

PLANNING BOARD MEETING

Tuesday, February 27, 2024 at 6:00 PM

Town Hall - 41 South Main Street Randolph, MA 02368

AGENDA

Pursuant to the temporary provisions pertaining to the Open Meeting Law, public bodies may continue holding meetings remotely without a quorum of the public body physically present at a meeting location until March 31, 2025. The public is invited to participate in the meeting in person, via telephone or computer.

A. Call to Order - Roll Call

B. Chairperson Comments

C. Public Speaks

D. Public Hearings

1. 43 Scanlon Drive (Scanlon/Billings/High) continuation 6:15pm

E. New Business

1. Site Plan & Design Review - Short Street

F. Staff Report

- *Active Subdivision Review
- *Active Project Review
- *Upcoming Projects

G. Board Comments

H. Adjournment

Notification of Upcoming Meeting Dates

File Attachments for Item:

1. 43 Scanlon Drive (Scanlon/Billings/High) continuation 6:15pm

February 20, 2024

Ms. Michelle Tyler, Director of Planning
Town of Randolph Planning Board
41 South Main Street
Randolph, MA 02368

Re: **Site Plan Design & Review**
Proposed Development North of Scanlon Drive
43 Scanlon Drive
Randolph, MA 02368
VERTEX Project No. 78000

Dear Ms. Tyler and Members of the Planning Board:

On behalf of the Applicant and pursuant to the Site plan & Design Review Regulations by Planning Board for the Town of Randolph, The Vertex Companies LLC (VERTEX) is pleased to submit the items outlined below for the Proposed Development North of Scanlon Drive (Randolph North Development) as part of the Site plan Design & Review process.

The project will ultimately involve proposed development on two newly formed parcels (Parcel A and Parcel) consisting of the combined existing parcels referenced in the Site Plan application. Parcel A will consist of the western portion of land and Parcel B will be in the east. The current request from the Applicant is to obtain approval for the proposed development on Parcel A and the documents attached to this letter are specific to Parcel A.

The design team for this project is led by Stantec Architecture & Engineering P.C., of Boston, MA. Civil Engineering services are being provided by The Vertex Companies, LLC of Weymouth, MA. Stantec Architecture & Engineering P.C. of Boston, MA is also providing landscape architectural design for this project.

The project consists of the demolition of the existing onsite structures and construction of a new buildings. In addition to the new structures, work will include site grading, utilities, stormwater management facilities, and site amenities. The structure will be accessed via a new curb cuts on High Street.

Included in this submission are the following materials:

- Three (3) copies of a slide showing response to Planning Board comments
- Three (3) copies of the plans entitled *Site Development Plans for Proposed Development North of Scanlon Drive*, prepared by The Vertex Companies, LLC and dated December 26, 2023 with revisions through February 16, 2024;

- Three (3) copies of the plan entitled *Site Location Plan*, prepared by Stantec Architecture and Engineering, P.C. dated October 6, 2023 with revisions through February 16, 2024;
- Three (3) copies of Architectural, MEP Plans, and Fuel Island Plans prepared by Stantec Architecture & Engineering P.C. and dated October 6, 2024 with revisions through February 16, 2024;
- Three (3) copies of the landscape plans prepared by Stantec Architecture & Engineering P.C. and dated October 6, 2023 with revisions through February 16, 2024;
- Three (3) copies of the figure entitled *Fire Truck Exhibit* prepared by The Vertex Companies, LLC and dated February 16, 2024;
- Three (3) copies of the Stormwater Management Report prepared by The Vertex Companies, LLC and dated December 26, 2023 with revisions through February 16, 2024;

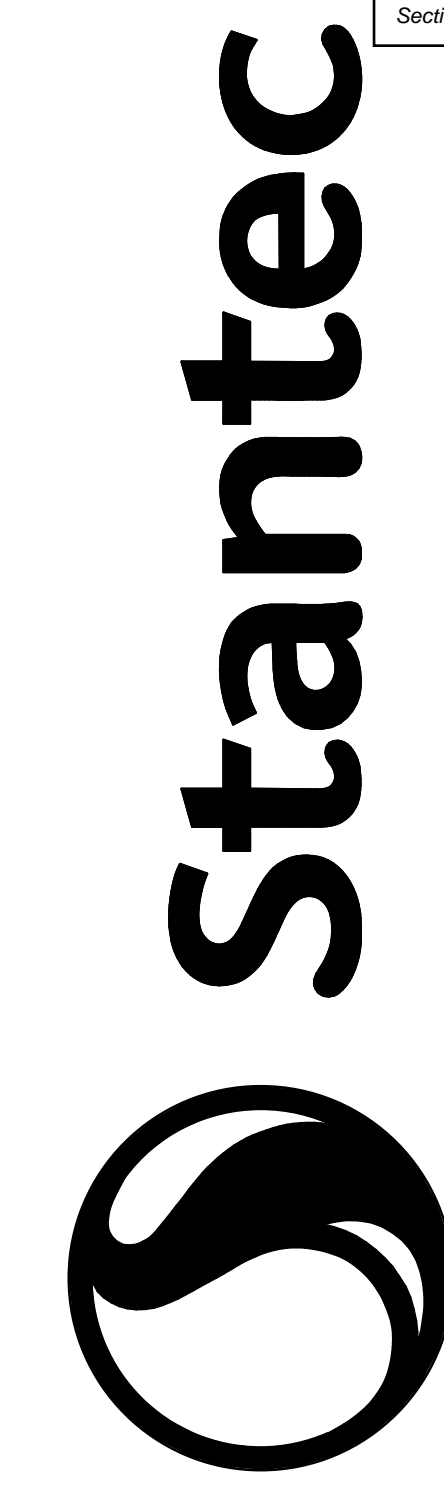
We appreciate your consideration of this project and respectfully request the review of the included project materials. Please feel free to contact us if you have any questions or concerns.

Sincerely,

The Vertex Companies, LLC.



Andrew B. Street, PE
Regional Vice President - Civil Engineering



RANDOLPH NORTH BUILDING A

SCANLON DRIVE
RANDOLPH, MA 02368



ZONING SUMMARY			
ZONING DISTRICT			
Blue Hills River Highway District (BHRHD)			
LAND USE			
Commercial			
OVERLAYS			
Surface Water Protection Zones A & C			
LOT SIZE (SF)			
varies per site			
CLIMATE RESILIENCY- SEA LEVEL RISE - BASE FLOOD ELEVATION			
not specified			
CRITERIA (a)			
	ZONING AS-OF-RIGHT	PROPOSED	COMPLIANCE (Y/N)
Min. Lot Size (SF)	20,000	236,692	Y
Building Footprint (SF)		58,272	Y
Max. Floor Area Ratio (FAR)	none	0.28	Y
Max. Gross Floor Area (Lot Size x FAR) (SF)	none	65,591	Y
Max. Bldg. Stories	3.0	1.0 with Mezz	Y
Max. Bldg. Height (FT) (b)**	50.0	32.50	Y
Min. Lot Frontage (FT) (c)	130.0	165.00	Y
Min. Lot Depth (FT) (d)	100.0	432	Y
Min Lot Width (FT) (e)	100.0	529	Y
LOT COVERAGE:			
A) Building Lot Coverage (% max) (g)	60%	24.6%	Y
B) Impervious Lot Coverage (% max) (h)	30%	62.7%	Y*
C) Green Area Open Space (% min)	10%	11.7%	Y
Maximum Lot Coverage (A + B) (%)	90%	87.3%	Y
BUILDING SETBACKS			
Setback from Street (FT)	15.0		Y
Setback from Front Yard (FT)	15.0		Y
Setback from Side Yard (FT)	10.0		Y
Setback from Rear Yard (FT)	15.0		Y
BUFFERS			
Buffer Strips to Street (FT) (f)	5.0		Y
Buffer Strips to Residential (FT)	10.0		Y
Buffer Strips to Commercial (FT)	2.5		Y

(a) Based on Section 200 Attachment 2, Table of Dimensional Requirements**
Based on Section 200-3, Definitions:
(b) Height of Building. The vertical distance from the established grade at the center of the front of the building to the highest point of the roof surface if a flat roof, to the deck line for mansard roofs, and to the mean height level between eaves and ridge for gabled, hip and gambrel roofs
****Note:** The height of a structure shall be based on the average pre-existing grade within the proposed building footprint
 Mean height between eaves and ridges = 28'-0" for 200' of building length and 37'-0" for 200' of building length. Average Height by definition = 32'-6"
(c) Lot Frontage. The property line dividing a lot from a street (right-of-way). On a corner lot, the owner shall designate one (1) street line as the front lot line. On a corner lot, where the junction of two (2) streets is formed by a curve, the frontage shall be measured along the tangent line of the curve from the point of intersection to the side lot line
(d) Lot Depth. The mean horizontal distance between the front lot line and the rear lot line.
(e) Lot Width. The horizontal distance between the side lot lines as measured at the minimum required setback distance required by this chapter.
(f) Buffer Strip. A strip of land (often including vegetation) where disturbance is not allowed or is closely monitored to preserve or enhance aesthetic and other qualities along or adjacent to roads, trails, watercourses and recreation sites or between properties or lots
(g) Building Lot Coverage.
 The total area covered, measured from the outside of the exterior walls, by all principal and accessor...
(h) Maximum Lot Coverage.
 The total lot non-green area/open space may not exceed the maximum coverage specified in the Table of Dimensional Requirements. In order to fulfill the intent of maximum lot coverage, an applicant may shift a percentage of the building lot coverage requirement and the impervious lot coverage requirement, but in no case shall the maximum coverage percentage noted in the table be exceeded.
 200-34 Section D

PROJECT TEAM

OWNER:

CORE
800 Boylston St FL 30,
Boston, MA 02199
Contact:
Art Campbell
acampbell@coreinvestmentsinc.com

ARCHITECT:

STANTEC
Stantec Architecture and Engineering P.C.
40 Water Street
Boston, MA 02109
Contact:
Dave Kadish
email: dave.kadish@stantec.com

CONSTRUCTION MANAGER:

CALLAHAN
80 First Street
Bridgewater, MA 02324
Contact:
George Malakidis
tel: 508-279-0012
email: gmalakidis@callahan-inc.com

LANDSCAPE ARCHITECT:

STANTEC
Stantec Architecture and Engineering P.C.
40 Water Street
Boston, MA 02109
Contact:
Chris Fee
email: chris.fee@stantec.com

MEP/FP ENGINEER:

COSENTINI CONSULTING ENGINEERING
101 Federal Street, 6th Floor
Boston, MA 02110
Contact:
Aniruddha Nene
email: anene@cosentini.com

INTERIOR DESIGN:

STANTEC
Stantec Architecture and Engineering P.C.
40 Water Street
Boston, MA 02109
Contact:
Sara Diem
email: sara.diem@stantec.com

STRUCTURAL ENGINEER:

DESIMONE CONSULTING ENGINEERS
31 Milk Street, Suite 1016
Boston, MA, 02109
Contact:
Jarret Johnson
email: jarret.johnson@de-simone.com

CIVIL ENGINEER:

VERTEX
400 Libbey Parkway
Weymouth, MA 02189
Contact:
Andrew Street
email: astreet@vertexeng.com

ENVELOPE

DESIMONE CONSULTING ENGINEERS
31 Milk Street, Suite 1016
Boston, MA, 02109
Contact:
Benjamin Reich
email: benjamin.reich@de-simone.com

ACOUSTICAL CONSULTANT

ACENTECH
33 Moulton Street
Cambridge, MA 02138
Contact:
Jonah Sacks
tel: 617-499-8000
email: jsacks@acentech.com

CODE CONSULTANT:

COSENTINI CONSULTING ENGINEERS
101 Federal Street, 6th Floor
Boston, MA 02110
Contact:
Mike McMahon
mmcmahon@cosentini.com

FLUIDS AND FUEL

WESTON & SAMPSON
150 Dow Street, Tower 4, Suite 350
Manchester, NH 03103
Contact:
Tyler Cofelice
tel: 603-263-9498
email: CofeliceT@wseinc.com

SPECIFICATIONS

KALIN ASSOCIATES INC.
PO BOX 420
Natick, MA, 01760
Contact:
Jay Ford
email: jford@kalinassociates.com

GROSS BUILDING AREA (GSF) & HEIGHT		
LEVEL	AREA (SF)	HEIGHT (FT)
Mezzanine (height to high eave)	7,355	22.50
Ground Level	58,334	11.50
GROSS BUILDING TOTAL	65,689	34.00
GROSS FLOOR AREA*	65,689	

Based on Section 200-3 Definitions:
Floor area, gross. The sum of the gross horizontal areas of the several floors of a building measured from the exterior face of exterior walls, or from the center line of a wall separating two (2) buildings, but not including interior parking spaces, loading space for motor vehicles, or any space where the floor-to-ceiling height is less than six (6) feet.
Floor Area Ratio. Determined by dividing the gross floor area of all buildings on a lot by the area of that lot

OFF-STREET PARKING REQUIREMENTS			
COMMERCIAL/BUSINESS	1 SPACE PER AREA (SF)	BLG. FLOOR AREA (SF)	REQUIRED NO. OF SPACES
Mezzanine	400	7,355	0
Ground Floor (B)	200	7,355	37
Ground Floor (S-1)	Warehouse*	50,979	12
TOTAL		65689.4	49

Per Section 200-22, Required Number of Spaces
 Commercial/Business: one (1) space for each two hundred (200) square feet of gross floor area on the first floor of a building and one (1) space for each four hundred (400) square feet of gross floor area thereafter for all floors used for business purposes, excluding storage area

Warehouse/Industrial: one (1) space for each two (2) employees, plus space for every company-owned and -operated vehicle, plus spaces for customers' vehicles as determined appropriate by the Building Commissioner or Site Plan Administrator

10 warehouse workers (max) = 5 spaces
 5 company owner vehicles (yard trucks) = 5 spaces
 2 customer vehicles (max) = 2 spaces
 *By Right = 12 spaces. Compliant.

Mixed uses: Where a building has a mixture of uses for which off-street parking is required, the number of spaces will be the sum of the requirements of the various individual uses.
Other: Reasonable off-street parking requirements for uses not listed in this section shall be determined by the Site Plan Administrator.

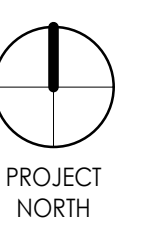
By right, 49 required, currently providing 37 marked spaces and 12 unmarked spaces. Compliant.

218421418



Key Plan

RANDOLPH NORTH BUILDING A



Notes

3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEMATIC DESIGN	2023.10.04

Issued/Revision YYYMMDD

Permit/Seal

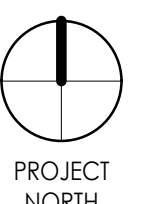
**PRELIMINARY
NOT FOR
CONSTRUCTION**

Scale
Project No. 218421418

DRAWING INDEX

G-002

DRAWING LIST		SCHEMATIC DESIGN	DESIGN DEVELOPMENT	50% CONSTRUCTION DOCUMENTS
SHEET NO.	SHEET NAME			
GENERAL				
G-000	COVER SHEET	■	■	■
G-002	DRAWING INDEX	■	■	■
G-010	SITE LOCATION PLAN	■	■	■
CIVIL				
C-11	GENERAL NOTES AND LEGEND	■	■	■
C1.0	OVERALL EXISTING CONDITIONS AND DEMOLITION PLAN	■	■	■
C1.1	EXISTING CONDITIONS AND DEMOLITION PLAN 1	■	■	■
C1.2	EXISTING CONDITIONS AND DEMOLITION PLAN 2	■	■	■
C1.3	EXISTING CONDITIONS AND DEMOLITION PLAN 3	■	■	■
C2.0	OVERALL SITE IMPROVEMENT PLAN	■	■	■
C2.1	SITE IMPROVEMENT PLAN 1	■	■	■
C2.2	SITE IMPROVEMENT PLAN 2	■	■	■
C2.3	SITE IMPROVEMENT PLAN 3	■	■	■
C3.0	OVERALL GRADING PLAN	■	■	■
C3.1	GRADING PLAN 1	■	■	■
C3.2	GRADING PLAN 2	■	■	■
C3.3	GRADING PLAN 3	■	■	■
C4.0	OVERALL UTILITY PLAN	■	■	■
C4.1	UTILITY PLAN 1	■	■	■
C4.2	UTILITY PLAN 2	■	■	■
C4.3	UTILITY PLAN 3	■	■	■
C5.0	OVERALL DRAINAGE PLAN	■	■	■
C5.1	DRAINAGE PLAN 1	■	■	■
C5.2	DRAINAGE PLAN 2	■	■	■
C5.3	DRAINAGE PLAN 3	■	■	■
LANDSCAPE				
L-100	OVERALL PLAN	■	■	■
L-101	LAYOUT AND MATERIALS 1	■	■	■
L-102	LAYOUT AND MATERIALS 2	■	■	■
L-103	LAYOUT AND MATERIALS 3	■	■	■
L-121	PLANTING PLAN 1	■	■	■
L-122	PLANTING PLAN 2	■	■	■
L-123	PLANTING PLAN 3	■	■	■
L-131	SITE DETAILS 1	■	■	■
L-132	SITE DETAILS 2	■	■	■
L-141	PLANTING DETAILS	■	■	■
ARCHITECTURE				
A-001	STANDARD LEGENDS, SYMBOLS, ABBREVIATIONS, & NOTES	■	■	■
A-011	PARTITION TYPES	■	■	■
A-016	FLOOR / CEILING ASSEMBLY TYPES	■	■	■
A-021	DOOR & HARDWARE SCHEDULES	■	■	■
A-022	DOOR & FRAME DETAILS	■	■	■
A-024	EXTERIOR DOOR DETAILS	■	■	■
A-101	FLOOR PLANS	■	■	■
A-102	ROOF PLAN	■	■	■
A-140	EDGE OF SLAB PLAN	■	■	■
A-171	REFLECTED CEILING PLANS	■	■	■
A-201	EXTERIOR ELEVATIONS	■	■	■
A-211	BUILDING SECTIONS	■	■	■
A-220	WALL SECTIONS	■	■	■
A-221	WALL SECTIONS	■	■	■
A-300	ENVELOPE AND ROOF SYSTEM TYPES	■	■	■
A-400	SECTION DETAILS	■	■	■
A-401	SECTION DETAILS	■	■	■
A-451	HORIZONTAL DETAILS	■	■	■
A-420	STAR PLANS AND SECTIONS	■	■	■
A-522	TYPICAL STEEL PLATE STAIR DETAILS	■	■	■
A-700	INTERIOR FINISH SCHEDULES & NOTES	■	■	■
A-701	ENLARGED OFFICE PLAN	■	■	■
A-710	OFFICE REFLECTED CEILING PLAN	■	■	■
A-720	OFFICE POWER & SIGNAL PLAN	■	■	■
A-730	OFFICE FINISH PLAN	■	■	■
A-750	LOCKER ROOM AND RESTROOM PLANS AND ELEVATIONS	■	■	■
A-760	INTERIOR ELEVATIONS	■	■	■
A-780	FINISH TRANSITION DETAILS	■	■	■
A-790	INTERIOR DETAILS	■	■	■
A-861	CEILING DETAILS	■	■	■
A-881	MILLWORK CABINET DETAILS	■	■	■
A-884	MILLWORK CABINET DETAILS	■	■	■
STRUCTURAL				
S-001	GENERAL NOTES	■	■	■
S-101	FOUNDATION AND LEVEL 1 FLOOR PLAN	■	■	■
S-110	FOUNDATION DETAILS	■	■	■
S-201	PILE LAYOUT	■	■	■
FIRE PROTECTION				
FP-001	FIRE PROTECTION LEGEND, SCHEDULES, AND DETAILS	■	■	■
FP-002	FIRE PROTECTION DETAILS	■	■	■
FP-101A	FIRE PROTECTION LEVEL 1 - NORTH PLAN	■	■	■
FP-101B	FIRE PROTECTION LEVEL 1 - SOUTH PLAN	■	■	■
FP-102A	FIRE PROTECTION LEVEL 2 - NORTH PLAN	■	■	■
FP-102B	FIRE PROTECTION LEVEL 2 - SOUTH PLAN	■	■	■
PLUMBING				
P-001	LEGEND, SCHEDULES & DETAILS	■	■	■
P-002	PLUMBING - DETAILS	■	■	■
P-101A	PLUMBING LEVEL 1 - NORTH PLAN	■	■	■
P-101B	PLUMBING LEVEL 1 - SOUTH PLAN	■	■	■
P-102	PLUMBING LEVEL 2 - SOUTH PLAN	■	■	■
MECHANICAL				
M-001	LEGEND & SCHEDULE	■	■	■
M-002	SCHEDULE	■	■	■
M-101A	MECHANICAL LEVEL 1 - NORTH PLAN	■	■	■
M-101B	MECHANICAL LEVEL 1 - SOUTH PLAN	■	■	■
M-102B	MECHANICAL LEVEL 2 - SOUTH PLAN	■	■	■
M-103A	MECHANICAL ROOF - NORTH PLAN	■	■	■
M-103B	MECHANICAL ROOF - SOUTH PLAN	■	■	■
M-400	DETAILS	■	■	■
M-401	DETAILS	■	■	■
ELECTRICAL				
E-001	ELECTRICAL SYMBOL LIST	■	■	■
E-002	ELECTRICAL EQUIPMENT SCHEDULES	■	■	■
E-003	ELECTRICAL LIGHTING FIXTURE SCHEDULE	■	■	■
E-004	ELECTRICAL LIGHTING FIXTURE SCHEDULE	■	■	■
E-005	ELECTRICAL PANEL SCHEDULES	■	■	■
E-006	ELECTRICAL PANEL SCHEDULES	■	■	■
E-007	ELECTRICAL PANEL SCHEDULES	■	■	■
E-101	ELECTRICAL OVERALL POWER PLAN	■	■	■
E-102A	ELECTRICAL LEVEL 1 - NORTH POWER PLAN	■	■	■
E-102B	ELECTRICAL LEVEL 1 - SOUTH POWER PLAN	■	■	■
E-103A	ELECTRICAL LEVEL 2 - NORTH POWER PLAN	■	■	■
E-103B	ELECTRICAL LEVEL 2 - SOUTH POWER PLAN	■	■	■
E-201	ELECTRICAL OVERALL LIGHTING PLAN	■	■	■
E-202A	ELECTRICAL LEVEL 1 - NORTH LIGHTING PLAN	■	■	■
E-202B	ELECTRICAL LEVEL 1 - SOUTH LIGHTING PLAN	■	■	■
E-203A	ELECTRICAL LEVEL 2 - NORTH LIGHTING PLAN	■	■	■
E-203B	ELECTRICAL LEVEL 2 - SOUTH LIGHTING PLAN	■	■	■
E-301	ELECTRICAL OVERALL FIRE ALARM PLAN	■	■	■
E-302A	ELECTRICAL LEVEL 1 - NORTH FIRE ALARM PLAN	■	■	■
E-302B	ELECTRICAL LEVEL 1 - SOUTH FIRE ALARM PLAN	■	■	■
E-303A	ELECTRICAL LEVEL 2 - NORTH FIRE ALARM PLAN	■	■	■
E-303B	ELECTRICAL LEVEL 2 - SOUTH FIRE ALARM PLAN	■	■	■
E-401	ELECTRICAL ONE-LINE DIAGRAM	■	■	■
E-501	ELECTRICAL SERVICE PLAN	■	■	■
E-502	ELECTRICAL SITE LIGHTING PLAN	■	■	■
E-503	ELECTRICAL SITE POWER PLAN	■	■	■
E-601	ELECTRICAL DETAILS	■	■	■
E-602	ELECTRICAL DETAILS	■	■	■
TELECOMMUNICATIONS				
TC-001	TELECOM COVER SHEET	■	■	■
TC-101	TELECOM OVERALL PLAN	■	■	■
TC-102A	TELECOM LEVEL 1 - NORTH PLAN	■	■	■
TC-102B	TELECOM LEVEL 1 - SOUTH PLAN	■	■	■
TC-103A	TELECOM LEVEL 2 - NORTH PLAN	■	■	■
TC-103B	TELECOM LEVEL 2 - SOUTH PLAN	■	■	■
TC-201	TELECOM SERVER CLOSET LAYOUT AND ELEVATION	■	■	■
TC-202	TELECOM IDF CLOSET LAYOUT AND ELEVATION	■	■	■
TC-401	TELECOM DETAILS - SHEET 1	■	■	■
TC-402	TELECOM DETAILS - SHEET 2	■	■	■
TC-502	TELECOM SITE PLAN	■	■	■
SECURITY				
SE-001	SECURITY COVER SHEET	■	■	■
SE-101	SECURITY OVERALL PLAN	■	■	■
SE-102A	SECURITY LEVEL 1 - NORTH PLAN	■	■	■
SE-102B	SECURITY LEVEL 1 - SOUTH PLAN	■	■	■
SE-103A	SECURITY LEVEL 2 - NORTH PLAN	■	■	■
SE-103B	SECURITY LEVEL 2 - SOUTH PLAN	■	■	■
SE-301	SECURITY ELEVATION AND RISER DIAGRAM	■	■	■
SE-401	SECURITY DETAILS - SHEET 1	■	■	■
SE-402	SECURITY DETAILS - SHEET 2	■	■	■
SE-502	SECURITY SITE PLAN	■	■	■
FLUIDS & FUEL				
EQ-101	FLUID DISTRIBUTION	■	■	■
EQ-201	FUEL ISLAND LAYOUT PLAN	■	■	■
EQ-202	FUEL SYSTEM DETAILS	■	■	■
EQ-203	FUEL SYSTEM DETAILS	■	■	■



NO.	DESCRIPTION	DATE
3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEMATIC DESIGN	2023.10.06

Issued/Revision
YYYY.MM.DD

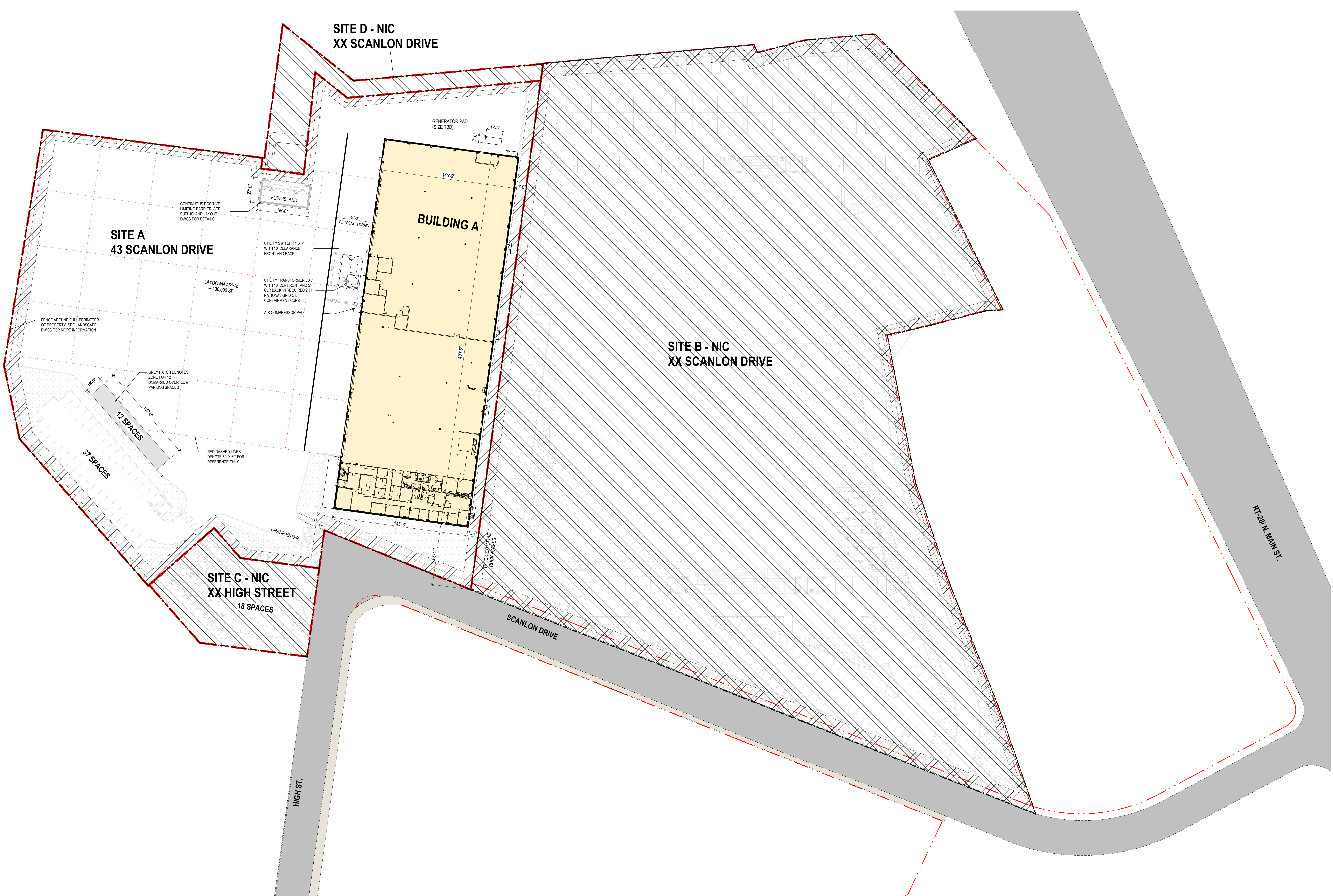
Permit/Seal

**PRELIMINARY
NOT FOR
CONSTRUCTION**

Scale 1" = 40'-0"
Project No. 218421418

SITE LOCATION PLAN

A B C D E



1 G-010 SITE PLAN - MAXIM CRANE - 5 ACRES
1" = 40'-0"

© 2018 Stantec
All Rights Reserved
02/16/2024 10:30 AM
PROJECT: 218421418
SHEET: G-010

REFERENCE

- 1. EXISTING CONDITION AND PROPERTY INFORMATION PROVIDED BY CHA CONSULTING, INC. IN APRIL OF 2022.

GENERAL NOTES

- 1. THE STATE OF MASSACHUSETTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES 1995 EDITION AND THE SUPPLEMENTAL SPECIFICATIONS 2002 EDITION, OR LATEST REVISION, AND THE MASSACHUSETTS STANDARD DETAILS AND TOWN OF RANDOLPH STANDARD DETAILS AND CONSTRUCTION STANDARDS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO.

DEMOLITION NOTES

- 1. ALL DEMOLITION SHALL BE COORDINATED WITH THE OWNER PRIOR TO START OF WORK.

STORMWATER MAINTENANCE

- 1. PREVENTATIVE MAINTENANCE SHOULD BE PERFORMED AT LEAST TWICE A YEAR, AND IDEALLY SEDIMENT SHOULD BE REMOVED FROM PRETREATMENT BMPs AFTER EVERY MAJOR STORM EVENT.

SURVEY NOTES

- 1. INFORMATION SHOWN HEREON IS THE RESULT OF AN ON-THE-GROUND SURVEY PERFORMED BY CHA CONSULTING, INC. IN APRIL OF 2022.

- 8. THE WORD "CERTIFY" IS UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE LAND SURVEYOR WHICH IS BASED ON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF.

EROSION AND SEDIMENTATION CONTROL NOTES

- 1. SOIL EROSION AND SEDIMENTATION CONTROLS SHALL BE PROVIDED IN ACCORDANCE WITH THE "MASSACHUSETTS SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" THE NPDES GENERAL PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITY AND THE NOTES AND DETAILS SHOWN IN THIS PLAN SET.

GRADING AND UTILITY NOTES

- 1. ALL WORK PERFORMED AND ALL MATERIALS FURNISHED SHALL CONFORM WITH THE LINES AND GRADES ON THE PLANS AND SITE WORK SPECIFICATIONS, UNLESS OTHERWISE DIRECTED.

LAYOUT NOTES

- 1. ALL LINES ARE PERPENDICULAR OR PARALLEL TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.

EXISTING LEGEND

Legend table listing existing features such as LOCUS PROPERTY LINE, INTERNAL PROPERTY LINE, ABUTTER PROPERTY LINE, EASEMENT LINE, ZONING, INDEX CONTOUR, etc.

PROPOSED LEGEND

Legend table listing proposed features such as CURBING(TYPE), EDGE OF PAVEMENT, RETAINING WALL, INTERMEDIATE CONTOUR, INDEX CONTOUR, etc.

Legend table listing abbreviations such as AD-1 = AREA DRAIN (SEE DETAIL), ATC = ADJUST TO GRADE, BB = BITUMINOUS BERM, etc.

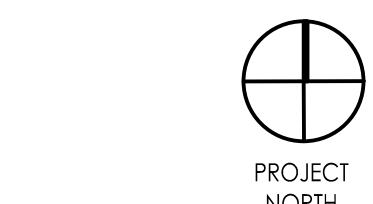
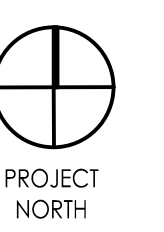


Table with 3 columns: Description, Date, and Revision/Issued/Revision.

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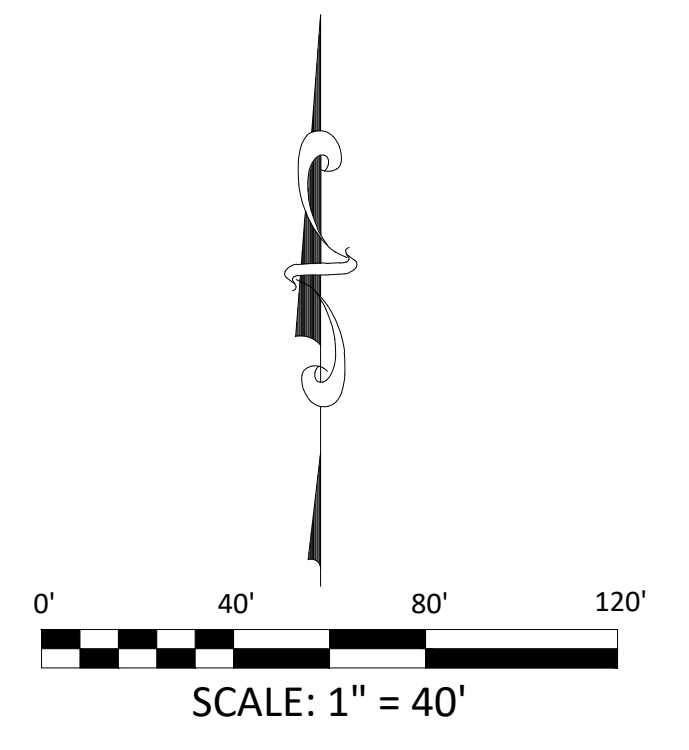
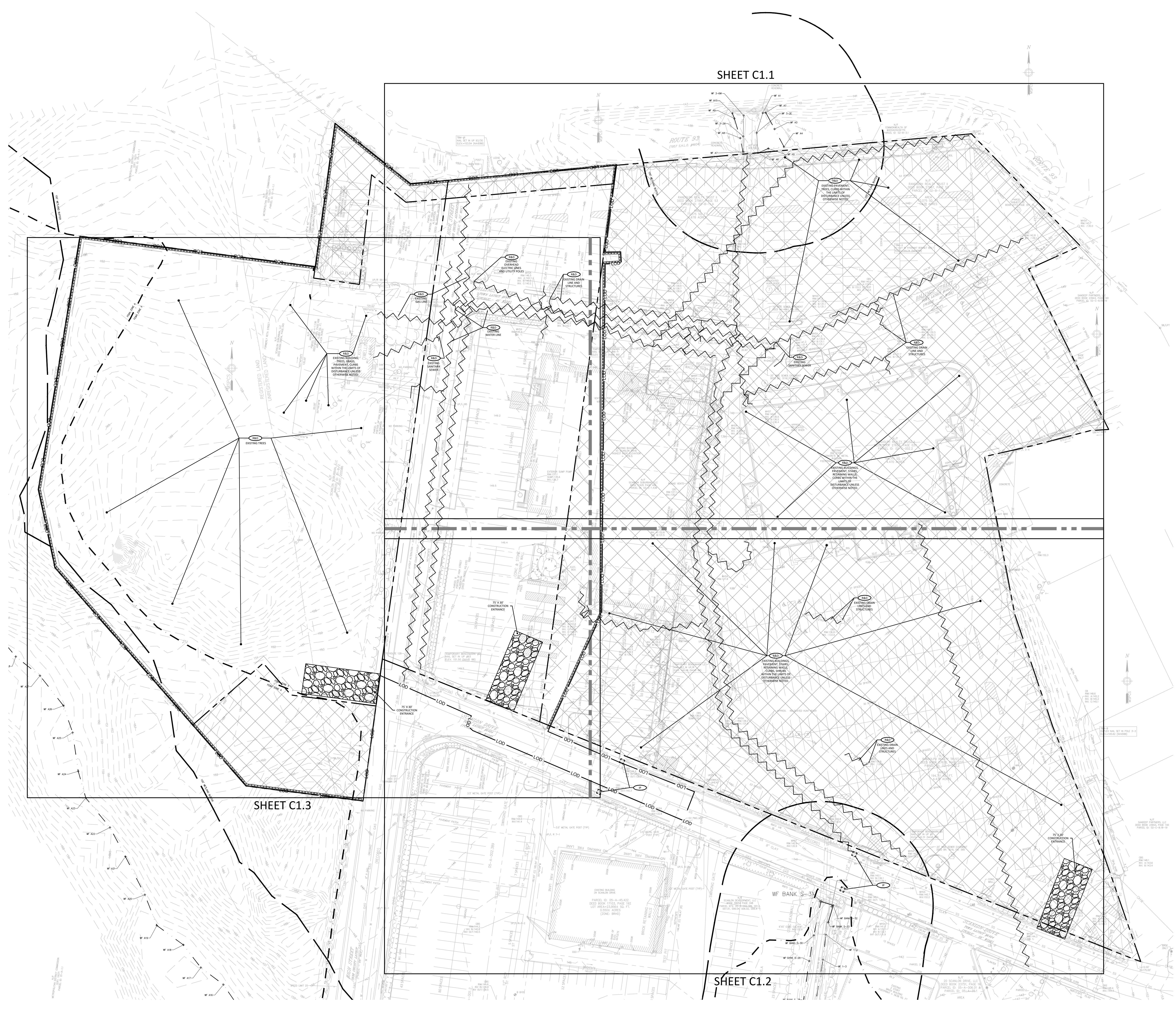
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2	2023.12.15	XXXXXX
3	2023.10.04	XXXXXX

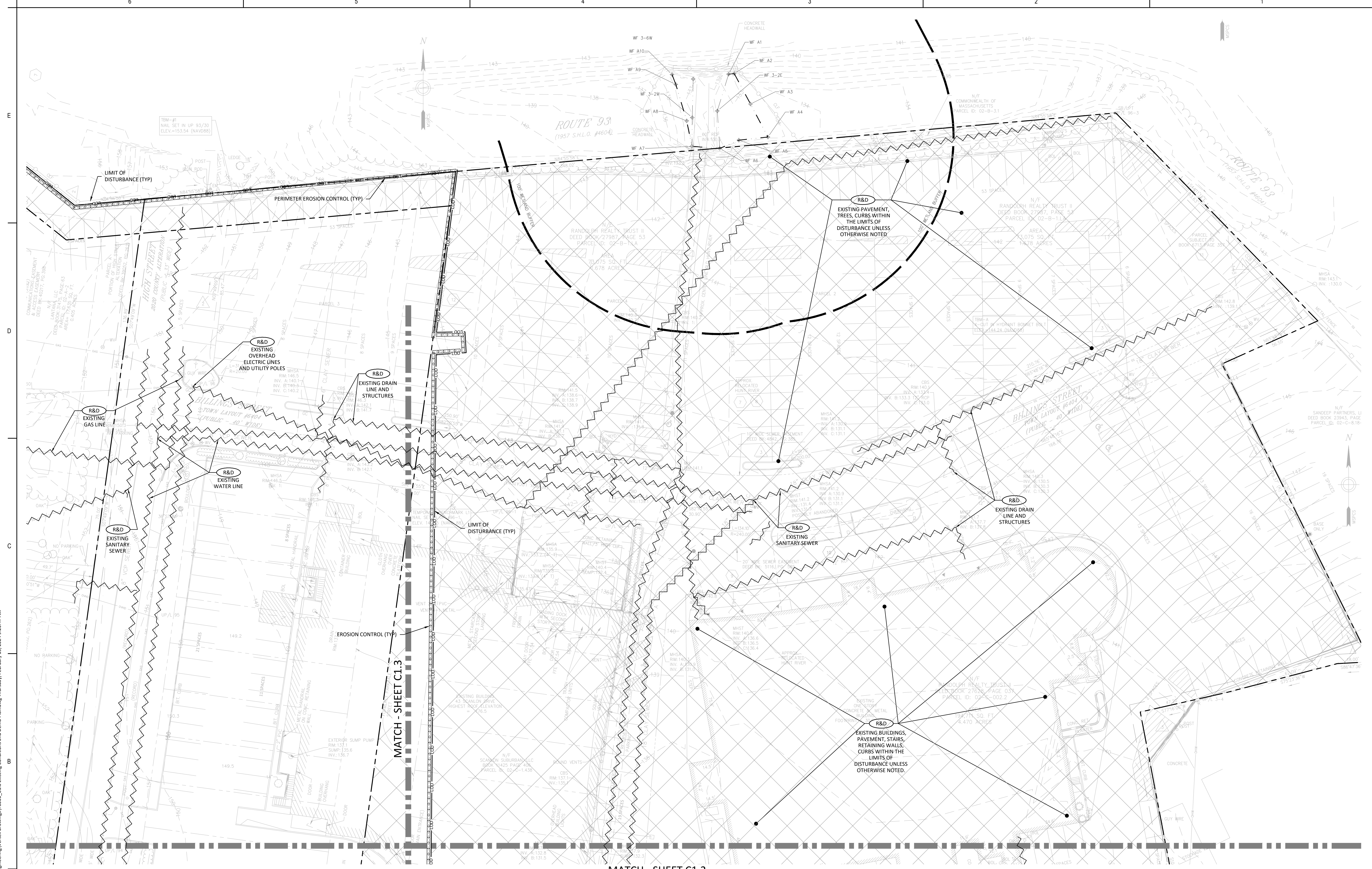
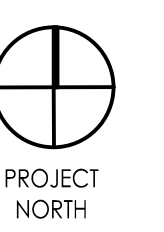
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**OVERALL EXISTING
 CONDITIONS AND
 DEMOLITION PLAN**

C1.0

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- NOTES:**
- EXISTING UTILITY INFORMATION SHOWN HEREON IS BASED UPON PREVIOUS DESIGN DRAWINGS AND RECORD INFORMATION. LOCATIONS, SIZES, AND DEPTHS OF UTILITIES HAVE NOT BEEN SURVEYED IN THE FIELD. ADDITIONAL SITE SURVEY IS ONGOING.
 - DEMOLITION OF EXISTING BUILDING AND SITE FEATURES SHOWN ON SHEETS C1.1 THROUGH C1.3 ARE INCLUSIVE OF ALL PHASES. PROPOSED DEMOLITION ACTIVITIES SHOWN ON THESE SHEETS ARE NOT INTENDED TO INDICATE THE PHASE IN WHICH THEY OCCUR. SEE PHASING DRAWINGS FOR DEMOLITION SPECIFIC TO PHASING.
 - THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE PLANS ARE INTENDED TO REPRESENT THE MINIMUM CONTROLS NECESSARY TO MEET ANTICIPATED SITE CONDITIONS. ADDITIONAL MEASURES SHALL BE IMPLEMENTED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
 - INSTALL EROSION CONTROLS DOWNSTREAM OF ANY DISTURBED AREAS TO REDUCE POTENTIAL FOR EROSION. CONTRACTOR SHALL INDICATE LOCATIONS OF EROSION CONTROLS FOR REVIEW WITH GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCING DISTURBANCE. THE DEMOLITION IS PROPOSED TO BE CONDUCTED IN PHASES. EROSION CONTROLS SHALL BE RELOCATED AS NECESSARY DURING EACH PHASE.
 - INSTALL CHAIN LINK FENCE TREE PROTECTION PER DETAIL. AT THE LOCATIONS SHOWN ON THE PLAN TO PROTECT EXISTING TREES SPECIFICALLY INDICATED ON THE PLAN. LAYOUT OF FENCE SHALL BE REVIEWED AND APPROVED BY THE LANDSCAPE ARCHITECT. TREE PROTECTION SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF CONSTRUCTION.
 - ALL EXISTING DRAINAGE AND SEWER SHALL BE MAINTAINED OR REROUTED AS NECESSARY UNTIL PERMANENT PIPING IS INSTALLED.
 - ELECTRICAL DEMOLITION IS SHOWN FOR INFORMATION ONLY. REFER TO ELECTRICAL PLANS FOR COMPLETE EXTENT OF ELECTRICAL DEMOLITION.
 - PROVIDE INLET PROTECTION AT ALL EXISTING DRAINAGE INLETS.
 - ALL ITEMS TO BE REMOVED AND STOCKPILED SHALL BE COORDINATED WITH OWNER FOR STOCKPILE LOCATIONS. AT THIS TIME, THE OWNER HAS NOT IDENTIFIED ITEMS FOR STOCKPILE.
 - ALL ITEMS MARKED FOR RE-USE SHALL BE STOCKPILED ONSITE, PROTECTED AND RE-INSTALLED AS SHOWN ON THE LANDSCAPE PLANS.
 - DRAINAGE FEATURES AND UTILITIES TO BE MAINTAINED UNLESS OTHERWISE NOTED.
 - TOTAL AREA OF DISTURBANCE: 13.18 ACRES.
 - CONTRACTOR TO REESTABLISH BENCHMARKS IN ALTERNATE LOCATION PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL COORDINATE CLEARING OF ALL ABUTTER ENCROACHMENTS WITH THE OWNER PRIOR TO CONSTRUCTION. IT IS NOT EXPECTED THAT ENCROACHMENTS WILL BE ENCOUNTERED ON THIS SITE.
 - INSTALL CONSTRUCTION ENTRANCE AT ALL ENTRY/EXIT POINT FOR VEHICULAR TRAFFIC FOR EACH PHASE OF THE PROJECT. LOCATION TO BE DETERMINED BY PHASING. IT SHALL BE ASSUMED THAT TWO (2) WILL BE NECESSARY THROUGHOUT CONSTRUCTION.
 - ALL EARTH DISTURBANCE SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
 - ACTIVE UTILITY LINES (INCLUDING SEWER, WATER, AND DRAINAGE), CONTRACTOR SHALL PROVIDE 1 WEEK NOTIFICATION FOR ANY POSSIBLE DISRUPTION OF SERVICE TO OWNER, OWNER'S PROJECT MANAGER AND ARCHITECT; PROVIDE NOTIFICATION FOR CONNECTING, DISCONNECTING, TURNING ON OR TURNING OFF ANY SERVICE WHICH MAY AFFECT OWNER'S OPERATIONS.
 - CONTRACTOR SHALL PROVIDE 72 HOUR (3 WORKING DAYS) NOTICE TO LOCAL FIRE DEPARTMENT OF DISRUPTIONS.
 - DISTURBANCE ON ACTIVE GAS LINES SHALL BE COORDINATED WITH UTILITY PROVIDER.
 - THE CONTRACTOR SHALL CONFIRM LOCATION AND ELEVATION OF THE EXISTING DRAINAGE MANHOLES AND PIPES INDICATED. IT SHALL BE ASSUMED THAT AN ADDITIONAL 60 FEET OF PIPE WILL NEED TO BE REMOVED AND DISPOSED.
 - ANY UNFORESEEN UNDERGROUND TRANSIT PIPE OR OTHER UNFORESEEN HAZARDOUS MATERIAL SHALL BE ABATED IN ACCORDANCE WITH THE SPECIFICATIONS AND ALL LOCAL, STATE AND FEDERAL REGULATIONS.
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 - PERIMETER EROSION CONTROL SHALL BE PROVIDED.

