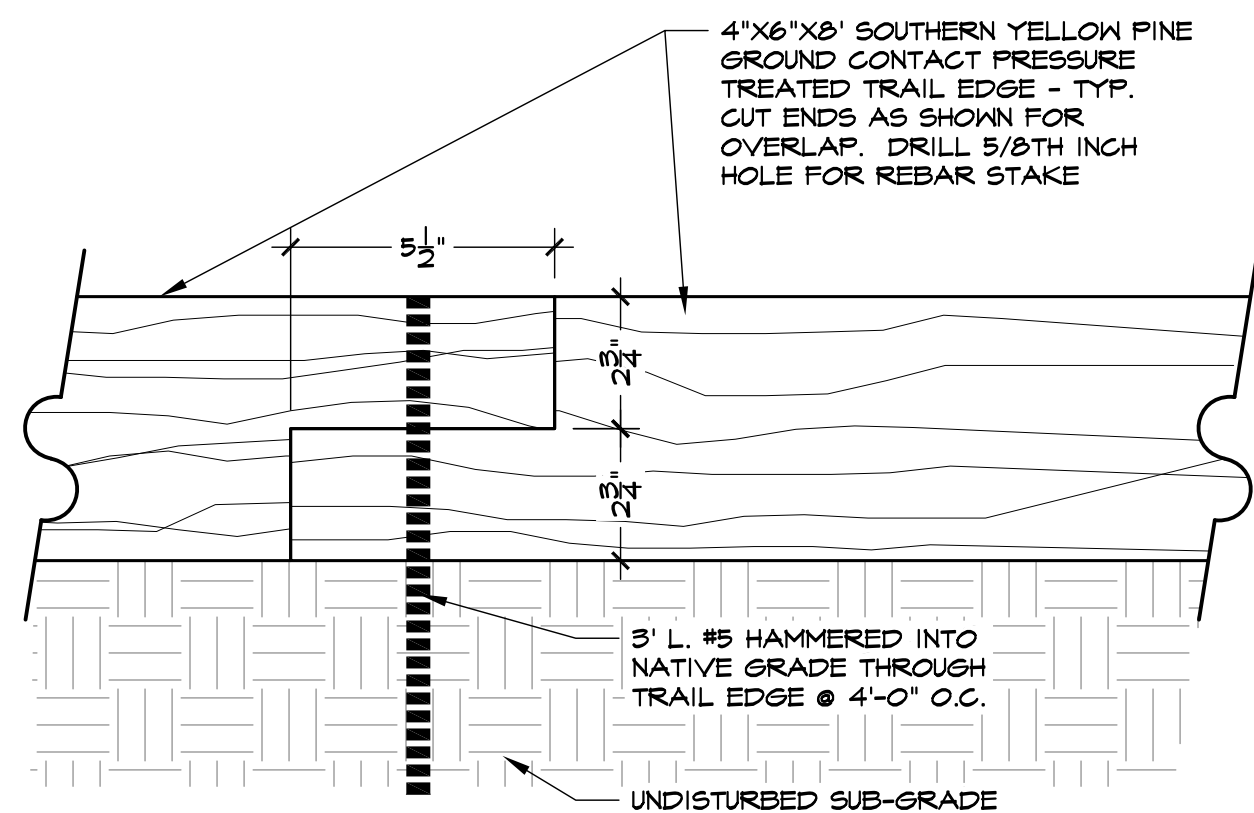
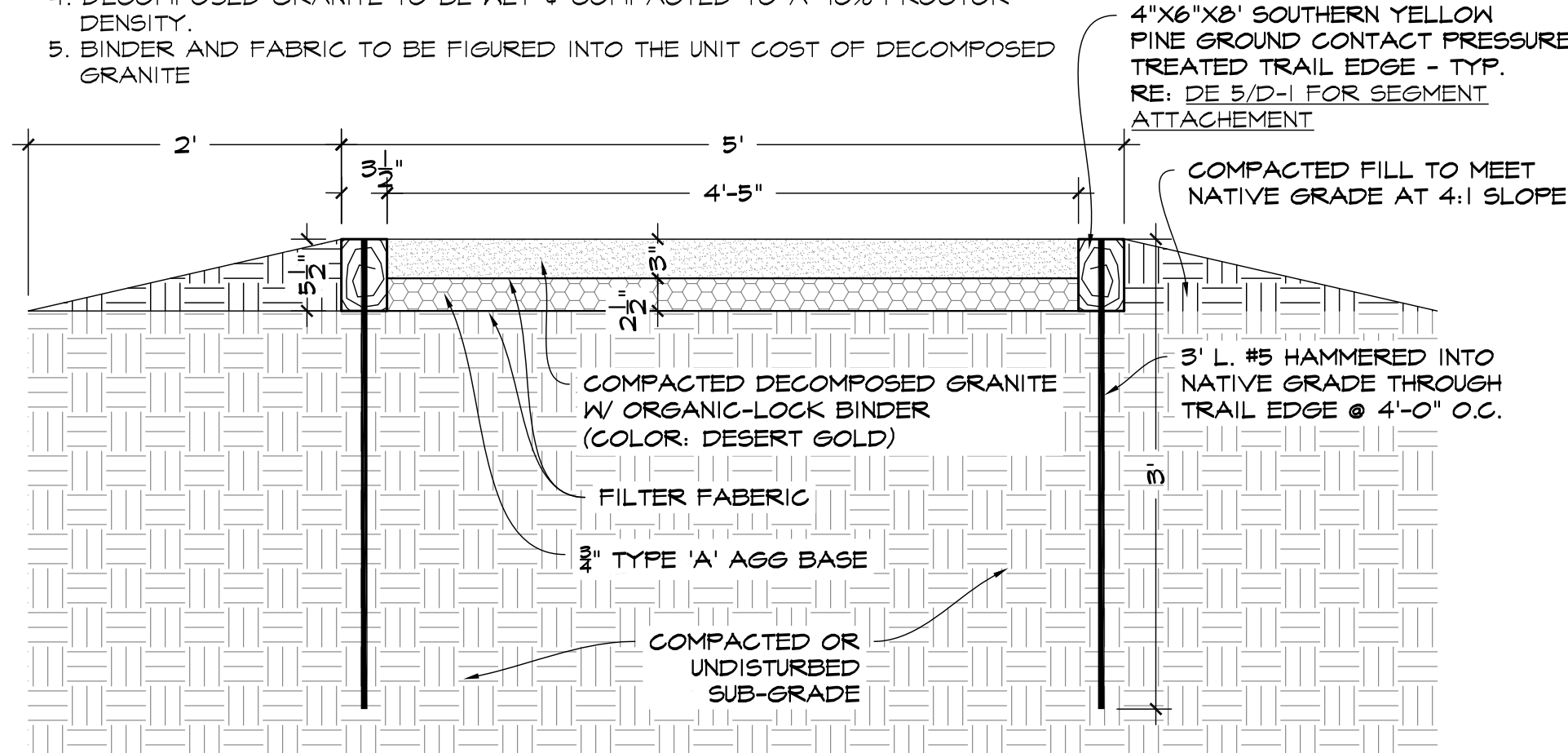


1 PEDESTRIAN CONCRETE PAVING - SECTION
1" = 1'-0" P-PDG-PAV-08

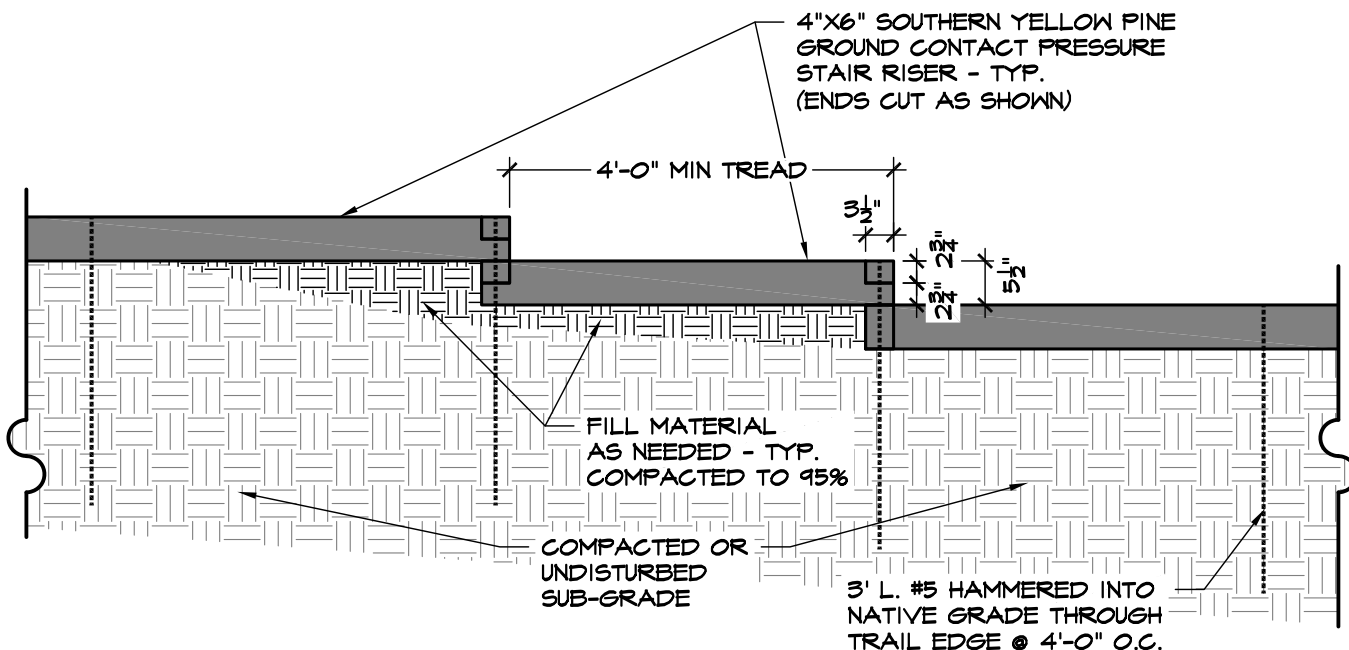
2 PEDESTRIAN EXPANSION JOINT (TYP) - SECTION
1" = 1'-0"

3 CONCRETE SAW CUT JOINT - SECTION
1" = 1'-0" P-PDG-PAV-09

- NOTES:
1. DECOMPOSED GRANITE SHALL BE DESERT GOLD IN COLOR AT (3/8" MINUS).
 2. BINDER SHALL BE USED IN ALL DECOMPOSED GRANITE APPLICATIONS AND SHALL BE PRE-MIXED W/ BINDER OFF SITE BY THE SUPPLIER.
 3. BINDER SHALL BE ORGANIC-LOCK BINDER, NON-TOXIC ORGANIC BINDER THAT IS A COLORLESS AND ODORLESS CONCENTRATED POWDER THAT BINDS DECOMPOSED GRANITE TO PRODUCE A FIRM SURFACE.
 4. DECOMPOSED GRANITE TO BE WET & COMPACTED TO A 90% PROCTOR DENSITY.
 5. BINDER AND FABRIC TO BE FIGURED INTO THE UNIT COST OF DECOMPOSED GRANITE



- NOTES:
1. RISERS MUST BE 4'-0" MIN. LENGTH TO MEET CODE AND AVOID USING HANDRAILS - TYP.
 2. RISERS TO BE BUILT ON NATURAL GRADE AS MUCH AS POSSIBLE TO PRESERVE TREES. USE FILL MATERIAL AS NEEDED AND COMPACT TO 95%.