Issued/Revision	DATE
1	2024.09.16
2	2023.12.15
3	2023.10.04
4	YYYYMMDD

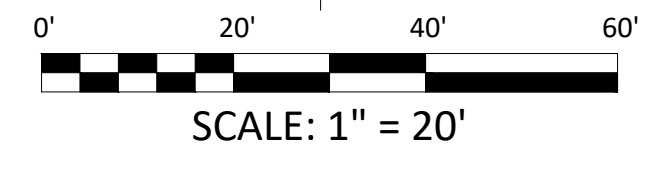
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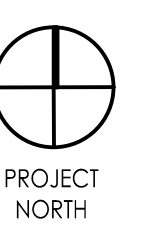
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**EXISTING CONDITIONS
 AND DEMOLITION
 PLAN 1**

C1.1



Key Plan



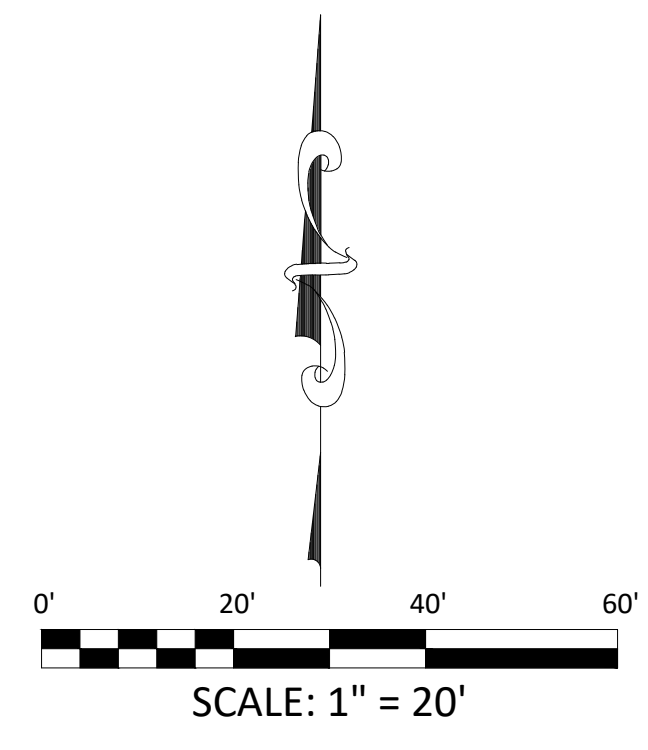
Notes

MATCH - SHEET C1.1



NOTES:

1. EXISTING UTILITY INFORMATION SHOWN HEREON IS BASED UPON PREVIOUS DESIGN DRAWINGS AND RECORD INFORMATION. LOCATIONS, SIZES, AND DEPTHS OF UTILITIES HAVE NOT BEEN SURVEYED IN THE FIELD. ADDITIONAL SITE SURVEY IS ONGOING.
2. DEMOLITION OF EXISTING BUILDING AND SITE FEATURES SHOWN ON SHEETS C1.1 THROUGH C1.3 ARE INCLUSIVE OF ALL PHASES. PROPOSED DEMOLITION ACTIVITIES SHOWN ON THESE SHEETS ARE NOT INTENDED TO INDICATE THE PHASE IN WHICH THEY OCCUR. SEE PHASING DRAWINGS FOR DEMOLITION SPECIFIC TO PHASING.
3. THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE PLANS ARE INTENDED TO REPRESENT THE MINIMUM CONTROLS NECESSARY TO MEET ANTICIPATED SITE CONDITIONS. ADDITIONAL MEASURES SHALL BE IMPLEMENTED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
4. INSTALL EROSION CONTROLS DOWNSTREAM OF ANY DISTURBED AREAS TO REDUCE POTENTIAL FOR EROSION. CONTRACTOR SHALL INDICATE LOCATIONS OF EROSION CONTROLS FOR REVIEW WITH GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCING DISTURBANCE. THE DEMOLITION IS PROPOSED TO BE CONDUCTED IN PHASES. EROSION CONTROLS SHALL BE RELOCATED AS NECESSARY DURING EACH PHASE.
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7. ELECTRICAL DEMOLITION IS SHOWN FOR INFORMATION ONLY. REFER TO ELECTRICAL PLANS FOR COMPLETE EXTENT OF ELECTRICAL DEMOLITION.
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18. CONTRACTOR SHALL PROVIDE 72 HOUR (3 WORKING DAYS) NOTICE TO LOCAL FIRE DEPARTMENT OF DISRUPTIONS.
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27. PERIMETER EROSION CONTROL SHALL BE PROVIDED.



Issue/Revision	DATE
1	2024.09.16
2	2023.12.15
3	2023.10.04

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 Project No. 78000

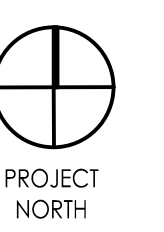
EXISTING CONDITIONS
 AND DEMOLITION
 PLAN 2

C1.2

NOTES:

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- DRAINAGE FEATURES AND UTILITIES TO BE MAINTAINED UNLESS OTHERWISE NOTED.
- TOTAL AREA OF DISTURBANCE: 13.18 ACRES.
- CONTRACTOR TO REESTABLISH BENCHMARKS IN ALTERNATE LOCATION PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE CLEARING OF ALL BUTTER ENCROACHMENTS WITH THE OWNER PRIOR TO CONSTRUCTION. IT IS NOT EXPECTED THAT ENCROACHMENTS WILL BE ENCOUNTERED ON THIS SITE.
- INSTALL CONSTRUCTION ENTRANCE AT ALL ENTRY/EXIT POINT FOR VEHICULAR TRAFFIC FOR EACH PHASE OF THE PROJECT. LOCATION TO BE DETERMINED BY PHASING. IT SHALL BE ASSUMED THAT TWO (2) WILL BE NECESSARY THROUGHOUT CONSTRUCTION.
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- PERIMETER EROSION CONTROL SHALL BE PROVIDED.

Key Plan



Notes

NO.	DESCRIPTION	DATE
1	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
3	SCHEMATIC DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

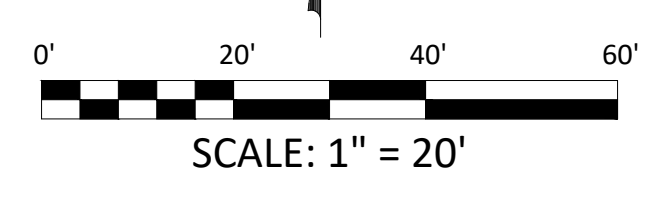
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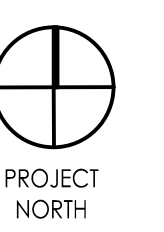
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**EXISTING CONDITIONS
AND DEMOLITION
PLAN 3**

C1.3



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Issued/Revision	DATE
1	2024.02.16
2	2023.12.15
3	2023.10.04

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SHEET C2.1

SHEET C2.2

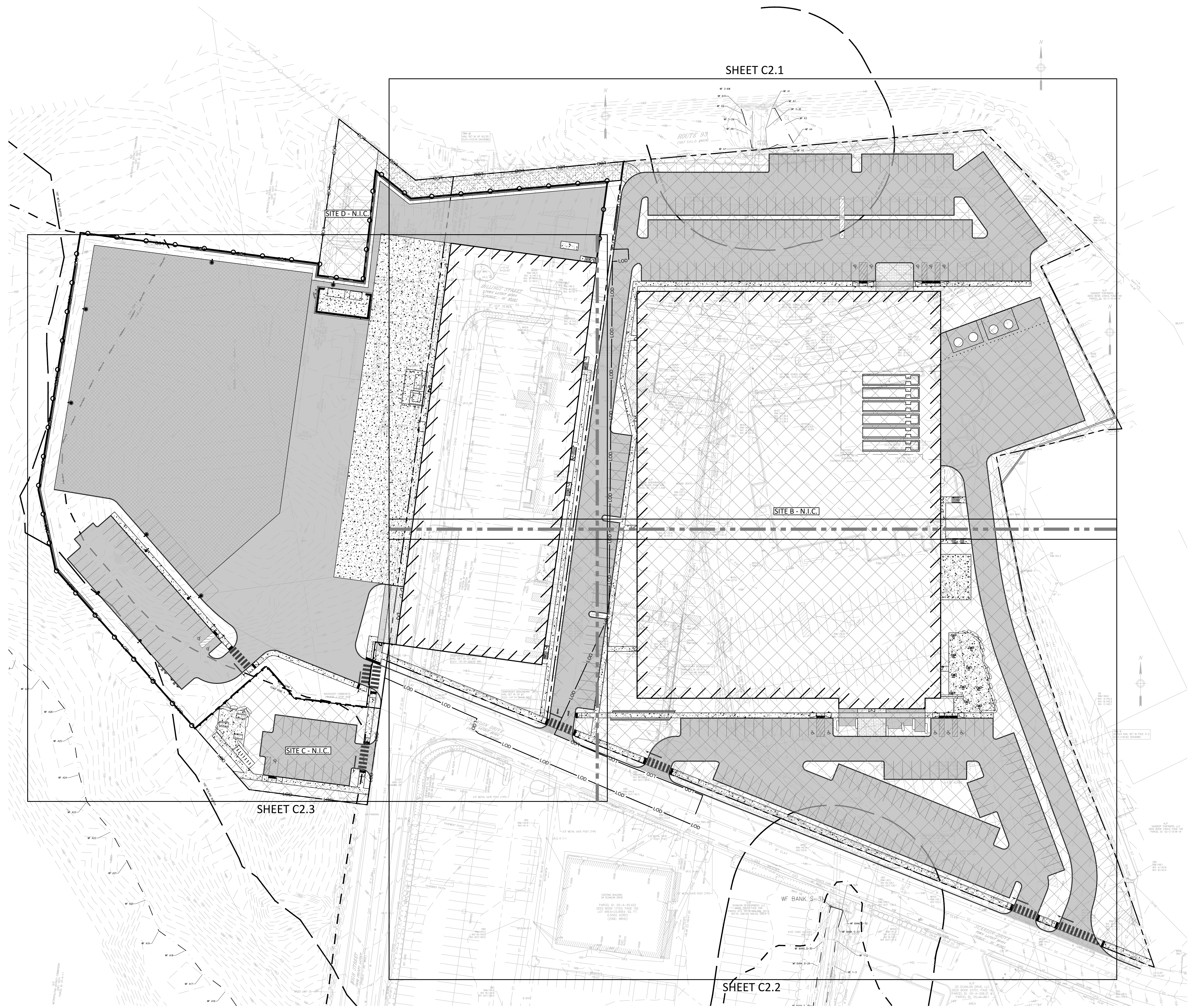
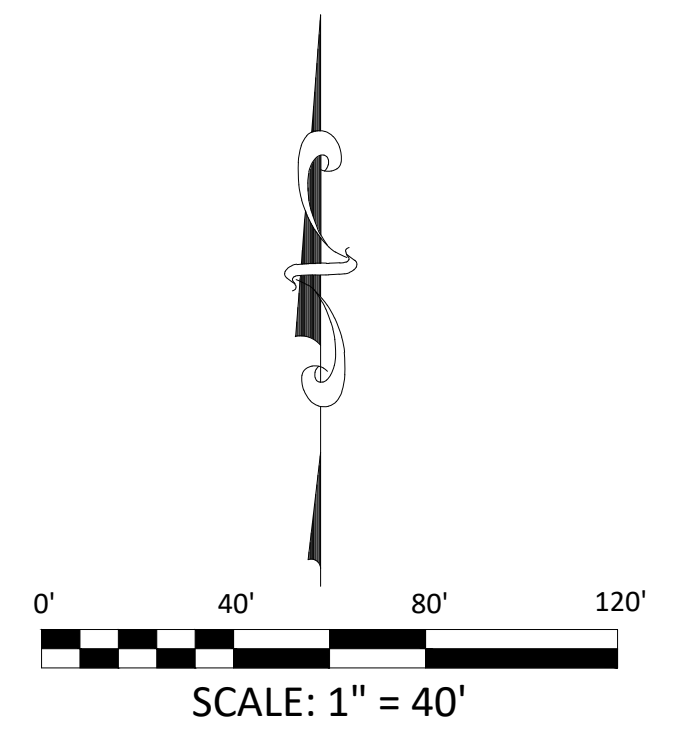
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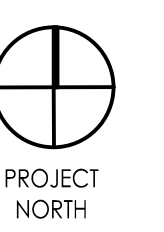
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SITE B - N.I.C.

SITE C - N.I.C.

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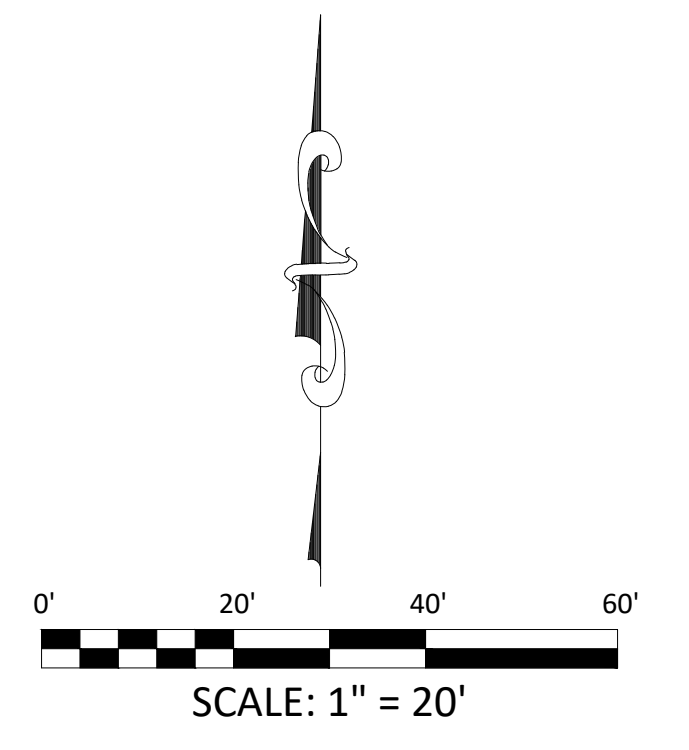
SITE B - N.I.C.

MATCH - SHEET C2.2

MATCH - SHEET C2.3

- NOTES:**
- EROSION CONTROL MEASURES SHALL BE IMPLEMENTED FOR THE DURATION OF CONSTRUCTION. AT A MINIMUM, PERIMETER HAY BALES, VEHICLE TRACKING CONTROL, INLET PROTECTION, CONCRETE WASHOUT AREAS AND TEMPORARY SEDIMENTATION BASINS SHOULD BE CONSIDERED
 - GRANITE CURB SHALL BE PROVIDED IN ALL PARKING AREAS AT THE EDGE OF THE PAVEMENT AND ADJACENT TO SIDEWALKS
 - CURB, BERM, AND WALKWAY RADII SHALL BE 2 FEET UNLESS NOTED ON PLANS.
 - WHERE SIDEWALKS INTERSECT CURB LINES, ADA, MAAB COMPLIANT CURB RAMP WITH DETECTABLE WARNING MAT SHALL BE INSTALLED. DETECTABLE WARNING PANELS SHALL BE CAST IRON, SEE SPECIFICATION SECTION 32.13.12.
 - CURB & GUTTER RELATED DIMENSIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED.
 - ALL PAVEMENT MARKINGS ONSITE SHALL BE WATERBOURNE, CONFORMING TO MASSACHUSETTS STANDARD SPECIFICATIONS.
 - CONCRETE WALKWAY MATERIALS SHOWN FOR CLARITY ONLY. REFER TO LANDSCAPE PLANS FOR ALL WALKWAY MATERIALS, FINISHES, AND SCORING.

	HEAVY-DUTY BITUMINOUS CONCRETE PAVEMENT: 1.5" FINISH COURSE OVER 2" BINDER COURSE OVER 8.5" PROCESSED GRAVEL OVER 12" COMPACTED SUBGRADE
	SIDEWALK CONCRETE RE: LANDSCAPE FOR CONCRETE TYPE
	POROUS PAVEMENT RE: SITE DETAILS
	SITE NOT INCLUDED (N.I.C.)



Issued/Revision	DATE
1	2024.02.16
2	2023.12.15
3	2023.10.04
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Permit/Seal

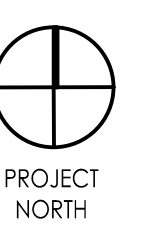
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 Project No. 78000

**SITE IMPROVEMENT
 PLAN 1**

C2.1

Key Plan



Notes

1	ISSUED FOR PERMIT	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
4	ISSUED FOR PERMIT	2024.02.16
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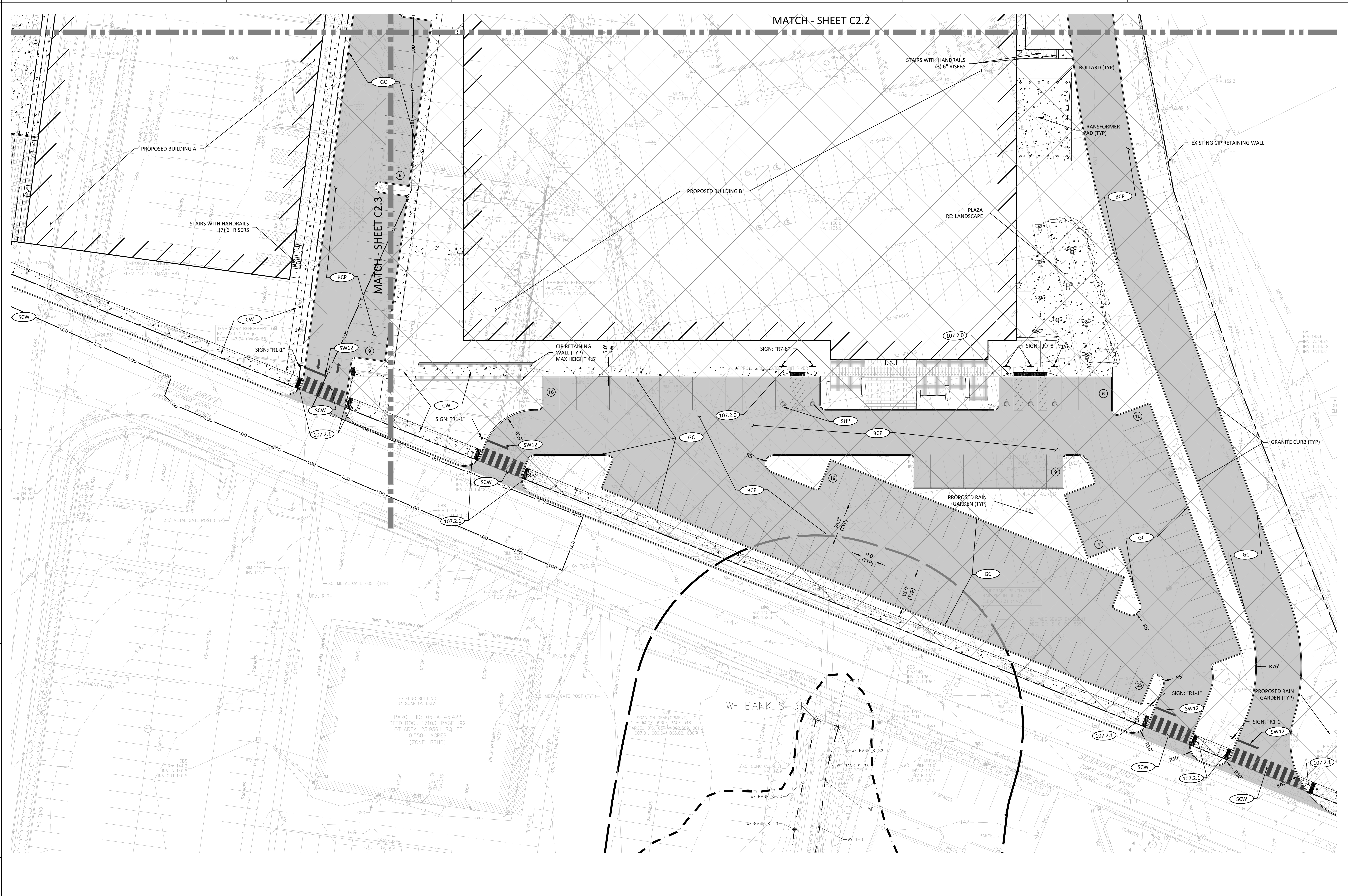
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NOT FOR
CONSTRUCTION**

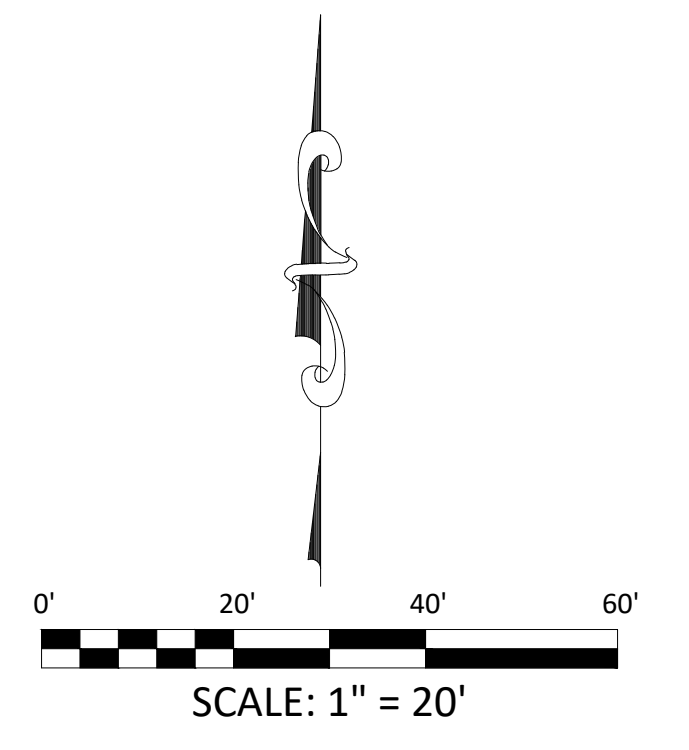
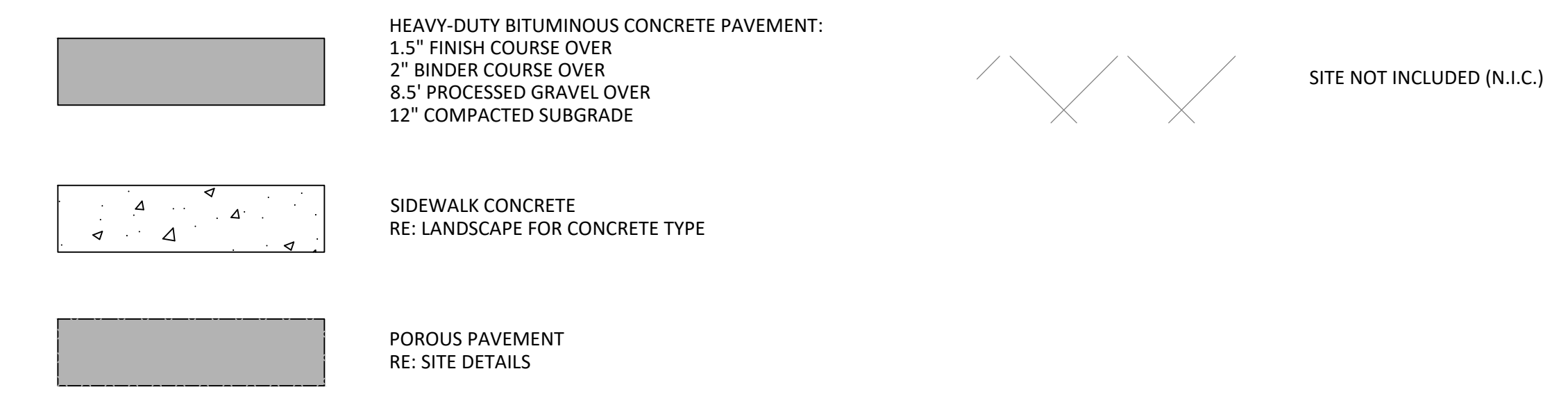
Scale AS NOTED
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**SITE IMPROVEMENT
PLAN 2**

C2.2

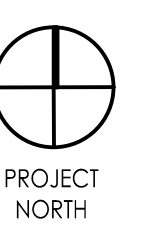


- NOTES:**
- EROSION CONTROL MEASURES SHALL BE IMPLEMENTED FOR THE DURATION OF CONSTRUCTION. AT A MINIMUM, PERIMETER HAY BALES, VEHICLE TRACKING CONTROL, INLET PROTECTION, CONCRETE WASHOUT AREAS AND TEMPORARY SEDIMENTATION BASINS SHOULD BE CONSIDERED
 - GRANITE CURB SHALL BE PROVIDED IN ALL PARKING AREAS AT THE EDGE OF THE PAVEMENT AND ADJACENT TO SIDEWALKS
 - CURB, BERM, AND WALKWAY RADII SHALL BE 2 FEET UNLESS NOTED ON PLANS.
 - WHERE SIDEWALKS INTERSECT CURB LINES, ADA, MAAB COMPLIANT CURB RAMP WITH DETECTABLE WARNING MAT SHALL BE INSTALLED. DETECTABLE WARNING PANELS SHALL BE CAST IRON, SEE SPECIFICATION SECTION 32.13.12.
 - CURB & GUTTER RELATED DIMENSIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED.
 - ALL PAVEMENT MARKINGS ONSITE SHALL BE WATERBOURNE, CONFORMING TO MASSACHUSETTS STANDARD SPECIFICATIONS.
 - CONCRETE WALKWAY MATERIALS SHOWN FOR CLARITY ONLY. REFER TO LANDSCAPE PLANS FOR ALL WALKWAY MATERIALS, FINISHES, AND SCORING.



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Key Plan



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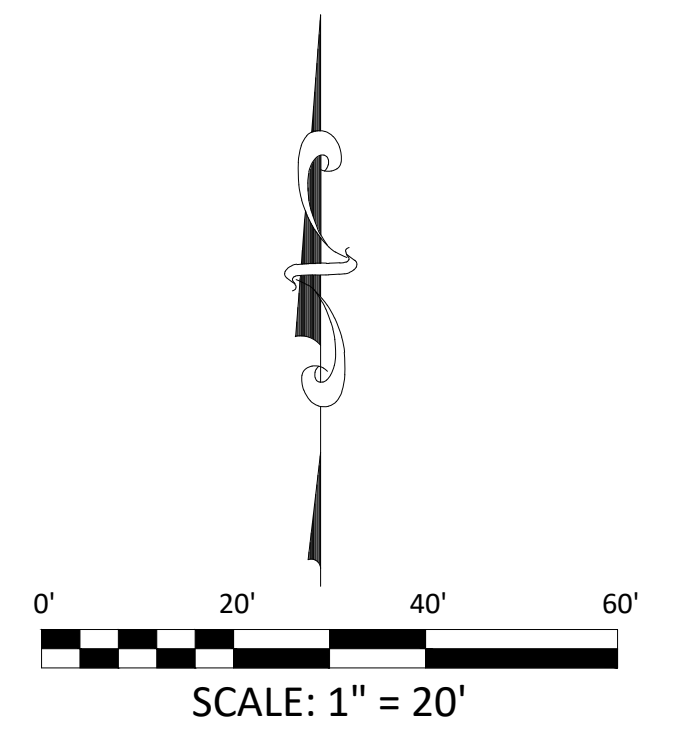
NOTES:

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2. GRANITE CURB SHALL BE PROVIDED IN ALL PARKING AREAS AT THE EDGE OF THE PAVEMENT AND ADJACENT TO SIDEWALKS.
3. CURB, BERM, AND WALKWAY RADII SHALL BE 2 FEET UNLESS NOTED ON PLANS.
4. WHERE SIDEWALKS INTERSECT CURB LINES, ADA, MAAB COMPLIANT CURB RAMP WITH DETECTABLE WARNING MAT SHALL BE INSTALLED. DETECTABLE WARNING PANELS SHALL BE CAST IRON, SEE SPECIFICATION SECTION 32 13 12.
5. CURB & GUTTER RELATED DIMENSIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED.
6. ALL PAVEMENT MARKINGS ONSITE SHALL BE WATERBOURNE, CONFORMING TO MASSACHUSETTS STANDARD SPECIFICATIONS.
7. CONCRETE WALKWAY MATERIALS SHOWN FOR CLARITY ONLY. REFER TO LANDSCAPE PLANS FOR ALL WALKWAY MATERIALS, FINISHES, AND SCORING.

MATCH - SHEET C2.1

	HEAVY-DUTY BITUMINOUS CONCRETE PAVEMENT: 1.5" FINISH COURSE OVER 2" BINDER COURSE OVER 8.5" PROCESSED GRAVEL OVER 12" COMPACTED SUBGRADE
	SIDEWALK CONCRETE RE: LANDSCAPE FOR CONCRETE TYPE
	POROUS PAVEMENT RE: SITE DETAILS
	SITE NOT INCLUDED (N.I.C.)

MATCH - SHEET C2.2



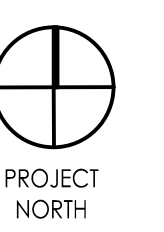
Issue/Revision	Date
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2	2023.12.15
3	2023.10.04
4	YYYYMMDD

Permit/Seal

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NOT FOR
CONSTRUCTION**

Scale AS NOTED
 Project No. 78000
**SITE IMPROVEMENT
PLAN 3**

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Issued/Revision	DATE
1	2024.02.16
2	2023.12.15
3	2023.10.04

Permit/Seal	DATE
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 CONSTRUCTION**

Scale AS NOTED
 Project No. 78000

**OVERALL GRADING
 PLAN**

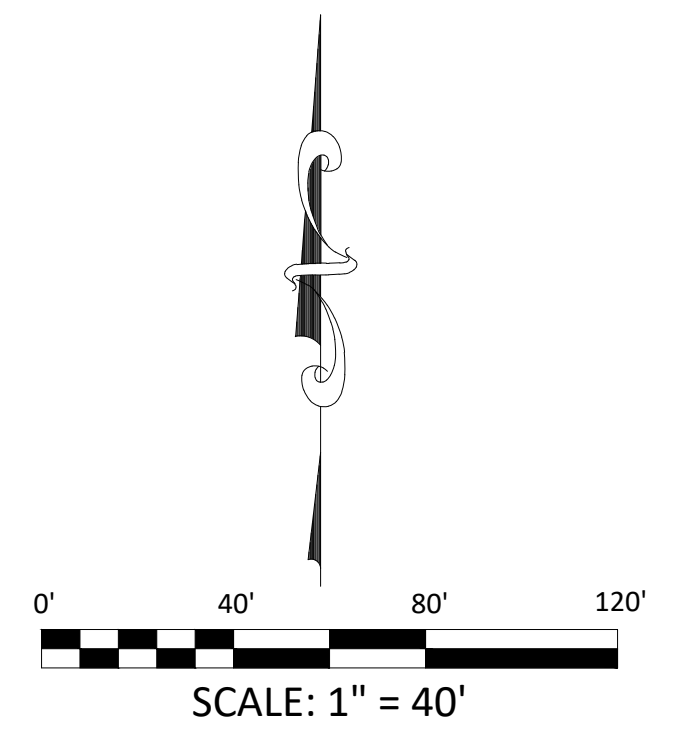
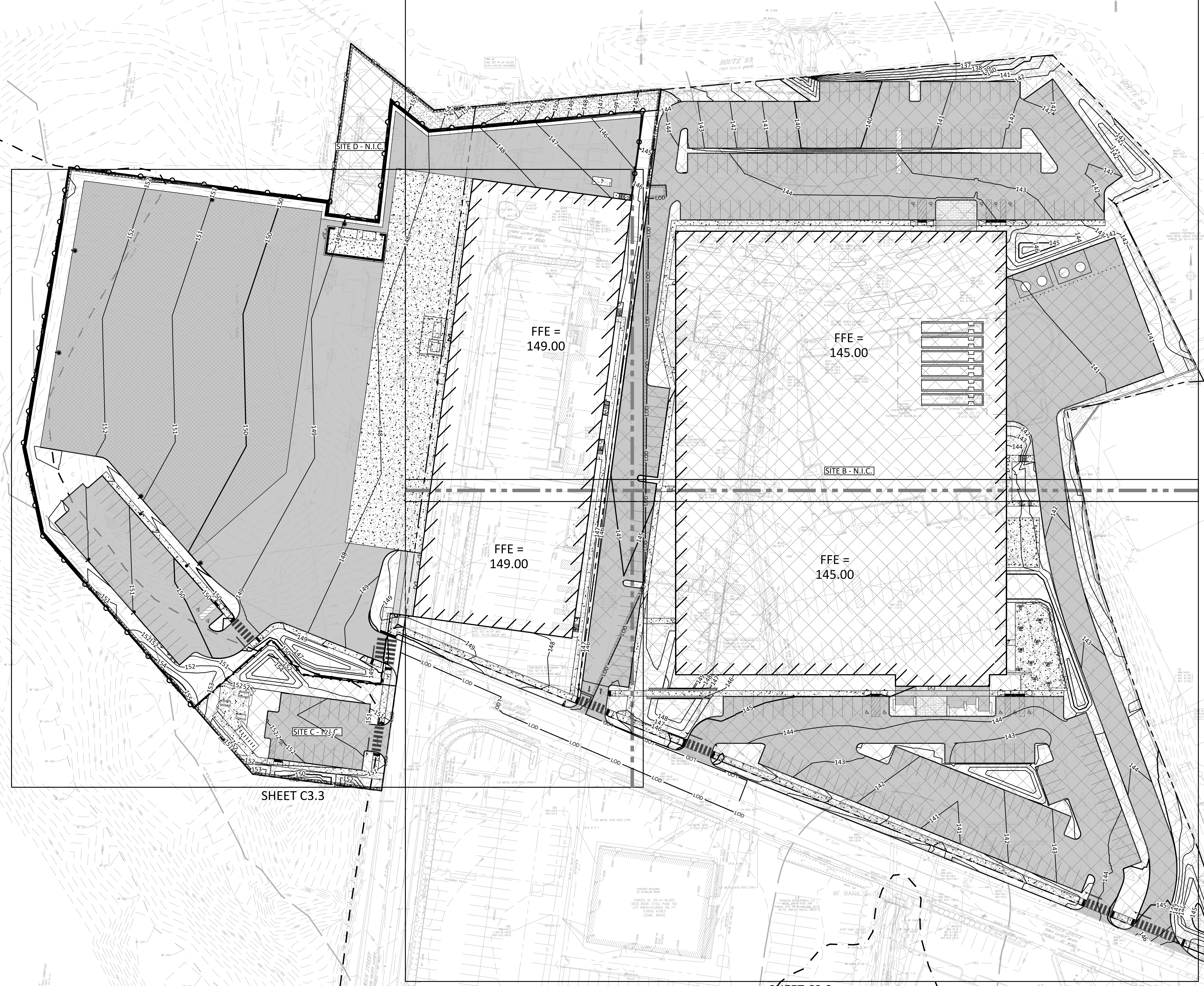
C3.0

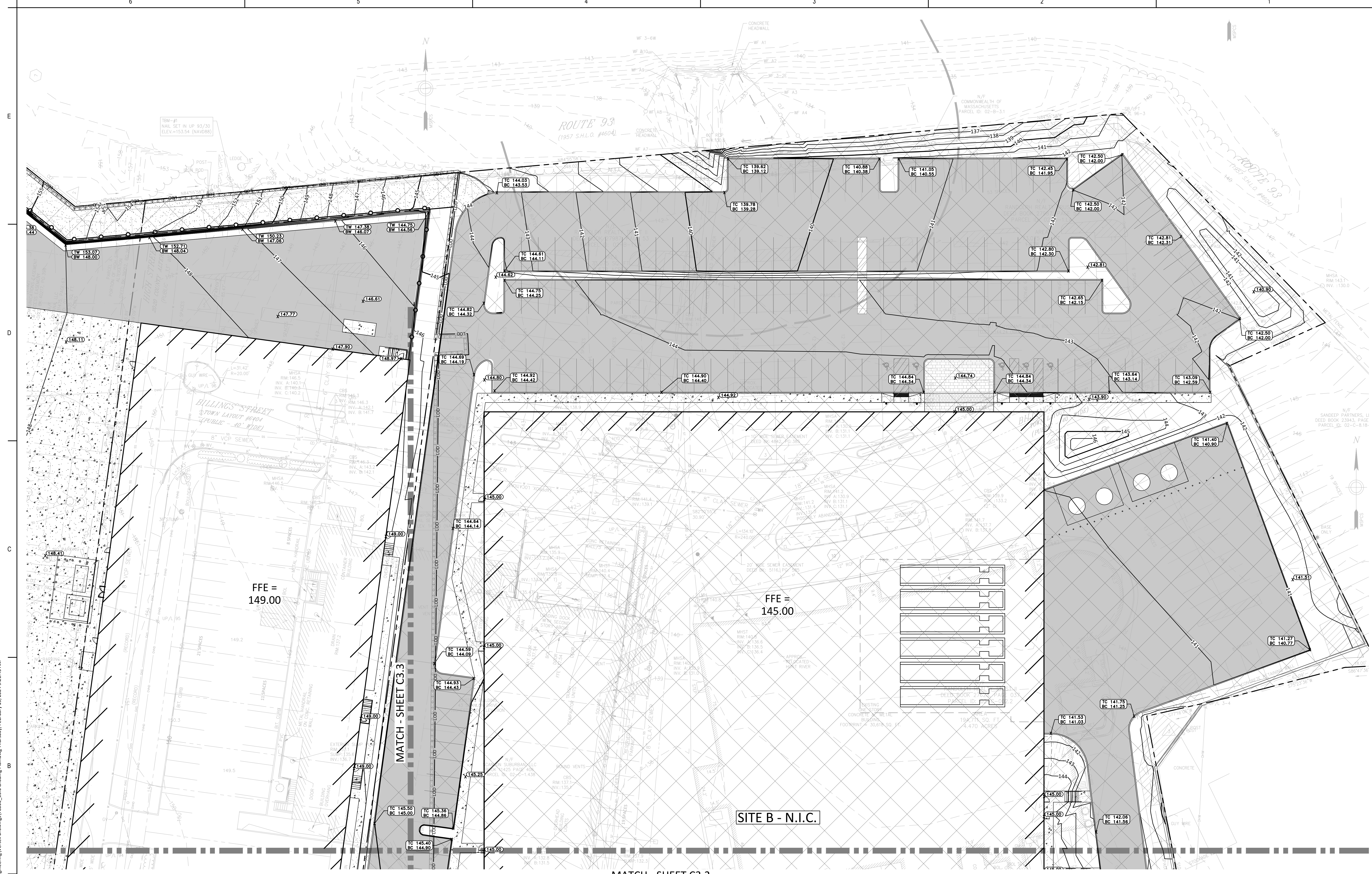
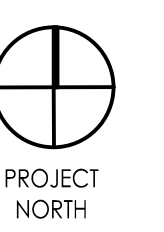
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SHEET C3.1

SHEET C3.2

SHEET C3.3





FFE = 149.00

FFE = 145.00

SITE B - N.I.C.

MATCH - SHEET C3.2

MATCH - SHEET C3.3

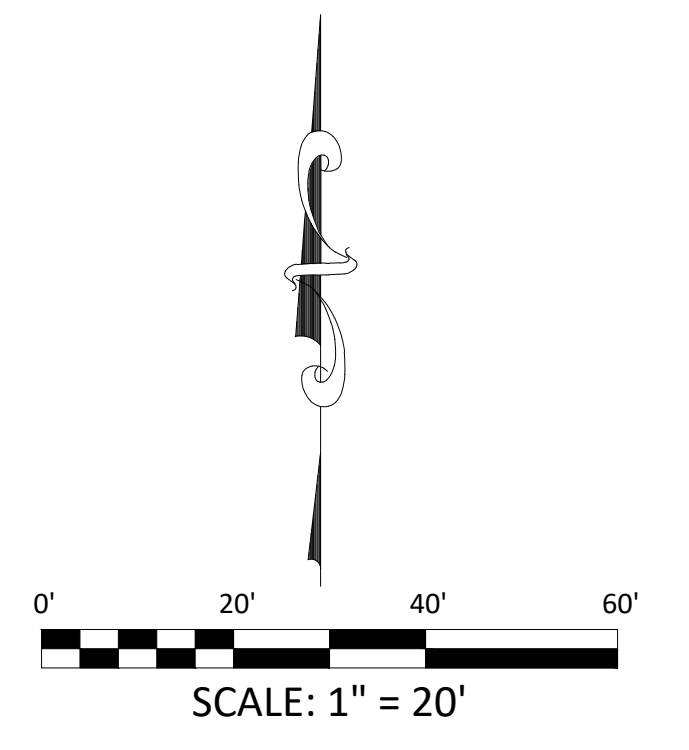
- NOTES:**
- PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED.
 - SITE GRADES SHALL CONFORM WITH ADA AND MAAB REQUIREMENTS. IN AREAS WHERE THESE REQUIREMENTS CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING FOR RESOLUTION.
 - ALL TRANSITIONS BETWEEN GROUND COVERING MATERIALS SHALL BE SMOOTH AND MEET 521 CMR 20.10 REQUIREMENTS.
 - CROSS SLOPES FOR ALL WALKWAYS SHALL NOT EXCEED 2% AND RUNNING SLOPES FOR ALL WALKWAYS SHALL NOT EXCEED 5%.
 - REFER TO GRADING PLANS FOR ALL GRADING STRUCTURE RIM ELEVATIONS.

3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEDULE DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

Permit/Seal

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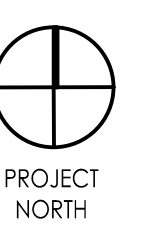
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 Project No. 78000
GRADING PLAN 1



C3.1

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Key Plan



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1	ISSUED FOR PERMIT	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
4	ISSUED FOR PERMIT	2024.02.16
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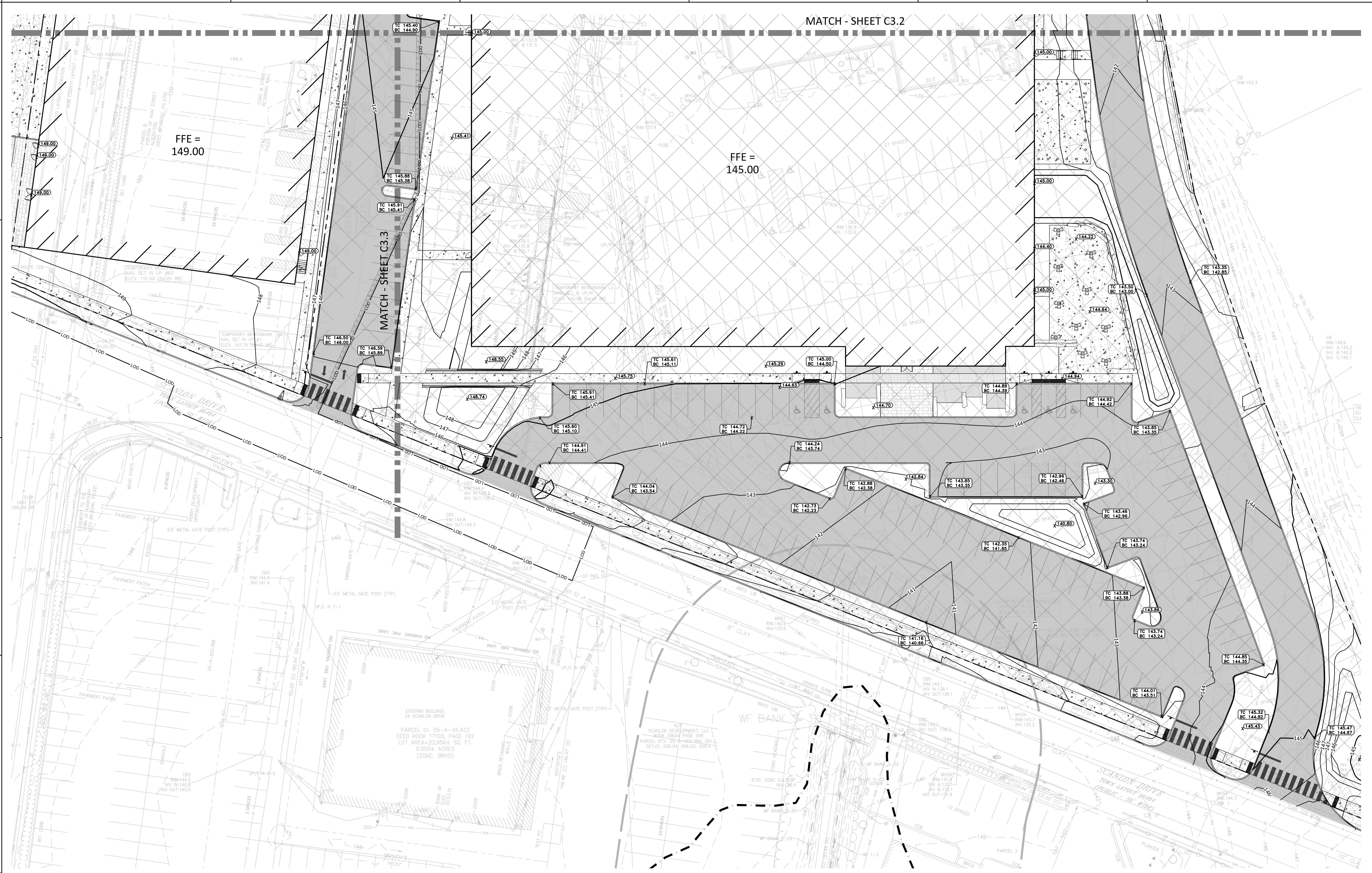
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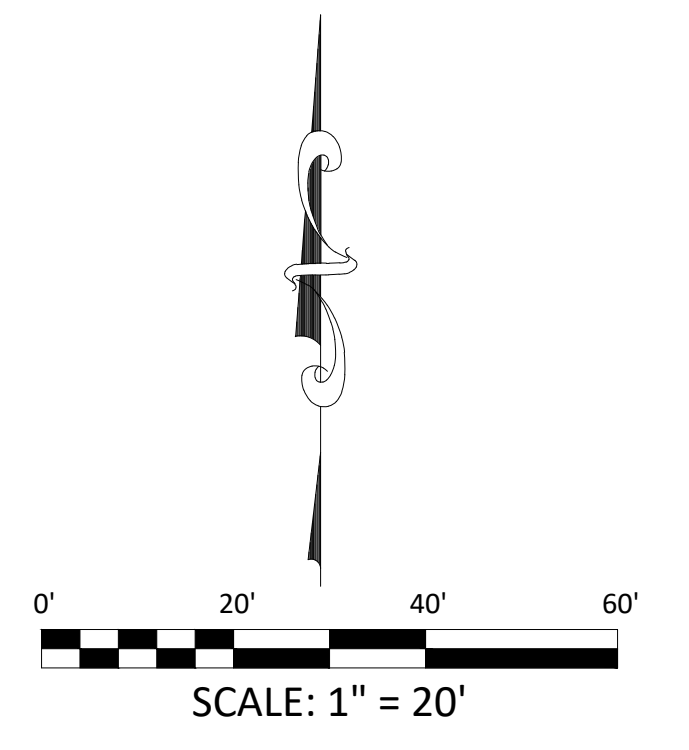
Scale AS NOTED
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GRADING PLAN 2

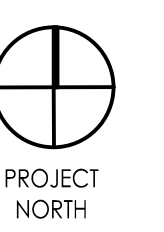
C3.2



- NOTES:**
- PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED.
 - SITE GRADES SHALL CONFORM WITH ADA AND MAAB REQUIREMENTS. IN AREAS WHERE THESE REQUIREMENTS CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING FOR RESOLUTION.
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 - REFER TO GRADING PLANS FOR ALL GRADING STRUCTURE RIM ELEVATIONS.



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NOTES:

- PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED.
- SITE GRADES SHALL CONFORM WITH ADA AND MAAB REQUIREMENTS. IN AREAS WHERE THESE REQUIREMENTS CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING FOR RESOLUTION.
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- CROSS SLOPES FOR ALL WALKWAYS SHALL NOT EXCEED 2% AND RUNNING SLOPES FOR ALL WALKWAYS SHALL NOT EXCEED 5%.
- REFER TO GRADING PLANS FOR ALL GRADING STRUCTURE RIM ELEVATIONS.



MATCH - SHEET C3.1

MATCH - SHEET C3.2

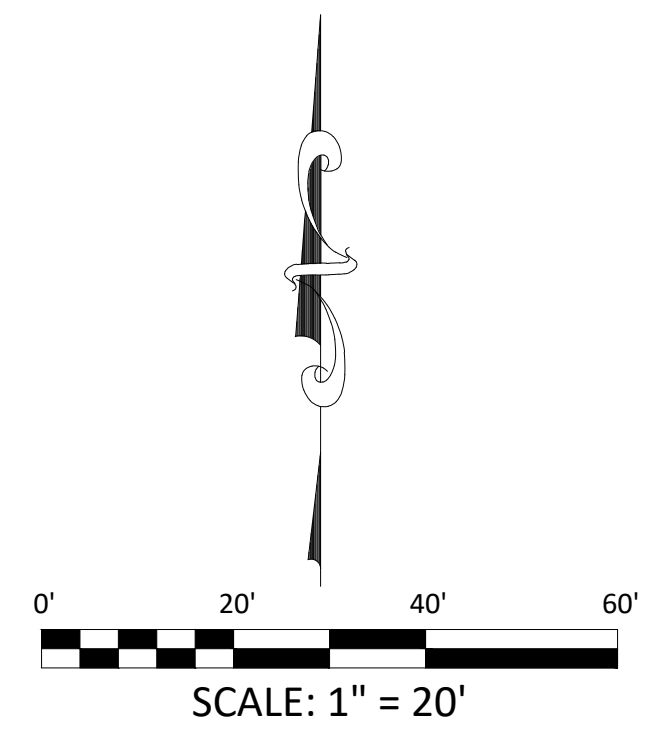
Issue/Revision	Issued/Revision
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2	2023.12.15
3	2023.10.04
4	YYYYMMDD

Permit/Seal

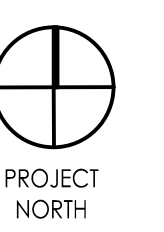
**PRELIMINARY
 NOT FOR
 CONSTRUCTION**

Scale AS NOTED
 Project No. 78000

GRADING PLAN 3



C3.3



1	ISSUED FOR PERMIT	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
3	SCHEMATIC DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

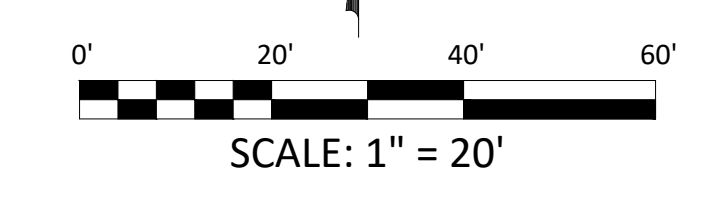
**PRELIMINARY
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 CONSTRUCTION**



MATCH - SHEET C4.2

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EXMH-102	134.47 INV IN = 130.05	SMH-105	143.25 INV IN = 131.67 INV OUT = 131.67
EXMH-103	133.99 INV IN = 132.80	SMH-201	148.36 INV IN = 137.98 INV OUT = 137.89
SMH-101	141.97 INV IN = 130.27 INV OUT = 130.26	SMH-202	138.26 INV IN = 137.07 INV OUT = 136.97
SMH-102	141.09 INV IN = 130.75 INV OUT = 130.75		
SMH-103	141.43 INV IN = 131.00 INV OUT = -4.15 INV OUT = 131.00		

- NOTES:**
- WORK ON ACTIVE UTILITY LINES (INCLUDING SEWER, WATER, AND DRAINAGE) SHALL BE COORDINATED AND SCHEDULED WITH THE OWNER PRIOR TO EXECUTION OF THE WORK.
 - THE CONTRACTOR SHALL MAINTAIN SANITARY SEWER SERVICE TO THE EXISTING SANITARY MAIN FROM THE START OF CONSTRUCTION TO THE START OF BUILDING DEMOLITION.
 - WORK ON EXISTING AND PROPOSED GAS LINES SHALL BE COORDINATED WITH LOCAL GAS COMPANY.
 - POLYVINYL CHLORIDE PIPE AND FITTINGS (PVC) SHALL BE MINIMUM SDR 35 WITH FULL DIAMETER DIMENSIONS CONFORMING TO THE SPECIFICATIONS FOR TYPE 85M POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION D3034 LATEST REVISION, FOR SIZES 18 INCHES TO 27 INCHES THE PIPE SHALL COMPLY WITH ASTM F679, LATEST RECORD.
 - MANHOLE FRAMES AND COVERS SHALL BE MINIMUM CLASS 25 CONFORMING TO ASTM "STANDARD SPECIFICATION FOR GRAY IRON CASTINGS," DESIGNATION: A48.
 - ALL WATER MAINS SHALL BE DUCTILE IRON CLASS 52 WITH PUSH ON JOINTS (UNLESS OTHERWISE SPECIFIED) MEETING THE REQUIREMENTS OF ANSI/AWWA C151/A21.51. ALL DUCTILE IRON WATER MAIN PIPE SHALL BE CEMENT LINED, WITH AN ASPHALTIC SEAL COAT MEETING THE REQUIREMENTS OF ANSI/AWWA C104/A21.4.
 - CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL WATERLINE BENDS AND TEES IN ACCORDANCE WITH THE SPECIFICATIONS.
 - ALL EXISTING STRUCTURES TO REMAIN WITHIN THE LIMITS OF WORK SHALL BE ADJUSTED TO FINISH GRADE. MINIMUM AND MAXIMUM NUMBER OF SEWER BRICK COURSES USED FOR GRADE ADJUSTMENT SHALL BE IN ACCORDANCE WITH TOWN STANDARDS
 - ALL PRECAST CONCRETE MANHOLES FOR SANITARY AND DRAINAGE SHALL CONFORM TO THE ASTM "SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS," DESIGNATION D478. THE BARREL SHALL BE 4-FOOT WITH A 1-FOOT COLLAR TO PREVENT FLOTATION
 - ALL DUCTILE IRON WATER PIPE SHALL BE PRESSURE TESTED FOR 2 HOURS.
 - ALL DOMESTIC AND FIRE SUPPLY PIPES AND MAINS MUST BE DISINFECTED AND SAMPLED FOR COLIFORM BACTERIA 2X24 HOURS APART BE A MASSACHUSETTS CERTIFIED LAB.
 - ALL WATERLINE CONNECTIONS SHALL REQUIRE A SHUTDOWN. LIVE TAPS SHALL NOT BE PERMITTED. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SHUTDOWN WITH RANDOLPH DPW TWO WEEKS IN ADVANCE OF WORK.
 - ALL UTILITY AND DRAINAGE INSTALLATION SHALL BE INSPECTED BY RANDOLPH DPW. CONTRACTOR SHALL PROVIDE 48 HOUR NOTICE TO DPW PRIOR TO INSTALLATION.
 - CONTRACTOR TO PROVIDE CONCRETE ENCASEMENT FOR WATER AND DRAINAGE CROSSINGS.
 - ALL WATERLINE GATE VALVES SHALL TURN TO THE RIGHT.



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Key Plan



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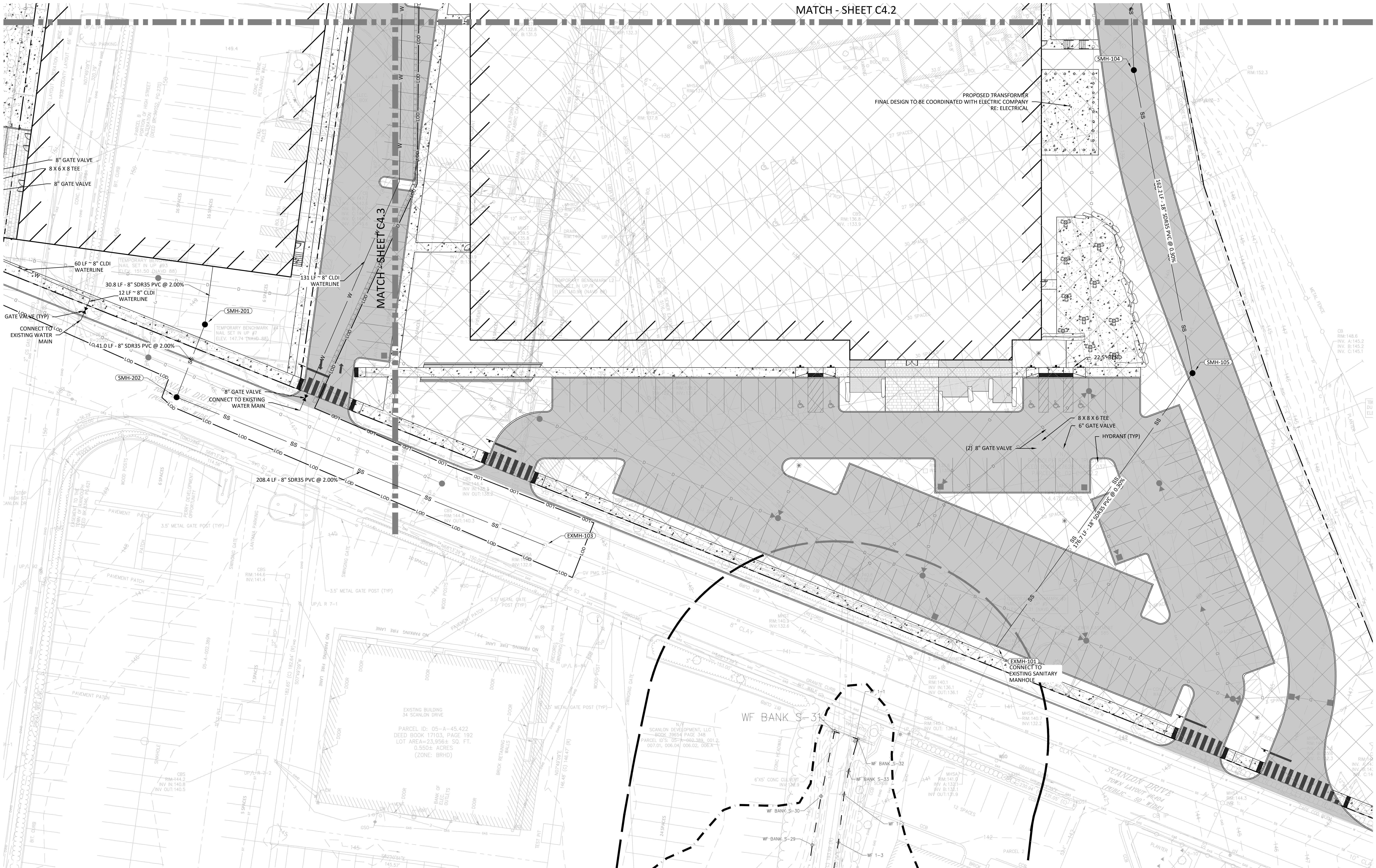
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UTILITY PLAN 2

C4.2

MATCH - SHEET C4.2

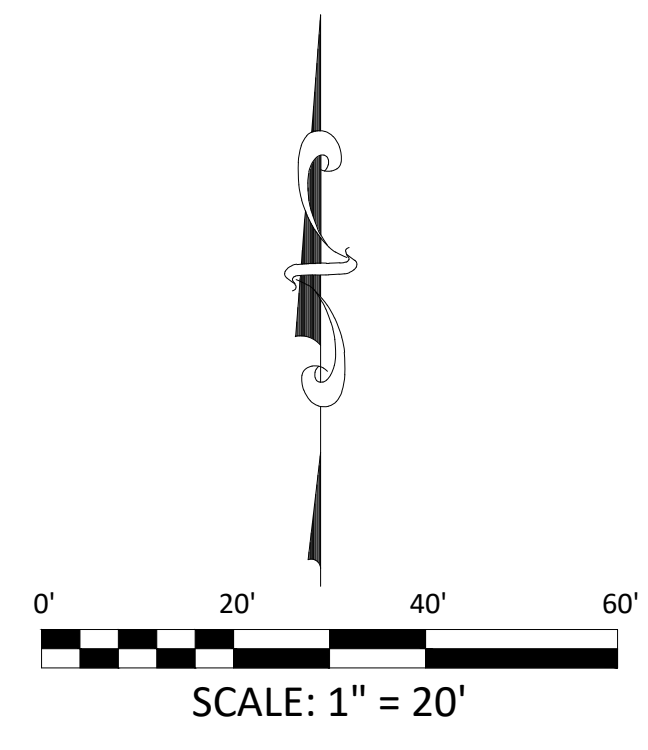
MATCH - SHEET C4.3



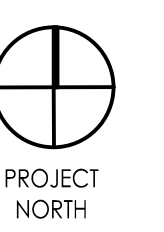
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Structure Table	
Structure Name	Structure Details
EXMH-101	141.80 INV OUT = 132.20
EXMH-102	134.47 INV IN = 130.05
EXMH-103	133.99 INV IN = 132.80
SMH-101	141.97 INV IN = 130.27 INV OUT = 130.26
SMH-102	141.09 INV IN = 130.75 INV OUT = 130.75
SMH-103	141.43 INV IN = 131.00 INV IN = -4.15 INV OUT = 131.00

Structure Table	
Structure Name	Structure Details
SMH-104	142.01 INV IN = 131.18 INV OUT = 131.18
SMH-105	143.25 INV IN = 131.67 INV OUT = 131.67
SMH-201	148.36 INV IN = 137.98 INV OUT = 137.89
SMH-202	138.26 INV IN = 137.07 INV OUT = 136.97



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NOTES:

- WORK ON ACTIVE UTILITY LINES (INCLUDING SEWER, WATER, AND DRAINAGE) SHALL BE COORDINATED AND SCHEDULED WITH THE OWNER PRIOR TO EXECUTION OF THE WORK.
- THE CONTRACTOR SHALL MAINTAIN SANITARY SEWER SERVICE TO THE EXISTING SANITARY MAIN FROM THE START OF CONSTRUCTION TO THE START OF BUILDING DEMOLITION.
- WORK ON EXISTING AND PROPOSED GAS LINES SHALL BE COORDINATED WITH LOCAL GAS COMPANY.
- POLYVINYL CHLORIDE PIPE AND FITTINGS (PVC) SHALL BE MINIMUM SDR 35 WITH FULL DIAMETER DIMENSIONS CONFORMING TO THE SPECIFICATIONS FOR TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION D3034 LATEST REVISION, FOR SIZES 18 INCHES TO 27 INCHES THE PIPE SHALL COMPLY WITH ASTM F679, LATEST RECORD.
- MANHOLE FRAMES AND COVERS SHALL BE MINIMUM CLASS 25 CONFORMING TO ASTM "STANDARD SPECIFICATION FOR GRAY IRON CASTINGS," DESIGNATION: A48.
- ALL WATER MAINS SHALL BE DUCTILE IRON CLASS 52 WITH PUSH ON JOINTS (UNLESS OTHERWISE SPECIFIED) MEETING THE REQUIREMENTS OF ANSI/AWWA C151/A21.51. ALL DUCTILE IRON WATER MAIN PIPE SHALL BE CEMENT LINED, WITH AN ASPHALTIC SEAL COAT MEETING THE REQUIREMENTS OF ANSI/AWWA C104/A21.4.
- CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL WATERLINE BENDS AND TEES IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL EXISTING STRUCTURES TO REMAIN WITHIN THE LIMITS OF WORK SHALL BE ADJUSTED TO FINISH GRADE. MINIMUM AND MAXIMUM NUMBER OF SEWER BRICK COURSES USED FOR GRADE ADJUSTMENT SHALL BE IN ACCORDANCE WITH TOWN STANDARDS.
- ALL PRECAST CONCRETE MANHOLES FOR SANITARY AND DRAINAGE SHALL CONFORM TO THE ASTM "SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS," DESIGNATION D478. THE BARREL SHALL BE 4-FOOT WITH A 1-FOOT COLLAR TO PREVENT FLOTATION.
- ALL DUCTILE IRON WATER PIPE SHALL BE PRESSURE TESTED FOR 2 HOURS.
- ALL DOMESTIC AND FIRE SUPPLY PIPES AND MAINS MUST BE DISINFECTED AND SAMPLED FOR COLIFORM BACTERIA 2X24 HOURS APART BE A MASSACHUSETTS CERTIFIED LAB.
- ALL WATERLINE CONNECTIONS SHALL REQUIRE A SHUTDOWN. LIVE TAPS SHALL NOT BE PERMITTED. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SHUTDOWN WITH RANDOLPH DPW TWO WEEKS IN ADVANCE OF WORK.
- ALL UTILITY AND DRAINAGE INSTALLATION SHALL BE INSPECTED BY RANDOLPH DPW. CONTRACTOR SHALL PROVIDE 48 HOUR NOTICE TO DPW PRIOR TO INSTALLATION.
- CONTRACTOR TO PROVIDE CONCRETE ENCASUREMENT FOR WATER AND DRAINAGE CROSSINGS.
- ALL WATERLINE GATE VALVES SHALL TURN TO THE RIGHT.

MATCH - SHEET C4.1

MATCH - SHEET C4.2

Structure Table		Structure Table	
Structure Name	Structure Details	Structure Name	Structure Details
EXMH-101	141.80 INV OUT = 132.20	SMH-104	142.01 INV IN = 131.18 INV OUT = 131.18
EXMH-102	134.47 INV IN = 130.05	SMH-105	143.25 INV IN = 131.67 INV OUT = 131.67
EXMH-103	133.99 INV IN = 132.80	SMH-201	148.36 INV IN = 137.98 INV OUT = 137.89
SMH-101	141.97 INV IN = 130.27 INV OUT = 130.26	SMH-202	138.26 INV IN = 137.07 INV OUT = 136.97
SMH-102	141.09 INV IN = 130.75 INV OUT = 130.75		
SMH-103	141.43 INV IN = 131.00 INV IN = -4.15 INV OUT = 131.00		

NO.	DESCRIPTION	DATE
1	ISSUE FOR PERMIT	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
3	FINAL DESIGN	2024.01.04
4	ISSUED FOR CONSTRUCTION	2024.02.16

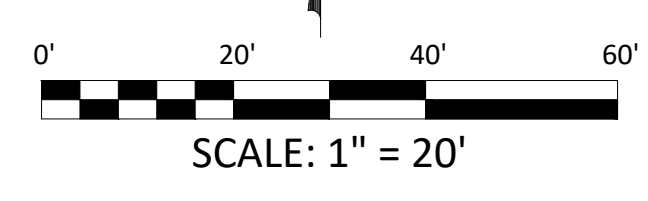
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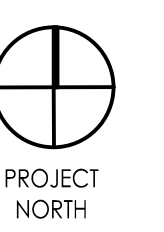
UTILITY PLAN 3



C4.3

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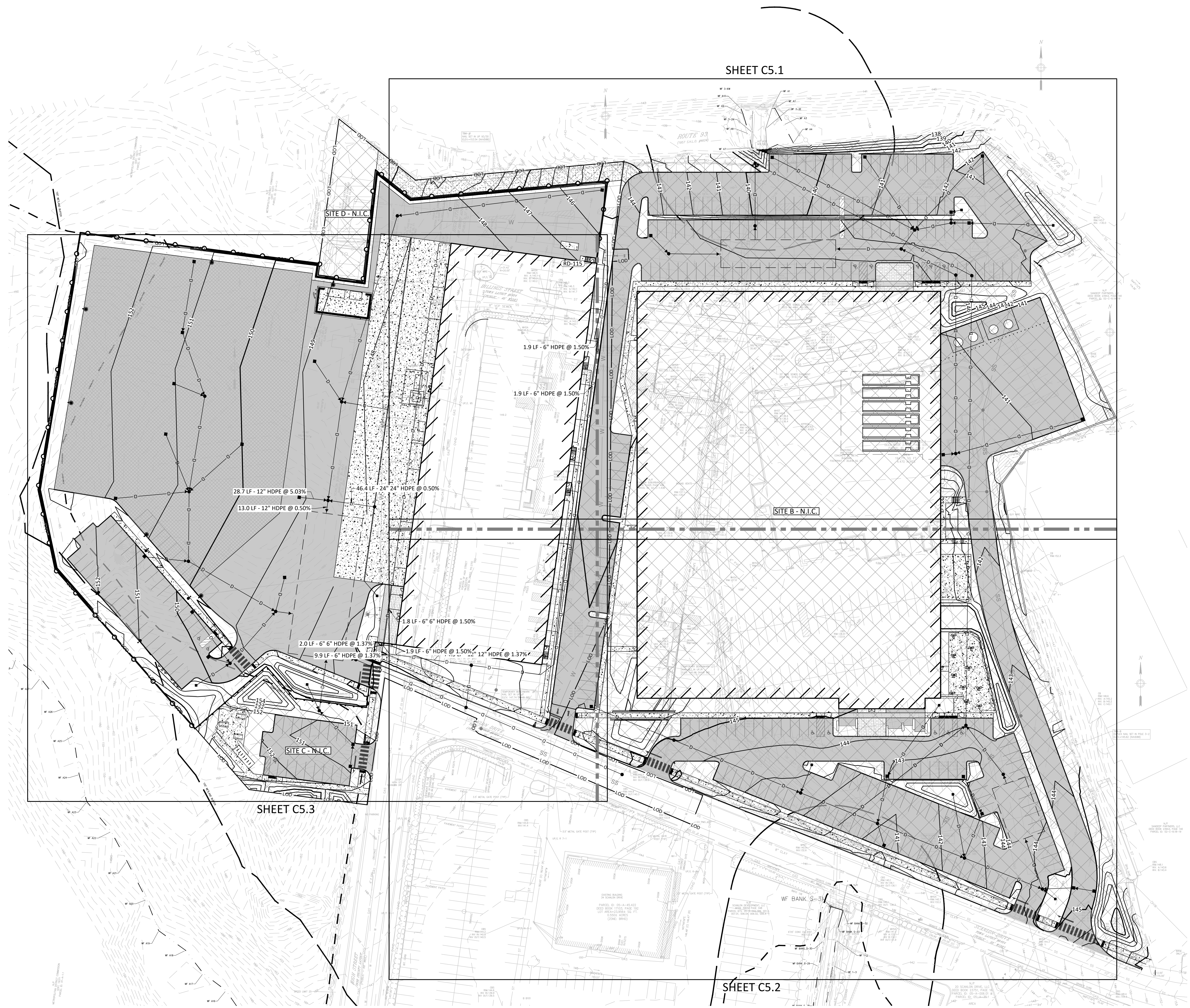




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2	DESIGN DEVELOPMENT	2023.12.15
3	SCHEMATIC DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

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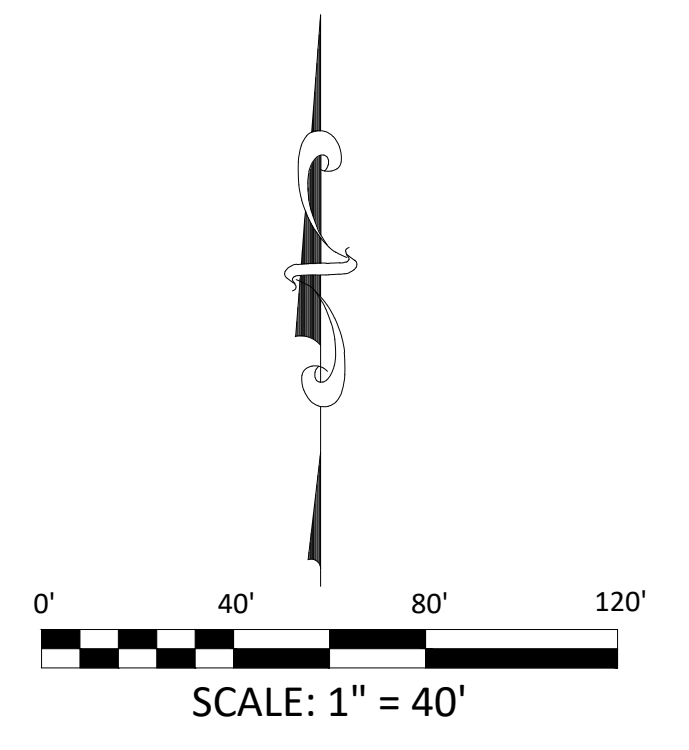
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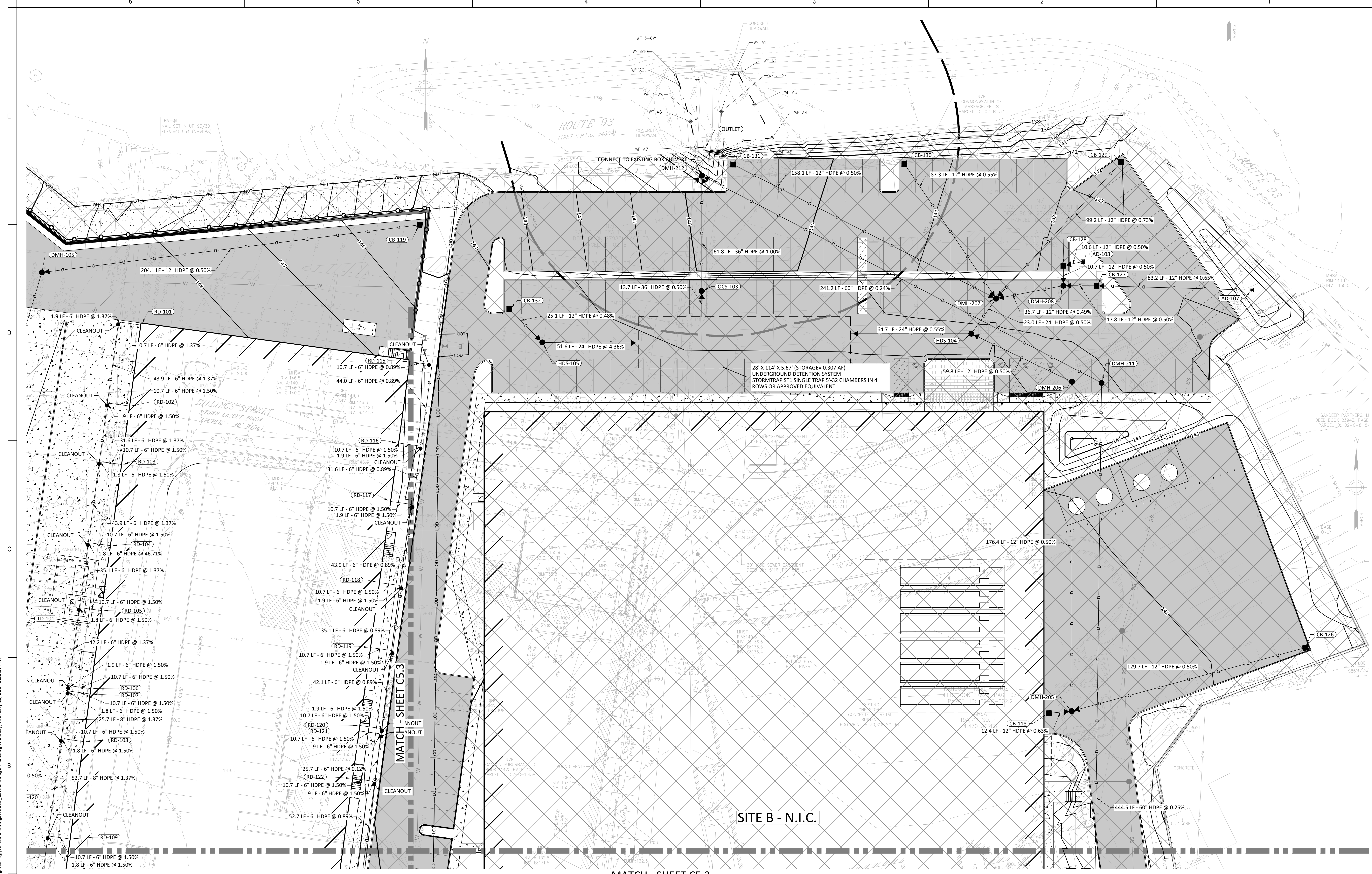
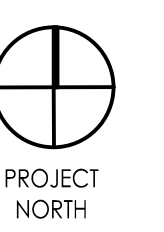


SHEET C5.1

SHEET C5.3

SHEET C5.2



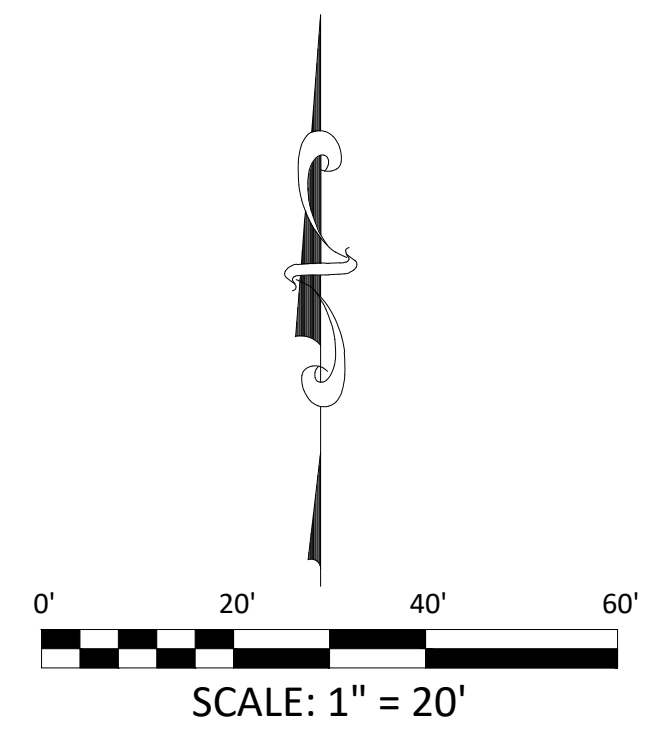


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 - ALL UTILITIES WITHIN THE FOOTPRINT OF PROPOSED BUILDING ADDITIONS SHOULD BE ANTICIPATED TO BE REMOVED AND RELOCATED. SERVICE SHALL BE MAINTAINED TO EXISTING BUILDINGS TO REMAIN FOR THE DURATION OF CONSTRUCTION
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 - ALL DRAIN LINES SHALL BE 12" UNLESS OTHERWISE NOTED. ALL DRAIN LINES SHALL BE RCP UNLESS OTHERWISE NOTED
 - ALL CATCH BASINS TO BE 4' DIAMETER (UNLESS OTHERWISE NOTED) SHALL CONFORM TO MHD STANDARD DETAIL 201.4.0 AND ALL CATCH BASIN FRAMES AND GRATES SHALL CONFORM TO 201.6.0 UNLESS OTHERWISE NOTED.
 - ALL MANHOLES TO BE 4' DIAMETER (UNLESS OTHERWISE NOTED) AND SHALL CONFORM TO MHD STANDARD DETAIL 202.4.0 AND ALL MANHOLE FRAMES AND COVERS SHALL CONFORM TO 202.6.0 UNLESS OTHERWISE NOTED. CONCRETE ANTI-FLOTATION COLLARS SHALL BE PROVIDED AT ALL MANHOLES.
 - REINFORCED CONCRETE PIPE AND FLARED ENDS SHALL CONFORM TO THE AASHTO M170 FOR STANDARD STRENGTH REINFORCED CONCRETE CULVERT PIPE FOR CLASS III PIPE, WALL B, OR ASTM C76 FOR REINFORCED CONCRETE CULVERT AND STORM DRAIN PIPE UNLESS NOTED OTHERWISE. ALL PIPE 24 INCHES IN DIAMETER OR SMALLER SHALL BE OF THE BELL AND SPIGOT TYPE. PIPES LARGER THAN 24 INCHES IN DIAMETER SHALL BE TONGUE AND GROOVE OR BELL AND SPIGOT. ALL DRAINAGE PIPING SHALL BE GASKETED.
 - RCP PIPE LOCATED IN VEHICULAR AREAS WITH LESS THAN 6" OF COVER BELOW SUBGRADE ELEVATION SHALL BE CLASS V
 - CONCRETE VAULT DETENTION SYSTEMS SHALL INCLUDE AN 8" EXTENDED CONCRETE SLAB WITH UNITS ANCHORED INTO SLAB, AND SHALL BE LINED WITH AN IMPERVIOUS LINER
 - HIGH-DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL BE ADS N-12 IB ST SMOOTH INTERIOR PIPE, ADS N-12 IB ST HIGH CAPACITY LARGE DIAMETER PIPE OR APPROVED EQUIVALENT. JOINTS SHALL BE SOIL-TIGHT AND INCLUDE A RUBBER GASKET ON THE SPIGOT END OF THE PIPE. WHEN INSTALLED INTO THE BELL END, THE JOINT SHALL BE SEALED.
 - MANHOLES OVER 12 FEET IN DEPTH SHALL HAVE MINIMUM OF 5 FEET INSIDE DIAMETER. ALL MANHOLES SHALL HAVE A SUMP OF AT LEAST 30 INCHES BELOW INVERT OF OUTLET PIPE. RISERS SHALL BE CLAY OR SHALE BRICK, AND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 91, GRADE MM OR AS SPECIFIED IN MASSDOT M4.05.
 - ALL CATCH BASINS SHALL HAVE A SUMP OF AT LEAST 48 INCHES (4 FEET) BELOW THE INVERT OF THE OUTLET PIPE, OR OTHERWISE APPROVED BY THE DPW, AND AN INSIDE DIAMETER OF 4 FEET MINIMUM.
 - LIVE LOAD DESIGN FOR CATCH BASINS SHALL BE HS-25 LOADING. CATCH BASINS WHICH ARE LIMITED BY HEIGHT SHALL BE INSTALLED WITH A FLAT TOP SLAB, CAST IN PLACE, DESIGNED FOR HS-25 LOADING AND CAST IRON FRAME CAST IN PLACE.
 - MANHOLE FRAMES AND COVERS SHALL BE AT LEAST CLASS 25 CONFORMING TO ASTM A48 "STANDARD SPECIFICATION FOR GRAY IRON CASTINGS.
 - CATCH BASIN HOODS SHALL BE USED TO MINIMIZE THE ENTRY OF OIL, GASOLINE, AND DEBRIS INTO DRAINAGE PIPES.
 - WHERE PROPOSED DRAIN LINES CROSS SANITARY OR WATER LINES WITH LESS THAN 1.5' CLEARANCE, ENCASE BOTH UTILITIES IN FLOWABLE FILL FOR A DISTANCE OF 10' ON EITHER SIDE OF CROSSING. CENTER PIPE LENGTH AT CROSSING. REFER TO CROSSING DETAIL ON SHEET C6_ ON DETAIL SHEETS.
 - HYDRODYNAMIC SEPARATORS SHALL BE CONTECH CDS2025-5-C, UNLESS OTHERWISE NOTED, OR APPROVED EQUIVALENT.
 - CONCRETE ANTI-FLOTATION COLLARS SHALL BE PROVIDED AT ALL MANHOLES IN AREAS OF HIGH GROUNDWATER.

MATCH - SHEET C5.2

SITE B - N.I.C.



NO.	DESCRIPTION	DATE
1	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
3	SCHEDULE DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

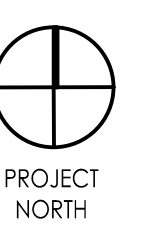
Permit/Seal

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Scale AS NOTED
Project No. 78000

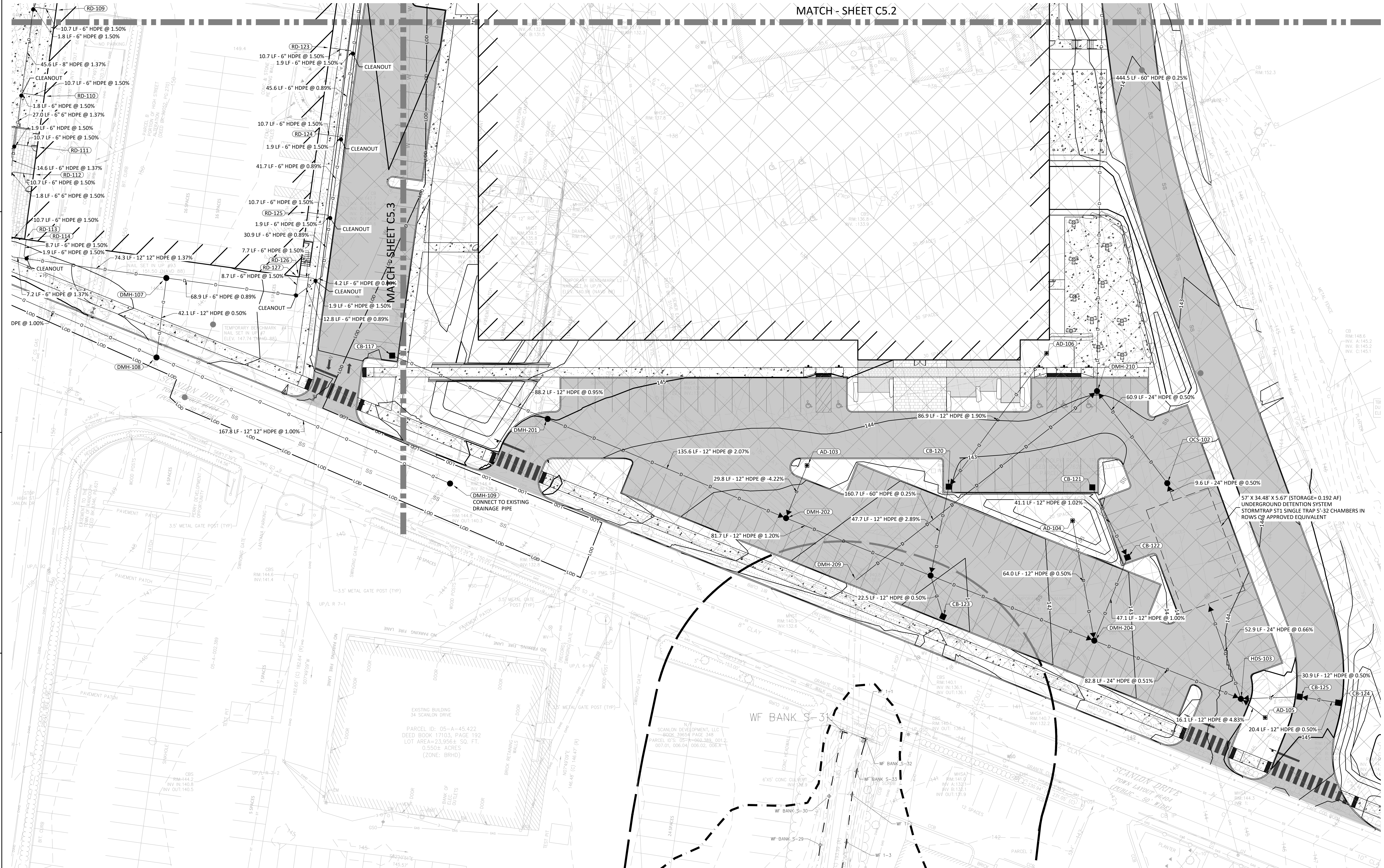
DRAINAGE PLAN 1

C5.1



MATCH - SHEET C5.2

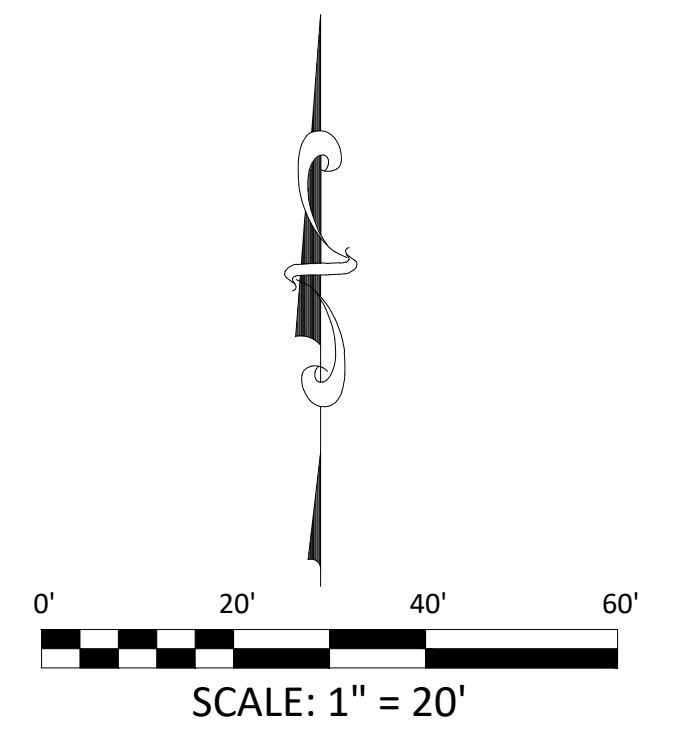
MATCH SHEET C5.3



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- CONCRETE ANTI-FLOTATION COLLARS SHALL BE PROVIDED AT ALL MANHOLES IN AREAS OF HIGH GROUNDWATER.



Issue/Revision	DATE
1	2024.02.16
2	2023.12.15
3	2023.10.04

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DRAINAGE PLAN 2

C5.2

Key Plan



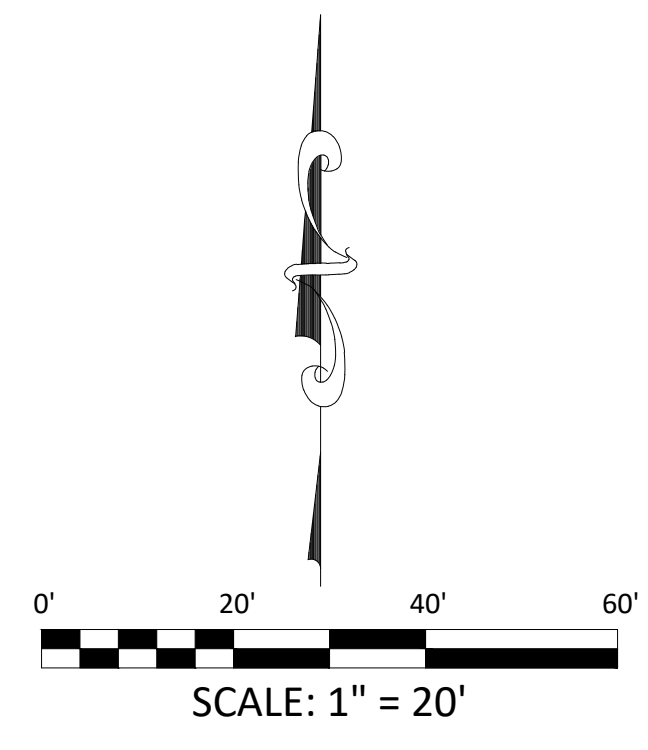
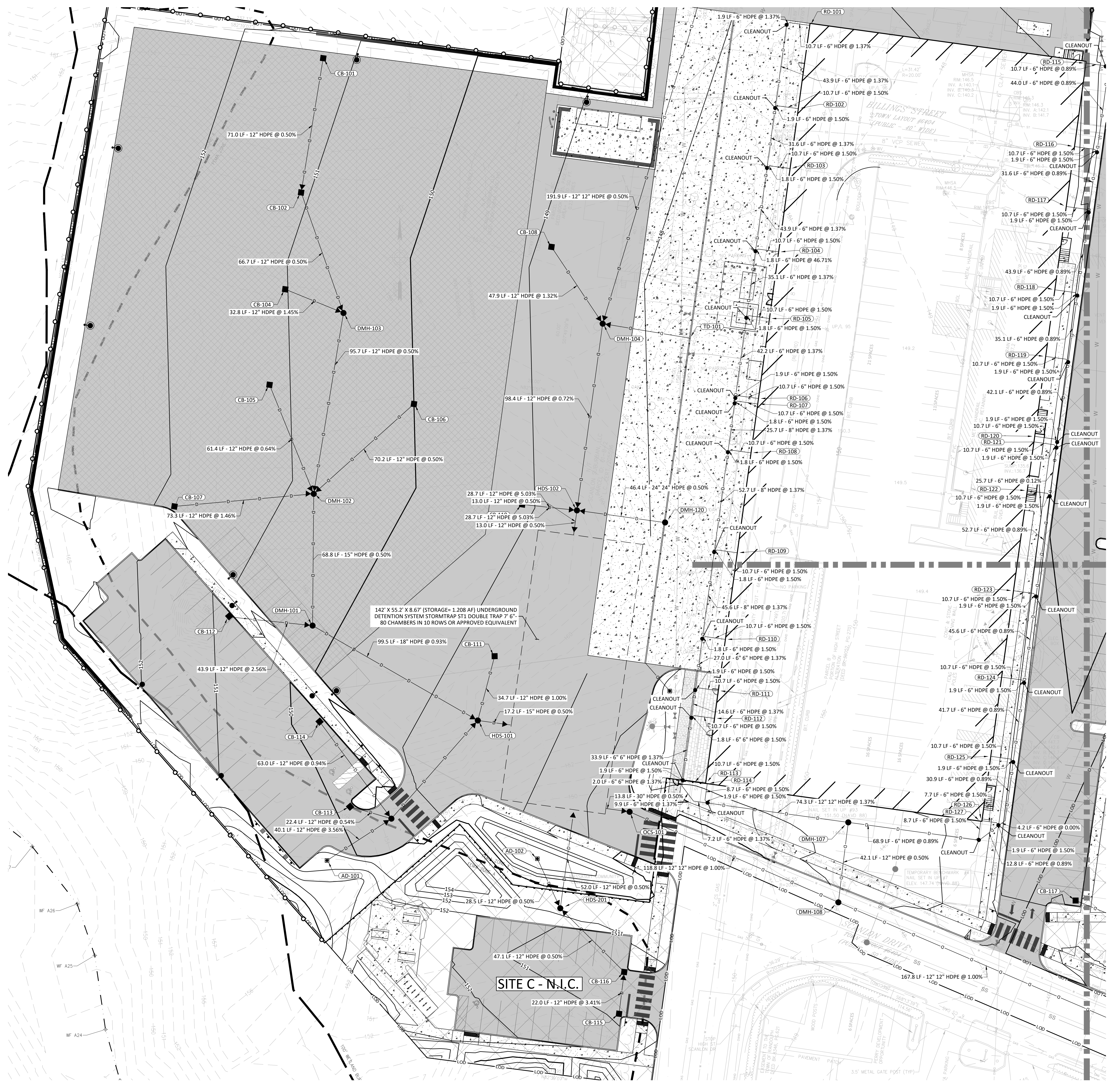
Notes

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MATCH - SHEET C5.1

MATCH - SHEET C5.2



NO.	DESCRIPTION	DATE
1	ISSUE FOR PERMIT	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
3	SCHEMATIC DESIGN	2023.10.04
4	ISSUED/REVISION	YYYYMMDD

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Scale AS NOTED
 Project No. 78000
DRAINAGE PLAN 3

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Stantec Architecture and Engineering P.C.
40 Water Street
Boston, MA 02109
Tel: (617) 294-3100
www.stantec.com

Consultant



The Vertec Companies, LLC
400 Libbey Parkway
Weymouth, MA 02189
PHONE 781.952.6000
www.vertexeng.com

Key Plan



PROJECT NORTH

Notes

Table with 2 columns: No., Description. Contains 10 rows of empty table structure.

Revision table with 3 columns: No., Description, Date. Contains 3 rows of revision data.

Issued/Revision YYYYYY.MMM.DD

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Project No. 78000

DRAINAGE PLAN 4

C5.4

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E

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C

B

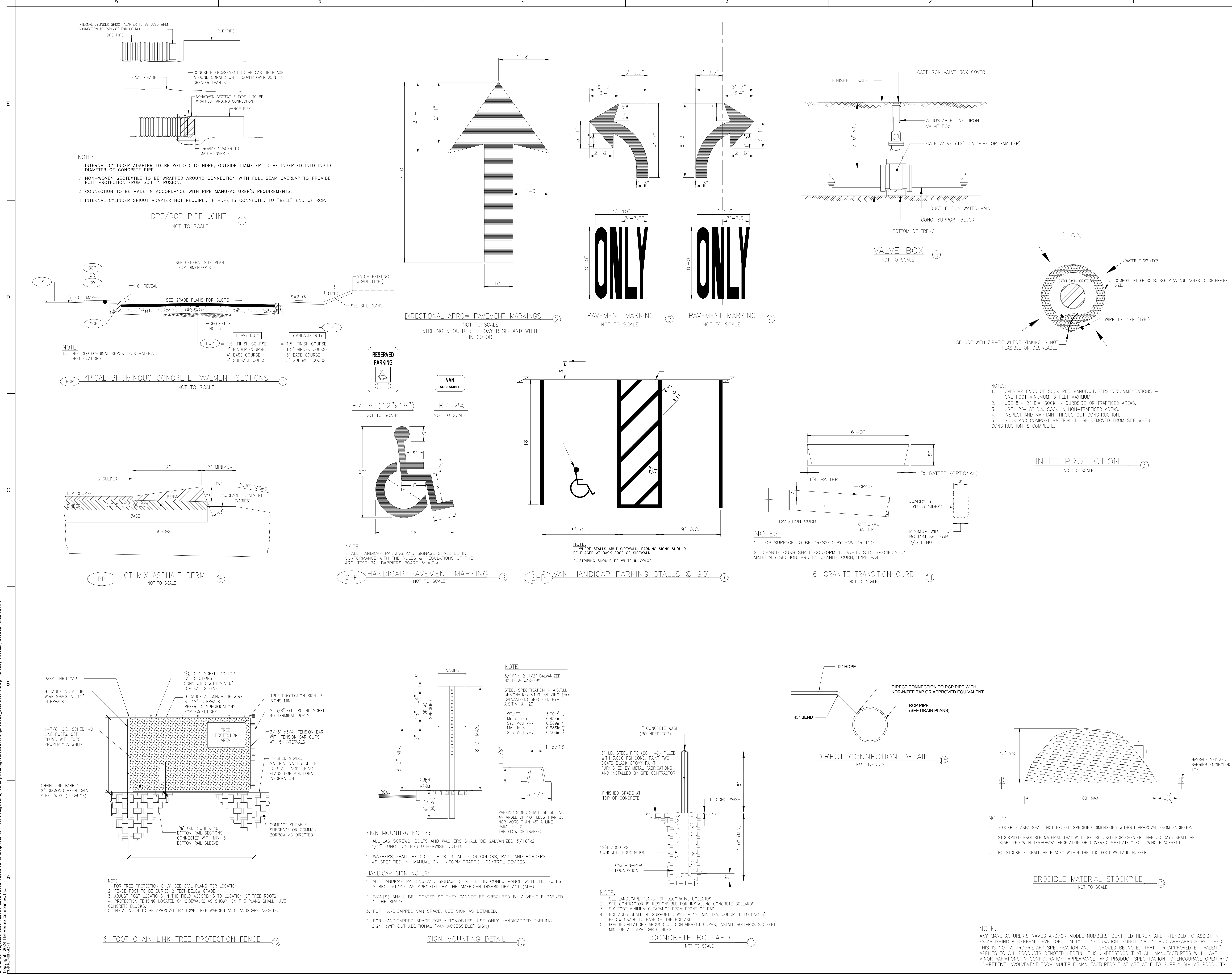
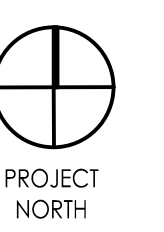
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Structure Table with 2 columns: Structure Name, Structure Details. Contains 22 rows of data for structures CB-130 to HDS-201 and INF-101 to INF-104.

Structure Table with 2 columns: Structure Name, Structure Details. Contains 22 rows of data for structures OCS-101 to RD-127.