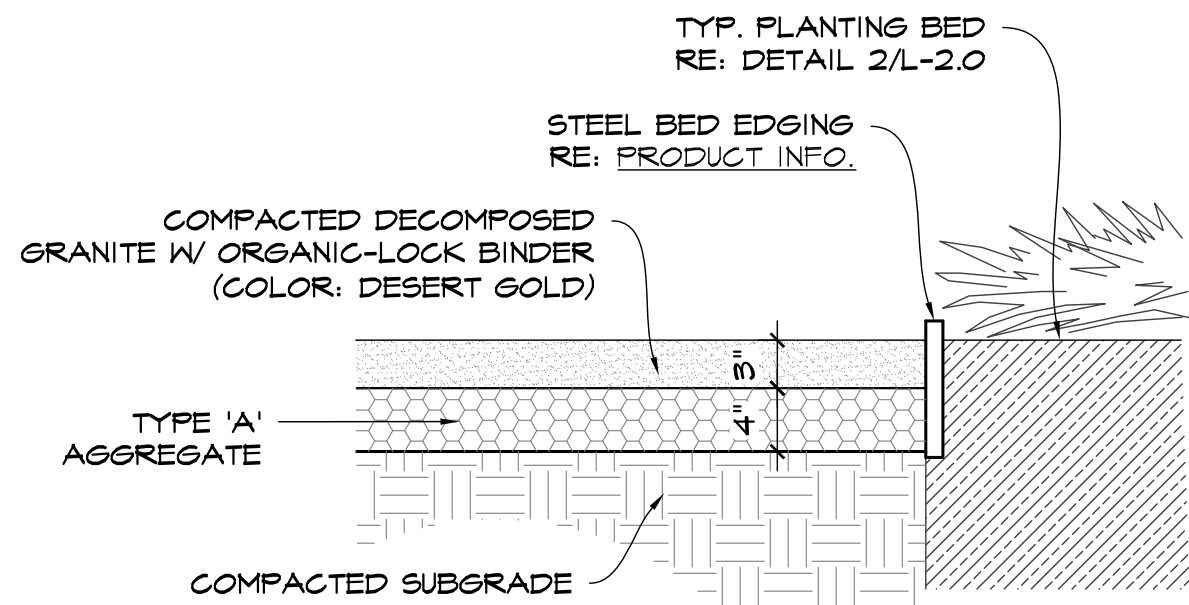
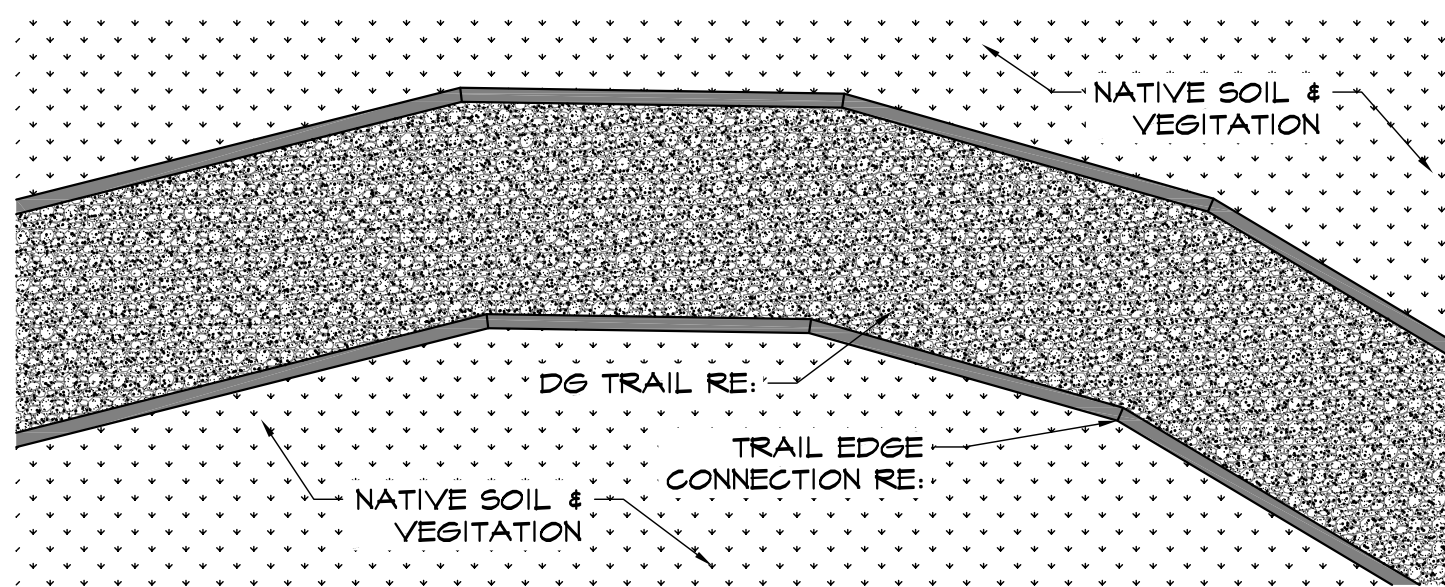
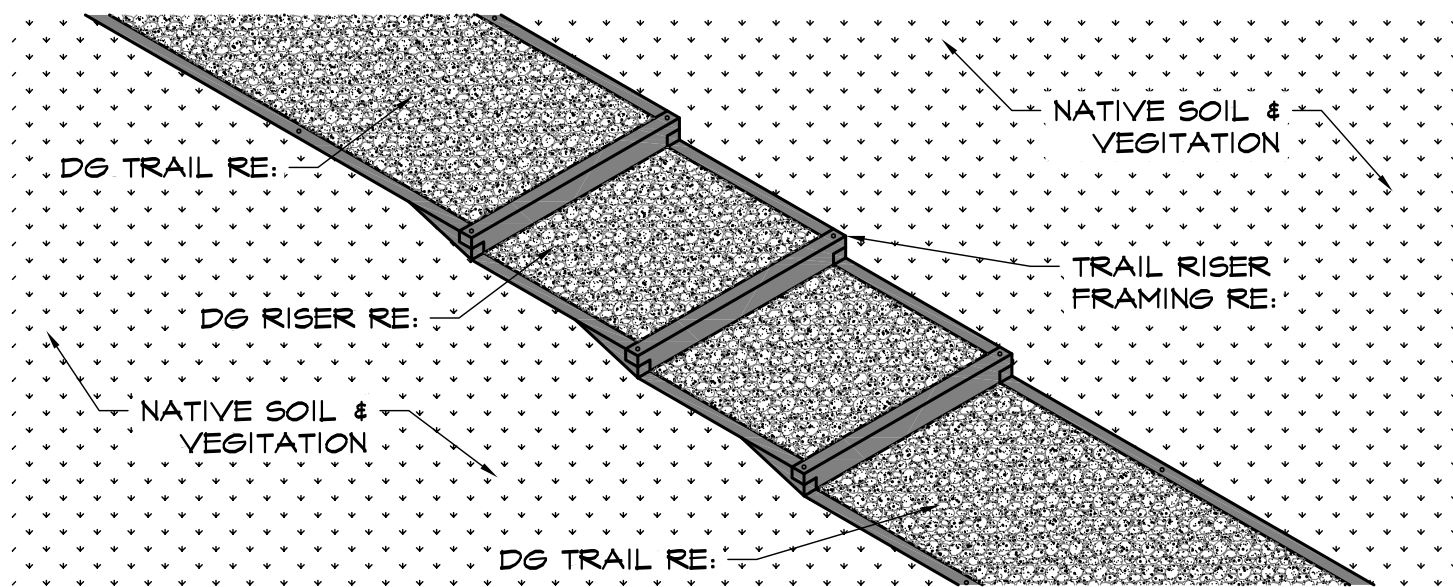


4 DECOMPOSED GRANITE TRAIL W/WOOD EDGING - SECTION VIEW
1" = 1'-0" P-PDG-GRO-TRAI-01

5 TRAIL EDGE CONNECITON
3" = 1'-0" P-PDG-GRO-TRAI-02

6 DG TRAIL RISERS
1/2" = 1'-0" P-PDG-GRO-TRAI-03

- NOTES:
1. DECOMPOSED GRANITE SHALL BE DESERT GOLD IN COLOR AT (3/8" MINUS).
 2. BINDER SHALL BE USED IN ALL DECOMPOSED GRANITE APPLICATIONS AND SHALL BE PRE-MIXED W/ BINDER OFF SITE BY THE SUPPLIER.
 3. BINDER SHALL BE ORGANIC-LOCK BINDER, NON-TOXIC ORGANIC BINDER THAT IS A COLORLESS AND ODORLESS CONCENTRATED POWDER THAT BINDS DECOMPOSED GRANITE TO PRODUCE A FIRM SURFACE.
 4. DECOMPOSED GRANITE TO BE WET & COMPACTED TO A 90% PROCTOR DENSITY.
 5. BINDER AND FABRIC TO BE FIGURED INTO THE UNIT COST OF DECOMPOSED GRANITE



7 DG TRAIL STEPS - ISO
1/4" = 1'-0" P-PDG-GRO-TRAI-04

8 DG TRAIL RADIUS - LAYOUT
1/4" = 1'-0" P-PDG-GRO-TRAI-05

9 DECOMPOSED GRANITE W/EDGING - SECTION VIEW
1" = 1'-0" P-PDG-GRO-18

PROJECT INFORMATION

PROJECT ADDRESS:	
801 E Alameda St. Norman, OK 73069	
PROJECT NO.	
DATE	11-02-23
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AB	GE

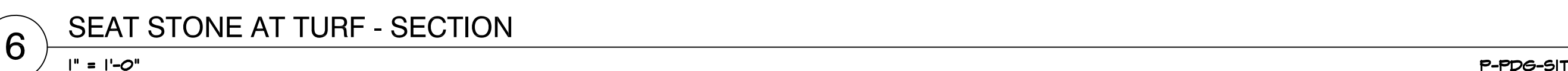
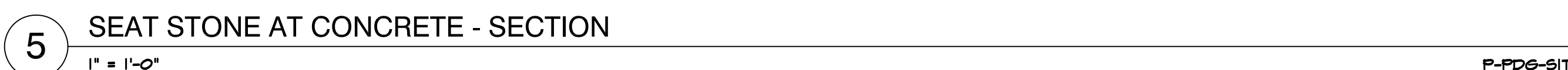
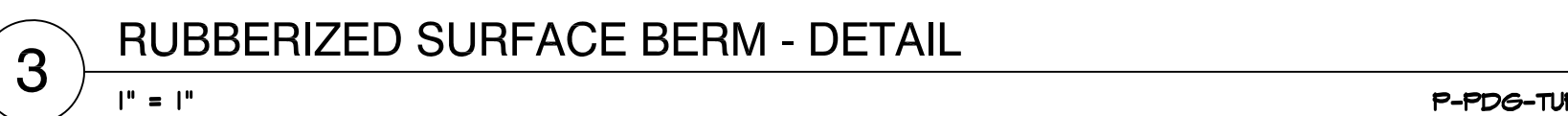
NORMAN NATURE PARK
NORMAN, OKLAHOMA