Vertical grid lines labeled A through E



NOTES
1. INTERNAL CYLINDER ADAPTER TO BE WELDED TO HDPE, OUTSIDE DIAMETER TO BE INSERTED INTO INSIDE DIAMETER OF CONCRETE PIPE.
2. NON-WOVEN GEOTEXTILE TYPE 1 TO BE WRAPPED AROUND CONNECTION WITH FULL SEAM OVERLAP TO PROVIDE FULL PROTECTION FROM SOIL INTRUSION.
3. CONNECTION TO BE MADE IN ACCORDANCE WITH PIPE MANUFACTURER'S REQUIREMENTS.
4. INTERNAL CYLINDER SPIGOT ADAPTER NOT REQUIRED IF HDPE IS CONNECTED TO "BELL" END OF RCP.

HDPE/RCP PIPE JOINT
NOT TO SCALE

DIRECTIONAL ARROW PAVEMENT MARKINGS
NOT TO SCALE
STRIPING SHOULD BE EPOXY RESIN AND WHITE IN COLOR

PAVEMENT MARKING
NOT TO SCALE

VALVE BOX
NOT TO SCALE

TYPICAL BITUMINOUS CONCRETE PAVEMENT SECTIONS
NOT TO SCALE

HOT MIX ASPHALT BERM
NOT TO SCALE

R7-8 (12"x18")
NOT TO SCALE

R7-8A
NOT TO SCALE

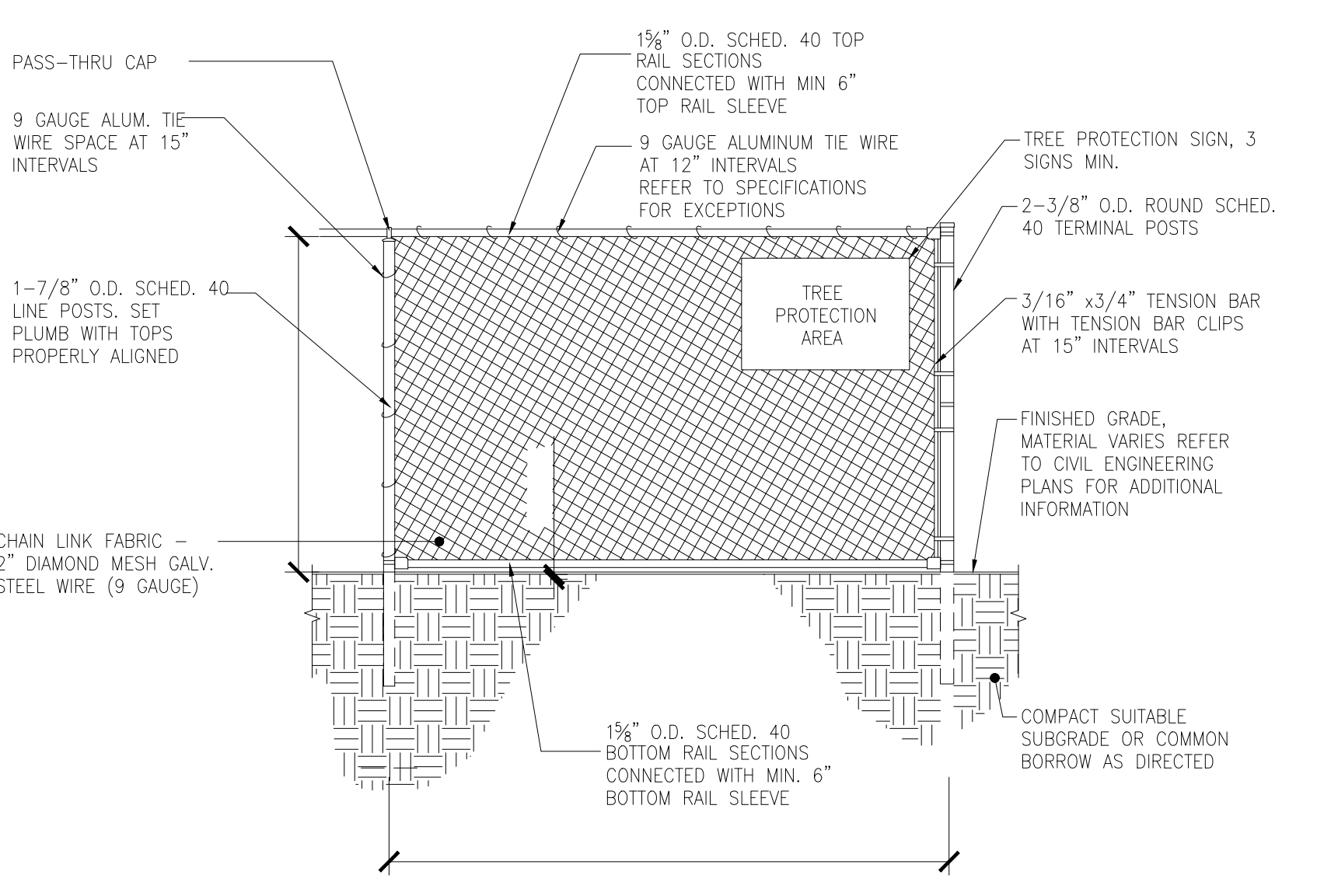
HANDICAP PAVEMENT MARKING
NOT TO SCALE

VAN HANDICAP PARKING STALLS @ 9'0"
NOT TO SCALE

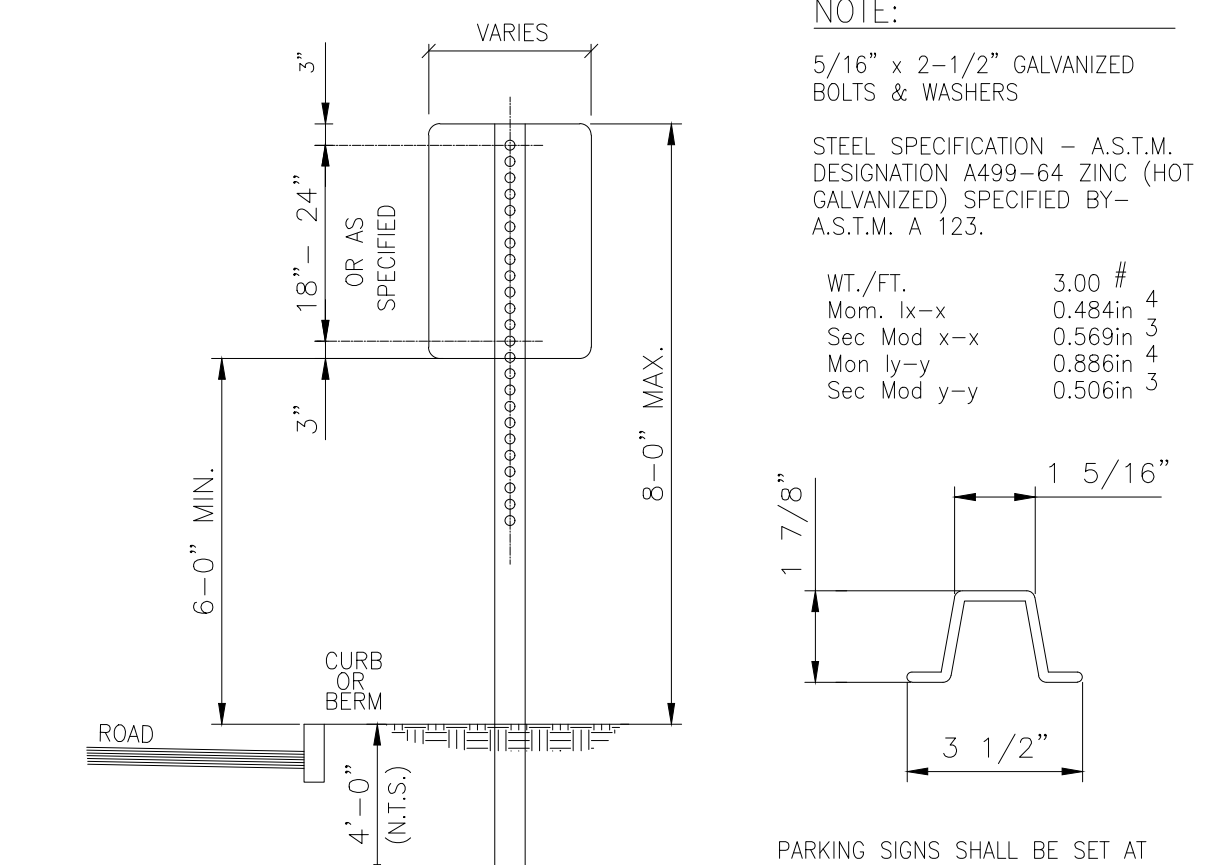
6' GRANITE TRANSITION CURB
NOT TO SCALE

INLET PROTECTION
NOT TO SCALE

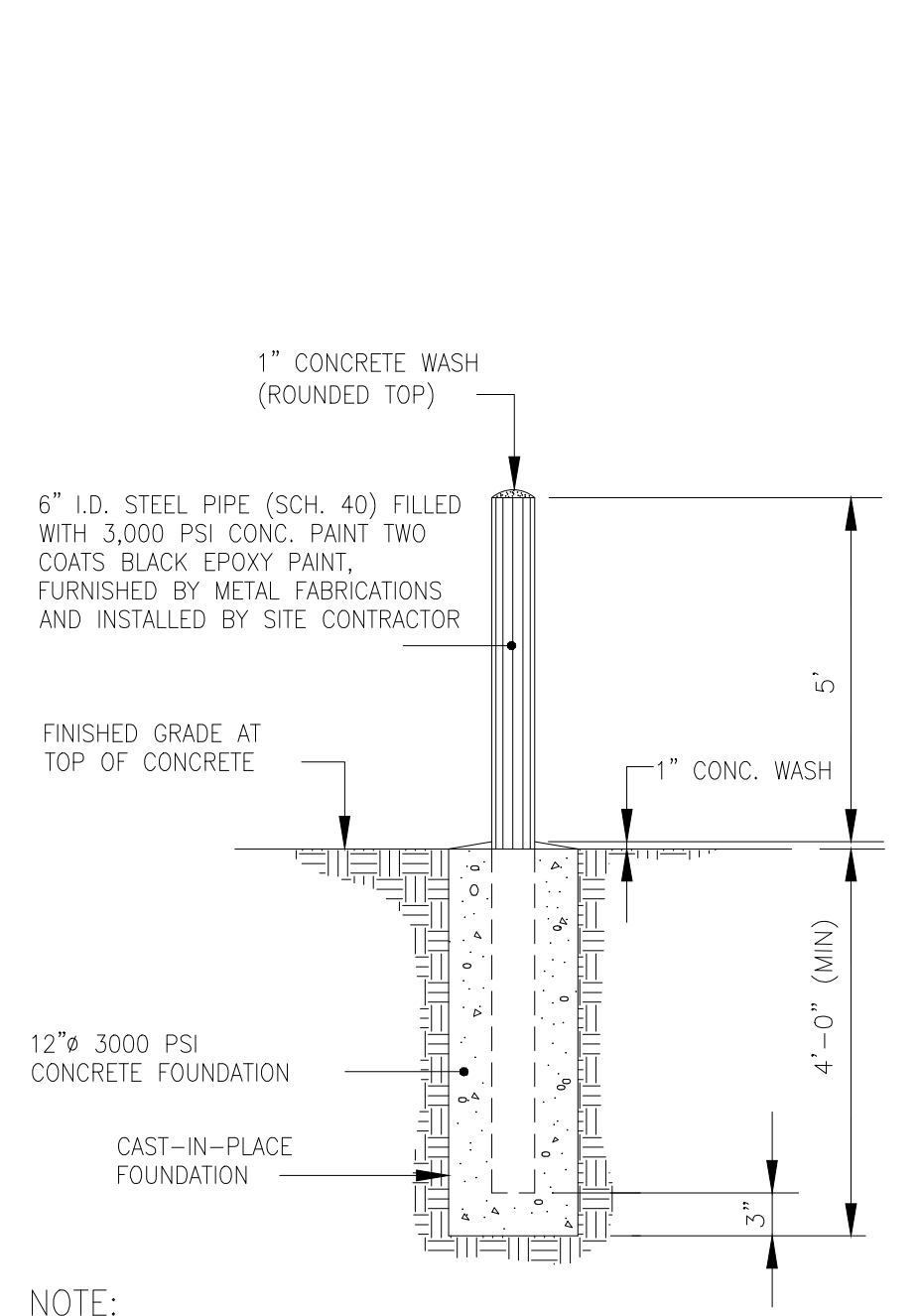
NOTES
1. OVERLAP ENDS OF SOCK PER MANUFACTURER'S RECOMMENDATIONS - ONE FOOT MINIMUM, 3 FEET MAXIMUM.
2. USE 8"-12" DIA. SOCK IN CURBSIDE OR TRAFFICED AREAS.
3. USE 12"-18" DIA. SOCK IN NON-TRAFFICED AREAS.
4. INSPECT AND MAINTAIN THROUGHOUT CONSTRUCTION.
5. SOCK AND COMPOST MATERIAL TO BE REMOVED FROM SITE WHEN CONSTRUCTION IS COMPLETE.



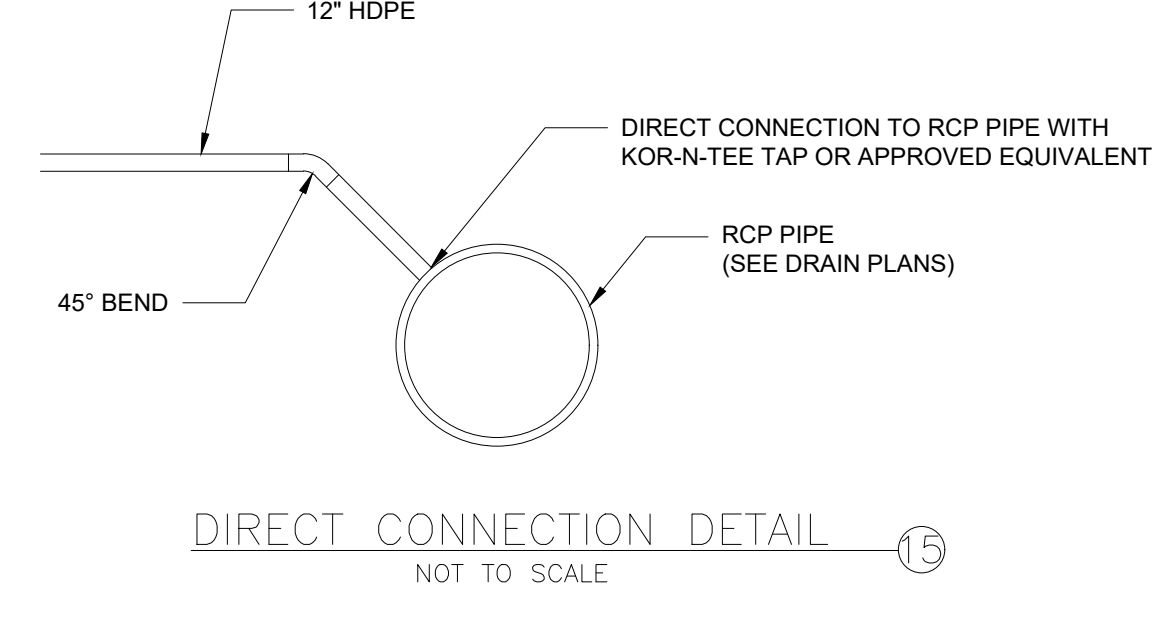
6 FOOT CHAIN LINK TREE PROTECTION FENCE
NOT TO SCALE



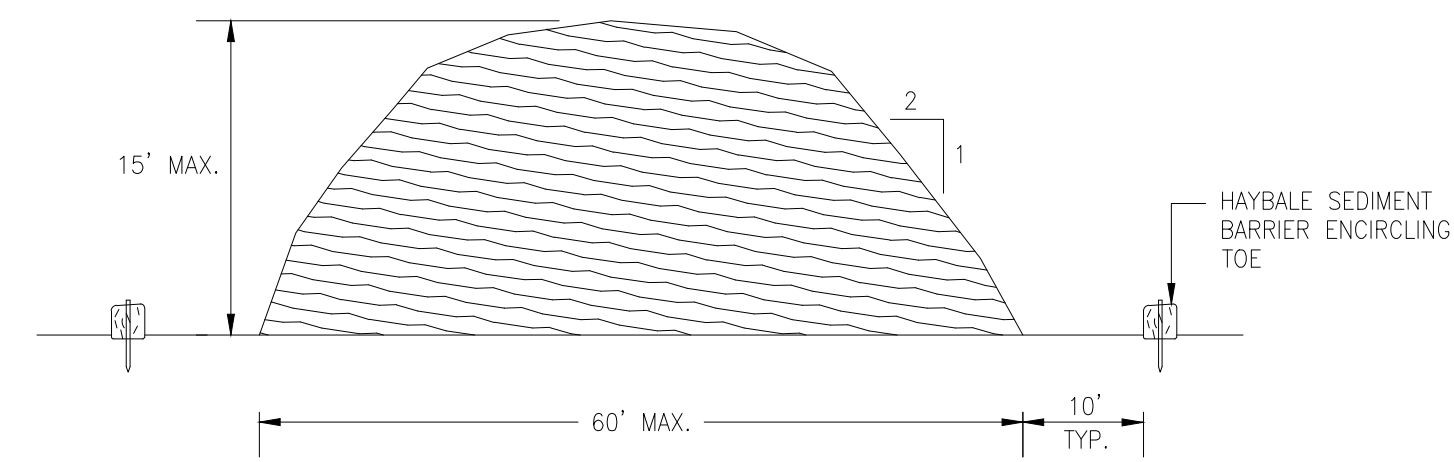
SIGN MOUNTING DETAIL
NOT TO SCALE



CONCRETE BOLLARD
NOT TO SCALE



DIRECT CONNECTION DETAIL
NOT TO SCALE



ERODIBLE MATERIAL STOCKPILE
NOT TO SCALE

NOTES
1. STOCKPILE AREA SHALL NOT EXCEED SPECIFIED DIMENSIONS WITHOUT APPROVAL FROM ENGINEER.
2. STOCKPILED ERODIBLE MATERIAL THAT WILL NOT BE USED FOR GREATER THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR COVERED IMMEDIATELY FOLLOWING PLACEMENT.
3. NO STOCKPILE SHALL BE PLACED WITHIN THE 100 FOOT WETLAND BUFFER.

NOTE
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Z:\Shared\Projects\78000\78959\78000\78959\78000\05_Randolph North - Assemblage (Civil)\05-Engineering\Vertex Drawings\78000_C6.0 Details.dwg Thursday, February 15, 2024 9:23:56 AM
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1	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
3	SCHEDULE DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

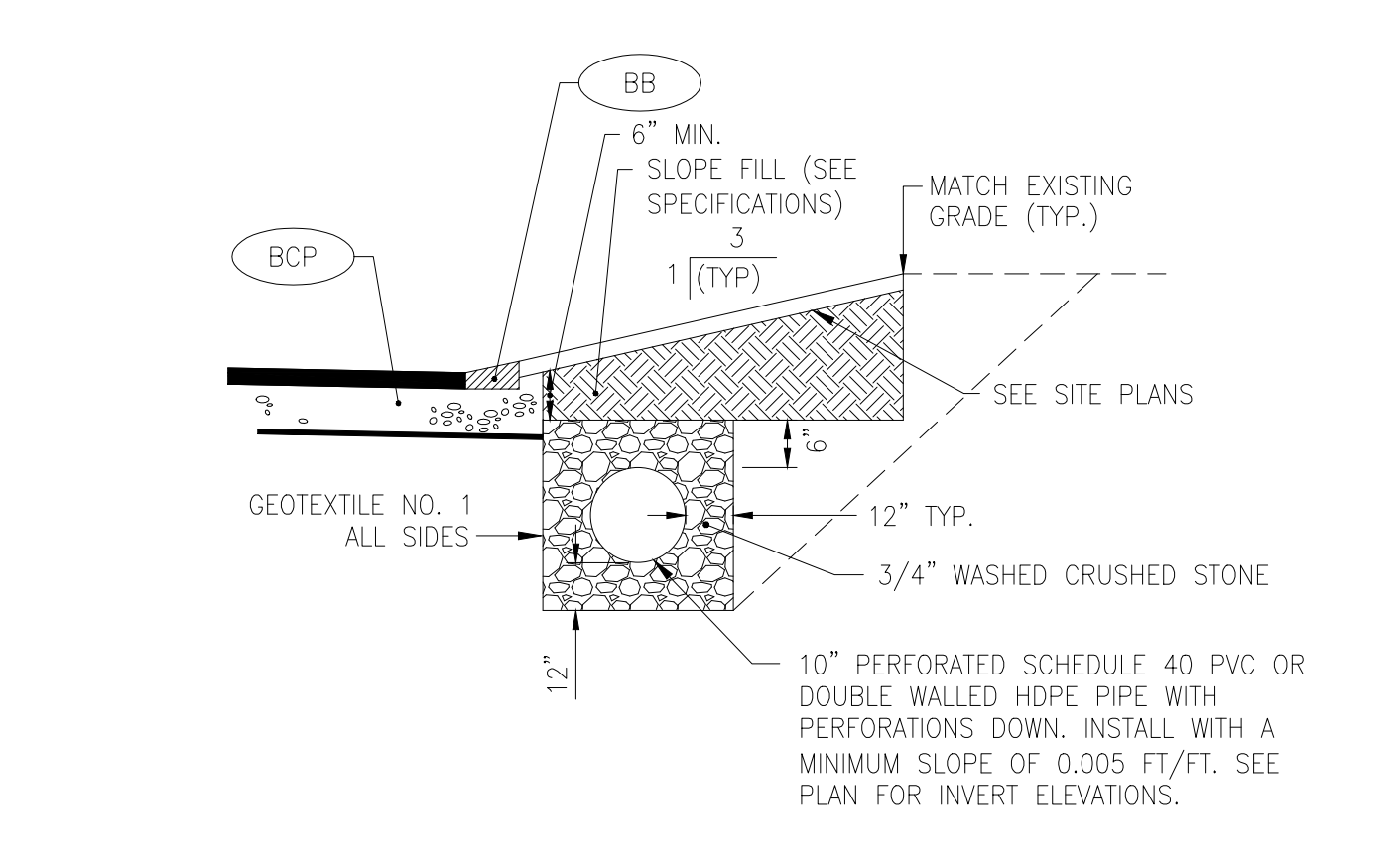
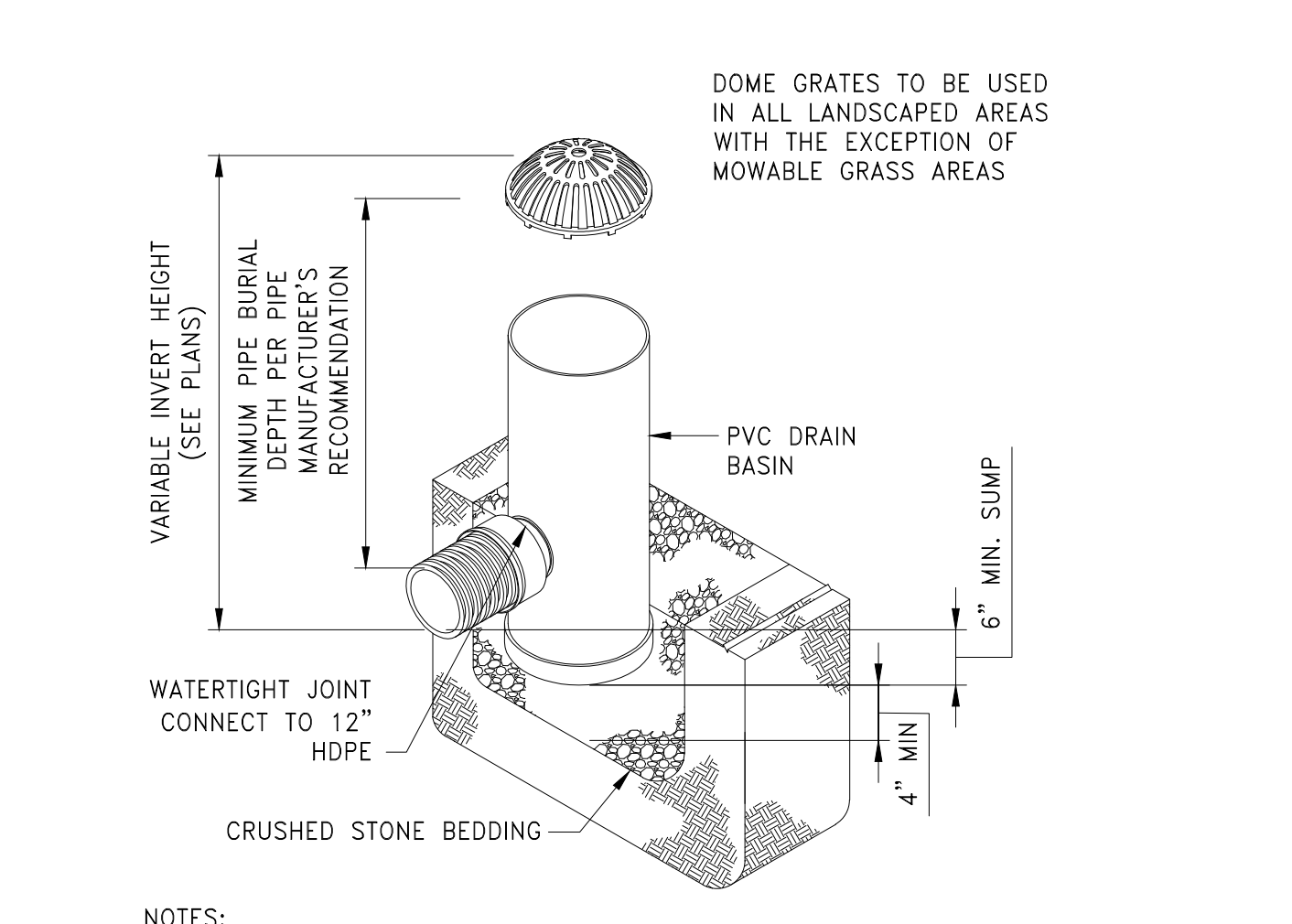
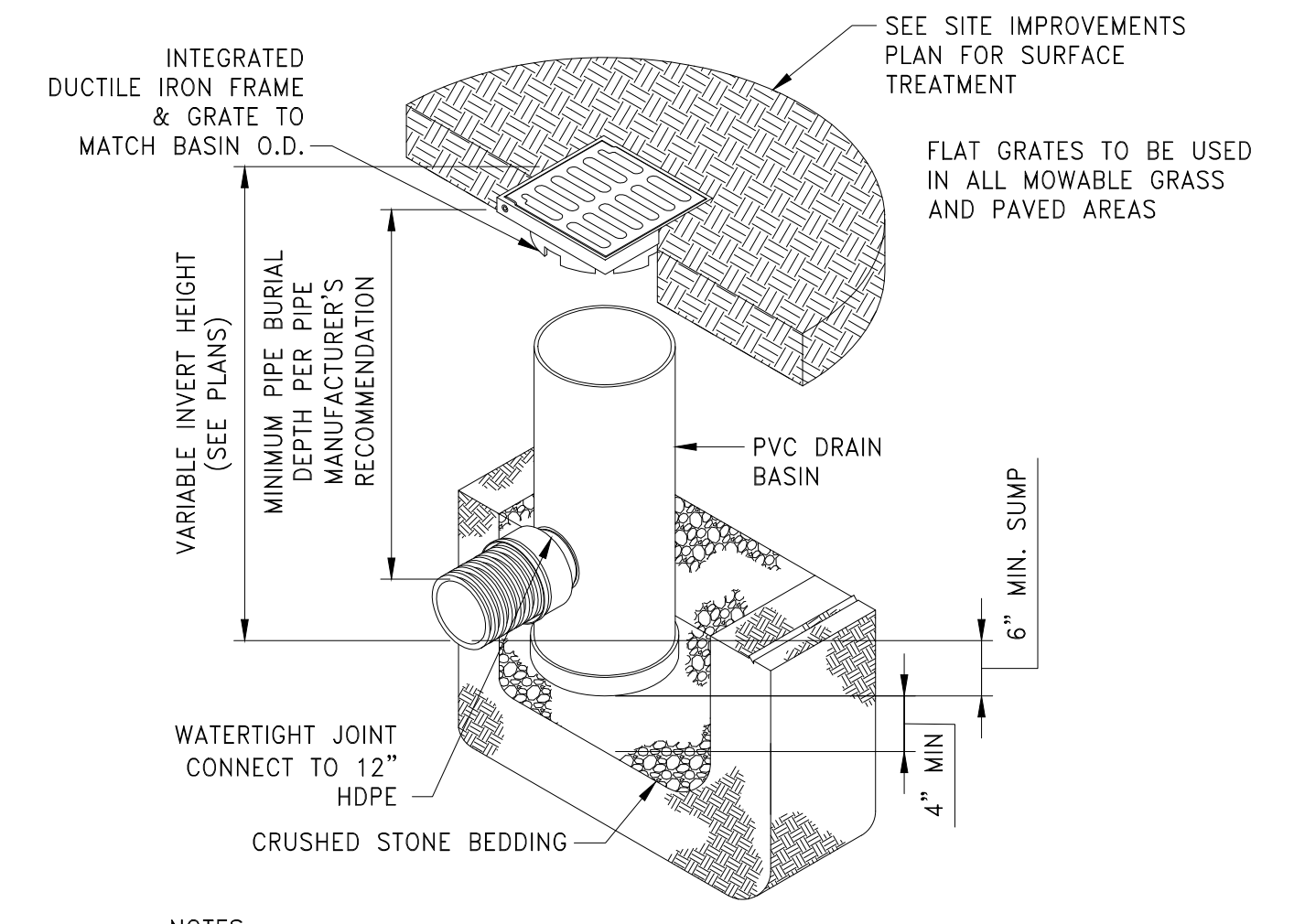
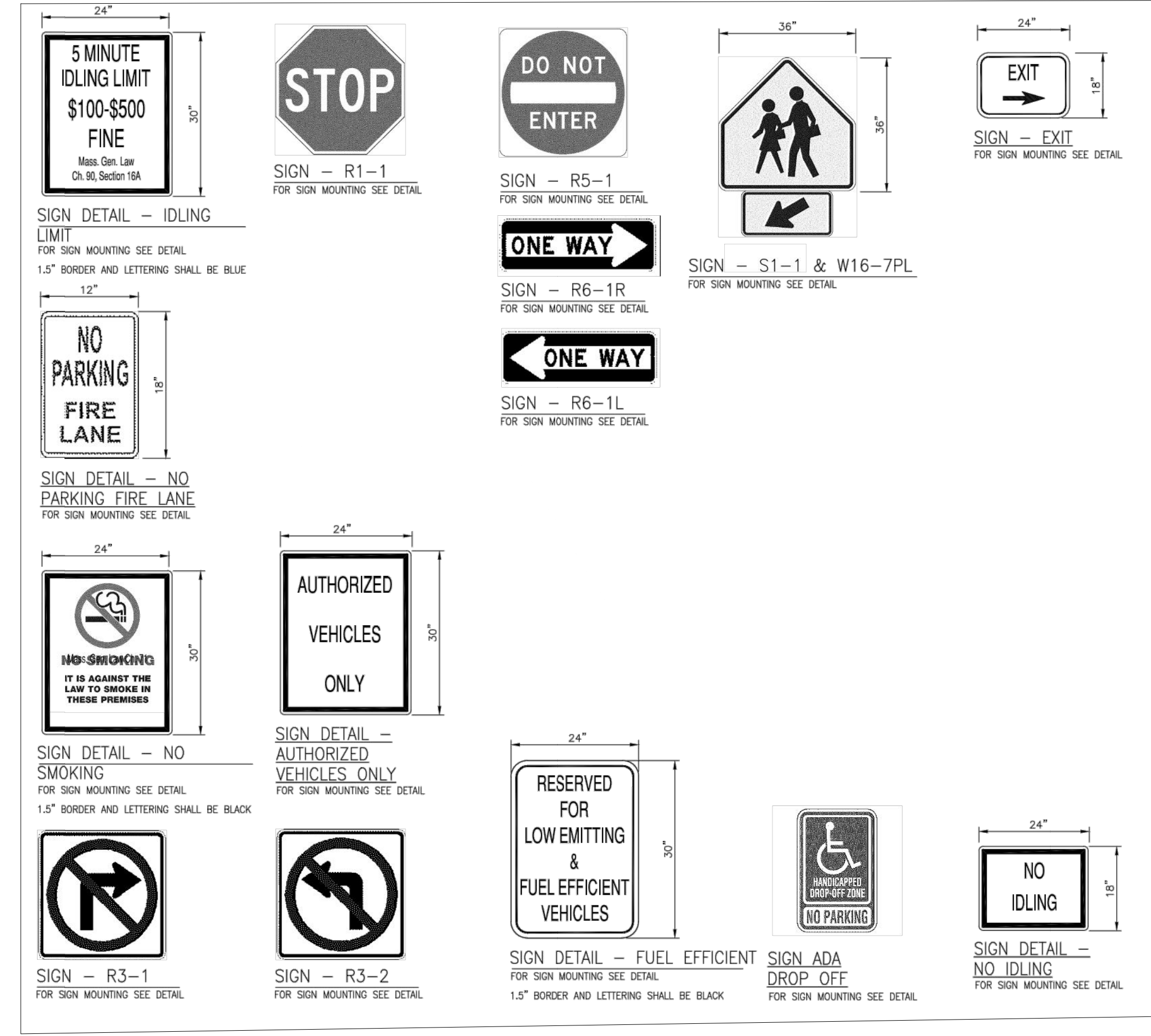
Permit/Seal

**PRELIMINARY
NOT FOR
CONSTRUCTION**

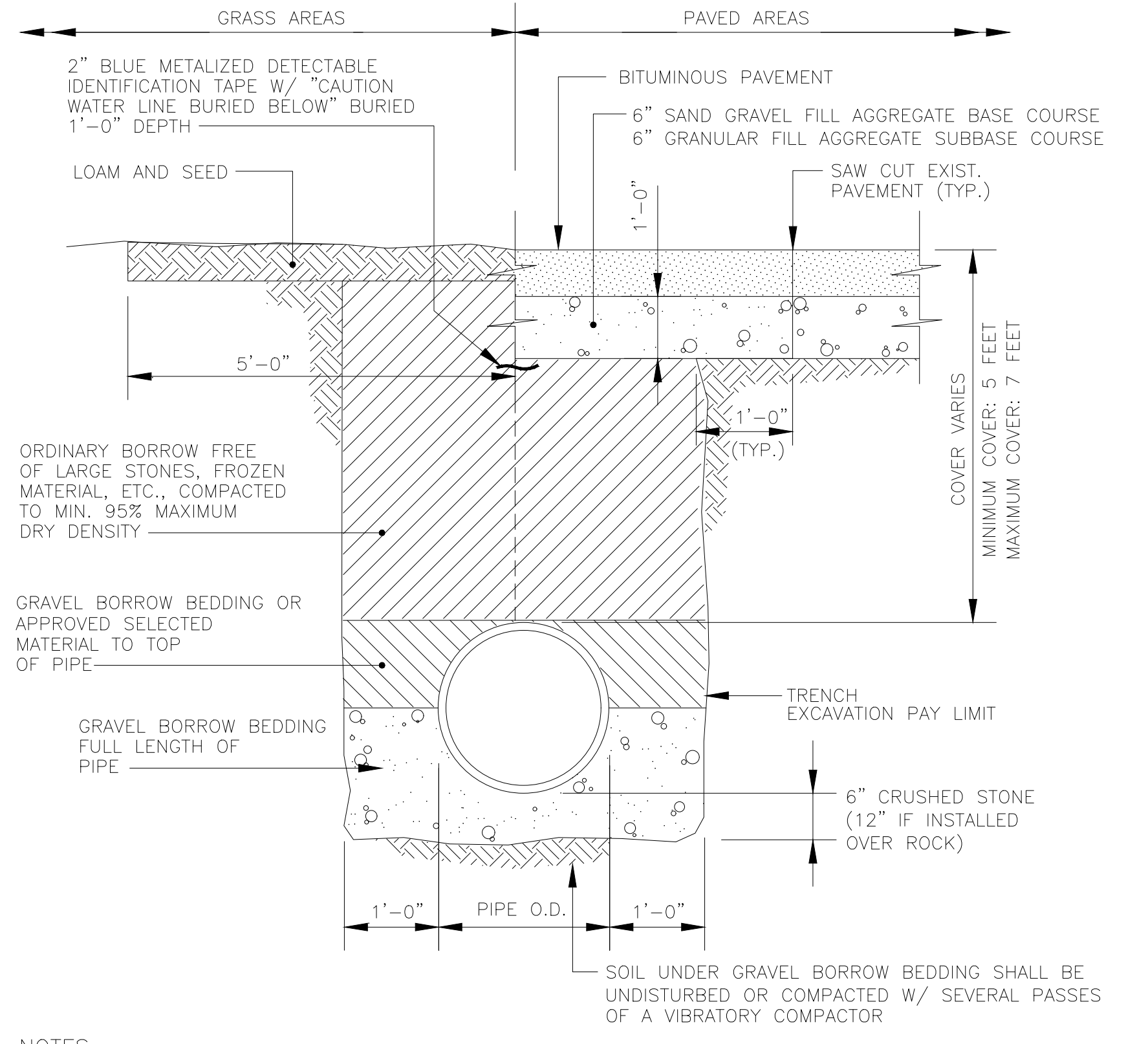
Scale AS NOTED
Project No. 78000

SITE DETAILS 1

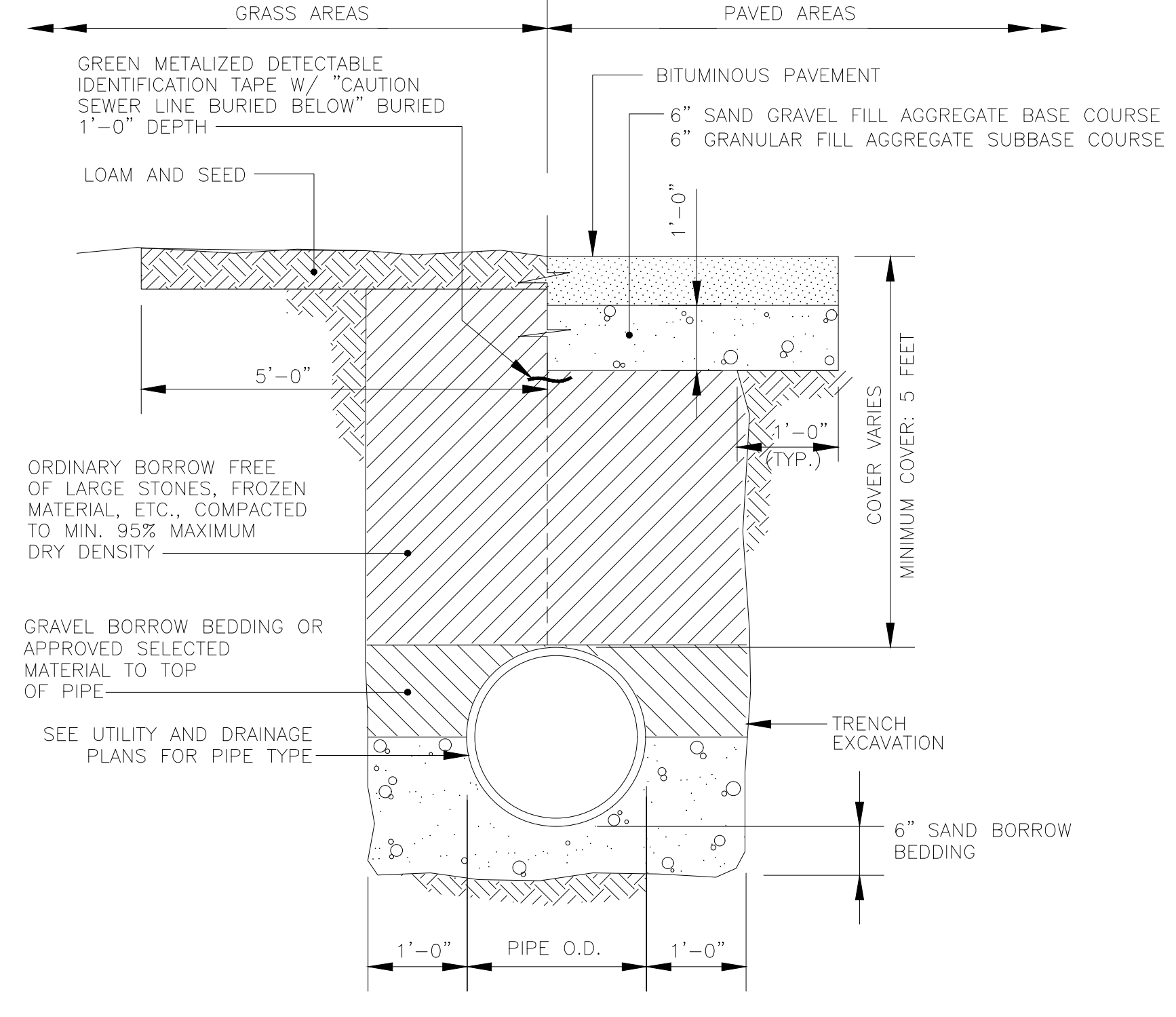
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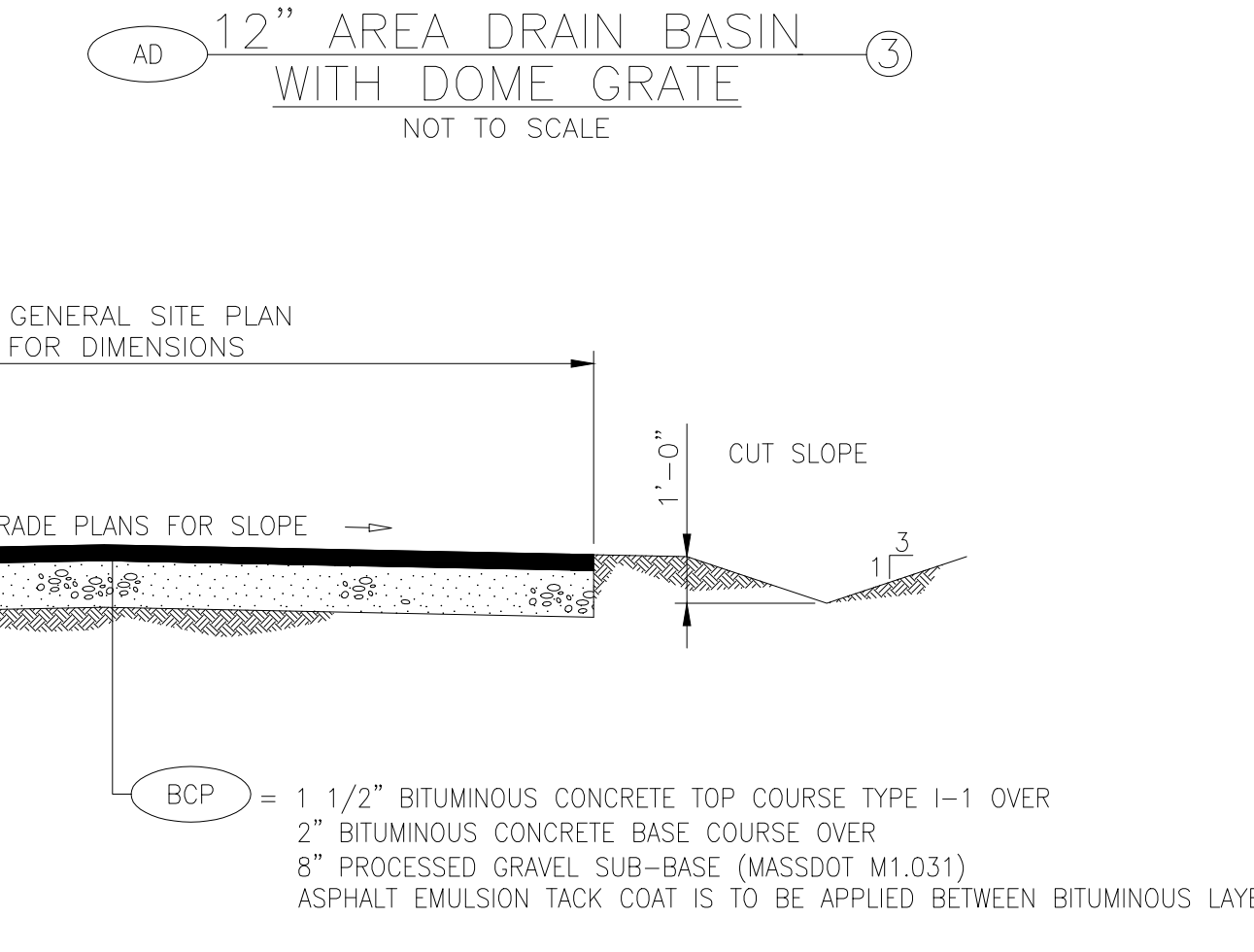
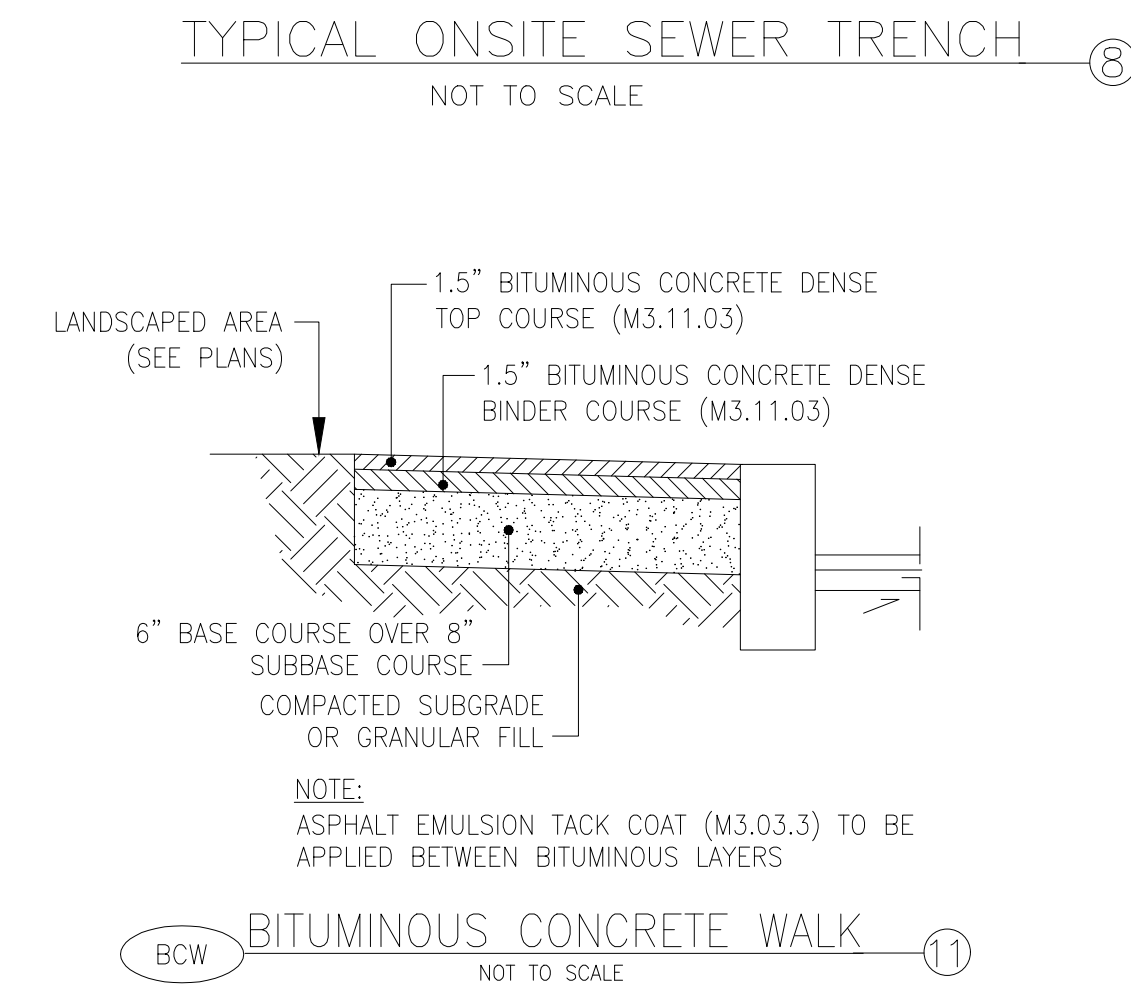
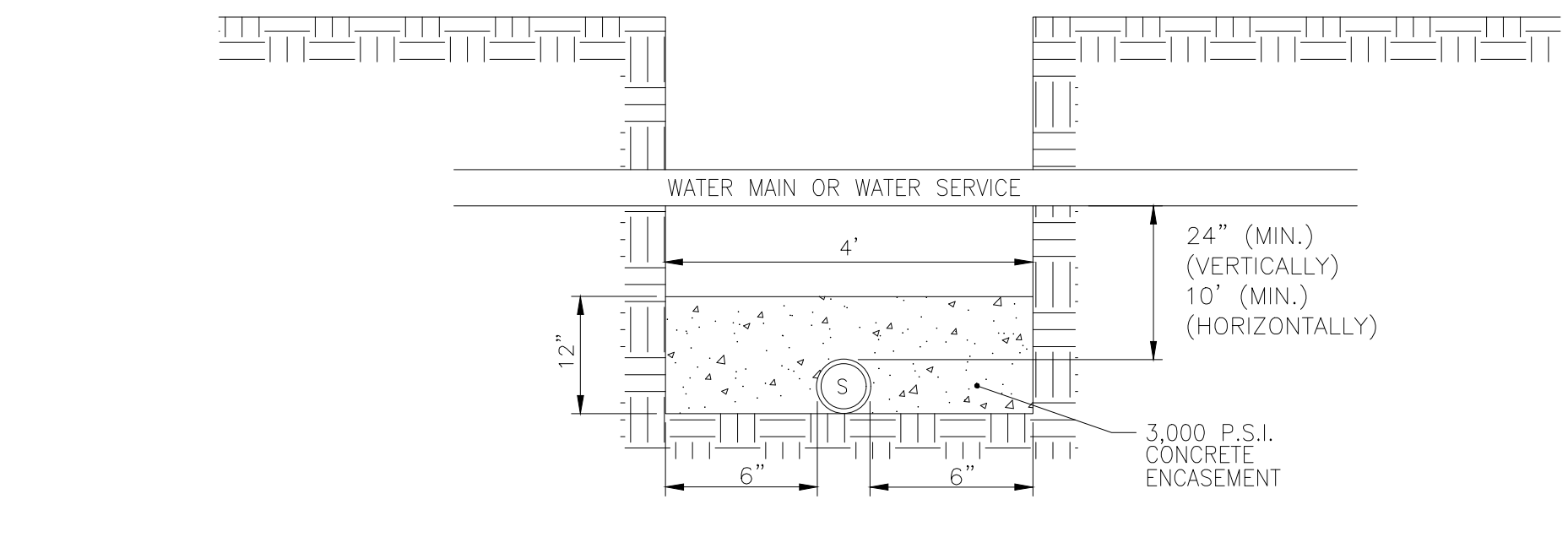
- NOTES:
- SEE UNDERDRAIN PLANS FOR LOCATION OF UNDERDRAIN.
 - SEE GRADING PLAN 2 FOR LOCATION AND EXTENT OF SLOPE FILL.
 - OVERLAP GEOTEXTILE NO. 1 A MINIMUM OF 1 FOOT.
 - DISTURBED AND REMOVED MATERIAL FROM EXISTING SLOPE SHALL BE REPLACED WITH GRANULAR FILL UNLESS OTHERWISE APPROVED BY THE ENGINEER.