ISSUE/ REVISIONS

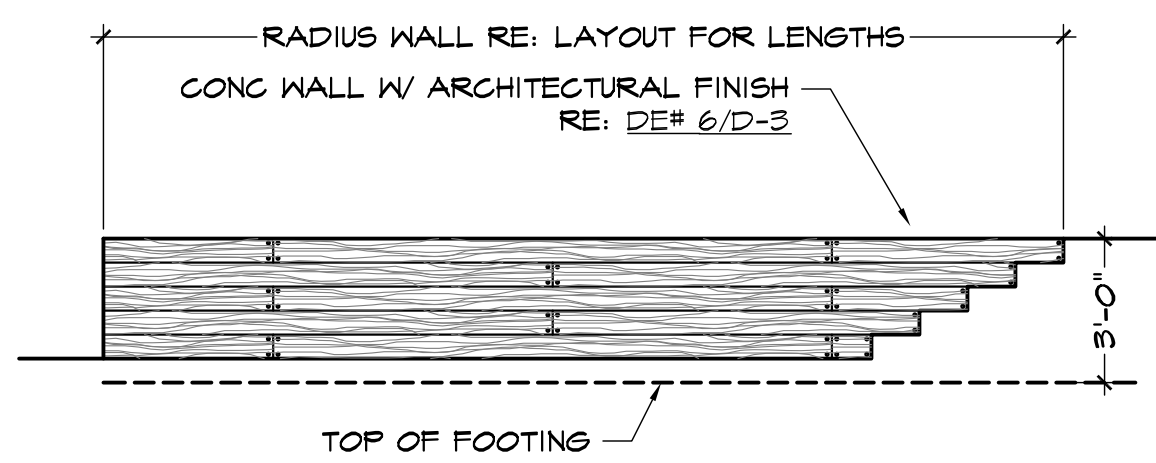
DATE	REVISION
05/13/24	65% Review Set

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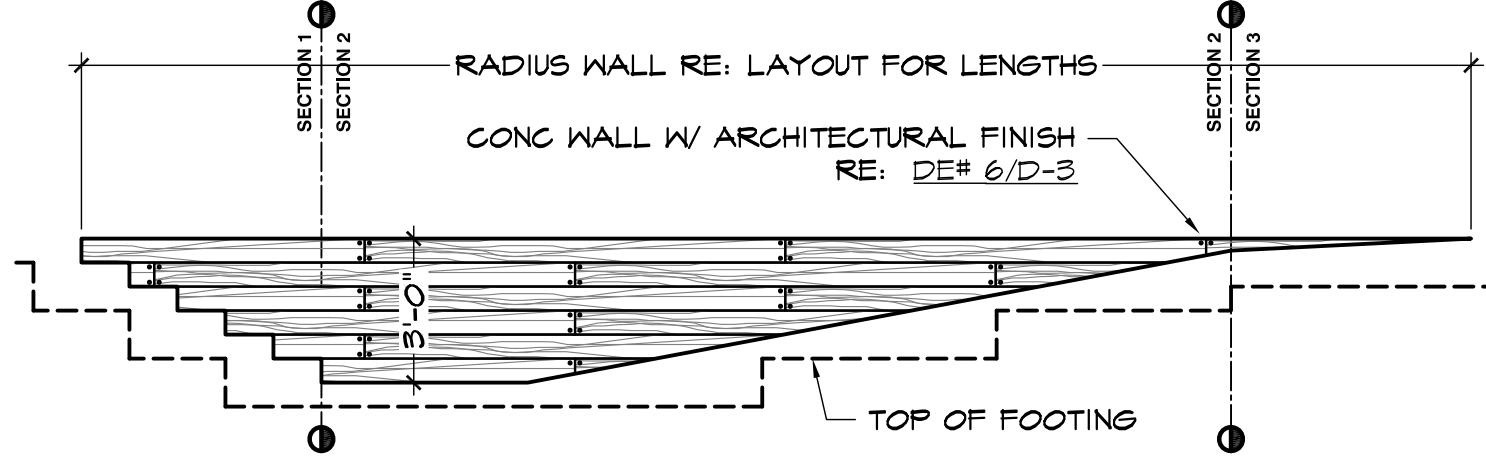
CITY OF NORMAN
201 W Gray St, Norman, OK 73069



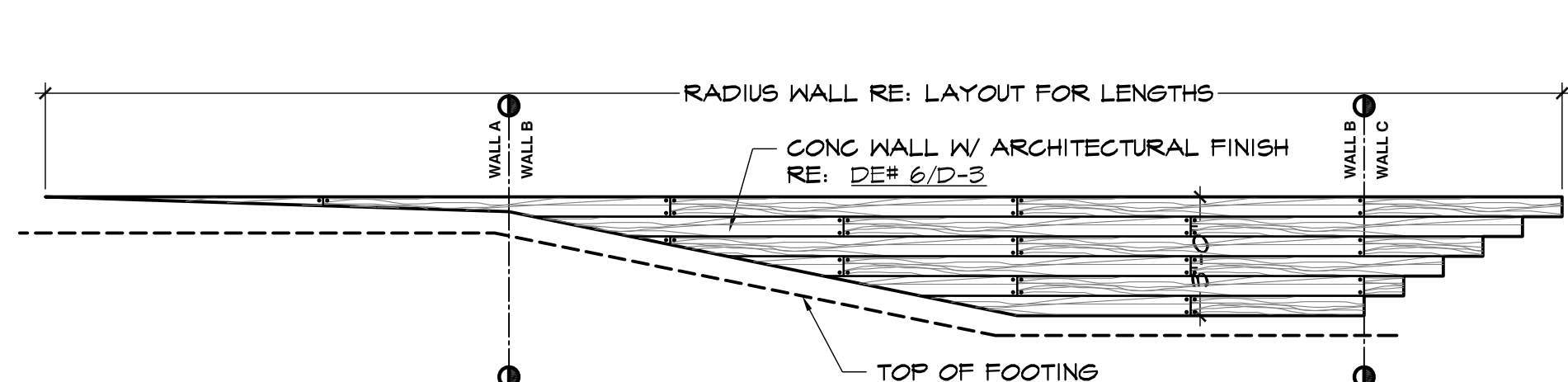
1. FINISHED GRADE TO BE A MINIMUM OF 6" ABOVE TOP OF ANY FOOTING
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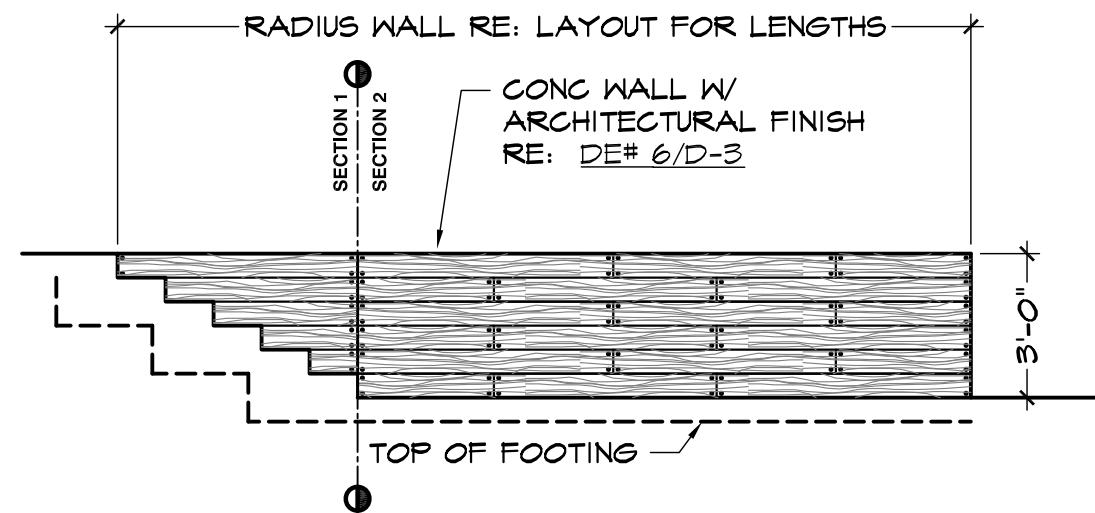
1 CONC. WALL A - ELEVATION
1/4" = 1'-0" P-PDS-WAL-ARCH-01



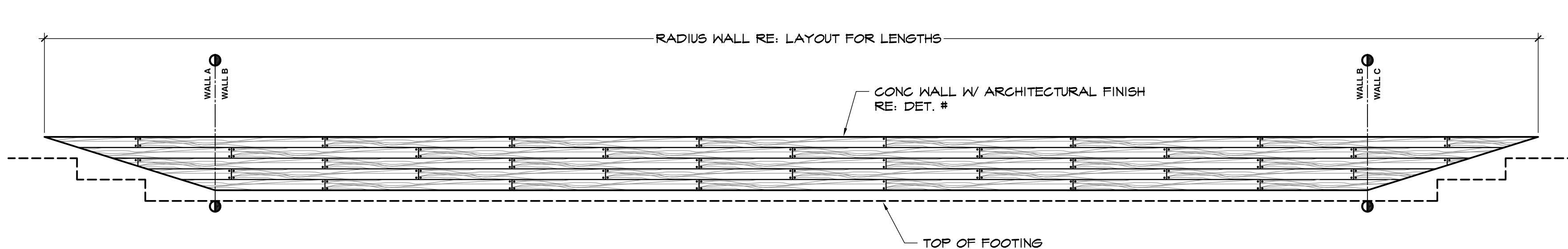
2 CONC. WALL B - ELEVATION
1/4" = 1'-0" P-PDS-WAL-ARCH-15



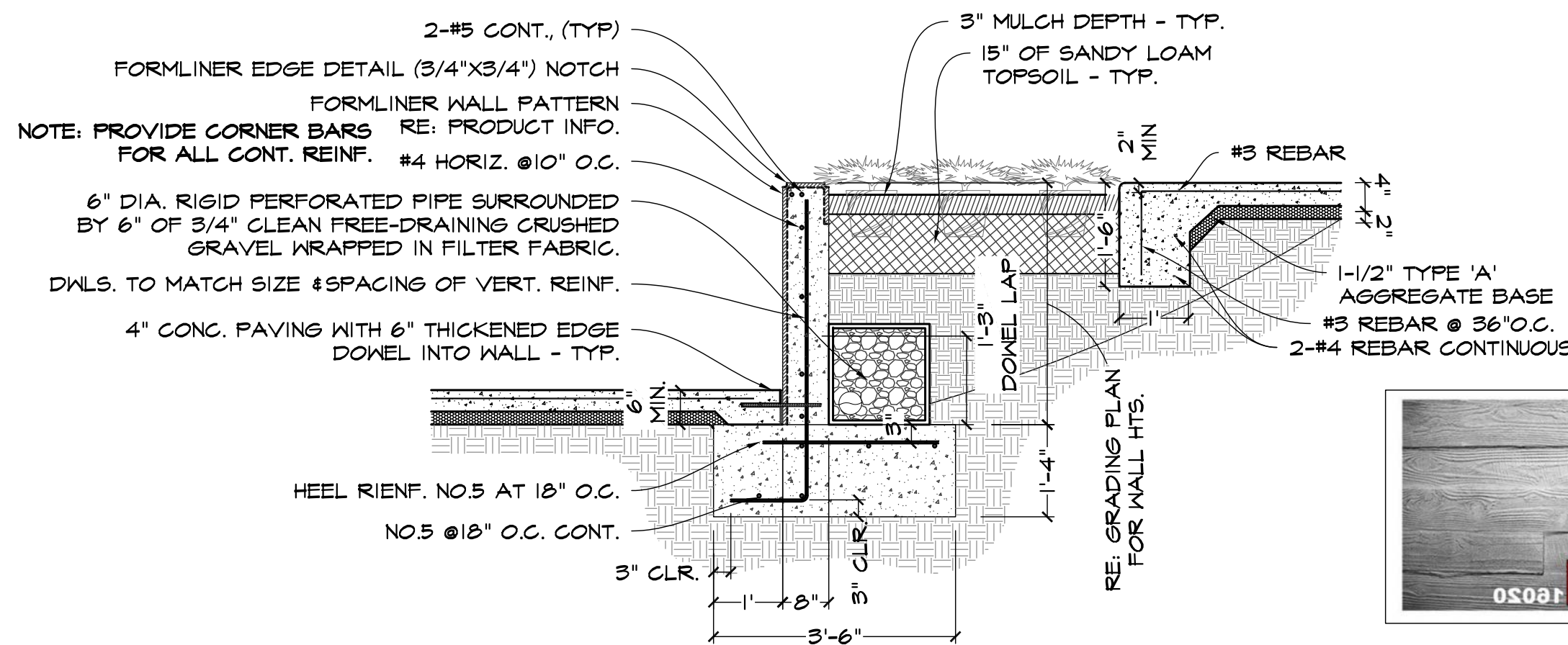
3 CONC. WALL C - ELEVATION
1/4" = 1'-0" P-PDS-WAL-ARCH-16



4 CONC. WALL D - ELEVATION
1/4" = 1'-0" P-PDS-WAL-ARCH-17

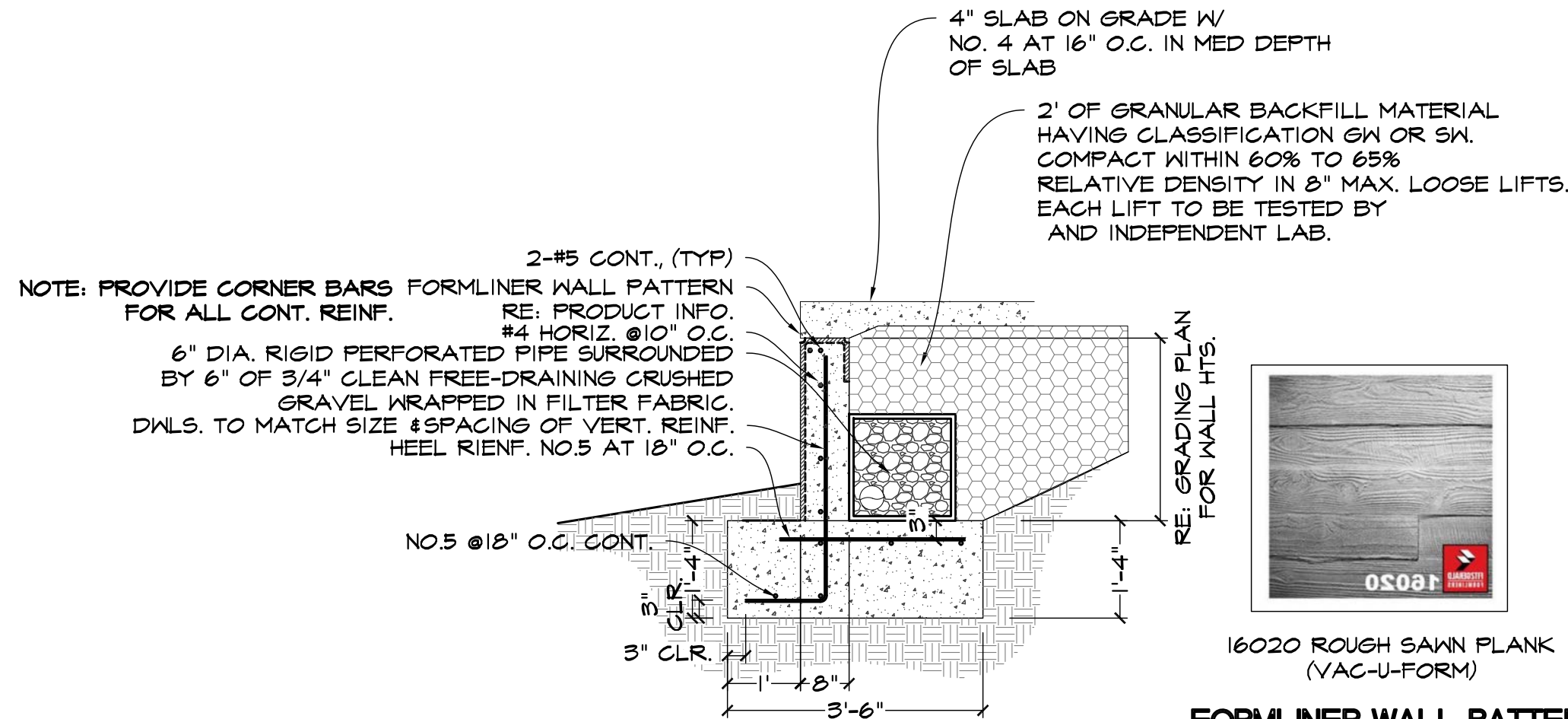


5 CONC. WALL E - ELEVATION
1/4" = 1'-0" P-PDS-WAL-ARCH-18

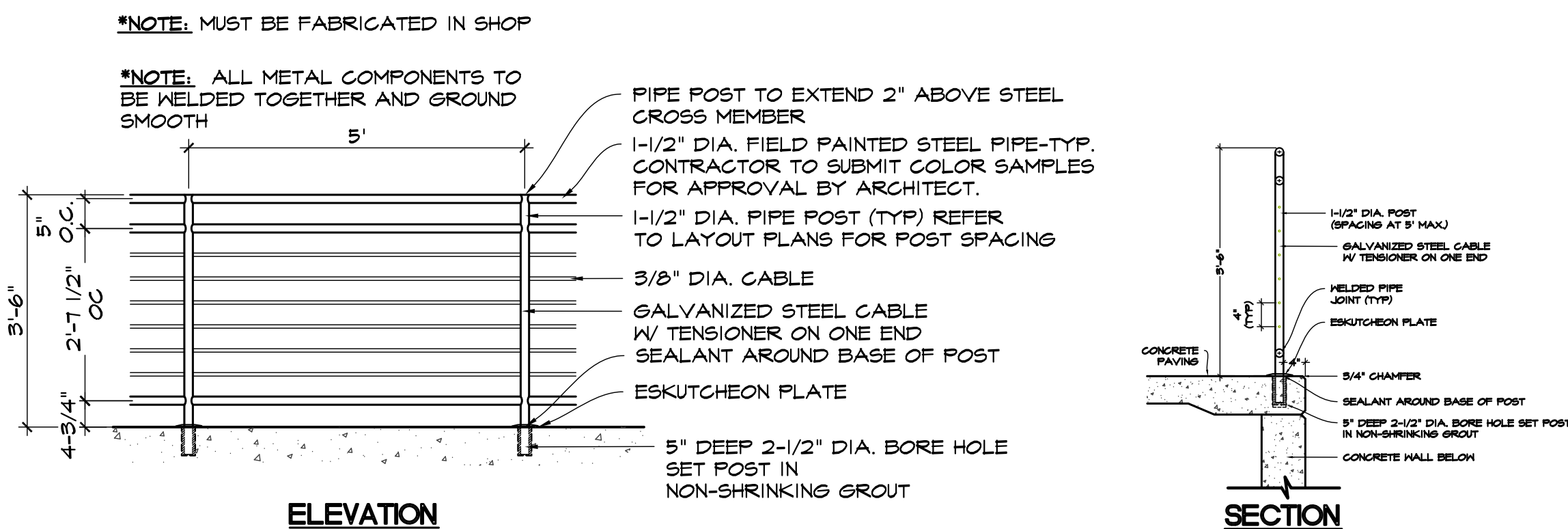


6 CONCRETE PLANTER W ARCHITECTURAL FINISH - SECTION
1/2" = 1'-0" P-PDS-WAL-ARCH-14

FORMLINER WALL PATTERN



7 CONCRETE PLAZA W ARCHITECTURAL FINISH - SECTION
1/2" = 1'-0" P-PDS-WAL-ARCH-19



8 CABLE RAIL FENCE ON PLAZA - DETAIL
1/2" = 1'-0" P-PDS-RAI-05

DETAIL NOTES

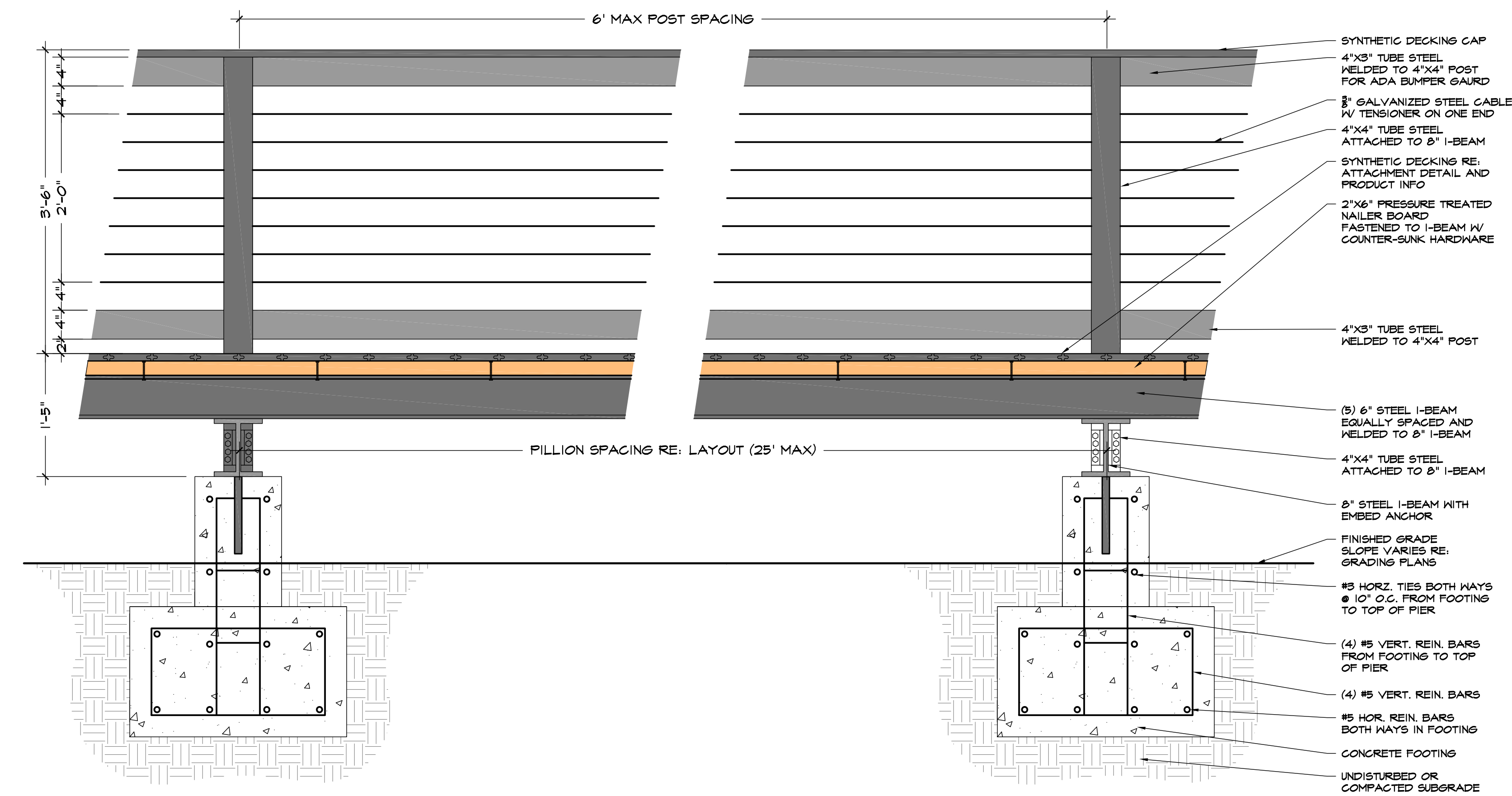
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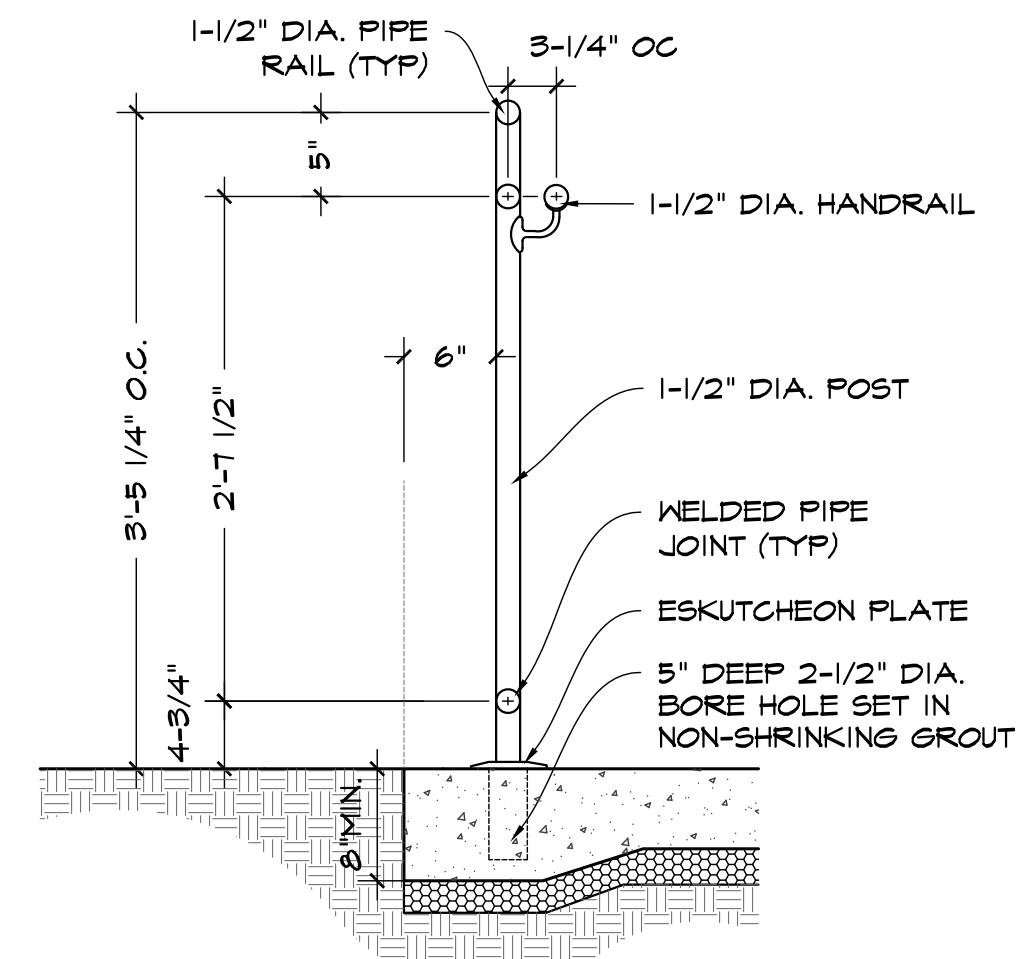
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OWNER:
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P-PDG-BRI-01