- NOTES:
- FOR PIPE INSTALLATION IN ROCK OR LEDGE MINIMUM TRENCH WIDTH SHOULD EQUAL THE DIAMETER OF THE PIPE PLUS 18 INCHES ON EACH SIDE.
 - MINIMUM WIDTH OF TRENCH SHOULD BE 3 FEET.
 - PLACE 6" OF DRAINAGE STONE FROM BASE OF TRENCH TO TOP OF PIPE IF PIPE IS INSTALLED BELOW SEASONAL HIGH GROUND WATER TABLE.



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- FOR PIPE INSTALLATION IN ROCK OR LEDGE MINIMUM TRENCH WIDTH SHOULD EQUAL THE DIAMETER OF THE PIPE PLUS 18 INCHES ON EACH SIDE.
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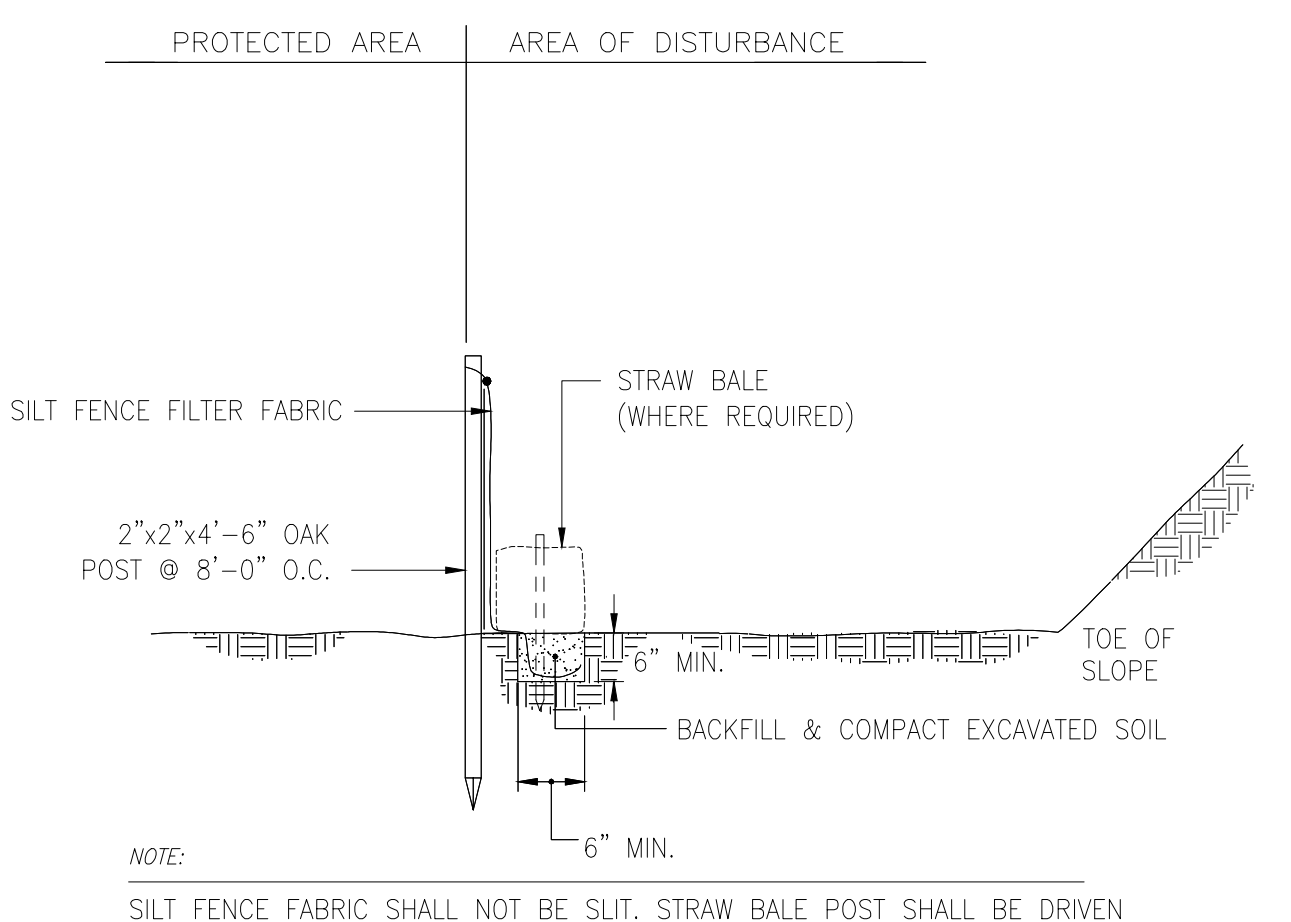
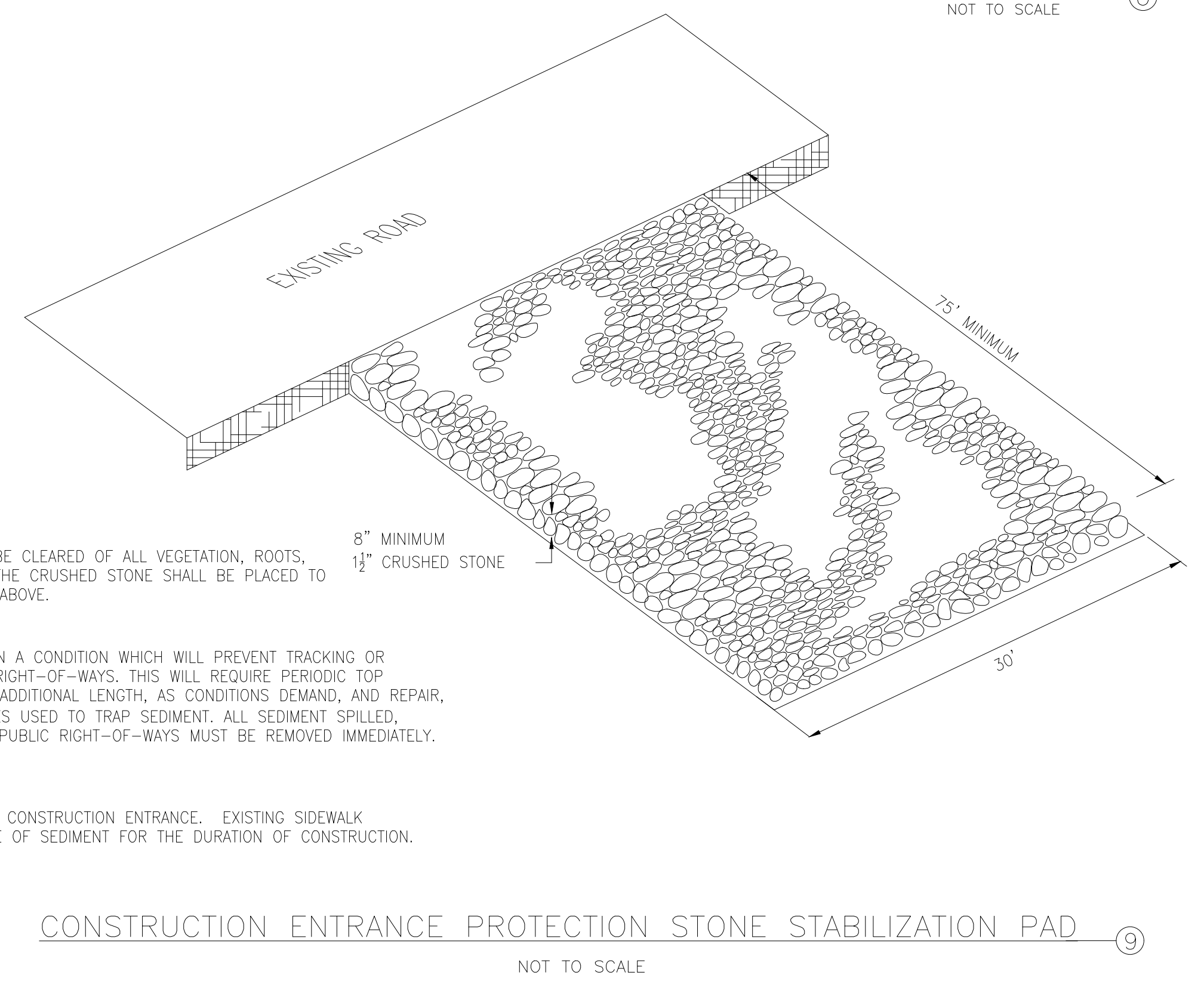


TYPICAL TEMPORARY ACCESS ROAD PAVEMENT SECTION
NOT TO SCALE

INSTALLATION
 THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. THE CRUSHED STONE SHALL BE PLACED TO THE SPECIFIED DIMENSIONS, AS NOTED ABOVE.

MAINTENANCE
 THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENTS ONTO PUBLIC RIGHT-OF-WAYS. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE, OR ADDITIONAL LENGTH, AS CONDITIONS DEMAND, AND REPAIR, AND / OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.

LOCATION
 SEE PROJECT PLANS FOR LOCATION OF CONSTRUCTION ENTRANCE. EXISTING SIDEWALK SHALL BE MAINTAINED INTACT AND FREE OF SEDIMENT FOR THE DURATION OF CONSTRUCTION.



SILT FENCE
NOT TO SCALE

- NOTES:
- PIPE SHALL BE PERFORATED SDR-35 PVC UNDER LANDSCAPED AREAS AND PERFORATED SCHEDULE 40 PVC UNDER PAVED AREAS UNLESS OTHERWISE SPECIFIED.
 - SEE UNDERDRAIN PLANS FOR PIPE SIZES, LOCATIONS AND INVERTS.
 - PIPE PERFORATIONS SHALL BE DOWN.

UNDERDRAIN
NOT TO SCALE

NO.	DESCRIPTION	DATE
3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEDULE DESIGN	2023.10.04

Issued/Revision: YYYYMMDD

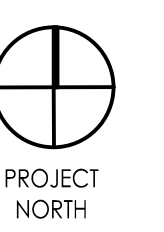
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PRELIMINARY NOT FOR CONSTRUCTION

Scale: AS NOTED
 Project No.: 78000

SITE DETAILS 3

C6.2



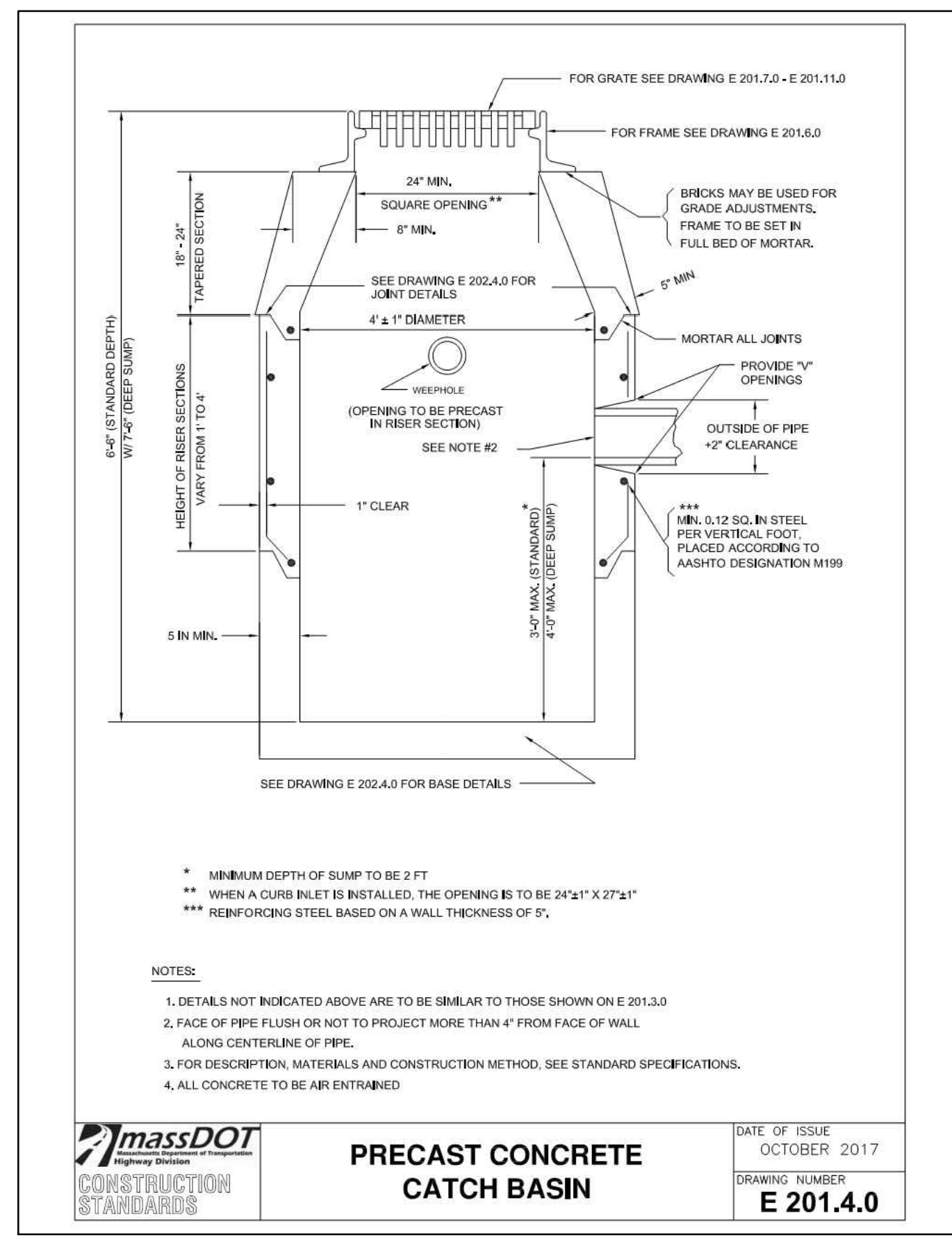
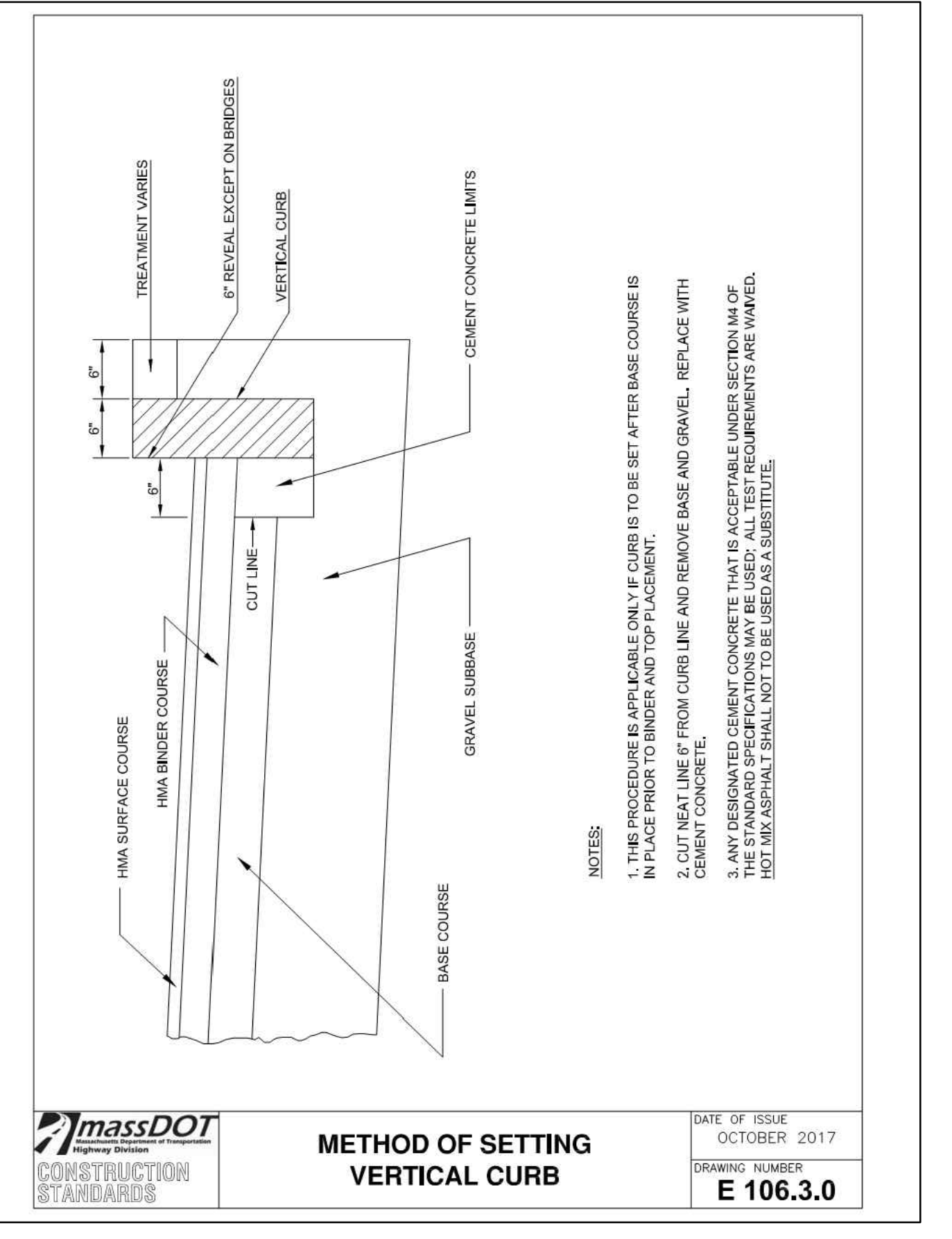
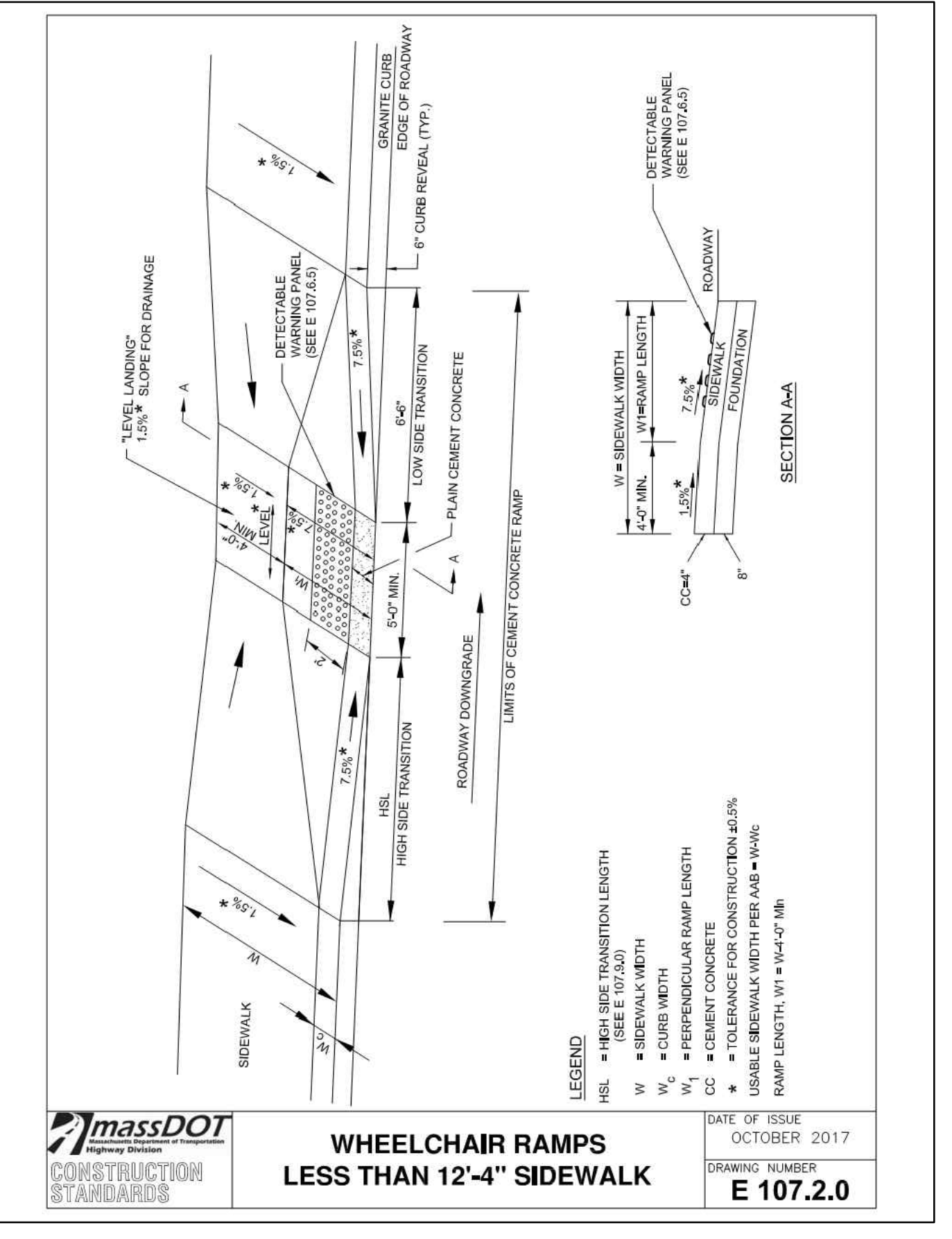
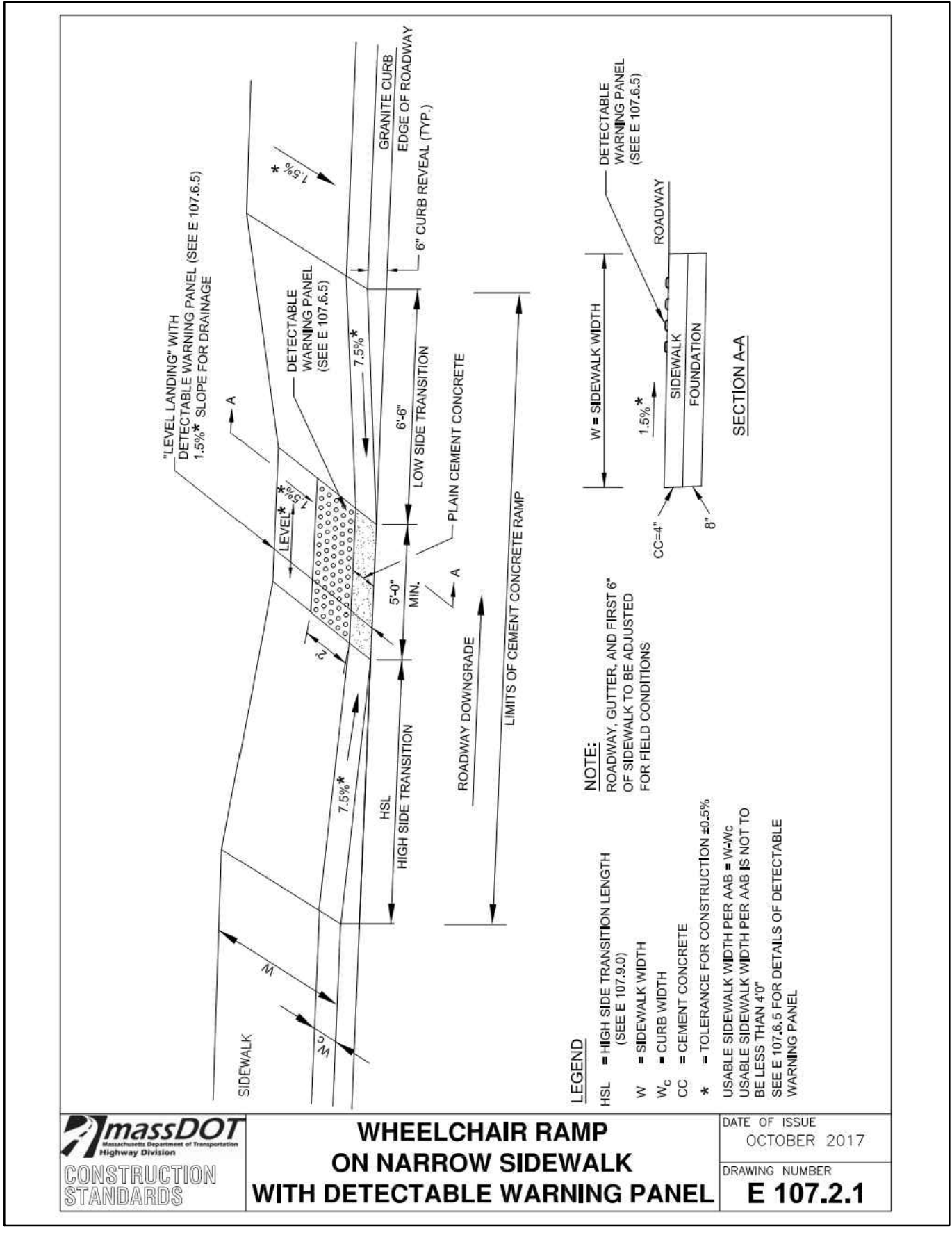
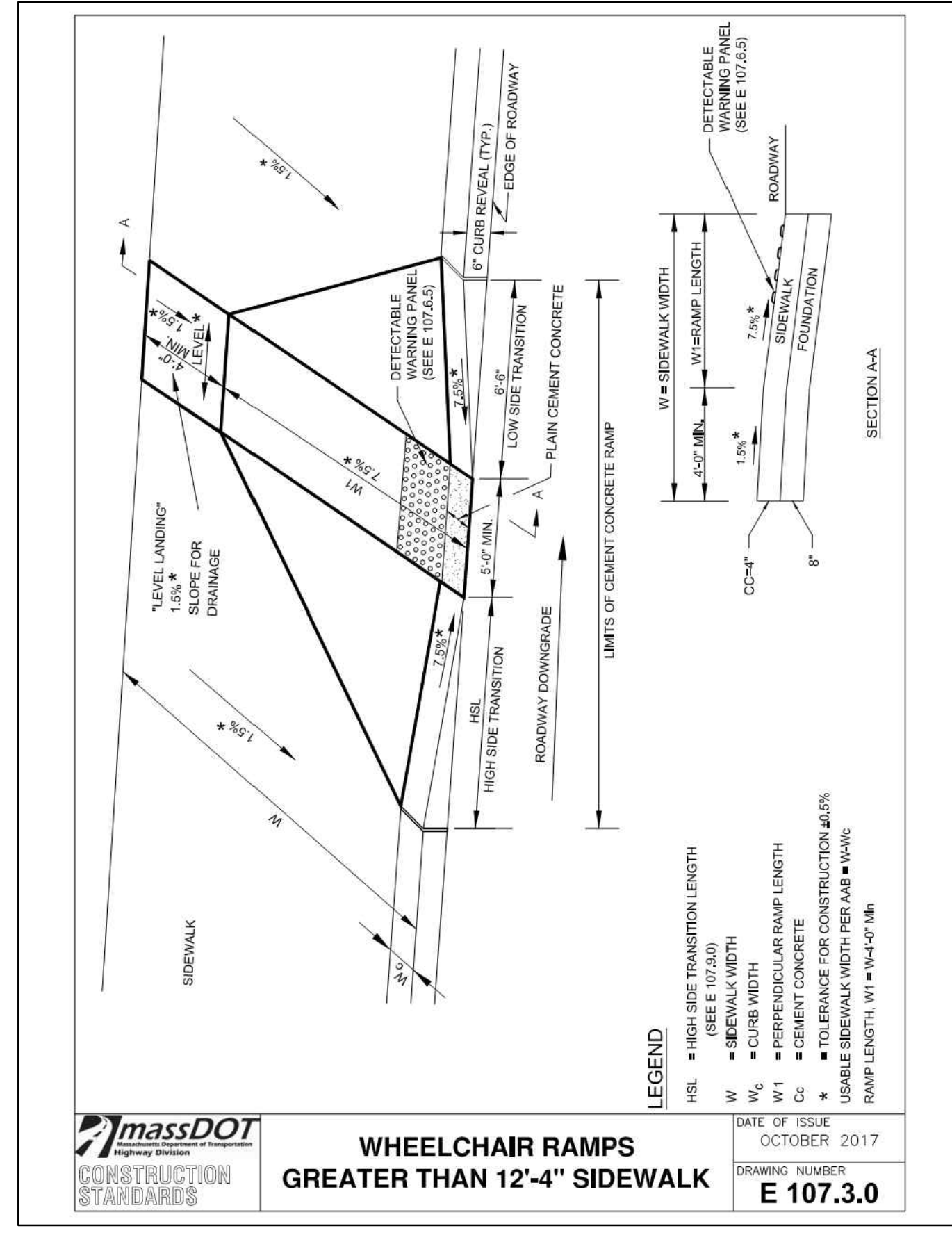
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Scale AS NOTED
Project No. 78000

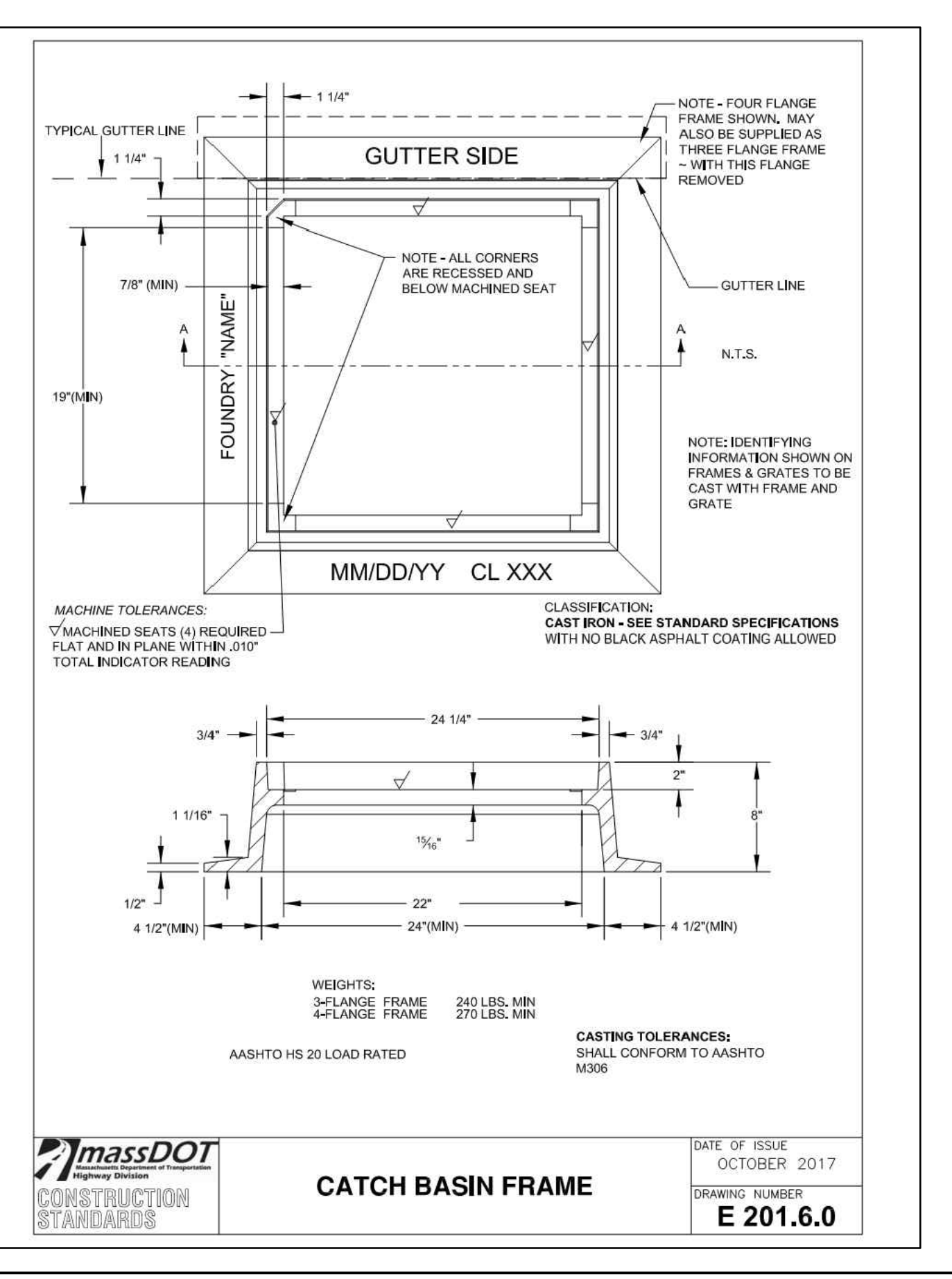
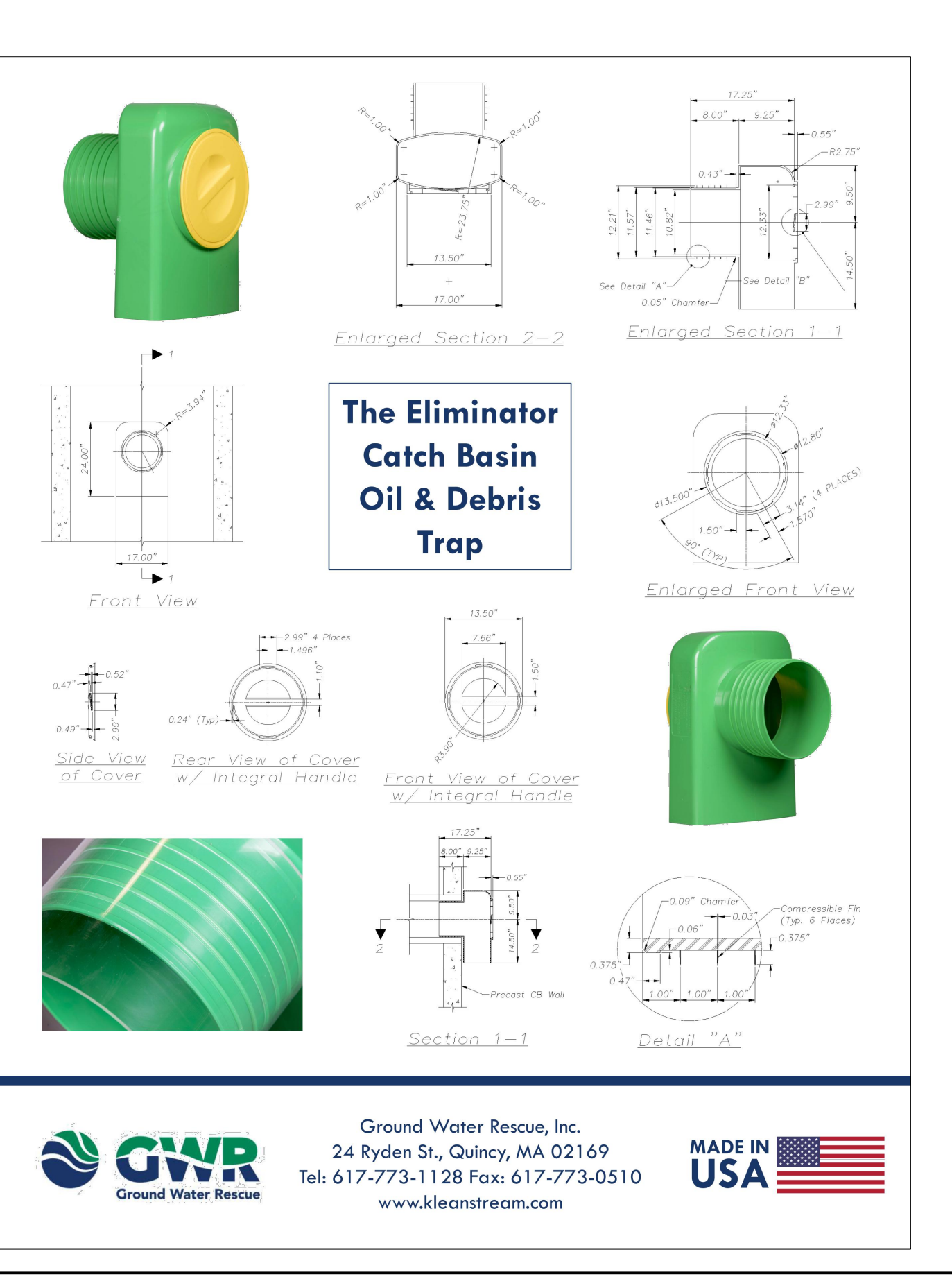
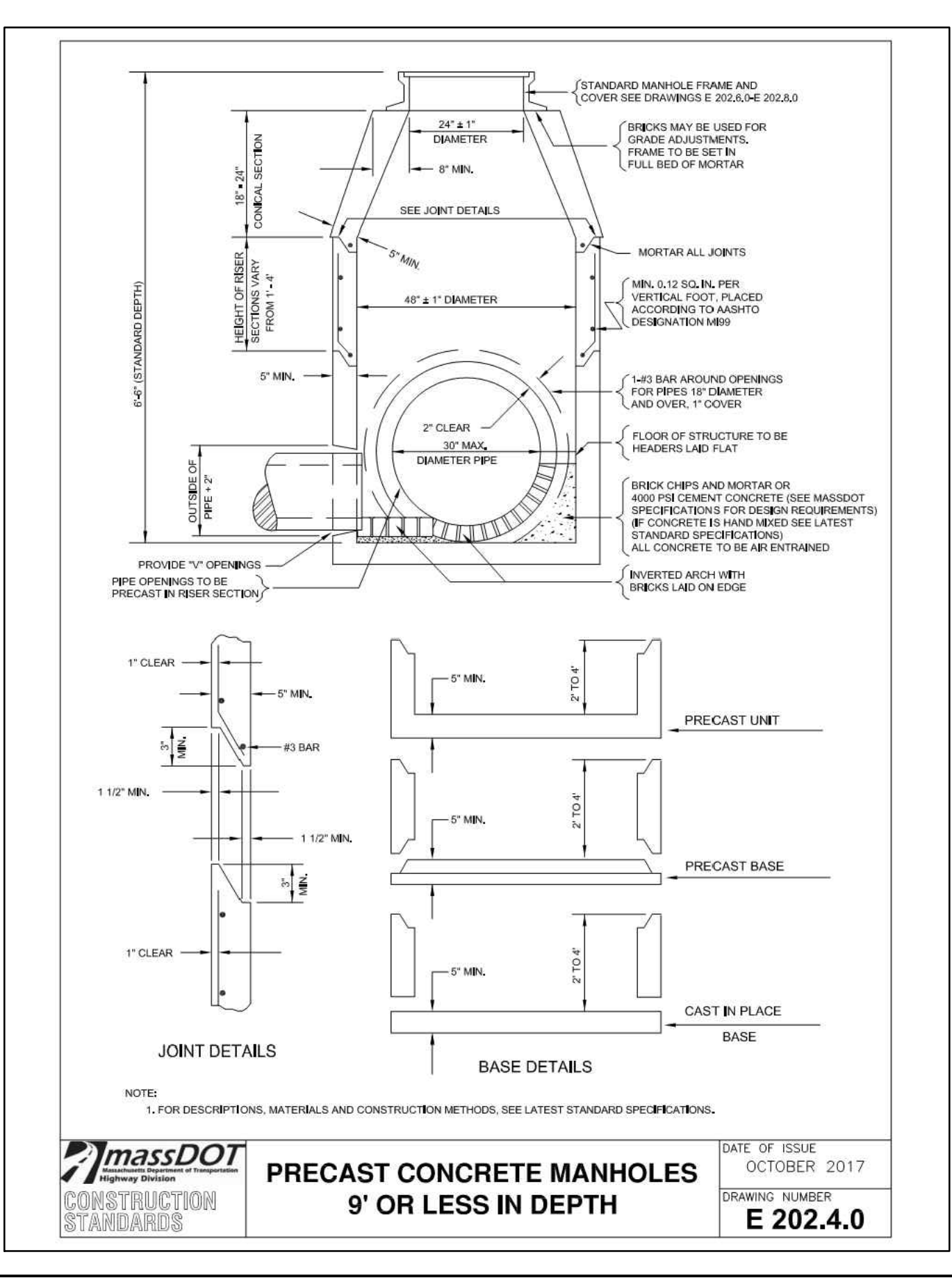
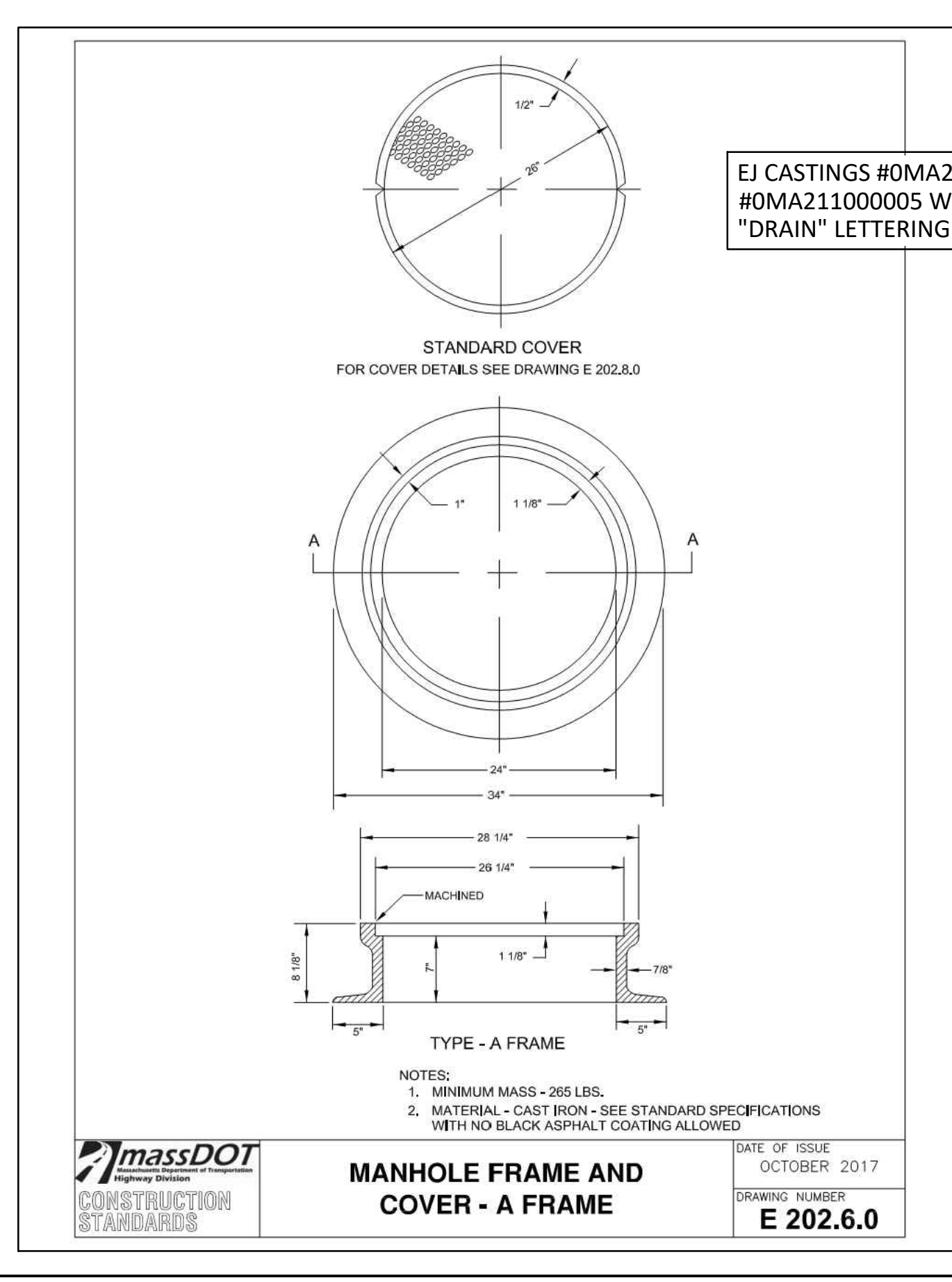
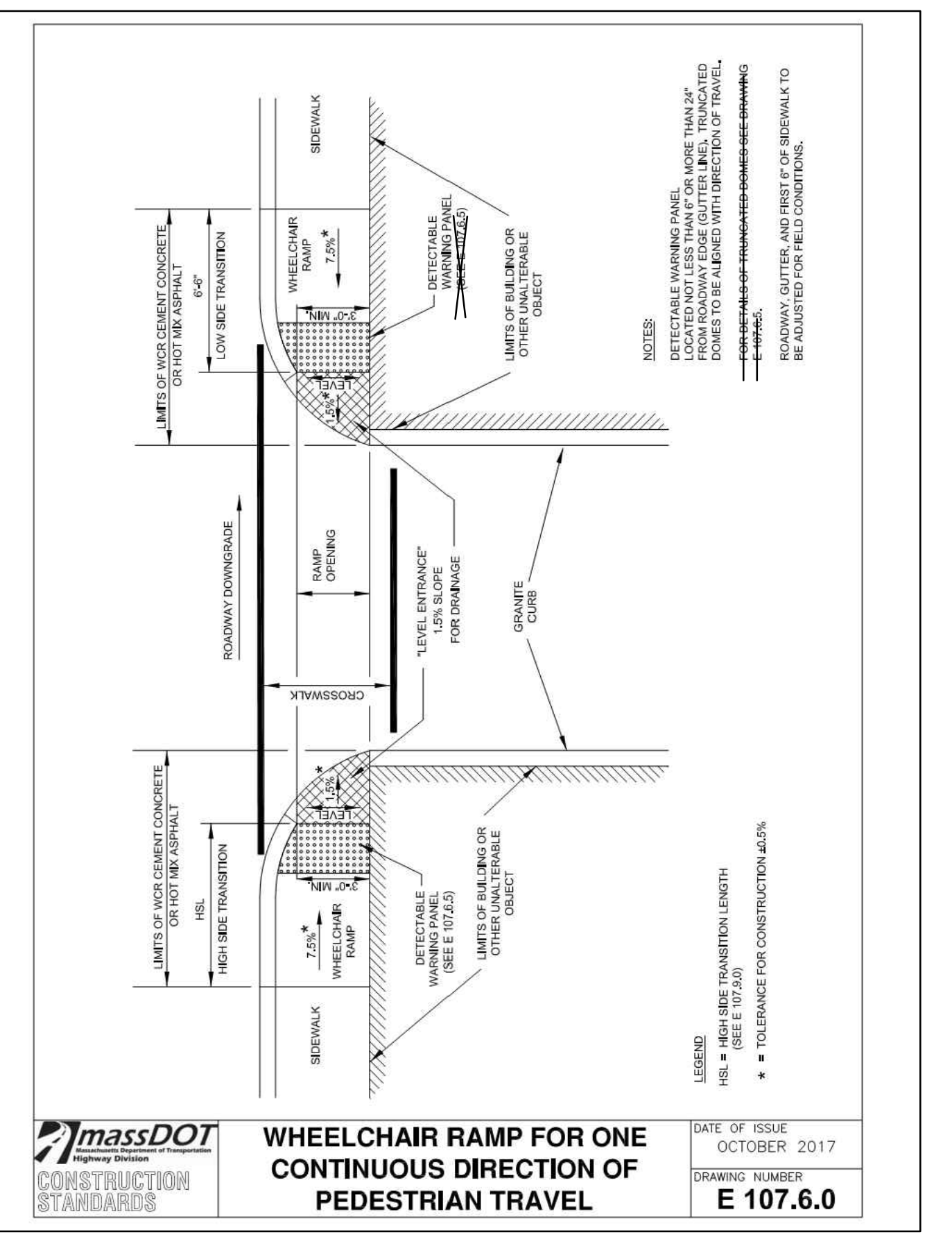
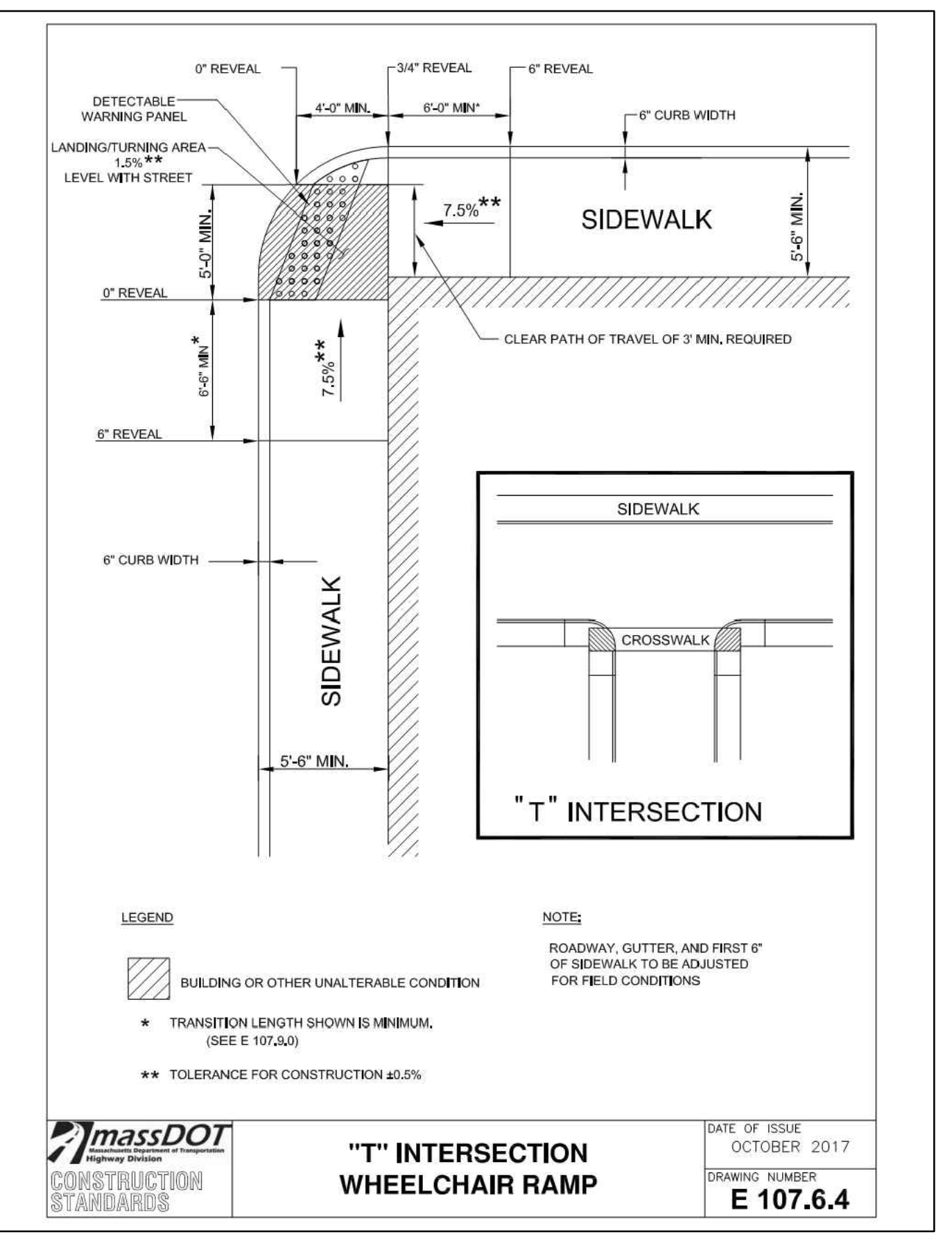
SITE DETAILS 3