P-PDG-BRI-02



P-PDG-STA-76

P-PDG-STA-TT

1. FINISHED GRADE TO BE A MINIMUM OF 6" ABOVE TOP OF ANY FOOTING.
2. WRITTEN DIMENSIONS HAVE PRIORITY OVER SCALED DIMENSIONS.
3. ALL VERTICAL DIMENSIONS ARE TAKEN FROM THE TOP OF FOOTING.
4. REFER TO SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS FOR ANY ADDITIONAL INFORMATION.
5. ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF NORMAN SPECIFICATIONS AND STANDARDS.

PROJECT INFORMATION	
PROJECT ADDRESS:	
801 E Alameda St. Norman, OK 73069	
PROJECT NO.	
DATE	11-02-23
DRAWN BY	CHECKED BY
JB	GE

[illegible]

OWNER:

CITY OF NORMAN

01 W Gray St, Norman, OK 73069

GENERAL NOTES

STRUCTURAL SPECIAL INSPECTION REQUIREMENTS	
INTERNATIONAL BUILDING CODE (IBC) SECTION 1704 REQUIRES A SPECIAL INSPECTOR TO REPORT RESULTS OF OBSERVATION AND/OR TESTING OF THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS. THE FOLLOWING INSPECTION REQUIREMENTS SHALL COMPLIMENT INSPECTIONS SPECIFIED ELSEWHERE:	
1. THE OWNER SHALL RETAIN THE SERVICES OF AN APPROVED AGENCY TO MAKE AVAILABLE A SPECIAL INSPECTOR WHO SHALL PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK INDICATED IN THE FOLLOWING SPECIAL INSPECTION TABLES. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.	
2. THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF INSPECTIONS PER SECTION 1704 REQUIREMENTS AND SHALL SUBMIT COPIES OF INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE OWNER, AND THE STRUCTURAL ENGINEER-OF-RECORD.	
3. IN ACCORDANCE WITH SECTION 1704.2, THESE SPECIAL INSPECTION REQUIREMENTS ALSO APPLY TO STRUCTURAL LOAD BEARING MEMBERS OR ASSEMBLIES WHERE FABRICATION IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP.	
4. REFER TO THE "GENERAL NOTES" FOR DETAILED REQUIREMENTS PERTAINING TO THE TYPES OF WORK INDICATED IN THE FOLLOWING SPECIAL INSPECTION TABLES.	

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS (IBC 2018 TABLE 1705.6)		
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION (IBC 2018 TABLE 1705.3)				
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD *	IBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X	ACI 318: CH. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
2. REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND C. INSPECT ALL OTHER WELDS.	- X	X -	AWS D1.4 ACI 318: 26.5.4	-
3. INSPECT ANCHORS CAST IN CONCRETE.	-	X	ACI 318: 17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPDIAGONALLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	X -	- X	ACI 318: 17.8.2.4 ACI 318: 17.8.2	- -
5. VERIFY USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C172 ASTM C31 ACI 318: 26.4.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 26.4.7-26.4.9	1908.9
9. INSPECT PRESTRESSED CONCRETE FOR: A. APPLICATION OF PRESTRESSING FORCES; AND B. GROUTING OF BONDED PRESTRESSING TENDONS.	X X	- -	ACI 318: 26.9.2.1 ACI 318: 26.9.2.3	-
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: CH. 26.8	-
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 26.10.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 26.10.1(B)	-

- a. WHERE APPLICABLE, SEE ALSO SECTION 1705.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.
- b. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318. OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

OVERALL NOTES

- THE CONSTRUCTION DOCUMENTS CONSIST OF THESE DRAWINGS AND A SEPARATE BOOK OF SPECIFICATIONS. THE DRAWINGS AND SPECIFICATIONS ARE CONSIDERED TO BE COMPLEMENTARY AND NEITHER IS MEANT TO STAND ALONE FOR ANY PORTION OF THE WORK DESCRIBED IN THE DOCUMENTS. IMMEDIATELY REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS TO THE ARCHITECT AND THE STRUCTURAL ENGINEER OF RECORD.
- PRIOR TO BEGINNING ANY WORK OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL COORDINATE THE STRUCTURAL DRAWINGS WITH THE DRAWINGS FROM THE ARCHITECT AND ALL OTHER TRADES. NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES OR POSSIBLE DEFICIENCIES.
- PRIOR TO STARTING WORK, THE CONTRACTOR SHALL VERIFY THE EXISTING SITE CONDITIONS AND CONSTRAINTS AS WELL AS EXISTING BUILDING LOCATION, DIMENSIONS, AND ELEVATIONS, IF ANY.
- THE CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. ALL TEMPORARY BRACING, SHORING, SUPPORTS, ETC. ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- NO FIELD REVISIONS OR MODIFICATIONS TO ANY STRUCTURAL COMPONENT SHALL BE PERFORMED WITHOUT PRIOR APPROVAL BY THE ENGINEER OF RECORD.
- PLANS AND DETAILS SHALL NOT BE SCALED FOR DETERMINATION OF LENGTHS, QUANTITIES, OR CONFIGURATION OF MATERIALS.

FOUNDATION AND GEOTECHNICAL NOTES

- WHERE UTILITY TRENCHES EXTEND BEYOND THE BUILDING PERIMETER OR THE WORK AREA, A MINIMUM 5' LENGTH OF THE UTILITY TRENCH SHALL BE BACKFILLED WITH COMPACTED, LOW-PERMEABILITY CLAY OR CLSM TO FORM A "PLUG" TO HELP PREVENT THE MIGRATION OF WATER UNDER THE BUILDING FOOTPRINT. PIPE BEDDING CONSISTING OF GRANULAR FILL SHALL NOT BE USED IN THE AREA OF THE "PLUG".
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING AND SHORING ALL FOUNDATION WALLS, GRADE BEAMS, AND FOOTINGS DURING BACKFILL AND COMPACTION PROCEDURES.
- THE FOUNDATIONS SHALL EXTEND BELOW THE FROST LINE. THE BOTTOM OF FOUNDATION ELEMENTS MAY BE LOWERED AS REQUIRED TO ACHIEVE THE REQUIRED COVER.
- THE FOUNDATION ELEMENTS FOR THIS BUILDING ARE DESIGNED BASED UPON THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT LISTED IN THE DESIGN CRITERIA. THE RECOMMENDATIONS LISTED IN THIS SECTION ARE AS NOTED IN THIS REPORT. ANY DISCREPANCIES BETWEEN THE GEOTECHNICAL REPORT AND THE RECOMMENDATIONS IN THIS SECTION SHALL BE IMMEDIATELY REPORTED TO THE STRUCTURAL ENGINEER OF RECORD.
- AFTER REMOVAL OF ALL SURFACE VEGETATION, UNSUITABLE BEARING MATERIALS, AND PERFORMING REQUIRED CUTS, THE WORK AREA SHALL BE UNDERCUT AND THEN BE PROOFROLLED AS SPECIFIED IN THE GEOTECHNICAL REPORT. THE WORK AREA SHALL EXTEND A MINIMUM OF 5'-0" BEYOND THE BUILDING PERIMETER OR AS DEFINED IN THE GEOTECHNICAL REPORT, WHICHEVER IS MORE RESTRICTIVE.
- AFTER PROOFROLLING AND COMPLETING ANY CORRECTIVE WORK, THE WORK AREA SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED. REFER TO THE GEOTECHNICAL REPORT FOR SCARIFICATION, MOISTURE, AND COMPACTION REQUIREMENTS.
- SELECT FILL SHALL BE NON-EXPANSIVE, COHESIVE MATERIAL. REFER TO THE GEOTECHNICAL REPORT FOR SELECT FILL REQUIREMENTS.
- THE MINIMUM RECOMMENDED MOISTURE CONTENT SHALL BE MAINTAINED IN THE AREA OF THE BUILDING PAD UNTIL THE FLOOR SLAB IS CONSTRUCTED.

STRUCTURAL STEEL NOTES

- U.N.O., FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH ANSI/AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," EDITION REFERENCED IN THE DESIGN CRITERIA, AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," EDITION REFERENCED IN THE DESIGN CRITERIA, AND THE STANDARDS OF THE AMERICAN WELDING SOCIETY.
- ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED BY A FABRICATOR WITH EITHER AN AISC STD CERTIFICATION OR AN IAS AC172 CERTIFICATION. IF THE STEEL FABRICATOR DOES NOT HAVE THE REQUIRED CERTIFICATION, THE FABRICATOR SHALL PAY FOR THE "IN-PLANT" INSPECTIONS ASSOCIATED WITH THE SPECIAL INSPECTION REQUIREMENTS OF THE IBC CODE.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS, U.N.O.:
a. W SHAPES ASTM A992 GRADE 50 Fy = 50 KSI
b. HP SHAPES ASTM A572 GRADE 50 Fy = 50 KSI
- REFER TO THE SPECIFICATIONS FOR PAINTING AND SURFACE PREPARATION REQUIREMENTS. DO NOT PAINT DEFORMED BAR ANCHORS.
- UNPAINTED STRUCTURAL STEEL MEMBERS PERMANENTLY EXPOSED TO THE ELEMENTS SHALL BE GALVANIZED. GALVANIZING SHALL CONFORM TO ASTM A123. ALL CONNECTIONS SHALL BE SEAL WELDED PRIOR TO GALVANIZING.
- ALL BOLTED CONNECTIONS FOR STRUCTURAL STEEL MEMBERS SHALL CONSIST OF ASTM A325-N BOLTS, U.N.O.
- ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARDS. ALL SHOP AND FIELD WELDS SHALL USE E70XX ELECTRODES. ALL WELDS SHALL BE PERFORMED BY A CERTIFIED WELDER AND CONFORM TO AISC AND AWS STANDARDS. ALL SHOP AND FULL PENETRATION BUTT WELDS SHALL BE INSPECTED BY ULTRASONIC TESTING UNLESS PROHIBITED BY THE GEOMETRY OF THE CONNECTION. IF ULTRASONIC TESTING CANNOT BE PERFORMED, X-RAY TESTING SHALL BE USED AT THE APPROVAL OF THE ARCHITECT/ENGINEER OF RECORD. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- STRUCTURAL STEEL SHALL NOT BE SPLICED OTHER THAN WHERE NOTED ON THE DRAWINGS WITHOUT APPROVAL OF THE ENGINEER OF RECORD.
- STEEL BEAMS SHALL BE ERECTED WITH THEIR NATURAL CAMBER UP.

CONCRETE NOTES

- ALL REINFORCED CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301 "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS," LATEST EDITION INCLUDING AMENDMENTS, AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," EDITION REFERENCED IN THE DESIGN CRITERIA.
- TOLERANCES FOR CONCRETE MEMBERS AND COMPONENTS SHALL CONFORM TO ACI 117 "SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS."
- DETAILING OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL CONFORM TO ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
- U.N.O., CONCRETE SHALL CONSIST OF TYPE I, II, OR III PORTLAND CEMENT MEETING THE REQUIREMENTS OF ASTM C150 OR TYPE 1L PORTLAND LIME CEMENT MEETING THE REQUIREMENTS OF C595, NORMAL WEIGHT COARSE AGGREGATE WITH CRUSHED STONE #57 GRADATION THAT MEETS THE REQUIREMENTS OF ASTM C33, AND FINE AGGREGATE CONSISTING OF SAND THAT MEETS THE REQUIREMENTS OF ASTM C33. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH, MAXIMUM WATER-TO-CEMENT RATIO, AND AIR CONTENT AS NOTED BELOW FOR EACH CONCRETE USE:

CONCRETE USE	F _c	W/C RATIO	AIR CONTENT	NOTES
FOUNDATIONS	4,500 PSI	0.45	6.0%	-
- PROVIDE AIR ENTRAINMENT ADMIXTURES AS REQUIRED TO ACHIEVE AIR CONTENTS INDICATED. AIR ENTRAINMENT ADMIXTURES SHALL MEET THE REQUIREMENTS OF ASTM C260.
- CONCRETE WITH AIR CONTENT GREATER THAN 3% SHALL NOT BE HARD TROWELED. COORDINATE CONCRETE FINISHES WITH ARCHITECT.
- SLUMP OF CONCRETE SHALL NOT EXCEED 3" AT THE END OF THE TRUCK OR PUMP HOSE (PER ACI 211.1 TABLE 6.3.1), SLUMP LOSS DUE TO PUMPING SHALL BE ACCOMMODATED. IF A SUPERPLASTICIZER OR MID-RANGE WATER REDUCING ADMIXTURE IS USED IN THE MIX DESIGN, THE SLUMP SHALL NOT EXCEED 8" AFTER ADDITION OF THE ADMIXTURE. DO NOT ADD WATER TO CONCRETE AFTER ADDING WATER-REDUCING ADMIXTURES TO THE MIX.
- CONTRACTOR SHALL SUBMIT CONCRETE PROPORTIONS AND SUFFICIENT DOCUMENTATION FROM TEST RESULTS TO ESTABLISH THE STANDARD DEVIATION OF THE PROPOSED MIXES OR TRIAL MIXTURES.
- U.N.O., ALL CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 AND BE OF DOMESTIC MANUFACTURE. REINFORCING BARS TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706, GRADE 60. WELDING OF REINFORCING NOT SPECIFICALLY SHOWN ON THE DRAWINGS IS PROHIBITED.
- WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A1064 AND SHALL BE SUPPLIED IN FLAT SHEETS.
- U.N.O., WELDING TO REINFORCING BARS SHALL NOT BE PERMITTED. ELECTRICAL GROUNDING AND OTHER REQUIRED CONNECTIONS TO REINFORCING BARS SHALL BE ATTAINED VIA CLAMPS OR OTHER MANUFACTURED CONNECTIONS.
- U.N.O., MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL ADHERE TO ACI 318 SECTION 20.6.1.1.
- U.N.O., DEVELOPMENT LENGTHS, CLASS "B" LAP SPLICES, AND HOOK DEVELOPMENT LENGTHS SHALL CONFORM TO ACI 318. REFER TO "CONCRETE REINFORCEMENT DEVELOPMENT LENGTH TABLE" FOR ADDITIONAL INFORMATION.
- SPLICES IN REINFORCING SHALL OCCUR AS SHOWN ON THE DRAWINGS. REINFORCEMENT DESIGNATED AS "CONTINUOUS REINFORCEMENT" MAY BE SPLICED AS REQUIRED WITH CLASS B LAP SPLICES. LAP SPLICES OF CONTINUOUS REINFORCEMENT SHALL OCCUR OVER SUPPORTS FOR BOTTOM BARS AND AT MID SPAN FOR TOP BARS.
- REINFORCING SHALL BE SUPPORTED AND SECURED IN ITS PROPER LOCATION TO PREVENT DISPLACEMENT DURING PLACEMENT OF CONCRETE.
- JOINTS IN CONCRETE MEMBERS NOT SHOWN SHALL BE MADE AND LOCATED TO LEAST IMPAIR THE STRENGTH OF THE MEMBER AND APPEARANCE OF THE STRUCTURE. JOINTS IN CONCRETE ELEMENTS EXPOSED TO VIEW SHALL BE APPROVED BY THE ARCHITECT AND ENGINEER OF RECORD.
- CONSTRUCTION JOINTS SHALL BE PREPARED BY ROUGHENING THE SURFACE OF THE CONCRETE IN AN APPROVED MANNER TO EXPOSE THE AGGREGATE UNIFORMLY LEAVING NO LAITANCE, LOOSENED PARTICLES, OR DAMAGED CONCRETE.
- PROVIDE CHAMFERS AS DETAILED ON THE ARCHITECTURAL DRAWINGS.
- ALL ANCHOR RODS SHALL MEET ASTM F1554, GR 36, U.N.O.
- ALL HIGH-STRENGTH GROUT SHALL BE PREPACKAGED, NON-METALLIC, AND NON-GASEOUS. IT SHALL BE NON-SHRINK ACCORDING TO ASTM C-1107 OR CRD-C-621. GROUT SHALL OBTAIN A MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI IN 28 DAYS AND SHALL NOT BLEED. GROUT SHALL BE MOIST CURED FOR A MINIMUM OF 24 HOURS AFTER PLACEMENT. SUBMIT CERTIFIED, INDEPENDENT TEST DATA FOR APPROVAL.
- CONTROLLED, LOW-STRENGTH MATERIAL (CLSM, OR FLOWABLE FILL) SHALL BE PROPORTIONED, MIXED, TRANSPORTED, AND PLACED ACCORDING TO ACI 229R, "CONTROLLED LOW-STRENGTH MATERIALS." THE MINIMUM COMPRESSIVE STRENGTH OF CLSM SHALL BE BETWEEN 50 PSI AND 100 PSI PER CHAPTER 7 OF ACI 229R.

CONCRETE REINFORCEMENT DEVELOPMENT LENGTH TABLE						
BAR SIZE	DEVELOPMENT LENGTH (IN.)	f _c = 3,500 psi			f _c = 4,500 psi	
		CLASS "B" LAP SPLICE (IN.)	HOOKED DEVELOPMENT LENGTH (IN.)	DEVELOPMENT LENGTH (IN.)	CLASS "B" LAP SPLICE (IN.)	HOOKED DEVELOPMENT LENGTH (IN.)
#3	16	21	8	14	19	7
#4	21	28	11	18	24	9
#5	26	34	13	23	30	12
#6	31	41	16	27	36	14
#7	45	59	18	40	52	16
#8	51	67	21	45	59	18
#9	58	76	23	51	67	21
#10	65	85	26	57	75	23
#11	72	94	29	64	84	26

TABLE NOTES:

- DEVELOPMENT LENGTH = STRAIGHT DEFORMED BAR DEVELOPMENT LENGTH IN TENSION AND IS EQUAL TO A CLASS "A" LAP SPLICE.
- CLASS "B" LAP SPLICE = SPLICE LENGTH FOR LAPPED DEFORMED BARS IN TENSION.
- HOOKED DEVELOPMENT LENGTH = DEVELOPMENT LENGTH FOR DEFORMED BARS WITH STANDARD 90° HOOKS IN TENSION.
- WHEN BARS OF DIFFERENT SIZES ARE LAPPED, SPLICE LENGTH SHALL BE THE GREATER OF A CLASS "A" LAP OF THE LARGER BAR OR A CLASS "B" LAP OF THE SMALLER BAR.
- MULTIPLY BY 1.3 FOR TOP BARS, WHICH INCLUDE BARS CAST WITH MORE THAN 12" OF FRESH CONCRETE BELOW THE DEVELOPMENT LENGTH OR SPLICE.
- MULTIPLY BY 1.5 FOR EPOXY-COATED BARS.
- MULTIPLY BY 1.3 FOR LIGHT-WEIGHT CONCRETE.

DESIGN CRITERIA

APPLICABLE BUILDING CODES

IBC 2018 ASCE 7-16 AISC 303-10 AISC 360-10 ACI 318-14	INTERNATIONAL BUILDING CODE MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
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DEAD LOAD

SELF WEIGHT OF STRUCTURE	ACTUAL WEIGHT OF MATERIALS
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LIVE LOAD

BOARDWALK	100 PSF
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SNOW LOAD

GROUND SNOW LOAD, P _g	10 PSF
IMPORTANCE FACTOR, I _s	1.00
THERMAL FACTOR, C _t	1.0
SNOW EXPOSURE FACTOR, C _e	0.9

WIND LOAD

RISK CATEGORY	II
BASIC WIND SPEED, V	108 MPH
EXPOSURE CATEGORY	C
WIND DIRECTIONALITY FACTOR, K _d	0.85
TOPOGRAPHIC FACTOR, K _{zt}	1.0

SEISMIC LOAD

LATITUDE AND LONGITUDE	35.2183571°N, 97.432459°W
S _s	0.339 g
S ₁	0.085 g
S _{ds}	0.293 g
S _{d1}	0.085 g
IMPORTANCE FACTOR, I _e	1.00
SITE CLASSIFICATION	C (PER GEOTECHNICAL REPORT)
SEISMIC DESIGN CATEGORY	B

FOUNDATION DESIGN

THE FOUNDATION ELEMENTS OF THE BUILDING HAVE BEEN DESIGNED BASED ON THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT PREPARED FOR THE SITE.

GEOTECHNICAL ENGINEER REPORT NUMBER REPORT DATE	HINDERLITER CEC-23-09 JULY 13, 2023
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SLAB-ON-GRADE MODULUS OF SUBGRADE REACTION, k	100 PCI
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DRIVEN PILE FOUNDATIONS

HP10X42 MAXIMUM FACTURED LOAD	70.5 TONS/PILE
ESTIMATED PENETRATION INTO ROCK	4.5 FT

SHALLOW FOUNDATIONS

ALLOWABLE BEARING PRESSURE	1,500 PSF (ASSUMED)
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STRUCTURAL ABBREVIATIONS