C6.3



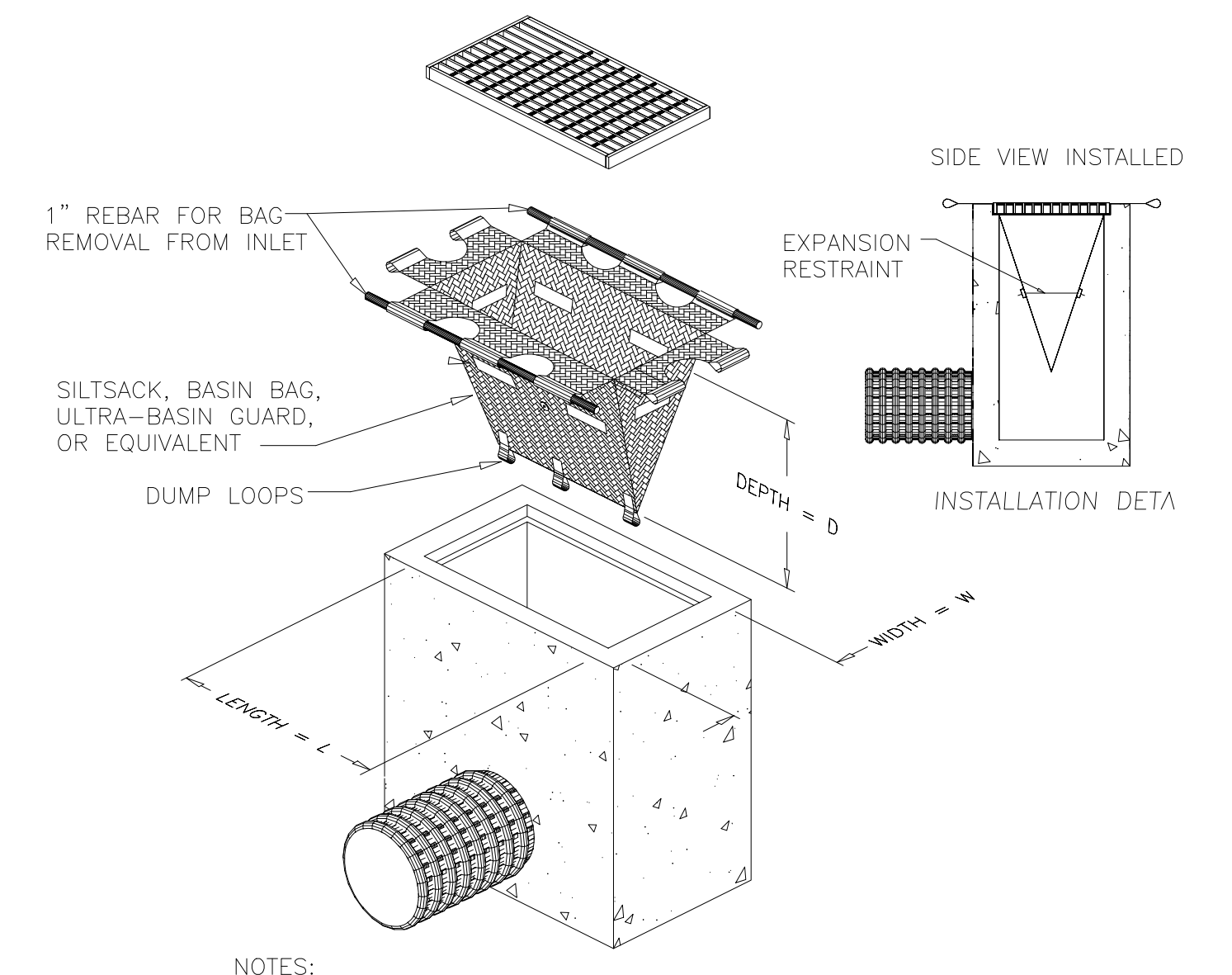
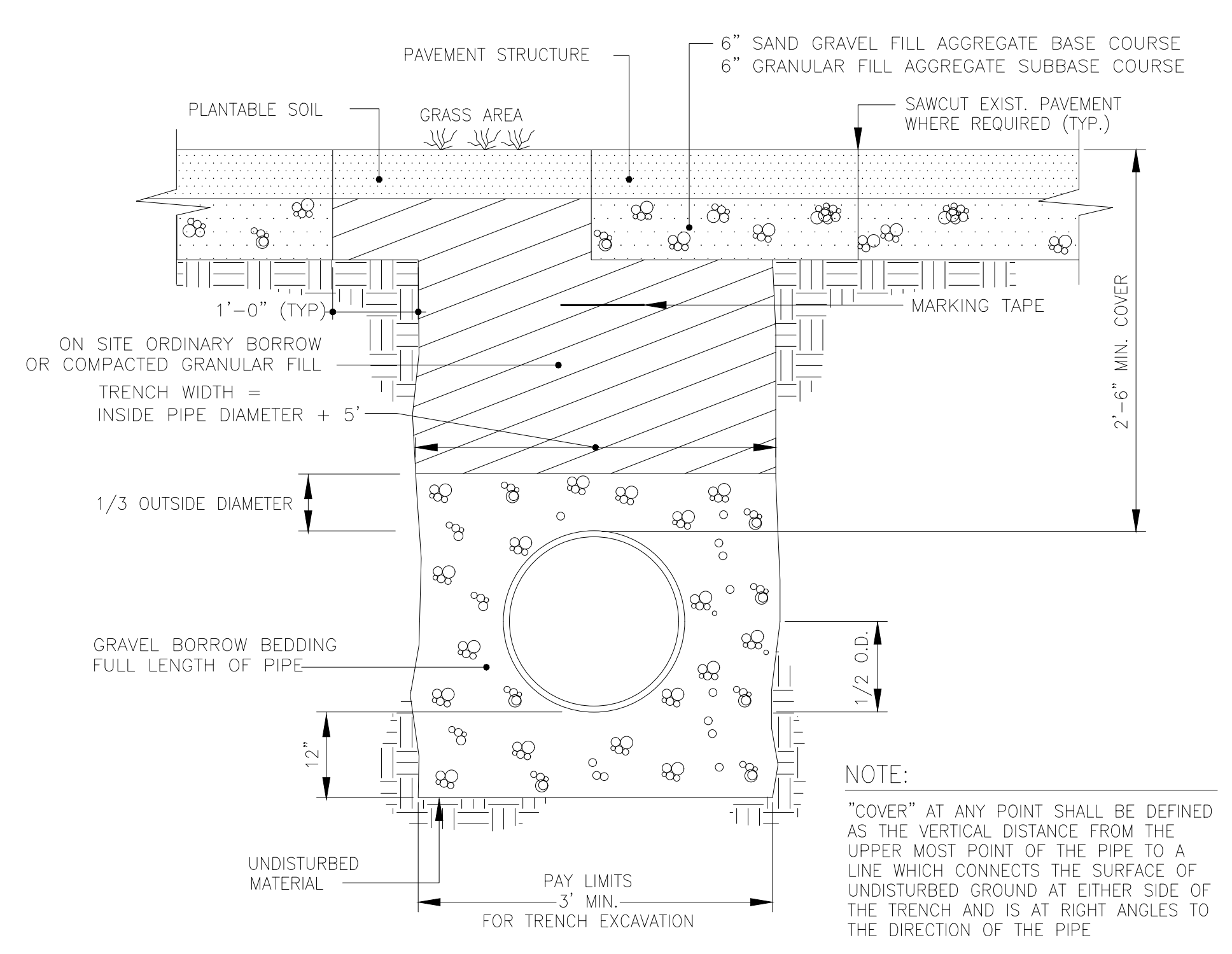
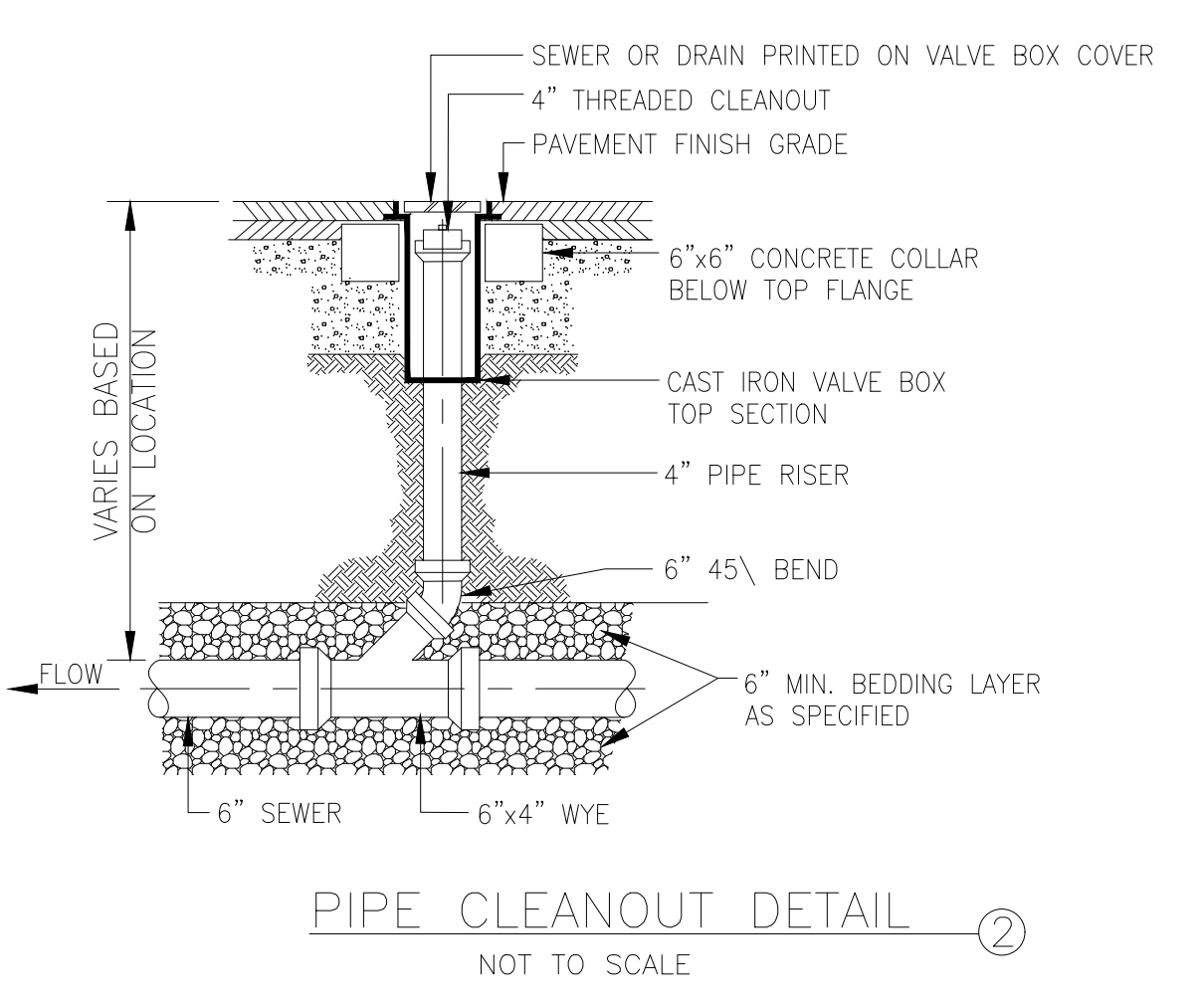
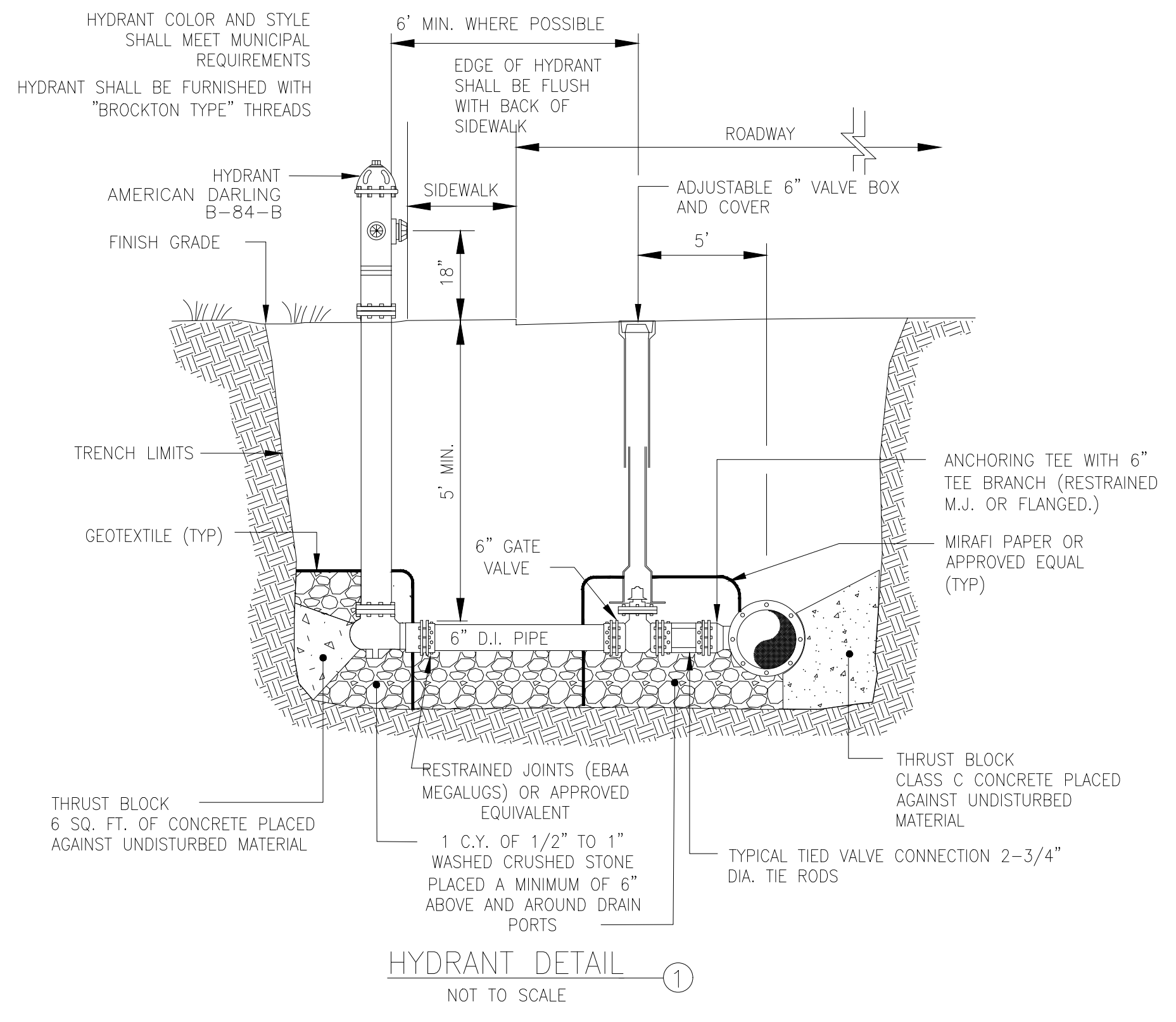
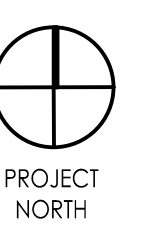
ROADWAY PROFILE GRADE	ENGLISH UNITS
%	6'-6"
>0% TO 1%	7'-8"
>1% TO 2%	9'-0"
>2% TO 3%	11'-0"
>3% TO 4%	14'-0"
>4% TO 5%	15'-0" Max

NOTE:
* BASED ON A DESIGN SLOPE OF 7.5% AND A REVEAL OF 6".

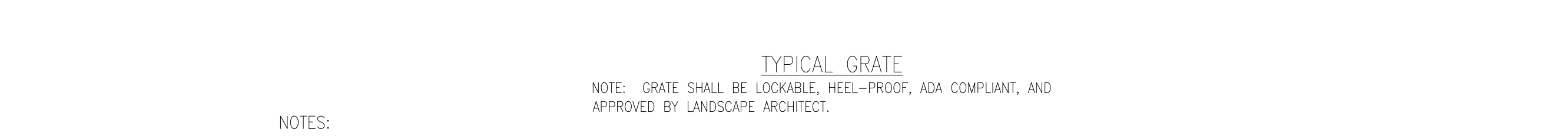
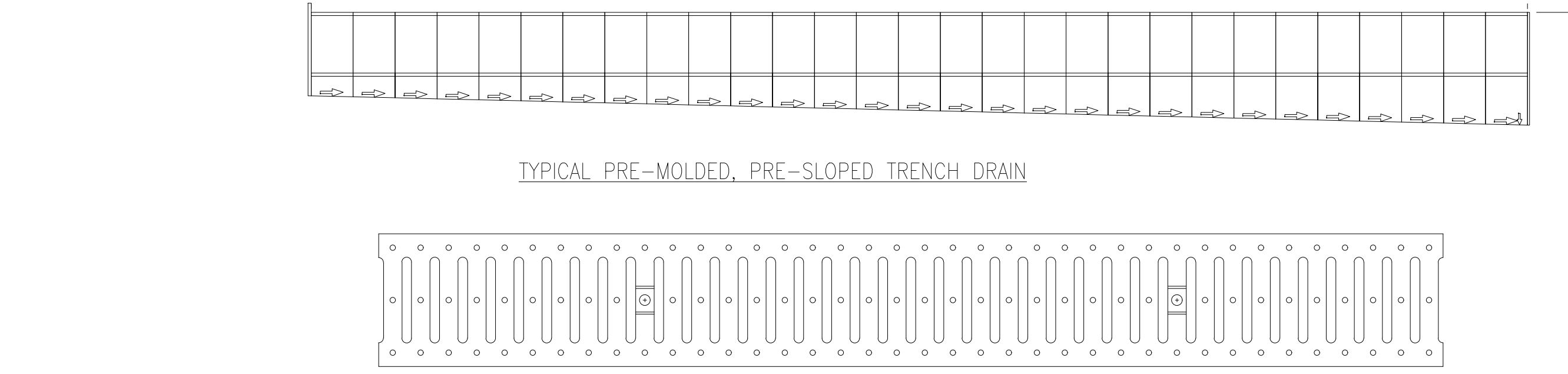
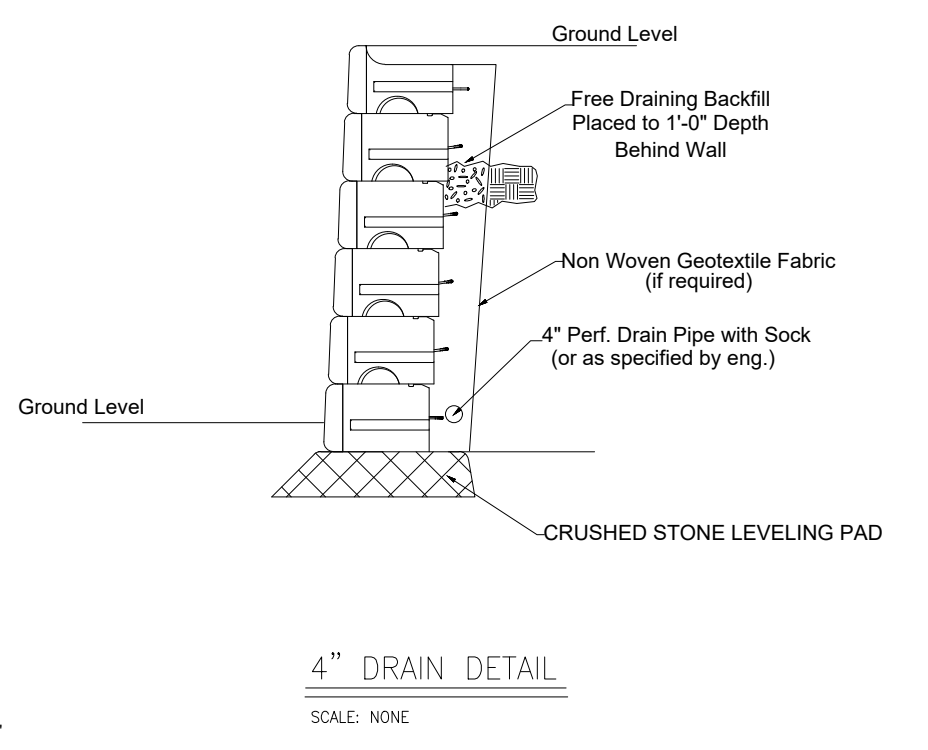
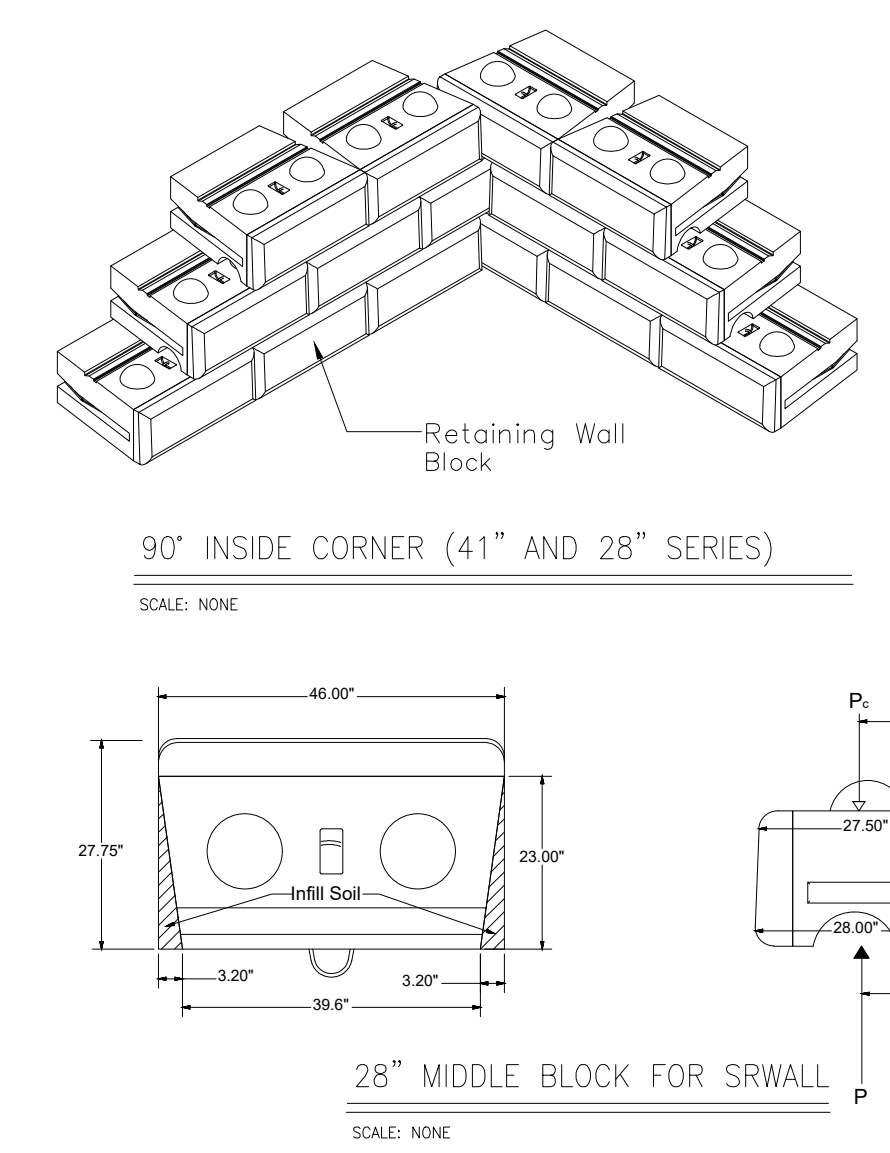
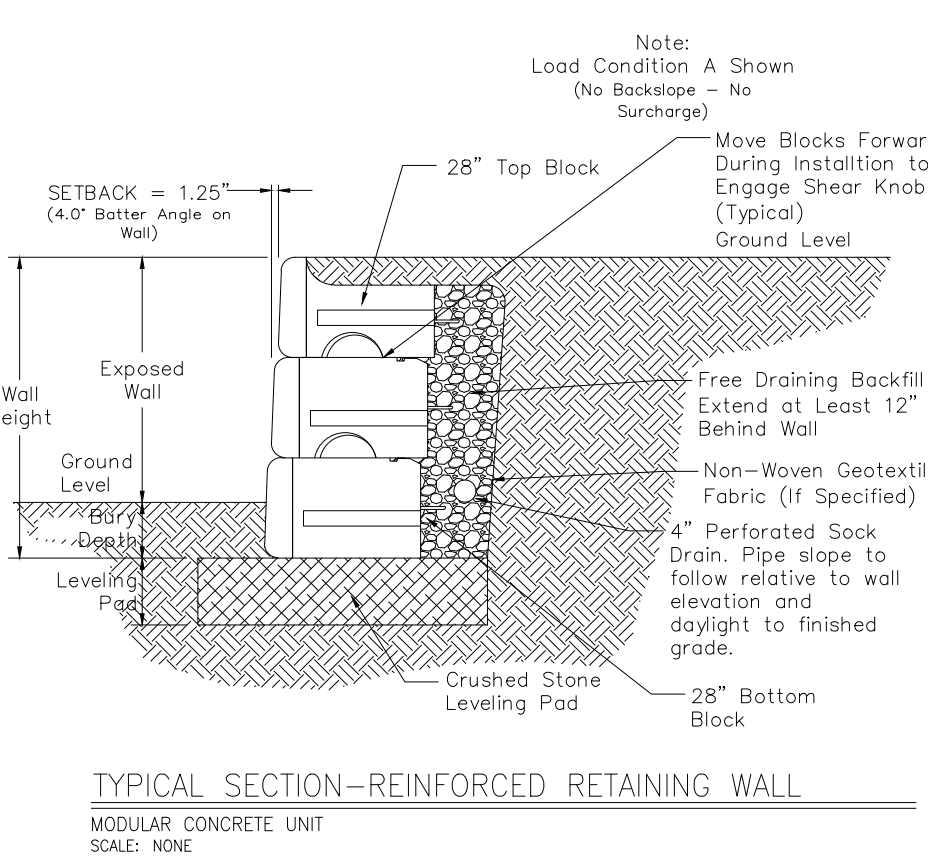
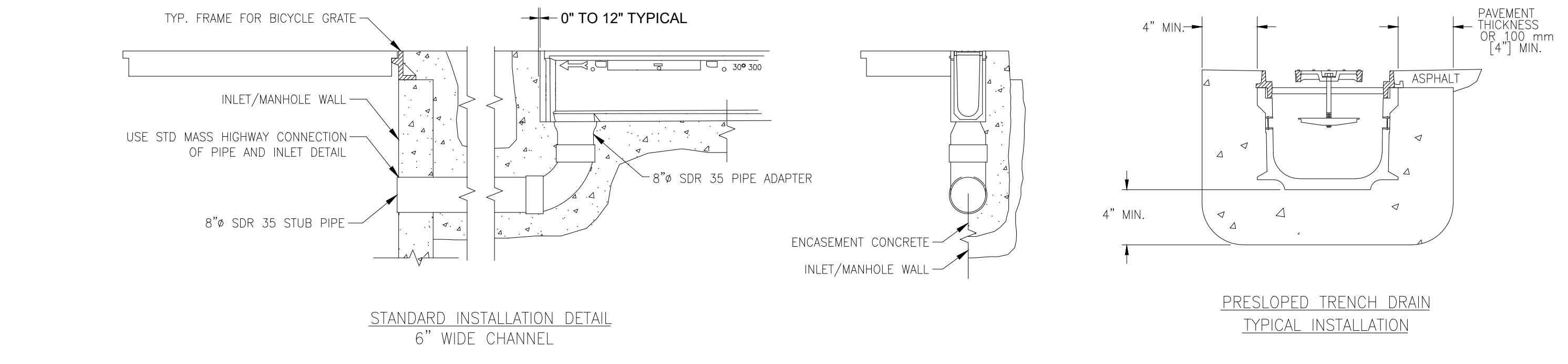


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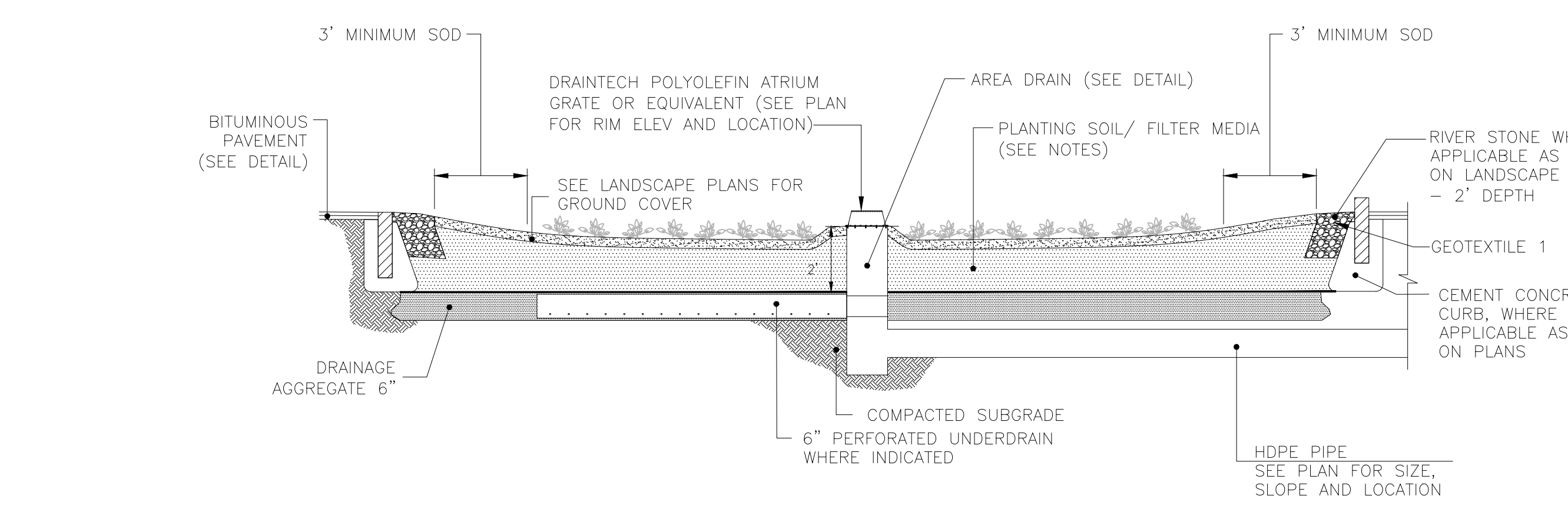


NOTES:
1. INLET PROTECTION SHALL BE CLEANED OF SILT AND DEBRIS ON A REGULAR BASIS AS REQUIRED BY PROJECT SPECIFIC SWPPP.
2. INSPECTIONS SHALL BE DONE AFTER EACH RAIN EVENT AND AS REQUIRED BY PROJECT SPECIFIC SWPPP.

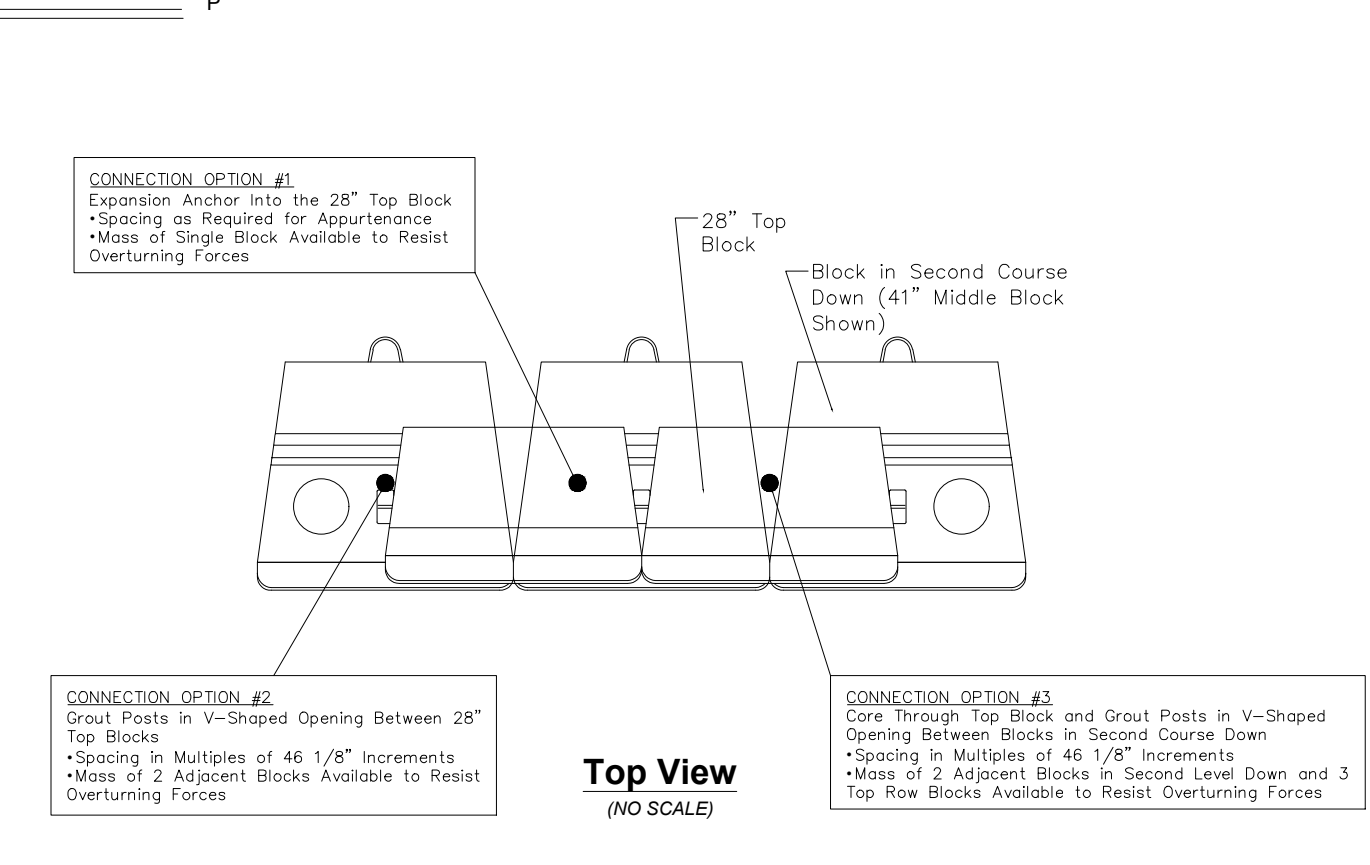
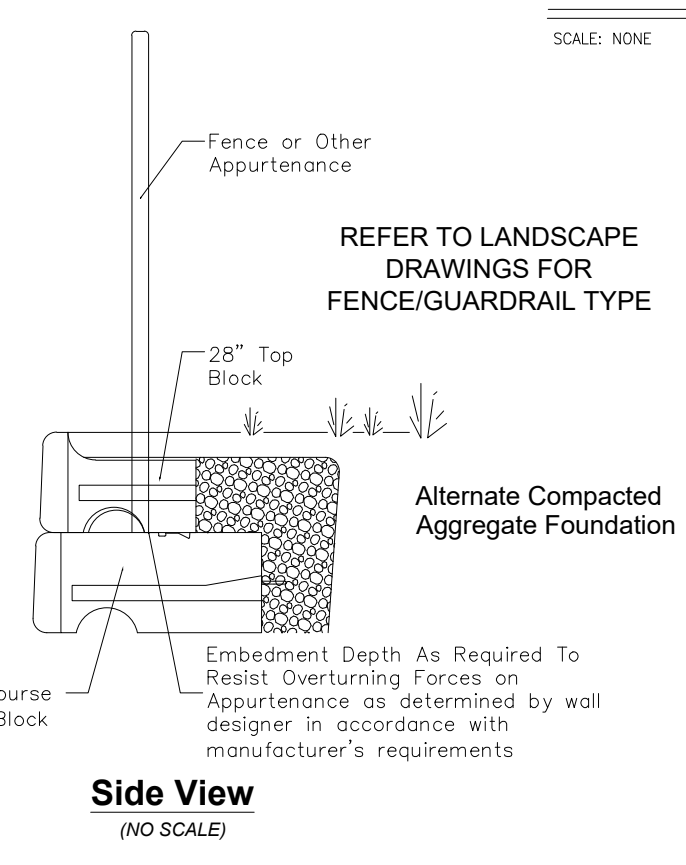
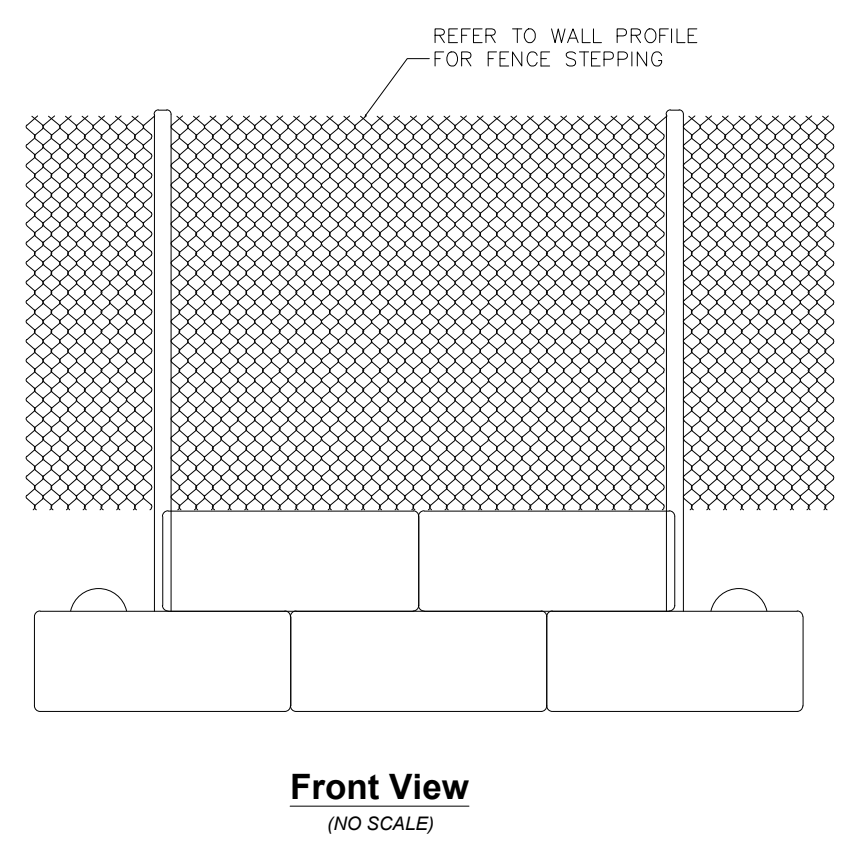


- NOTES:
- TRENCH DRAIN SYSTEM SHALL BE CAPABLE OF A MINIMUM HYDRAULIC FLOW OF 650 GPM.
 - CONTRACTOR SHALL PROVIDE SHOP DRAWING OF PROPOSED TRENCH DRAIN LAYOUT. ACCEPTABLE PRODUCTS FOR THIS APPLICATION INCLUDE POLYDRAIN BY ABT INC., SPORT SYSTEM 4000, KLASSIKDRAIN, OR POWERDRAIN BY ACO, DURASLOPE BY NDS, OR APPROVED EQUIVALENT.
 - TRENCH DRAIN SHALL HAVE MINIMUM SLOPE OF 0.6%.
 - AT ACCESSIBLE ROUTES, GRATE OPENINGS SHALL NOT EXCEED 2\"/>

TRENCH DRAIN
NOT TO SCALE



- BIO-RETENTION AREA NOTES :**
- FOR PLANTING SOIL/FILTER MEDIA AND BARK MULCH SPECIFICATIONS, REFER TO LANDSCAPE SPECIFICATIONS



SEGMENTAL RETAINING WALL DETAIL
NOT TO SCALE

- RETAINING WALLS SHALL BE REDI-ROCK, OR STRONG STONE, RE-CON RETAINING WALL SYSTEMS, INC., SERIES 50, NORTH SHORE GRANITE TEXTURE OR EQUIVALENT
- THESE DETAILS ARE FOR REFERENCE PURPOSES ONLY. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS COMPLETED AND STAMPED BY A MASSACHUSETTS REGISTERED STRUCTURAL ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL INCLUDE ALL DETAILS AND INFORMATION NECESSARY FOR CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE THE STRUCTURAL ENGINEER ALL APPURTENANT INFORMATION FOR THEIR DESIGN AND CALCULATIONS.