Ø	- DIAMETER	IBC	- INTERNATIONAL BUILDING CODE
°	- DEGREE		
&	- AND	IN-K	- INCH KIPS
@	- AT	INT	- INTERIOR
±	- PLUS OR MINUS		
A.B.	- ANCHOR BOLT(S)	J.B.	- JOIST BEARING
ACI	- AMERICAN CONCRETE INSTITUTE	JST	- JOIST
ADJ	- ADJACENT	KIP	- 1000 POUNDS
AISC	- AMERICAN INSTITUTE OF STEEL CONSTRUCTION	KSF	- KIPS PER SQUARE FOOT
AISI	- AMERICAN IRON AND STEEL INSTITUTE	LB	- POUND
ARCH'L	- ARCHITECT	LLH	- LONG LEG HORIZONTAL
ASCE	- AMERICAN SOCIETY OF CIVIL ENGINEERS	LLV	- LONG LEG VERTICAL
ASTM	- AMERICAN SOCIETY OF TESTING AND MATERIALS	LO	- LOW
AWS	- AMERICAN WELDING SOCIETY	MANUF	- MANUFACTURER
		MAX	- MAXIMUM
		MECH'L	- MECHANICAL
		MIN	- MINIMUM
		MPPI	- MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS
BAL	- BALANCE	N.E.	- NORTHEAST
BLDG	- BUILDING	N.W.	- NORTHWEST
BM	- BEAM	NO.	- NUMBER
B.O.	- BOTTOM OF		
BOTT	- BOTTOM		
BRG	- BEARING		
BTWN	- BETWEEN	O.C.	- ON-CENTER
		O.H.	- OPPOSITE HAND (REVERSED)
		O. TO O.	- OUT-TO-OUT
CANT	- CANTILEVER	P/C	- PRECAST
CFMF	- COLD FORMED METAL FRAMING	PEMB	- PRE-ENGINEERED METAL BUILDING
C.J.	- CONSTRUCTION JOINT		
C. TO C.	- CENTER-TO-CENTER	PL	- PLATE
CTR	- CENTER	PSF	- POUNDS PER SQUARE FOOT
C	- CENTERLINE	PSI	- POUNDS PER SQUARE INCH
CLR	- CLEAR		
COL	- COLUMN		
CONC	- CONCRETE	REINF	- REINFORCING
CONN/X	- CONNECTION	REQ'D	- REQUIRED
CONT	- CONTINUOUS		
		S.E.	- SOUTHEAST
DBE	- DECK BEARING ELEVATION	S.J.	- SAWED JOINT
DBL	- DOUBLE	SHT	- SHEET
D.B.A	- DEFORMED BAR ANCHOR	SIM	- SIMILAR
DN	- DOWN	S.O.G.	- SLAB-ON-GRADE
DTL	- DETAIL	SP	- SPACE(S) OR SPACING
DWG	- DRAWING	STD	- STANDARD
DWL	- DOWEL	STL	- STEEL
		STR'L	- STRUCTURAL
EA	- EACH	S.W.	- SOUTHWEST
E.J.	- EXPANSION JOINT		
ELEV.	- ELEVATION		
ELEC'L	- ELECTRICAL	T.O.	- TOP OF
EOS	- EDGE OF SLAB	THRU	- THROUGH
EQ	- EQUAL	TYP	- TYPICAL
E.W.	- EACH WAY		
EXT	- EXTERIOR	USGS	- UNITED STATES GEOLOGICAL SURVEY
FIN. FLR.	- FINISHED FLOOR	U.N.O.	- UNLESS NOTED OTHERWISE
FT	- FOOT (OR FEET)		
FV	- FIELD VERIFY	VERT	- VERTICAL
		W/	- WITH
GA	- GAGE	W/C	- WATER/CEMENT
GALV	- GALVANIZED	W/O	- WITHOUT
G.B.	- GRADE BEAM	W.P.	- WORKING POINT
		WWR	- WELDED WIRE REINFORCEMENT
H.S.	- HIGH STRENGTH		
HI	- HIGH		
HK	- HOOK		
HORZ	- HORIZONTAL		



CEC CORPORATION
WWW.CONNECTCEC.COM
OK C-AP-22 EXP. 2024-06-30

THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT

PROJECT INFORMATION	
PROJECT ADDRESS:	
801 E Alameda St. Norman, OK 73069	
PROJECT NO.	230413
DATE	05/10/2024
DRAWN BY	CHECKED BY
AH	IH

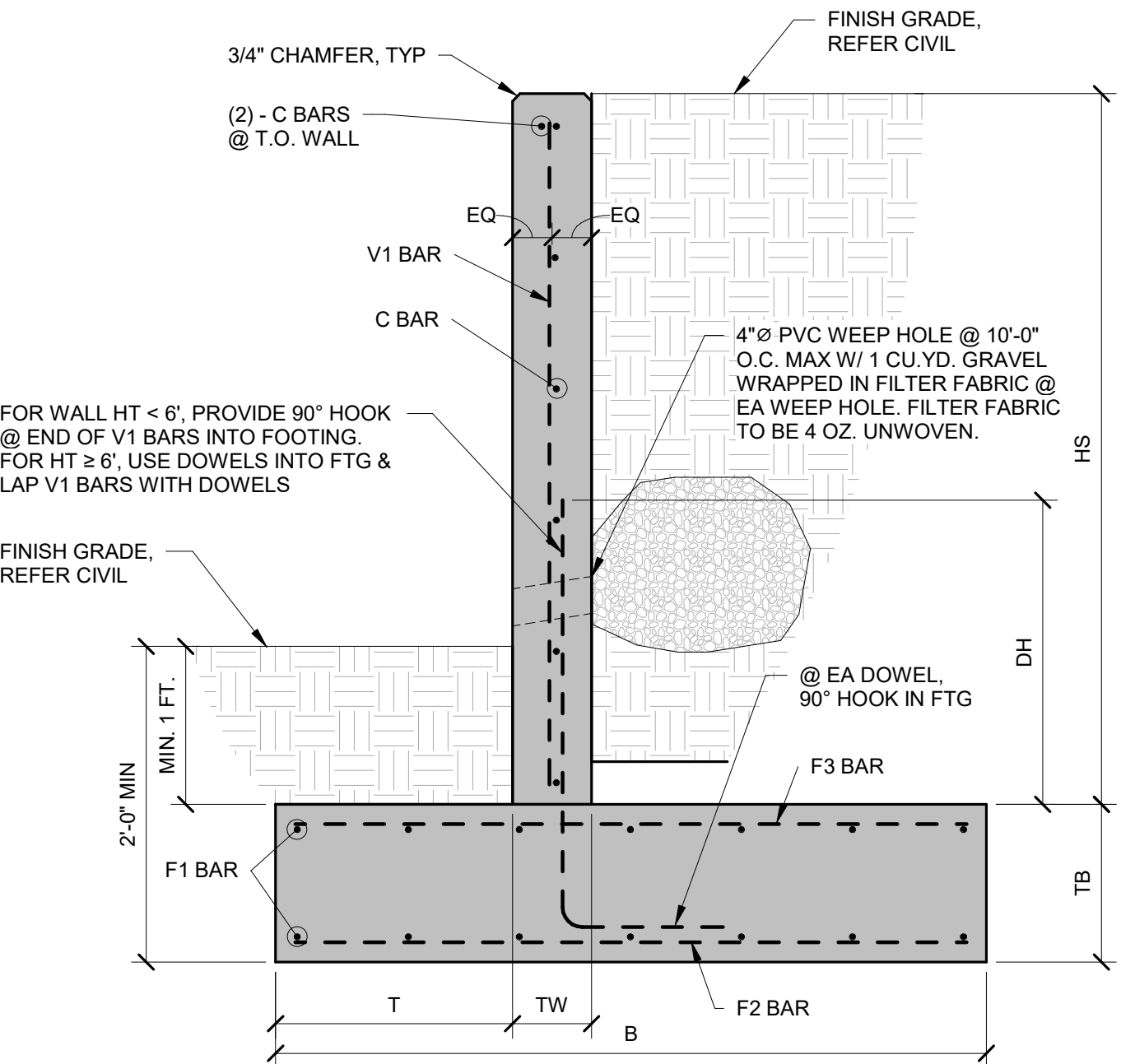
NORMAN NATURE PARK
NORMAN, OKLAHOMA

ISSUE/ REVISIONS	
05/10/2024	

OWNER:

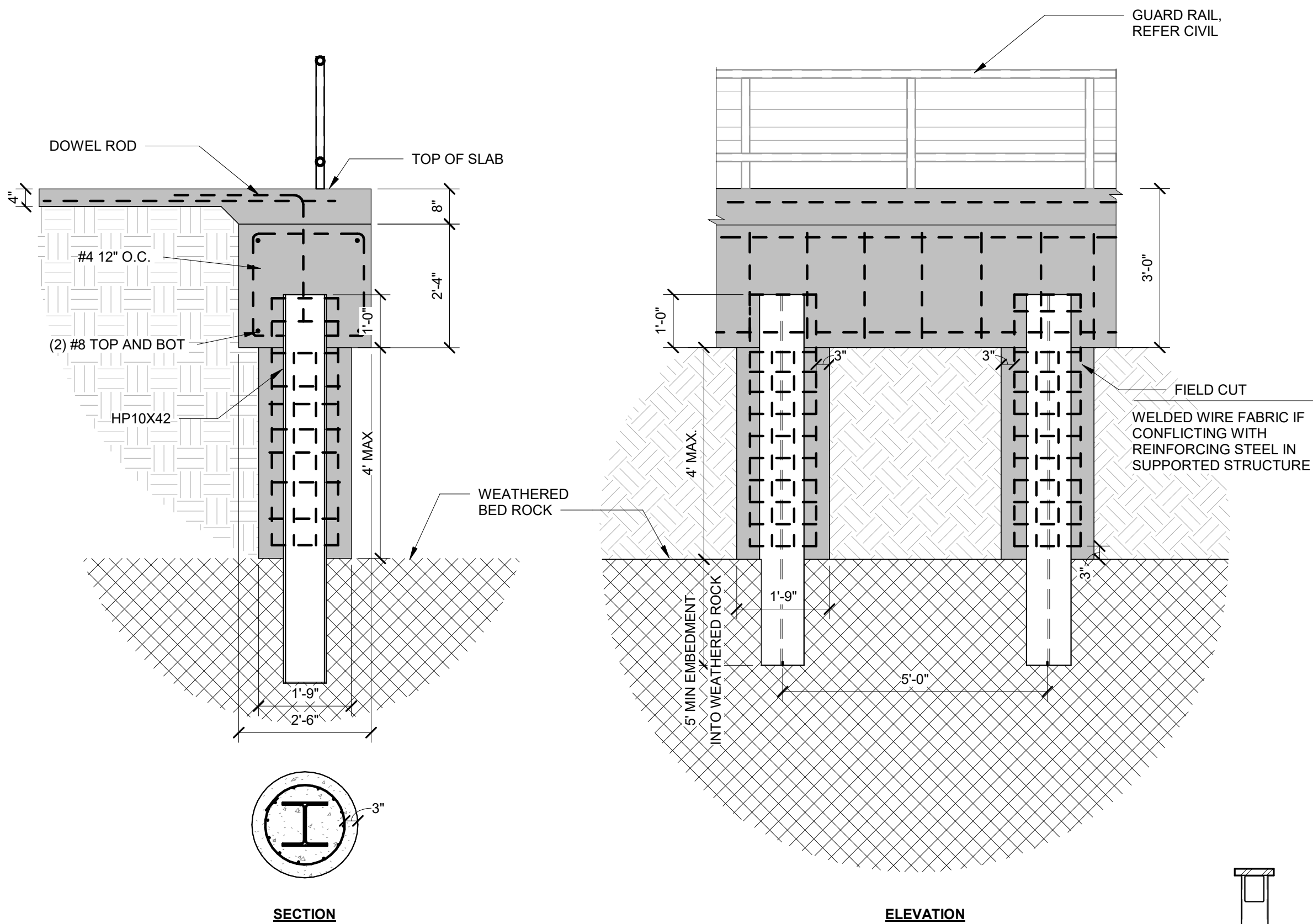
CITY OF NORMAN

201 W Gray St, Norman, OK 73069

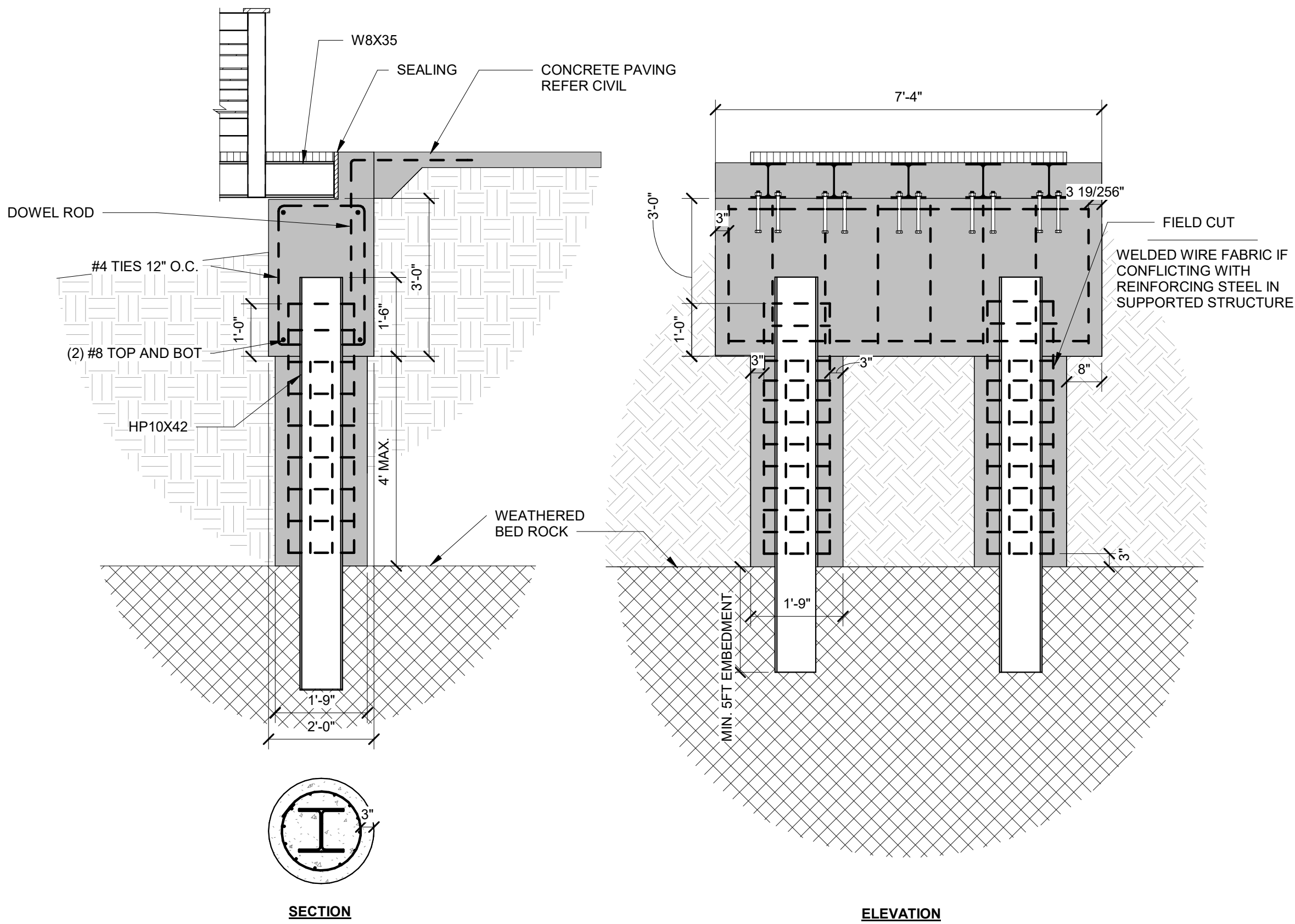


RETAINING WALL SCHEDULE												
WALL DIMENSIONS					REINFORCING STEEL							
HS	B	T	TB	TW	C BAR SIZE SPC	F1 BAR SIZE SPC	F2 BAR SIZE SPC	F3 BAR SIZE SPC	V1 BAR SIZE SPC	BAR SIZE	DH	
2'	3'-0"	1'-0"	1'-6"	0'-8"	#4 @ 12"	3-#5 EQ SPACED	#5 @ 18"	#5 @ 18"	#4 @ 18"	N/A	N/A	
3'	3'-0"	1'-0"	1'-0"	0'-8"	#4 @ 12"	#4 @ 9"	#4 @ 9"	#4 @ 9"	#4 @ 12"	N/A	N/A	
6'	4'-6"	1'-6"	1'-6"	1'-0"	#4 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#4 @ 18"	#4 @ 18"	2'-0"	
8'	5'-6"	2'-0"	1'-6"	1'-0"	#4 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#4 @ 18"	#6 @ 18"	2'-6"	
10'	7'-0"	2'-0"	1'-6"	1'-0"	#4 @ 18"	#5 @ 18"	#7 @ 18"	#5 @ 18"	#4 @ 18"	#7 @ 18"	4'-0"	
12'	9'-0"	2'-0"	1'-6"	1'-0"	#4 @ 18"	#5 @ 12"	#7 @ 12"	#7 @ 12"	#4 @ 12"	#7 @ 12"	5'-0"	

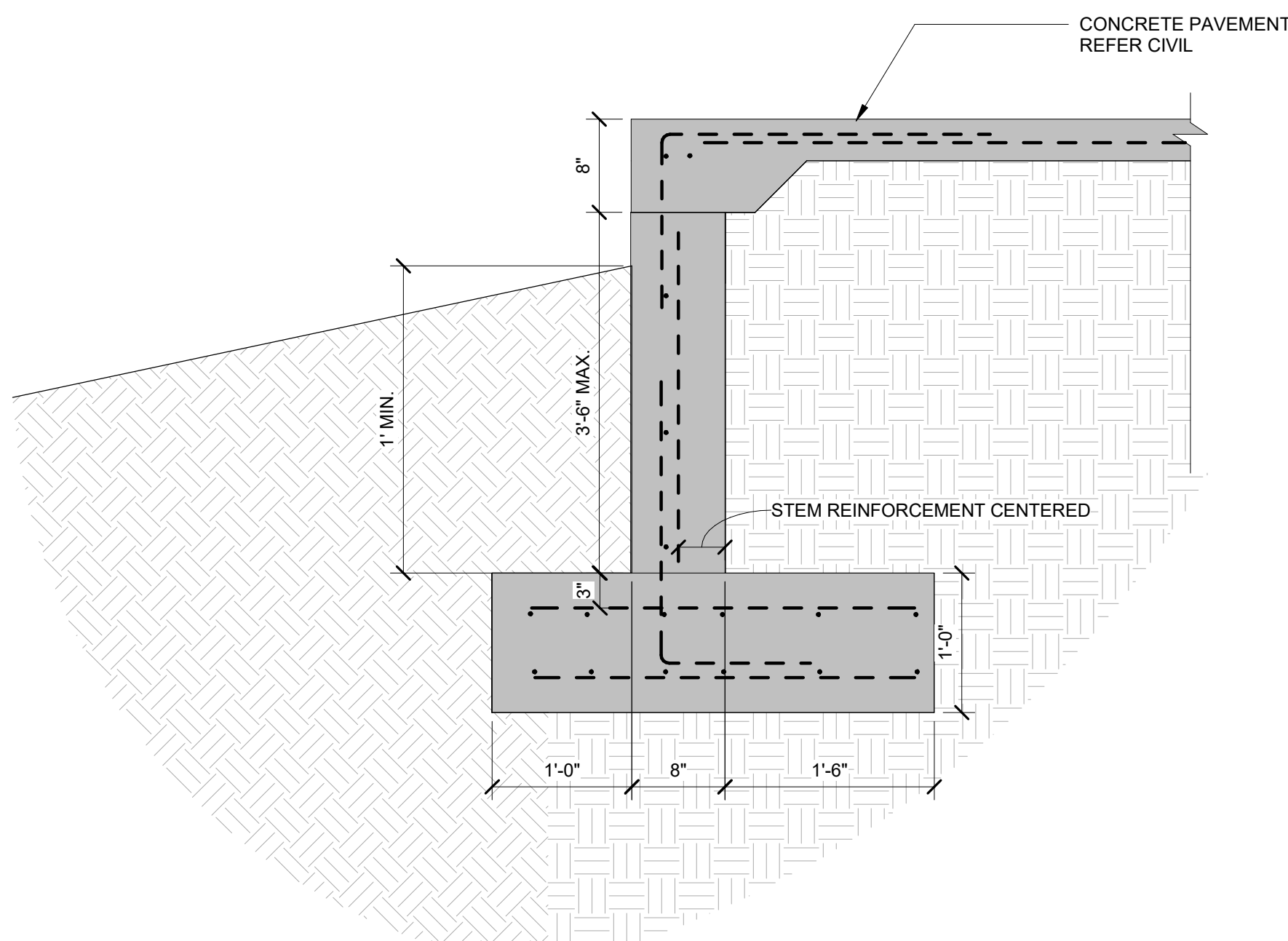
1 TYPICAL RETAINING WALL FOR PLANTER
SCALE : N.T.S.



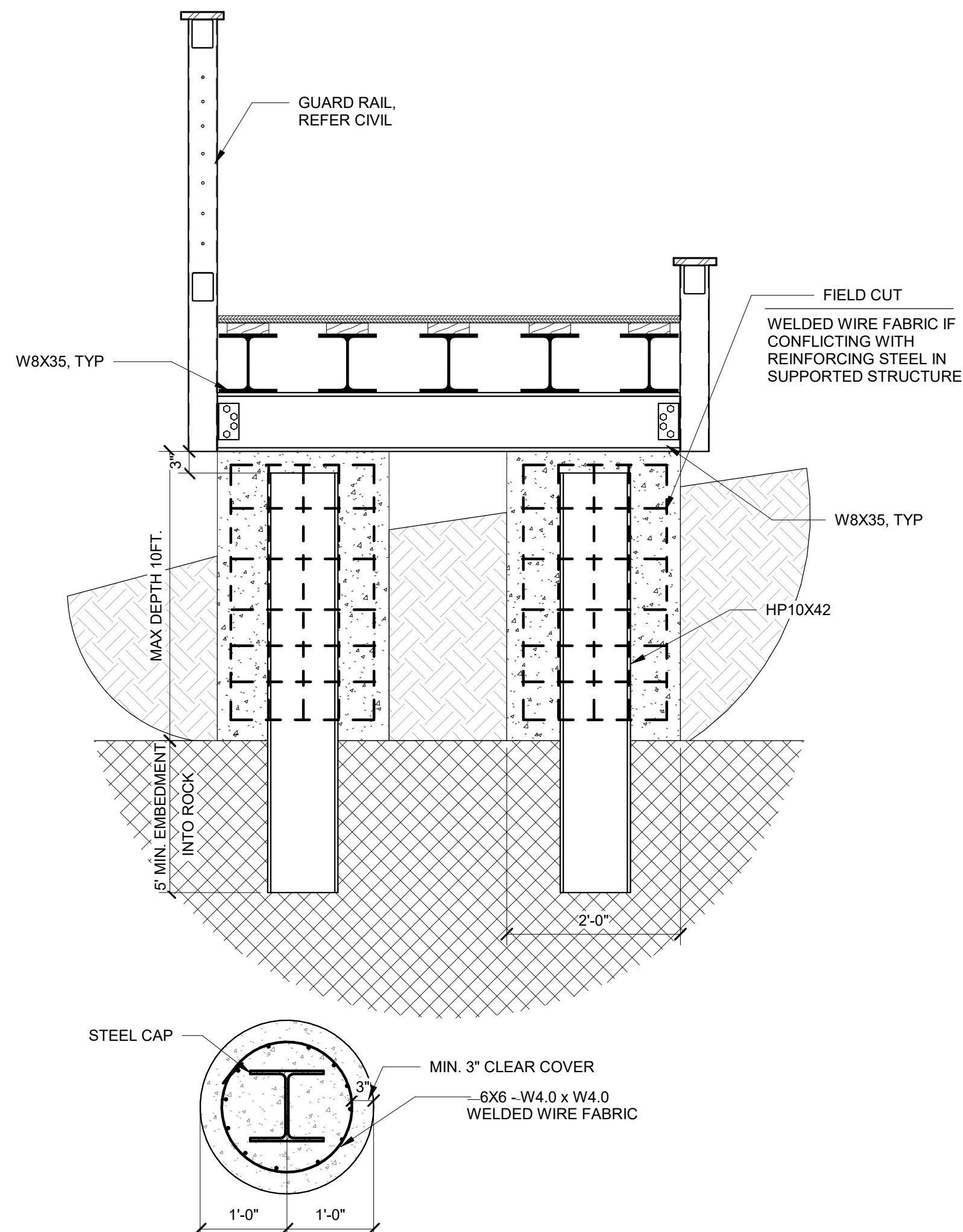
2 RETAINING WALL NEAR CANOPY
SCALE : 1/2" = 1'-0"



3 RETAINING WALL ENTRANCE TO WALKWAY
SCALE : 1/2" = 1'-0"



4 CONCRETE WEST PLAZA WALL
SCALE : 1" = 1'-0"



5 BOARDWALK SECTION
SCALE : 3/4" = 1'-0"