NOTE:
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2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEMATIC DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

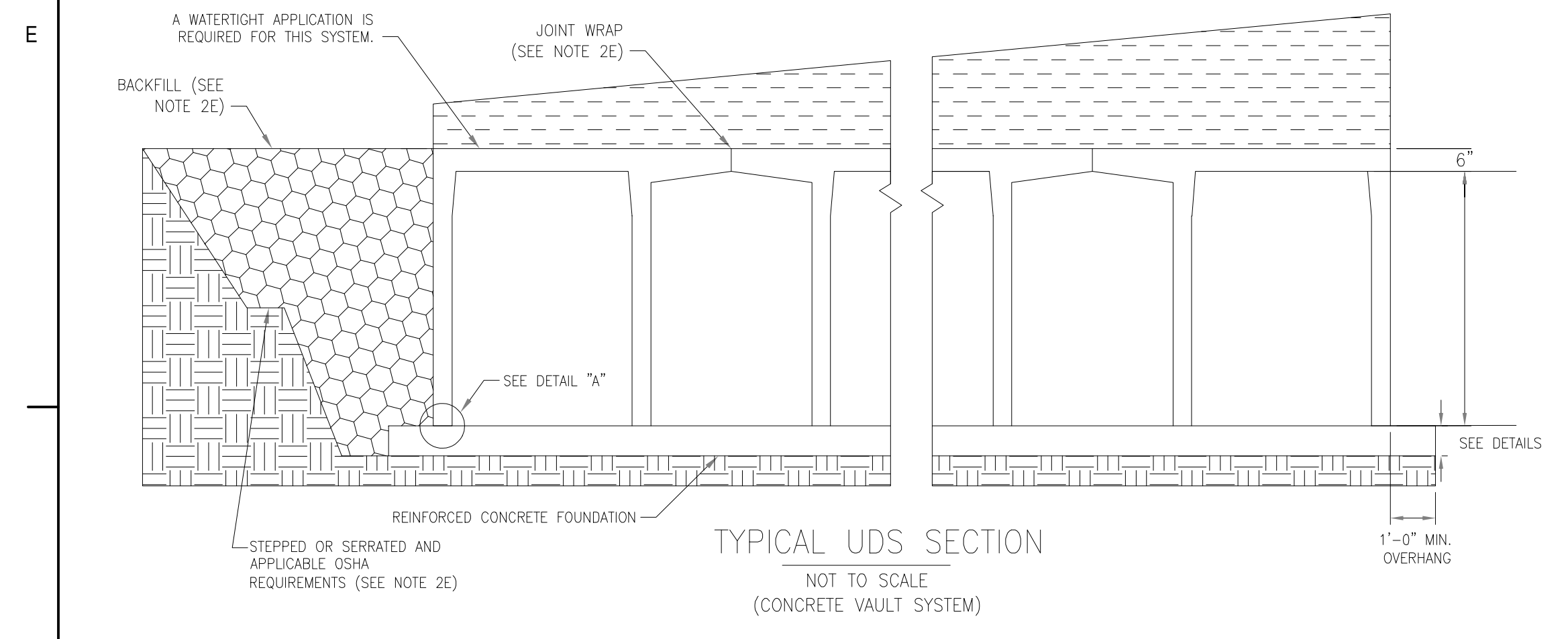
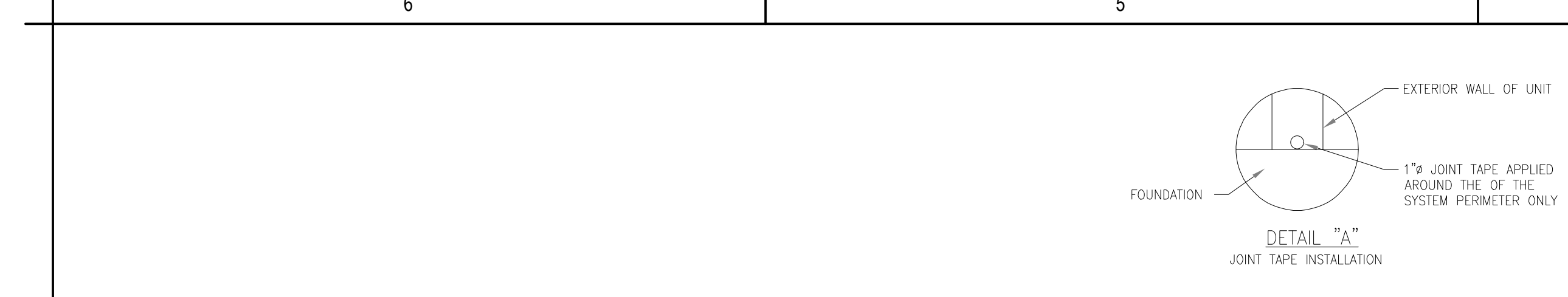
Permit/Seal

**PRELIMINARY
NOT FOR
CONSTRUCTION**

Scale AS NOTED
Project No. 78000

SITE DETAILS 4

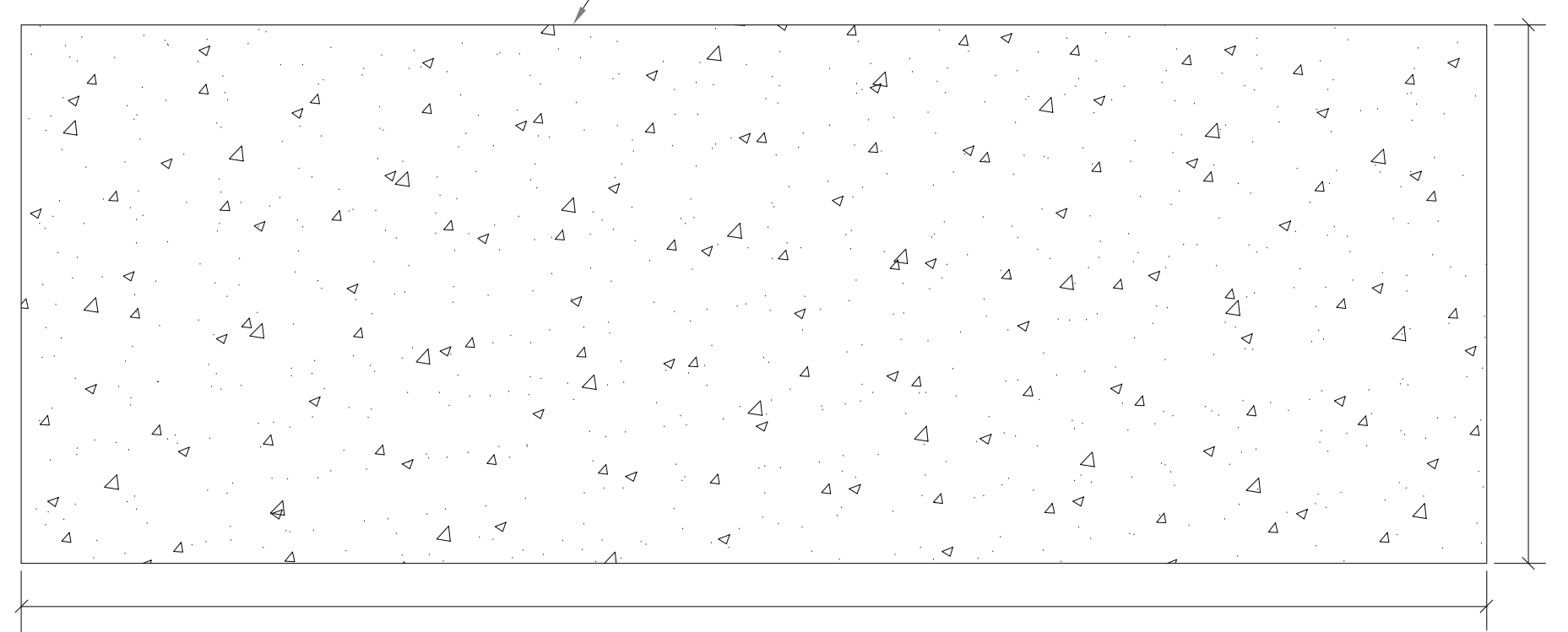
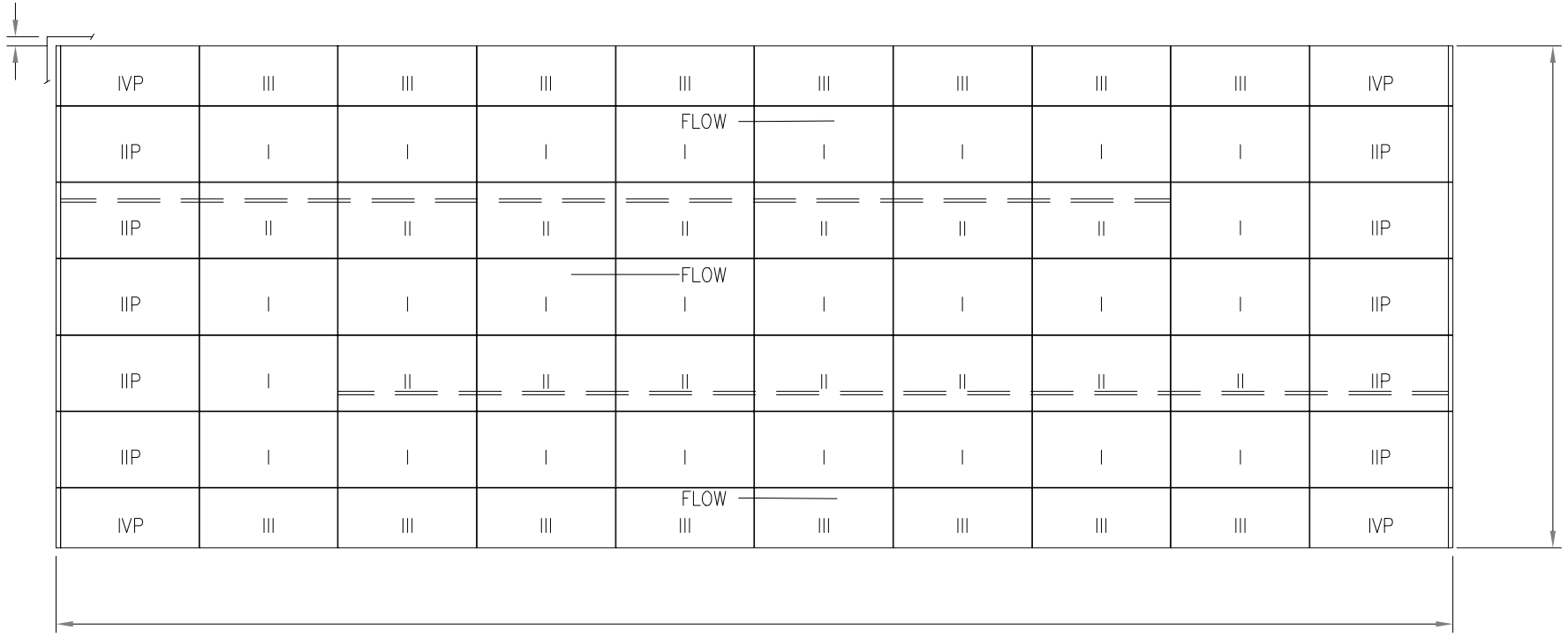
C6.4



SYSTEM SPECIFICATION

1. MANUFACTURER SHALL BE STORMTRAP, LLC, UNITED CONCRETE PRODUCTS, CONCRETE SYSTEMS INC, OR APPROVED EQUIVALENT.
2. CONTRACTOR SHALL SUBMIT MANUFACTURERS SHOP DRAWINGS, INCLUDING PLANS, ELEVATIONS, SECTIONS, AND DETAILS, INDICATING LAYOUT, DIMENSIONS, FOUNDATION, COVER, AND JOINTS. INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET AND OUTLET PIPE OPENINGS.
3. CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS INCLUDING STORMWATER VOLUME SIZING, STRUCTURAL CALCULATIONS, AND BUOYANCY CALCULATIONS.
4. TOTAL COVER: MIN. 2.25' MAX. 3.75' CONSULT MANUFACTURER FOR ADDITIONAL COVER OPTIONS.
5. THE SYSTEM SHALL BE WATER TIGHT.
6. CONCRETE CHAMBER SHALL BE DESIGNED FOR AASHTO HS-20 HIGHWAY LOADING. MIN. SOIL PRESSURE 2000 PSF.
7. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO UNIT INSTALLATION.
8. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE SHALL BE ASSUMED TO BE AT ELEVATION 18.62.
9. FOR STRUCTURAL CALCULATIONS THE SOIL DENSITY IS ASSUMED TO BE 120 PCF.
10. FOR FLOTATION CALCULATIONS THE GROUND WATER TABLE SHALL BE ASSUMED TO BE AT ELEVATION 18.62.
11. SYSTEM VOLUME =

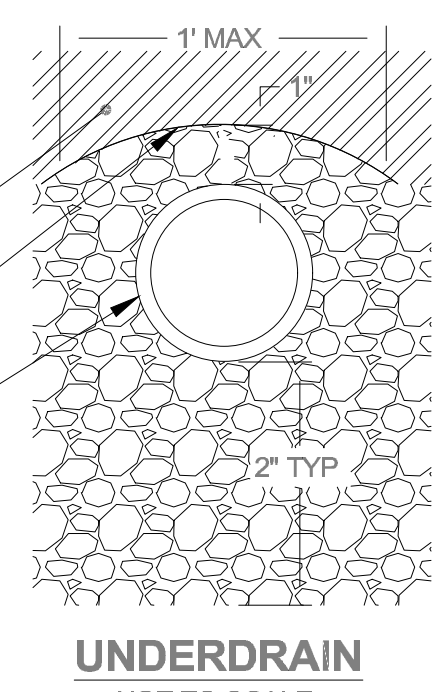
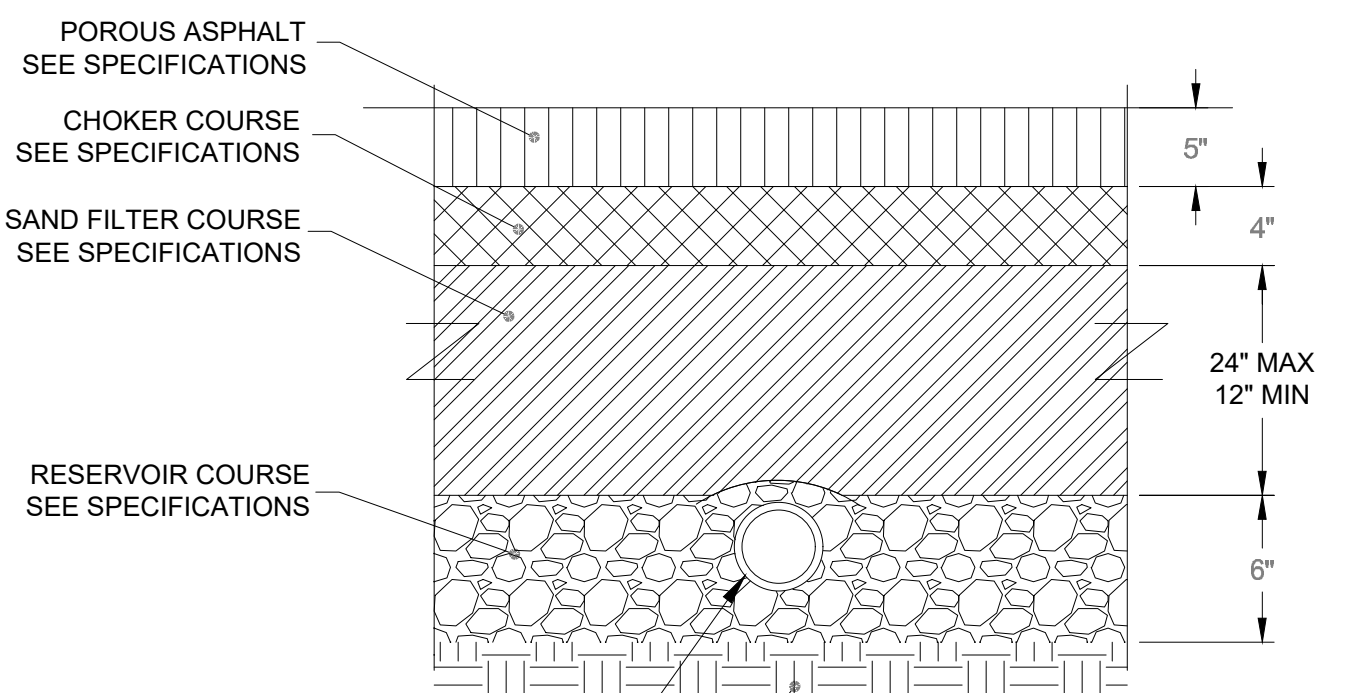
UNDERGROUND CONCRETE VAULT DETENTION SYSTEM (UDS)
 NOT TO SCALE



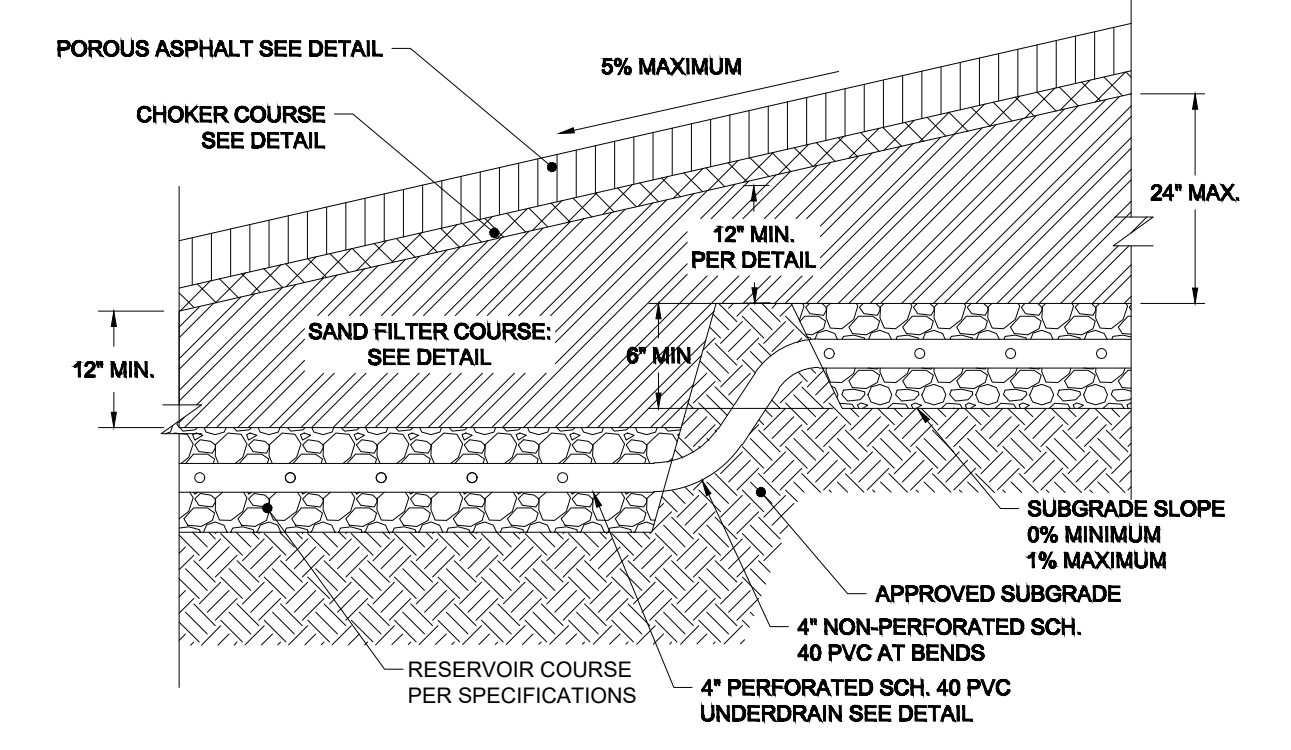
NOTES:

1. CONCRETE STRENGTH @ 28 DAYS, 5K-8K ENTRAINED AIR, 4" MAX. SLUMP.
2. NET ALLOWABLE SOIL PRESSURE GREATER THAN OR EQUAL TO 2000 PSF.
3. SOIL CONDITIONS TO BE VERIFIED ON SITE.
4. 1'-0" OVERHANG AROUND OUTSIDE OF SYSTEM.
5. REBAR: ASTM A-615 GRADE 60, BLACK BAR.
6. DIMENSION OF FOUNDATION MUST HAVE 1'-0" OVERHANG BEYOND EXTERNAL FACE OF UNITS.
7. DIMENSION OF SYSTEM ALLOW FOR A 3/4" GAP BETWEEN EACH UNIT.
8. ALL DIMENSIONS TO BE VERIFIED IN THE FIELD.
9. THE CONTROL JOINTS CAN BE 16'-0" TO 24'-0" MAX APART.

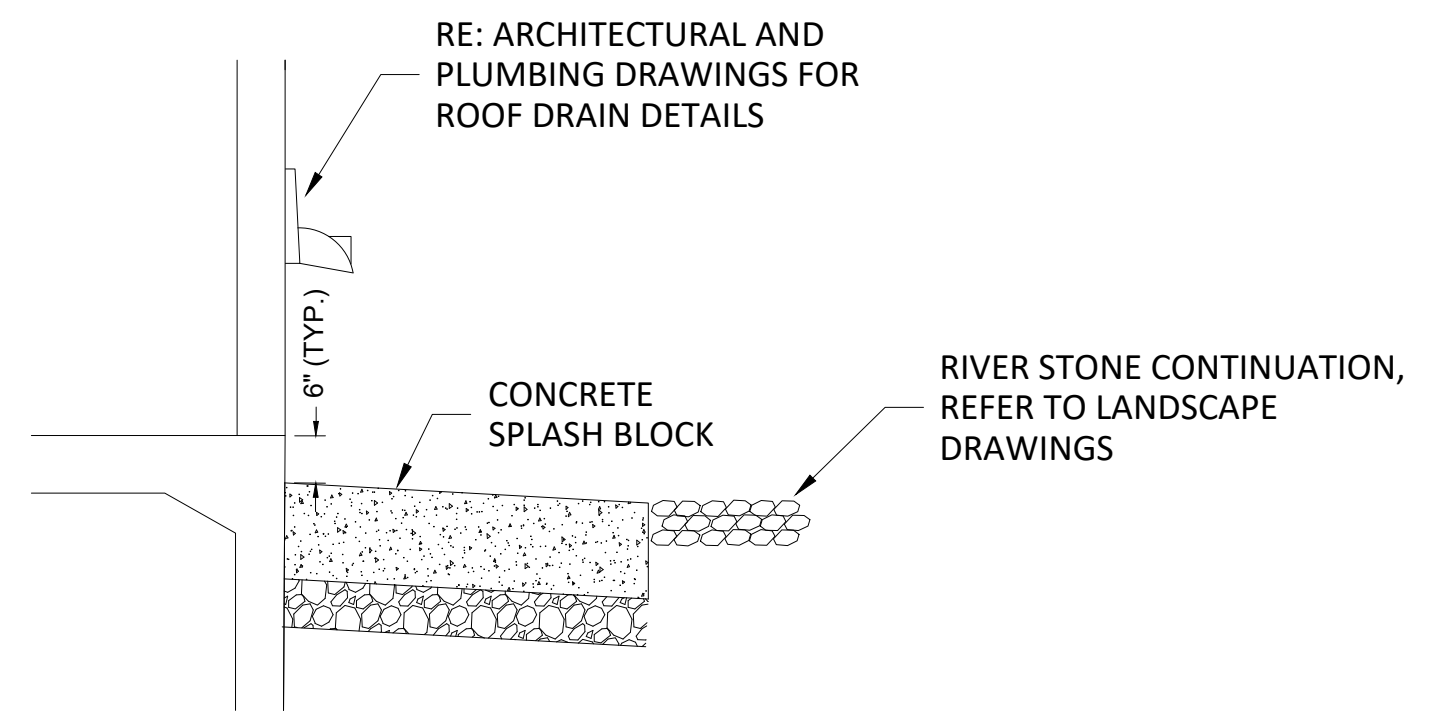
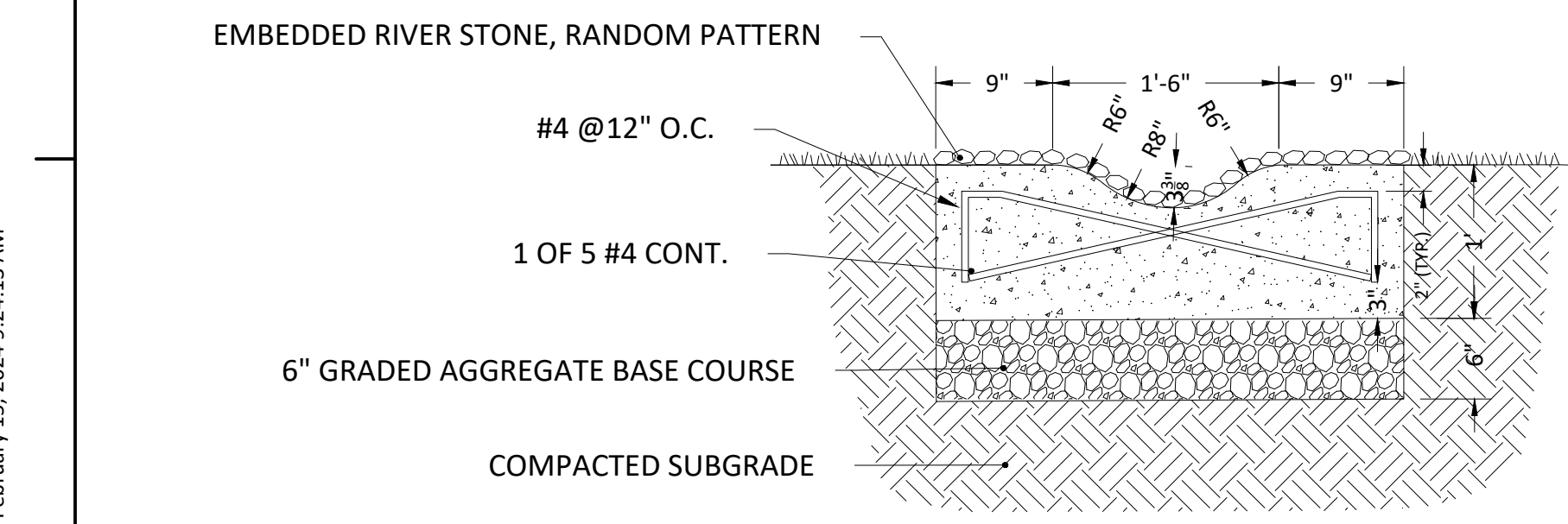
MAXIMUM SYSTEM COVER	SLAB THICKNESS	CONCRETE STRENGTH	REINFORCEMENT (BOTH DIRECTIONS)
0' - 1'-0"	8"	4000 psi	#4 @ 16" o.c.
>1'-0" - 2'-0"	8"	4000 psi	#4 @ 16" o.c.
>2'-0" - 3'-0"	8"	4000 psi	#4 @ 12" o.c.
>3'-0" - 4'-0"	8"	4000 psi	#4 @ 12" o.c.
>4'-0" - 5'-0"	8"	4000 psi	#5 @ 16" o.c.
>5'-0" - 6'-0"	8"	4000 psi	#5 @ 16" o.c.
>6'-0" - 7'-0"	8"	4000 psi	#5 @ 16" o.c.
>7'-0" - 8'-0"	9"	4000 psi	#5 @ 12" o.c.
>8'-0" - 9'-0"	10"	4000 psi	#5 @ 12" o.c.
>9'-0" - 10'-0"	10"	4500 psi	#5 @ 12" o.c.



TYPICAL POROUS ASPHALT CROSS-SECTION
 NOT TO SCALE



POROUS ASPHALT SUBBASE & UNDERDRAIN
 NOT TO SCALE



*NOTE: CONTRACTOR SHALL SUBMIT MOCKUP OF SPLASH BLOCK FOR APPROVAL BY THE LANDSCAPE ARCHITECT

NOTE:
 ANY MANUFACTURER'S NAMES AND/OR MODEL NUMBERS IDENTIFIED HEREIN ARE INTENDED TO ASSIST IN ESTABLISHING A GENERAL LEVEL OF QUALITY, CONFIGURATION, FUNCTIONALITY, AND APPEARANCE REQUIRED. THIS IS NOT A PROPRIETARY SPECIFICATION AND IT SHOULD BE NOTED THAT "OR APPROVED EQUIVALENT" APPLIES TO ALL PRODUCTS DENOTED HEREIN. IT IS UNDERSTOOD THAT ALL MANUFACTURERS WILL HAVE MINOR VARIATIONS IN CONFIGURATION, APPEARANCE, AND PRODUCT SPECIFICATION TO ENCOURAGE OPEN AND COMPETITIVE INVOLVEMENT FROM MULTIPLE MANUFACTURERS THAT ARE ABLE TO SUPPLY SIMILAR PRODUCTS.

NO.	DESCRIPTION	DATE
3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEMATIC DESIGN	2023.10.04

Issued/Revision: YYYYMMDD

Permit/Seal

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 NOT FOR
 CONSTRUCTION**

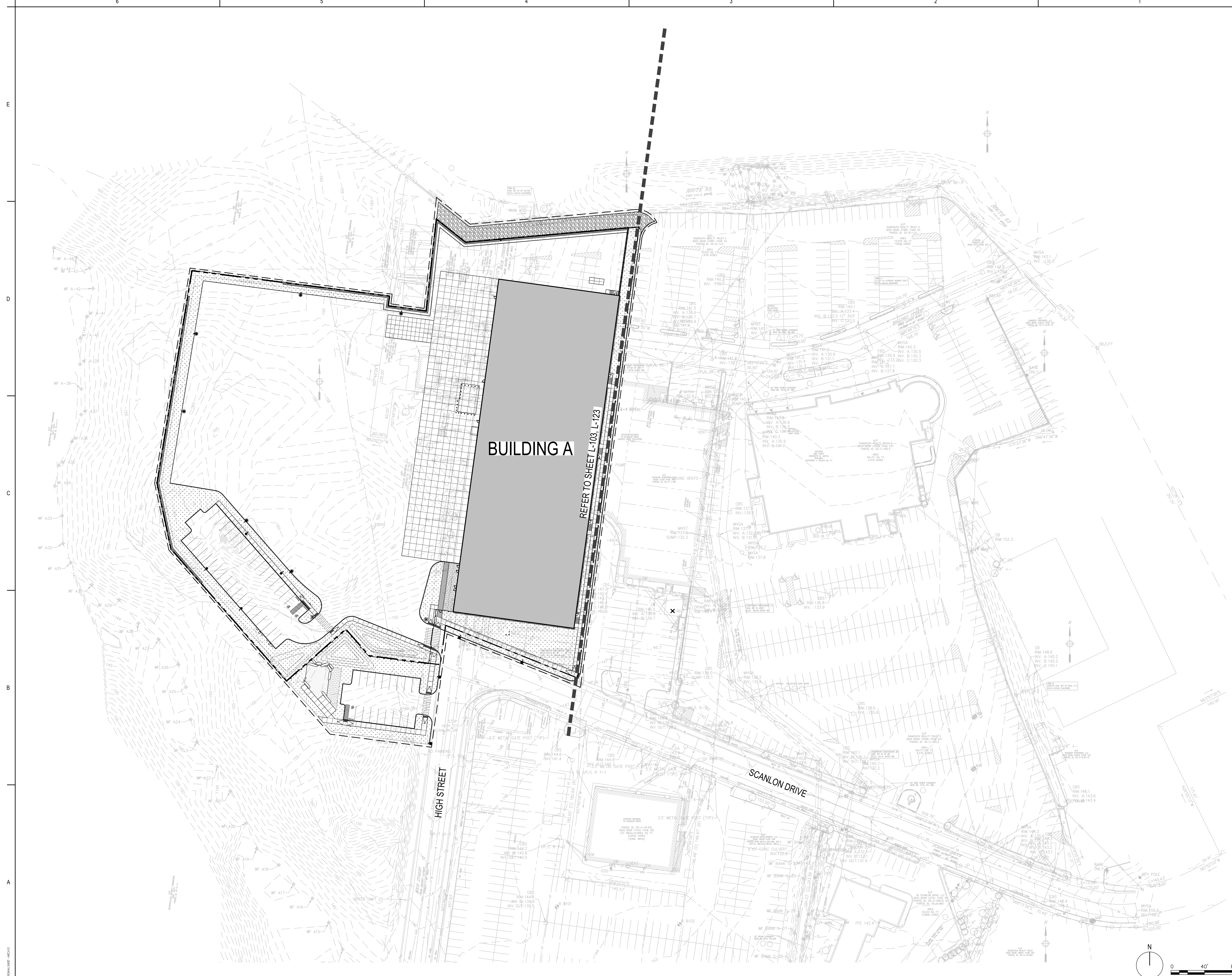
Scale: AS NOTED
 Project No.: 78000

SITE DETAILS 5

C6.5

Issued/Revision	DATE
1	2024.09.16
2	2023.12.13
3	2023.10.04
4	2023.08.08
5	2023.07.14
6	2023.06.27
7	2023.06.07
8	2023.05.18
9	2023.05.11
10	2023.05.04
11	2023.04.27
12	2023.04.20
13	2023.04.13
14	2023.04.06
15	2023.03.30
16	2023.03.23
17	2023.03.16
18	2023.03.09
19	2023.03.02
20	2023.02.25
21	2023.02.18
22	2023.02.11
23	2023.02.04
24	2023.01.28
25	2023.01.21
26	2023.01.14
27	2023.01.07
28	2022.12.31
29	2022.12.24
30	2022.12.17
31	2022.12.10
32	2022.12.03
33	2022.11.27
34	2022.11.20
35	2022.11.13
36	2022.11.06
37	2022.10.30
38	2022.10.23
39	2022.10.16
40	2022.10.09
41	2022.10.02
42	2022.09.26
43	2022.09.19
44	2022.09.12
45	2022.09.05
46	2022.08.29
47	2022.08.22
48	2022.08.15
49	2022.08.08
50	2022.08.01
51	2022.07.25
52	2022.07.18
53	2022.07.11
54	2022.07.04
55	2022.06.28
56	2022.06.21
57	2022.06.14
58	2022.06.07
59	2022.05.31
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72	2022.03.02
73	2022.02.25
74	2022.02.18
75	2022.02.11
76	2022.02.04
77	2022.01.28
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81	2022.01.01

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CONSTRUCTION**

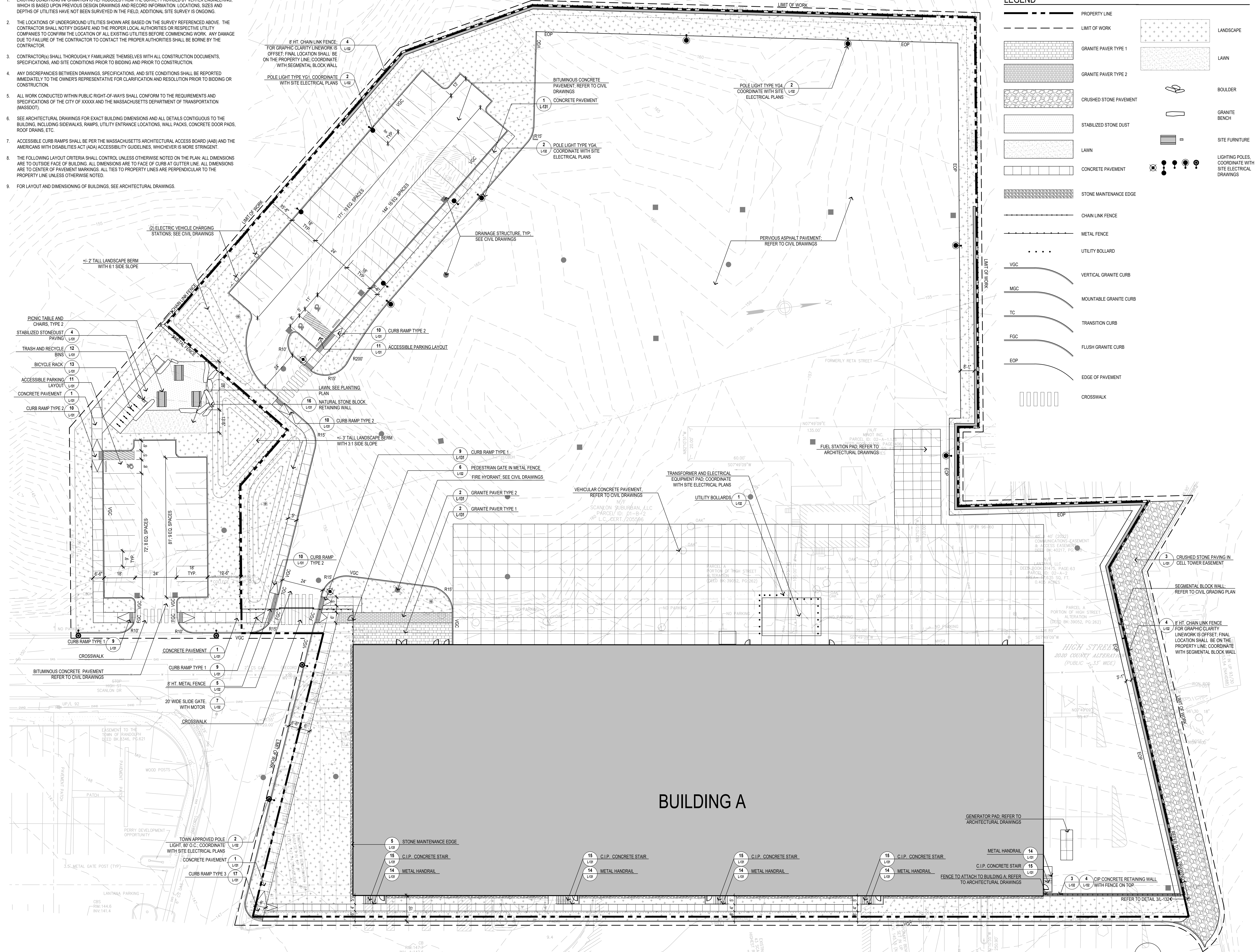


LAYOUT AND MATERIAL NOTES

- EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE SURVEY PROVIDED BY VERTEX ENGINEERING, WHICH IS BASED UPON PREVIOUS DESIGN DRAWINGS AND RECORD INFORMATION. LOCATIONS, SIZES AND DEPTHS OF UTILITIES HAVE NOT BEEN SURVEYED IN THE FIELD. ADDITIONAL SITE SURVEY IS ONGOING.
- THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ARE BASED ON THE SURVEY REFERENCED ABOVE. THE CONTRACTOR SHALL NOTIFY DIGSAFE AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
- CONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
- ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND RESOLUTION PRIOR TO CONSTRUCTION.
- ALL WORK CONDUCTED WITHIN PUBLIC RIGHT-OF-WAYS SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF XXXXX AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MASSDOT).
- SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND ALL DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, UTILITY ENTRANCE LOCATIONS, WALL PACKS, CONCRETE DOOR PADS, ROOF DRAINS, ETC.
- ACCESSIBLE CURB RAMPS SHALL BE PER THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (AAB) AND THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES, WHICHEVER IS MORE STRINGENT.
- THE FOLLOWING LAYOUT CRITERIA SHALL CONTROL UNLESS OTHERWISE NOTED ON THE PLAN. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING. ALL DIMENSIONS ARE TO FACE OF CURB AT GUTTER LINE. ALL DIMENSIONS ARE TO CENTER OF PAVEMENT MARKINGS. ALL TIES TO PROPERTY LINES ARE PERPENDICULAR TO THE PROPERTY LINE UNLESS OTHERWISE NOTED.
- FOR LAYOUT AND DIMENSIONING OF BUILDINGS, SEE ARCHITECTURAL DRAWINGS.

LEGEND

	PROPERTY LINE		LANDSCAPE
	LIMIT OF WORK		LAWN
	GRANITE PAVER TYPE 1		BOULDER
	GRANITE PAVER TYPE 2		GRANITE BENCH
	CRUSHED STONE PAVEMENT		SITE FURNITURE
	STABILIZED STONE DUST		LIGHTING POLES, COORDINATE WITH SITE ELECTRICAL DRAWINGS
	LAWN		
	CONCRETE PAVEMENT		
	STONE MAINTENANCE EDGE		
	CHAIN LINK FENCE		
	METAL FENCE		
	UTILITY BOLLARD		
	VERTICAL GRANITE CURB		
	MOUNTABLE GRANITE CURB		
	TRANSITION CURB		
	FLUSH GRANITE CURB		
	EDGE OF PAVEMENT		
	CROSSWALK		



Consultant



Key Plan

Notes

1	CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.13
3	SCHEMATIC DESIGN	2023.03.04
Issued/Revision		YYYYMMDD
Permit/Seal		

**PRELIMINARY
NOT FOR
CONSTRUCTION**

Scale 1"=20'
 Project No. 218421418

LAYOUT AND MATERIALS 3

Consultant



Key Plan

Notes

1	DATE	DESCRIPTION	BY
1	2024.02.16	ISSUED FOR PERMIT	MM/DD
2	2023.12.13	DESIGN DEVELOPMENT	MM/DD
3	2023.10.04	SCHEMATIC DESIGN	MM/DD

Issued/Revision YYYMMDD

Permit/Seal

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 Project No. 218421418

PLANTING PLAN 3

L-123

LEGEND

- PROPERTY LINE
- - - LIMIT OF WORK
- (+) DECIDUOUS TREE
- (*) EVERGREEN TREE
- (o) ORNAMENTAL TREE
- (x) SHRUBS

PLANTING NOTES

1. CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND WILL CONTINUE UNTIL FINAL WRITTEN ACCEPTANCE OF PLANT MATERIAL.
2. CONTRACTOR SHALL VERIFY ALL TREE REMOVALS AND/OR TRANSPLANTS WITH OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION START.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS, STRUCTURES, AND PLANTING BEDS.
4. MAXIMUM SLOPE WITHIN DISTURBED AREAS SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
5. THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE ALL PLANTINGS SHOWN ON THIS DRAWING.
6. ALL MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
7. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS TO ORIGINAL GRADES BEFORE DIGGING.
8. ALL PLANTS TO BE BALLED IN BURLAP OR CONTAINERIZED.
9. MULCH FOR PLANTED AREAS TO BE AGED PINE BARK, PARTIALLY DECOMPOSED, DARK BROWN IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4 INCH.
10. PLANTING SOIL MIX: LOAM THOROUGHLY INCORPORATED WITH ROTTED MANURE PROPORTIONED 5 C.Y. TO 1 C.Y. OR EQUIVALENT. FERTILIZER ADDED PER RECOMMENDED RATES OF SOILS ANALYSIS.
11. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE.
12. ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT, AT THE NURSERY, AND AT THE SITE.
13. ALL AREAS OF THE SITE WHICH HAVE BEEN DISTURBED AND NOT OTHERWISE DEVELOPED SHALL BE LOAMED AND SEEDING WITH A MINIMUM DEPTH OF 6" DEPTH TOPSOIL.

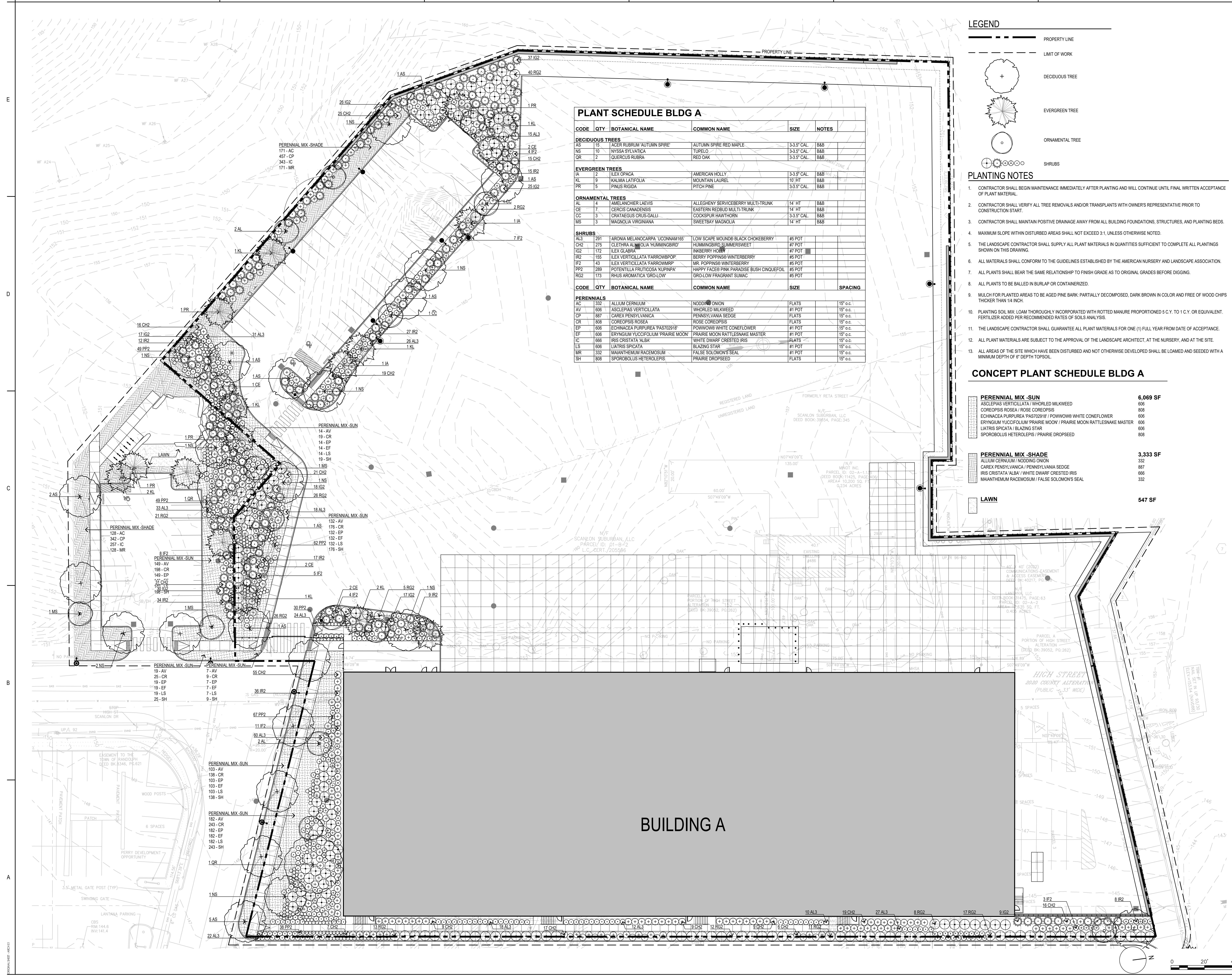
CONCEPT PLANT SCHEDULE BLDG A

PERENNIAL MIX - SUN	6,069 SF
ASCLEPIAS VERTICILLATA / WHORLED MILKWEED	806
COREOPSIS ROSEA / ROSE COREOPSIS	808
ECHINACEA PURPUREA 'PASTORIS' / POWWOW WHITE CONEFLOWER	606
ERYNGIUM YUCCIFOLIUM 'PRAIRIE MOON' / PRAIRIE MOON RATTLESNAKE MASTER	606
LIATRIS SPICATA / BLAZING STAR	606
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSSEED	606
PERENNIAL MIX - SHADE	3,333 SF
ALLIUM CERNUUM / NODDING ONION	332
CAREX PENNSYLVANICA / PENNSYLVANIA SEDGE	887
IRIS CRISTATA 'ALBA' / WHITE DWARF CRESTED IRIS	666
MAIANTHEMUM RACEMOSUM / FALSE SOLOMON'S SEAL	332
LAWN	547 SF

PLANT SCHEDULE BLDG A

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
DECIDUOUS TREES					
AS	15	FACER RUBRUM 'AUTUMN SPIRE'	AUTUMN SPIRE RED MAPLE	3-3.5" CAL	B&B
NS	10	NYSSA SYLVATICA	TUPELO	3-3.5" CAL	B&B
OR	2	QUERCUS RUBRA	RED OAK	3-3.5" CAL	B&B
EVERGREEN TREES					
IA	12	ILEX OPACA	AMERICAN HOLLY	3-3.5" CAL	B&B
KL	9	KALMIA LATIFOLIA	MOUNTAIN LAUREL	10" HT	B&B
PR	5	PINUS RIGIDA	PITCH PINE	3-3.5" CAL	B&B
ORNAMENTAL TREES					
AL	4	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY MULTI-TRUNK	14" HT	B&B
CE	7	CERCIS CANADENSIS	EASTERN REDBUD MULTI-TRUNK	14" HT	B&B
CC	3	CRATAEGUS CRUS-GALLI	COCKSPUR HAWTHORN	3-3.5" CAL	B&B
MS	3	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	14" HT	B&B
SHRUBS					
AL3	291	ARONIA MELANOCARPA 'UCONNAMI65'	LOW SCAPE MOUND BLACK CHOCHEBERRY	#5 POT	
CH2	275	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET	#7 POT	
IG2	172	ILEX GLABRA	INKBERRY HOLLY	#7 POT	
IR2	155	ILEX VERTICILLATA 'FARROWPOPP'	BERRY POPPIN'S WINTERBERRY	#5 POT	
IP2	43	ILEX VERTICILLATA 'FRUITWIMP'	MR POPPIN'S WINTERBERRY	#5 POT	
PP2	289	POTENTILLA FRUTICOSA 'KUPINPA'	HAPPY FACE® PINK PARADISE BUSH CINQUEFOIL	#5 POT	
RG2	173	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	#5 POT	
PERENNIALS					
AC	332	ALLIUM CERNUUM	NODDING ONION	FLATS	15" o.c.
AV	606	ASCLEPIAS VERTICILLATA	WHORLED MILKWEED	#1 POT	15" o.c.
CP	887	CAREX PENNSYLVANICA	PENNSYLVANIA SEDGE	FLATS	15" o.c.
CR	808	COREOPSIS ROSEA	ROSE COREOPSIS	FLATS	15" o.c.
EP	606	ECHINACEA PURPUREA 'PASTORIS'	POWOW WHITE CONEFLOWER	#1 POT	15" o.c.
EF	606	ERYNGIUM YUCCIFOLIUM 'PRAIRIE MOON'	PRAIRIE MOON RATTLESNAKE MASTER	#1 POT	15" o.c.
IC	666	IRIS CRISTATA 'ALBA'	WHITE DWARF CRESTED IRIS	FLATS	15" o.c.
LS	606	LIATRIS SPICATA	BLAZING STAR	#1 POT	15" o.c.
MR	332	MAIANTHEMUM RACEMOSUM	FALSE SOLOMON'S SEAL	#1 POT	15" o.c.
SH	606	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSSEED	FLATS	15" o.c.

BUILDING A



Consultant



Key Plan

Notes

NO.	DESCRIPTION	DATE
1	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.13
3	SCHEMATIC DESIGN	2023.03.04
Issued/Revision		YYYYMMDD

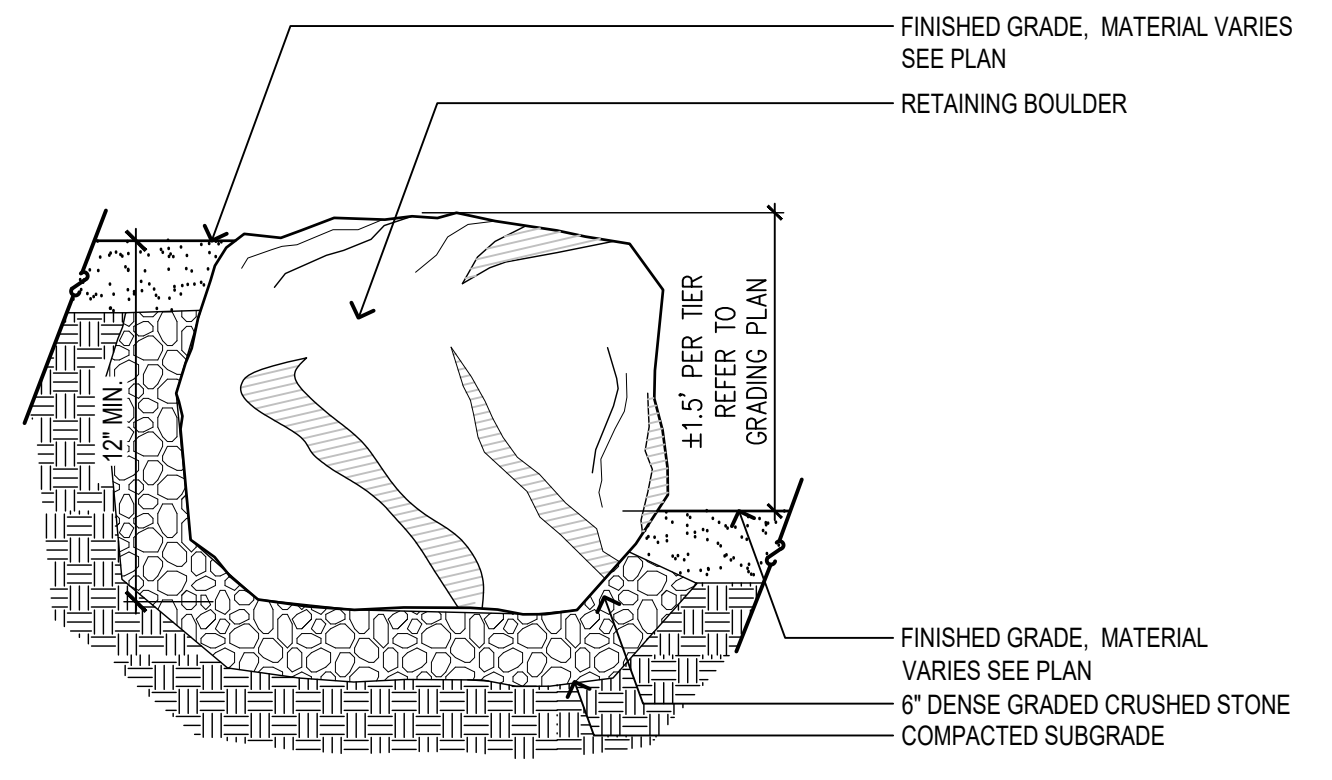
Permit/Seal

PRELIMINARY NOT FOR CONSTRUCTION

Scale 1"=20'
Project No. 218421418

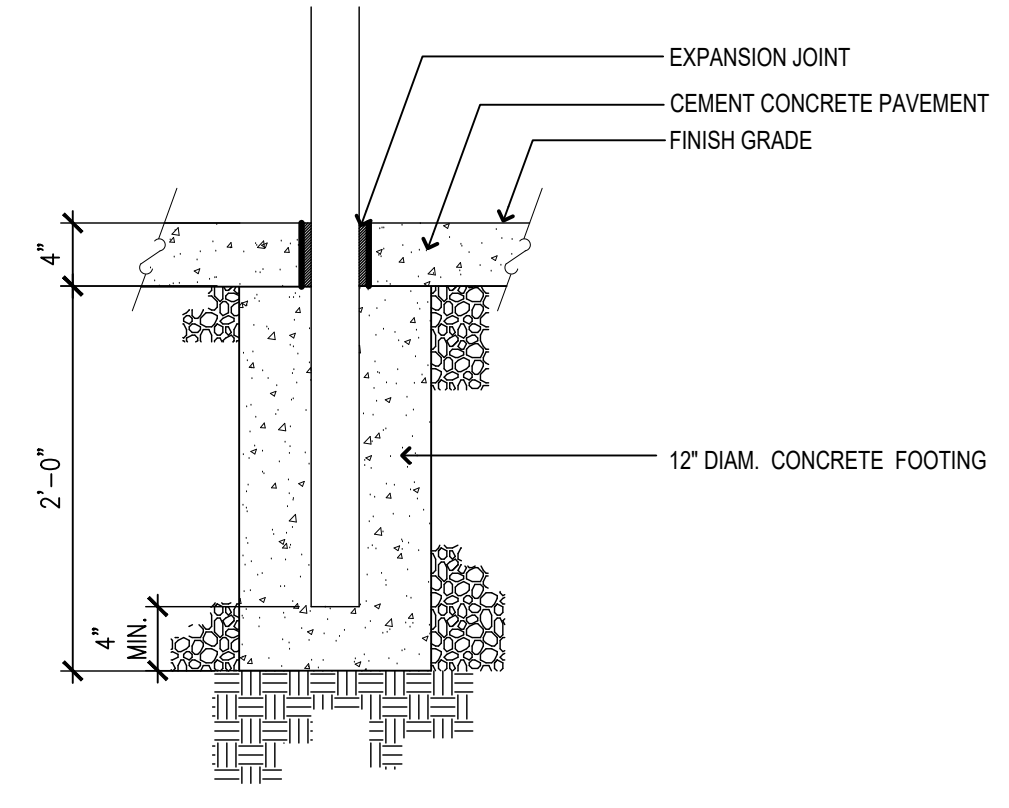
SITE DETAIL 1

L-131

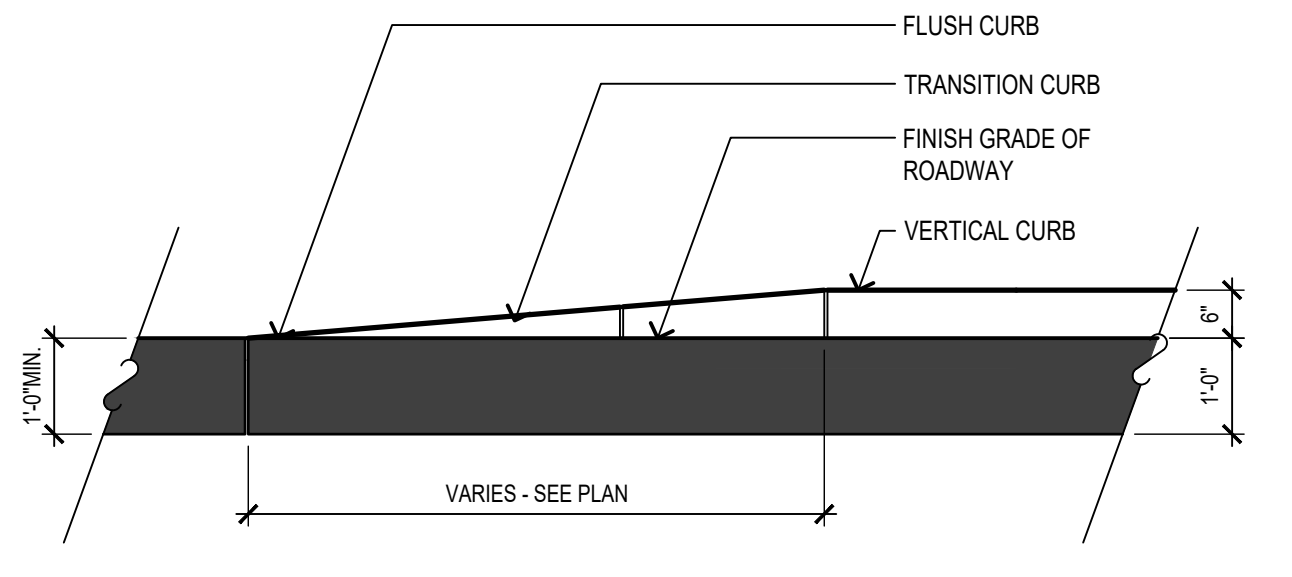


- NOTES:
1. PLACEMENT OF BOULDERS TO BE REVIEWED IN FIELD BY LANDSCAPE ARCHITECT
 2. BOULDERS SHALL BE STABLE, FREE OF MAJOR CRACKS, OF A NATIVE VARIETY AND SOURCED LOCALLY. SLIGHT COLOR VARIATION IS ACCEPTABLE. TEXTURE SHALL BE CONSISTENT.
 3. BOULDERS SHALL BE CHOSEN BY LANDSCAPE ARCHITECT FROM SURPLUS OF AVAILABLE BOULDERS AT SUPPLIER.
 4. INSTALLER TO MOVE AND PLACE BOULDERS USING EQUIPMENT THAT WILL NOT HARM OR SCRATCH THE BOULDER SURFACE.
 5. BOULDERS SHALL APPROXIMATE SIZES SHOWN ON PLAN.

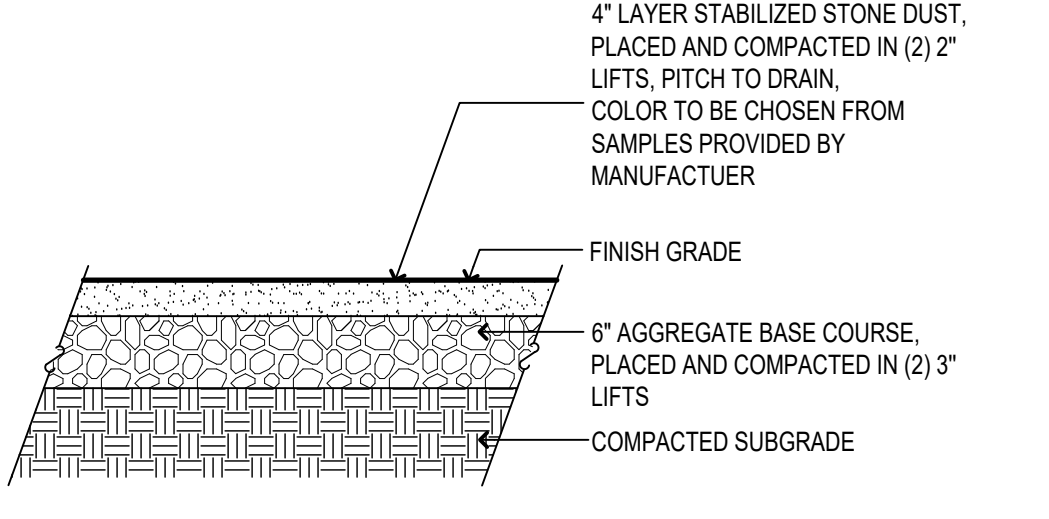
16 NATURAL STONE BLOCK RETAINING WALL
3/4" x 1/4" BC2184-21418-06



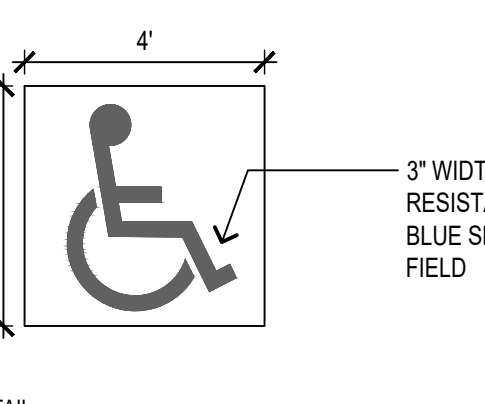
12 SITE FURNISHING BELOW GRADE FOOTING
1" x 1/4" BC2184-21418-37



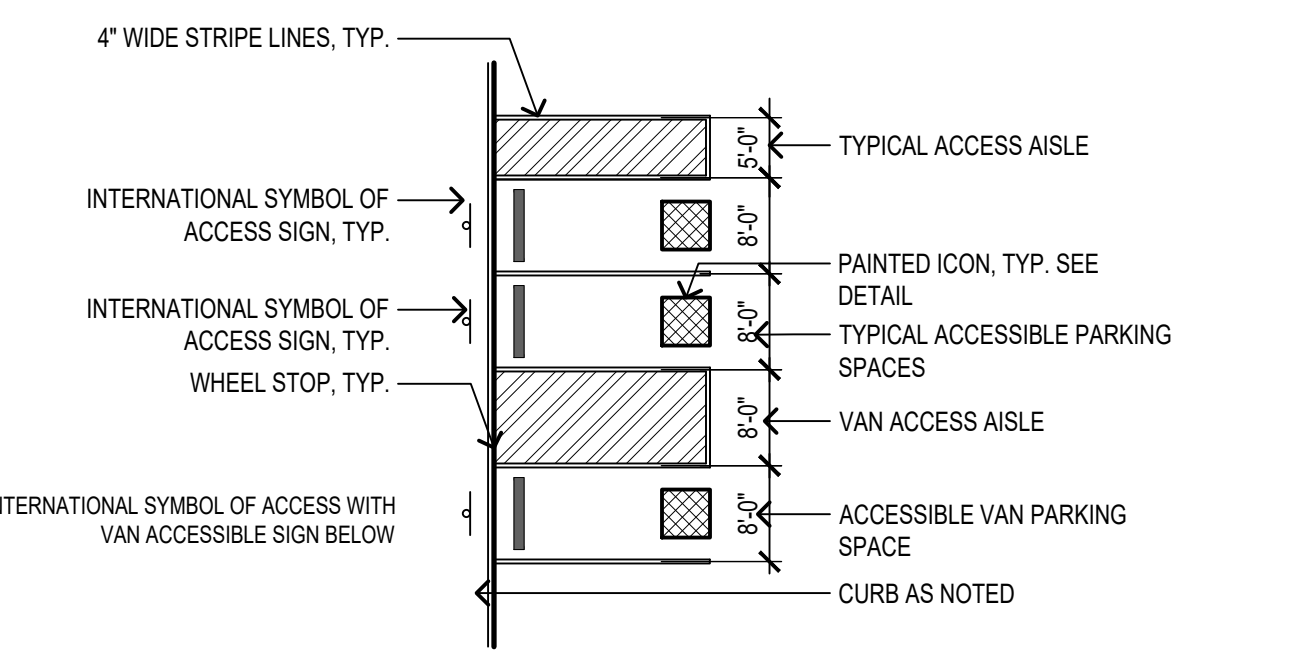
8 TRANSITION FROM VERTICAL TO FLUSH CURB
1/2" x 1/4" BC2184-21418-50



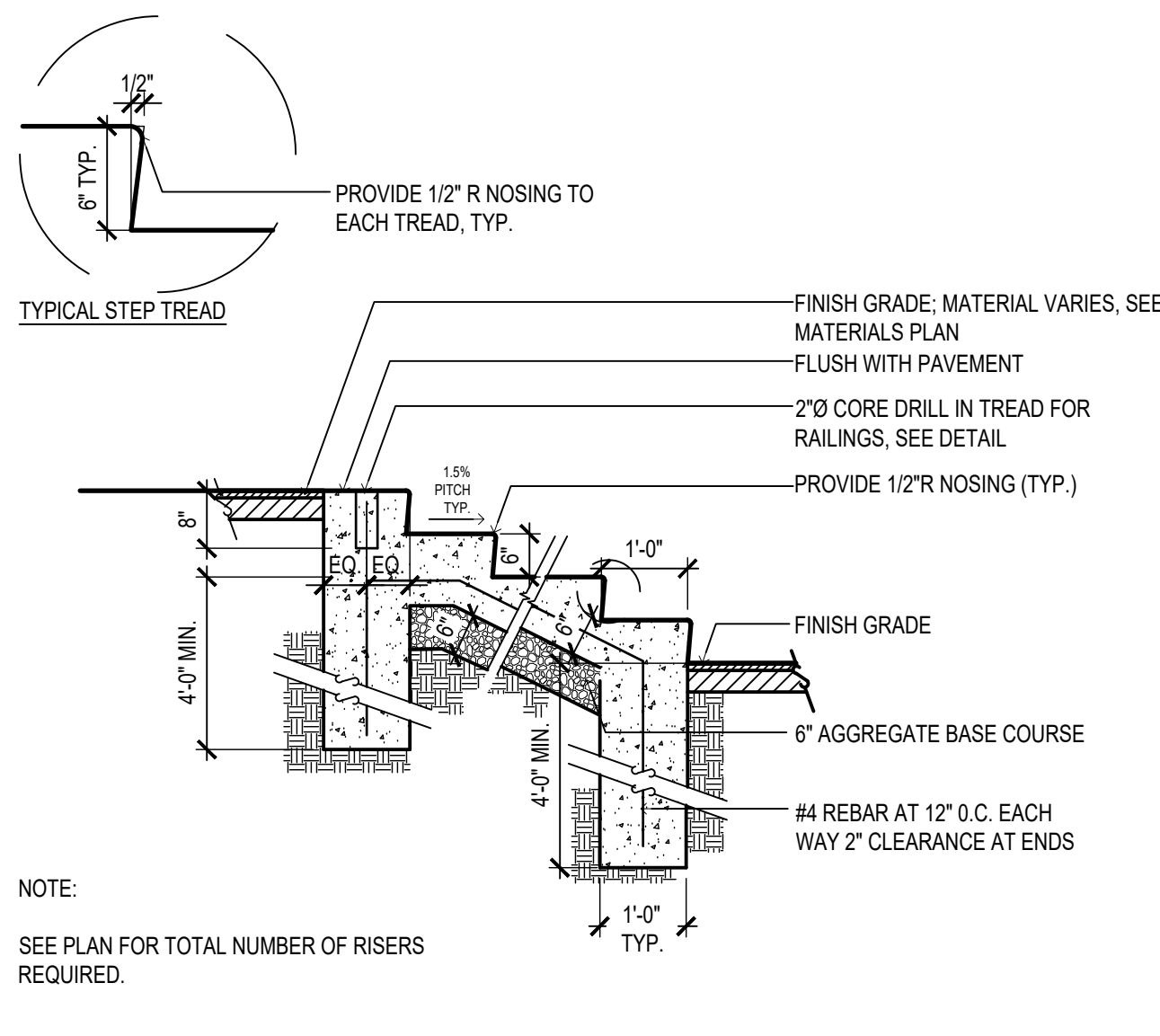
4 STABILIZED STONEDUST PAVING
3/4" x 1/4" BC2184-21418-03



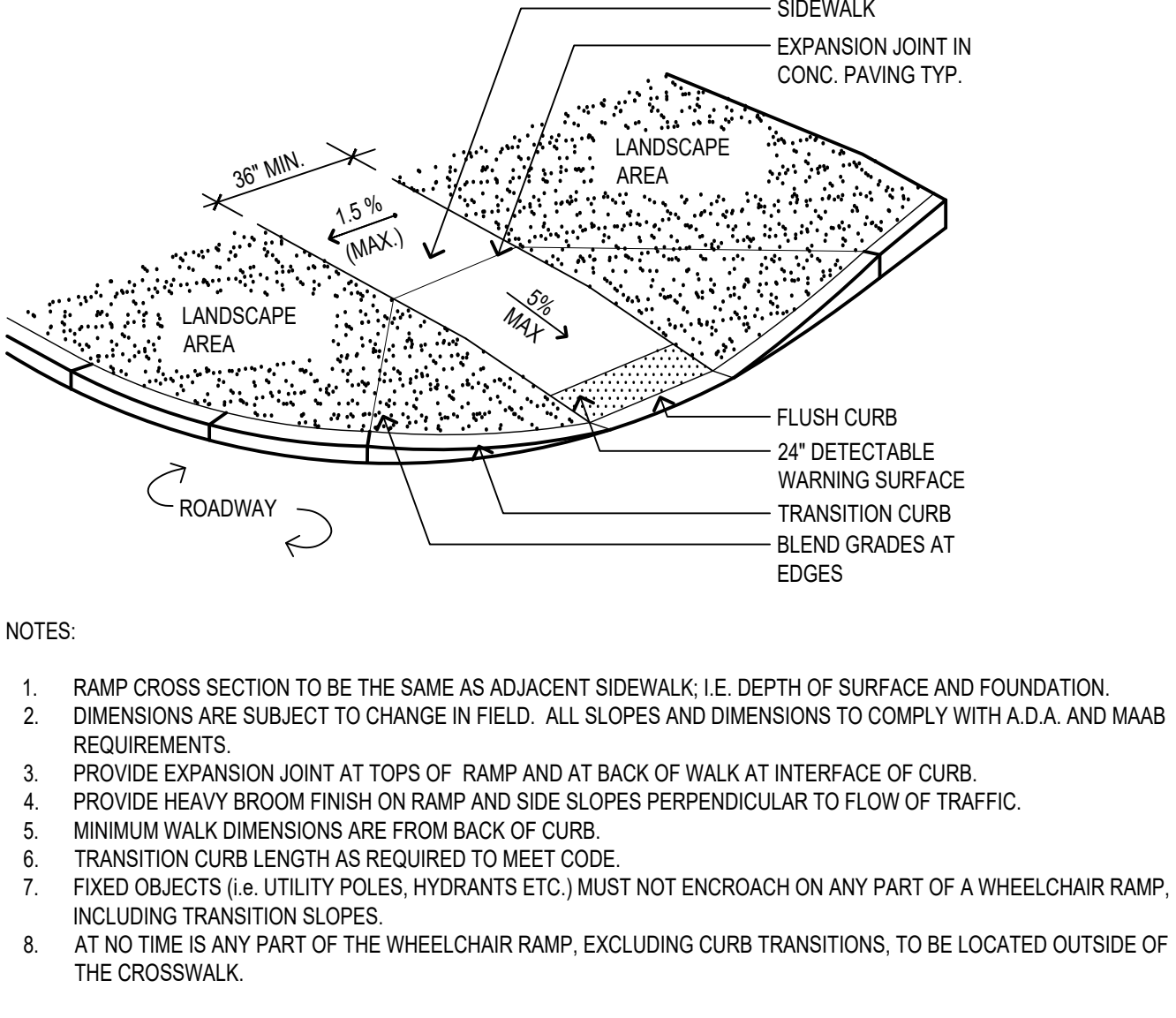
DETAIL



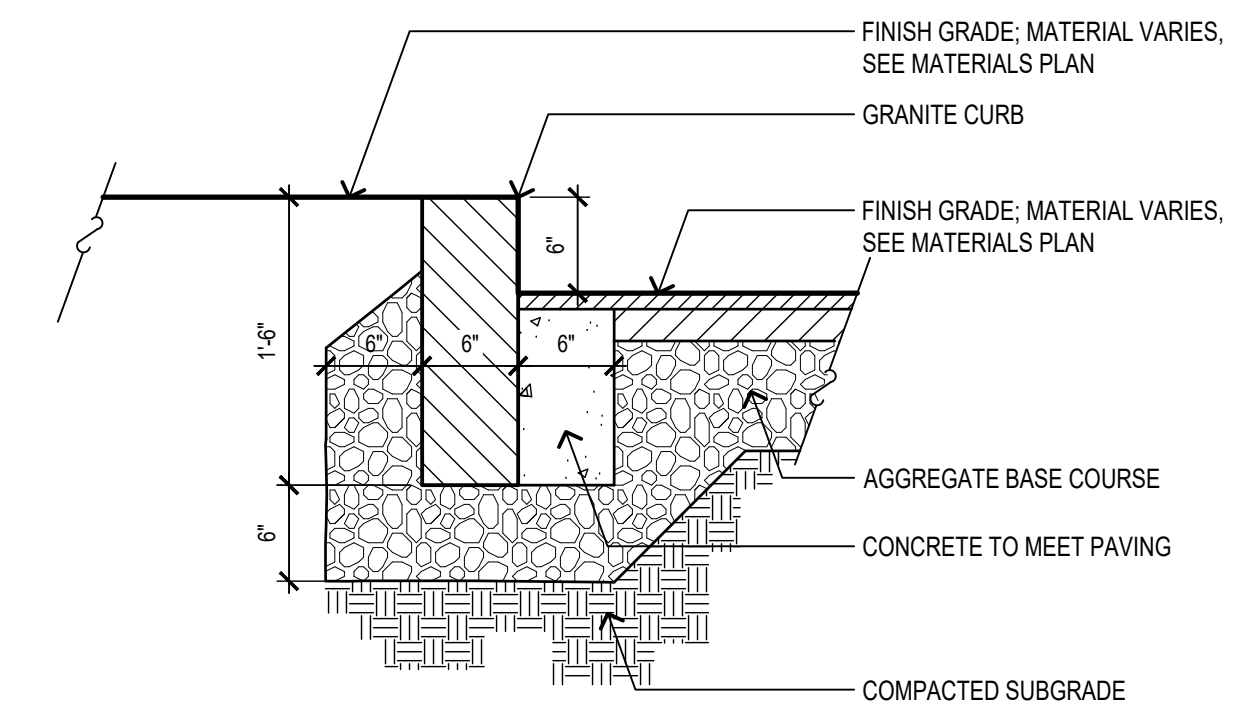
17 ACCESSIBLE PARKING LAYOUT
1/8" x 1/4" BC2184-21418-41



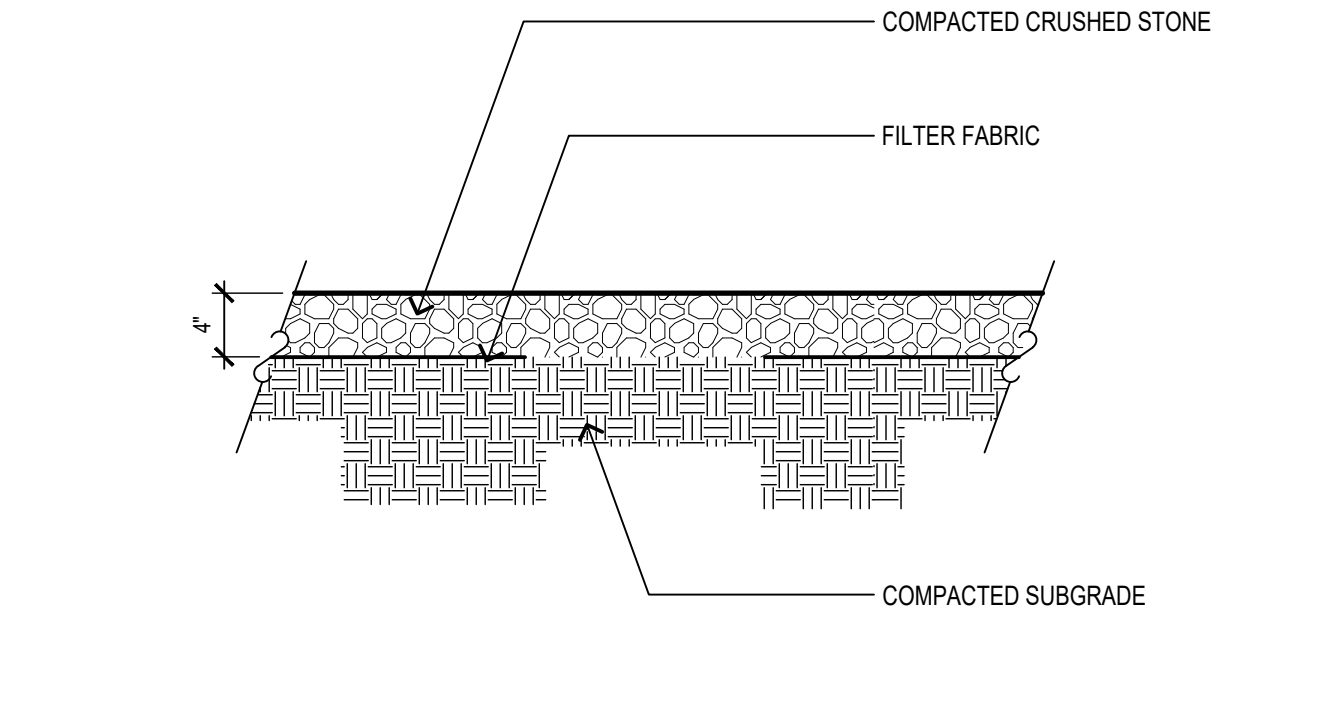
15 C.I.P. CONCRETE STAIRS
1/2" x 1/4" BC2184-21418-15



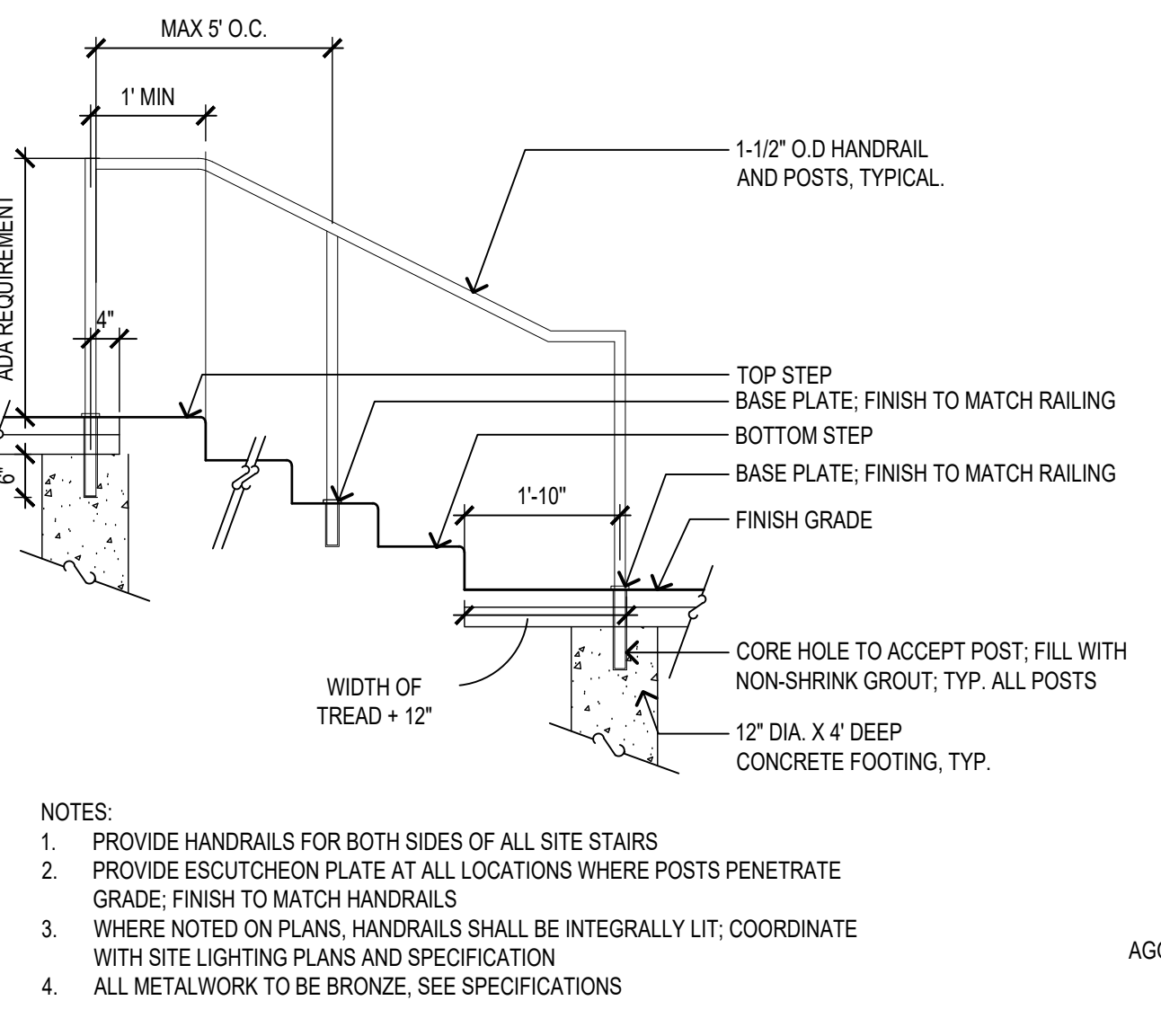
11 CURB RAMP TYPE 3
3/16" x 1/4" BC2184-21418-39



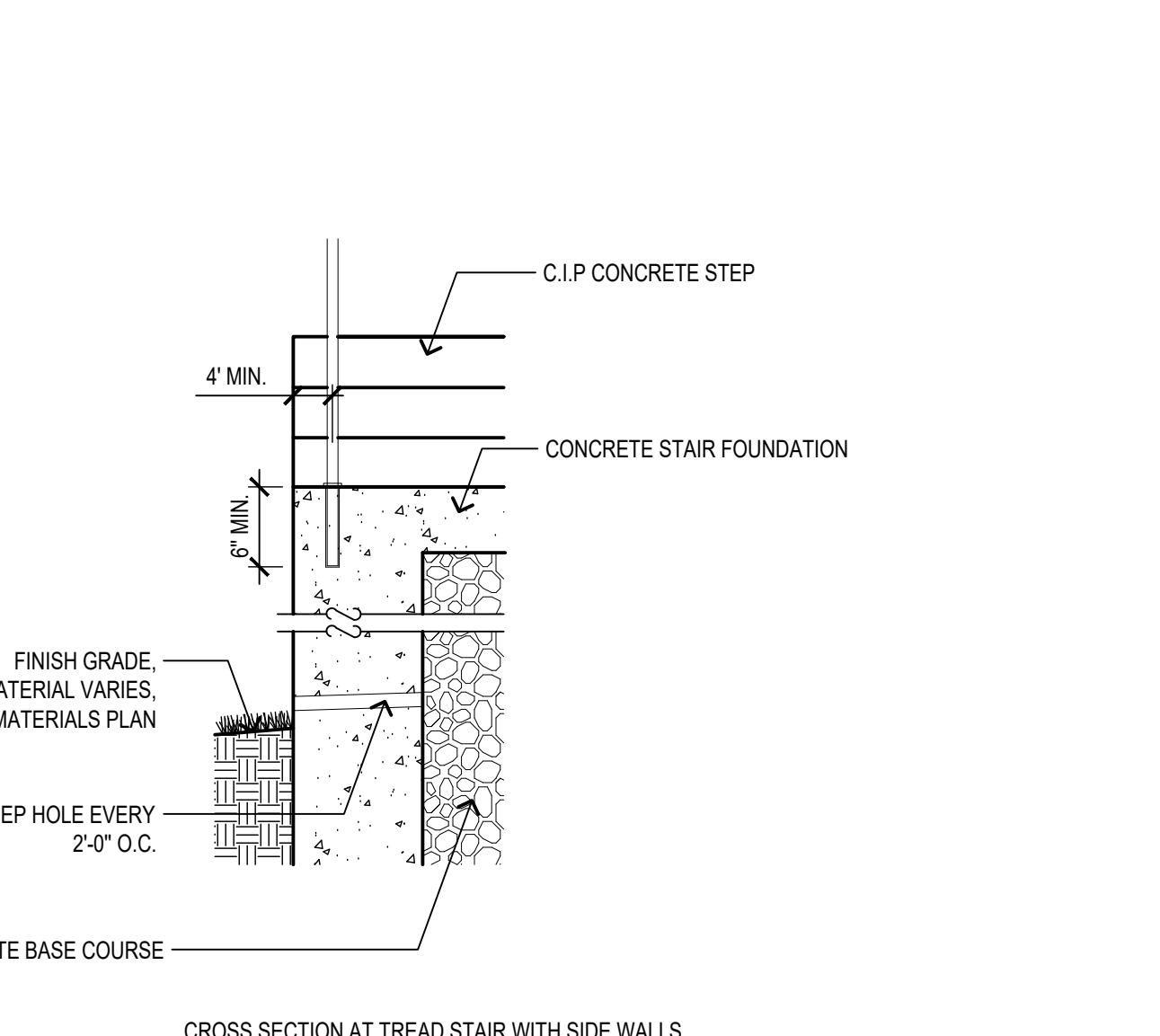
7 6" VERTICAL GRANITE CURB
1" x 1/4" BC2184-21418-61



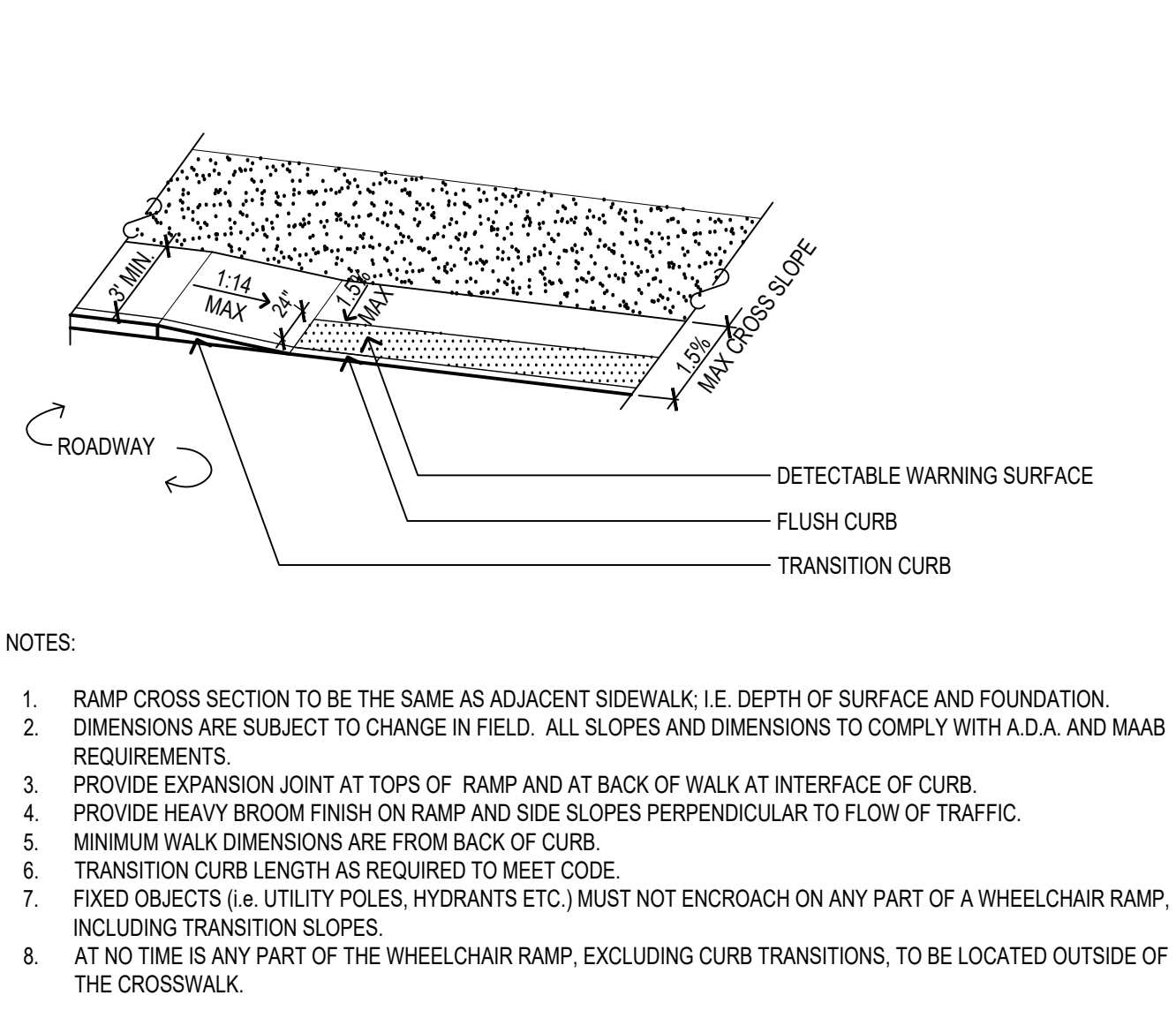
3 CRUSHED STONE PAVING
1" x 1/4" BC2184-21418-47



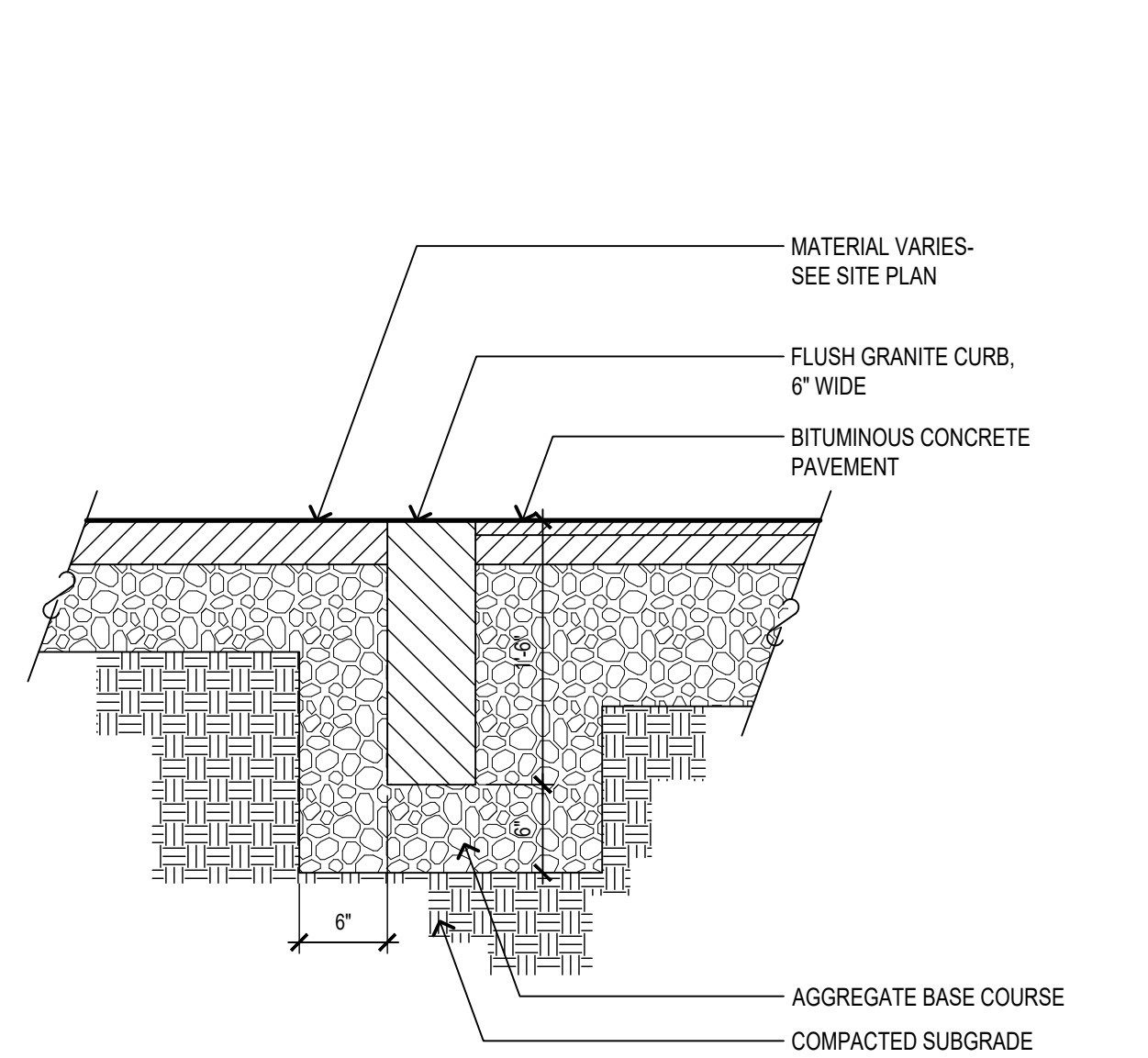
14 METAL HANDRAIL
1/2" x 1/4" BC2184-21418-17



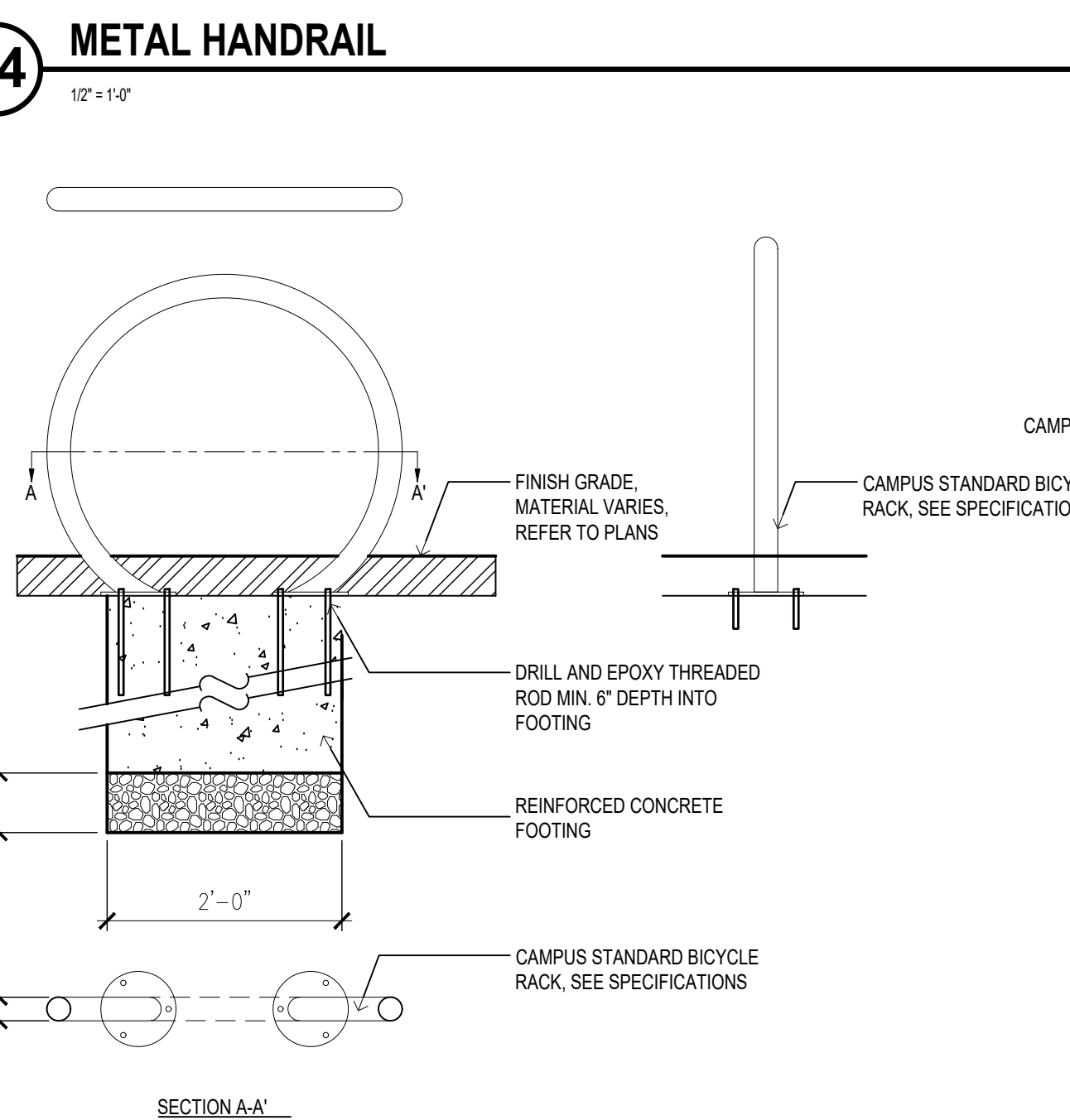
10 CURB RAMP TYPE 2
1/8" x 1/4" BC2184-21418-59



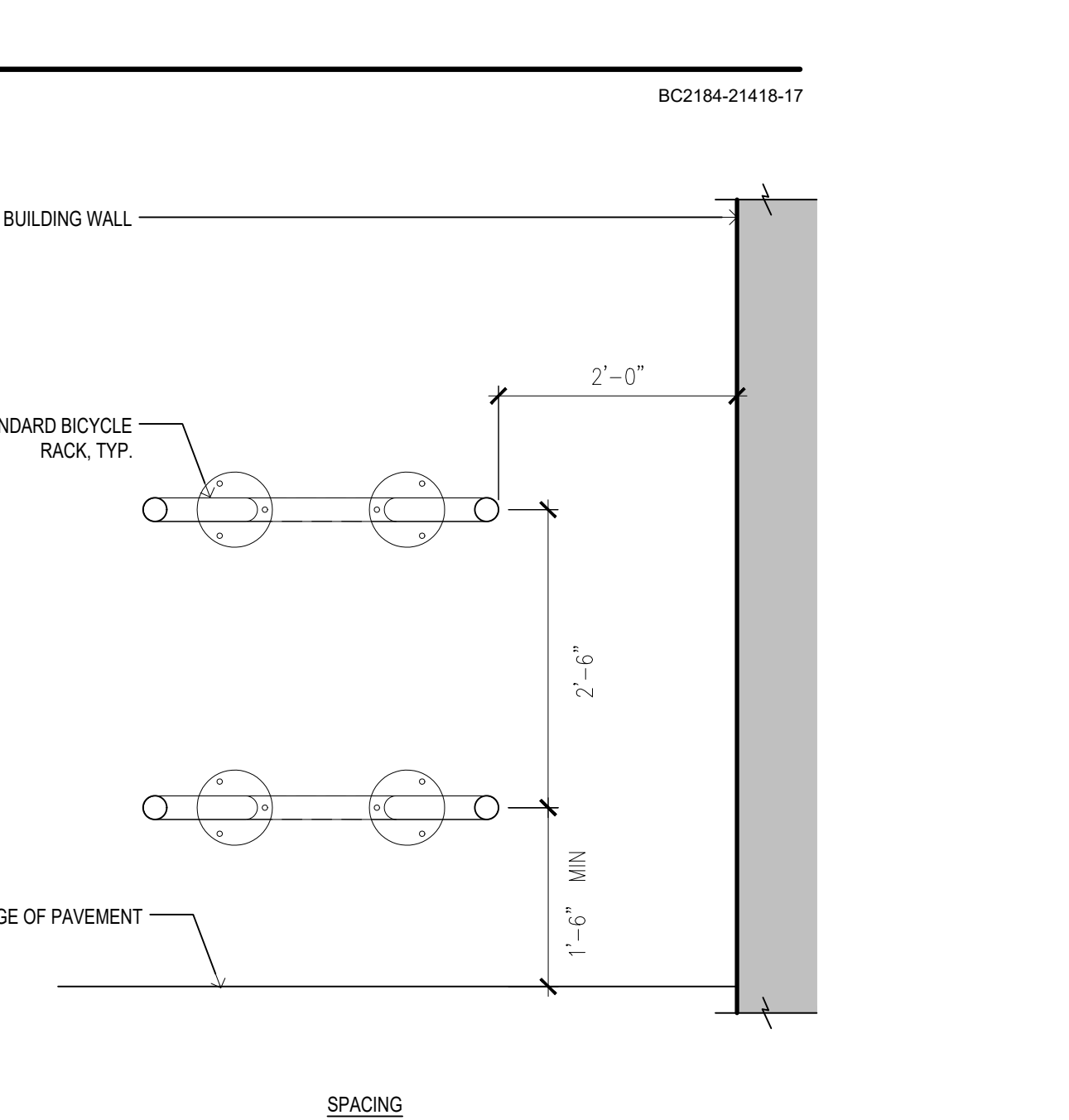
6 FLUSH GRANITE CURB
1" x 1/4" BC2184-21418-28



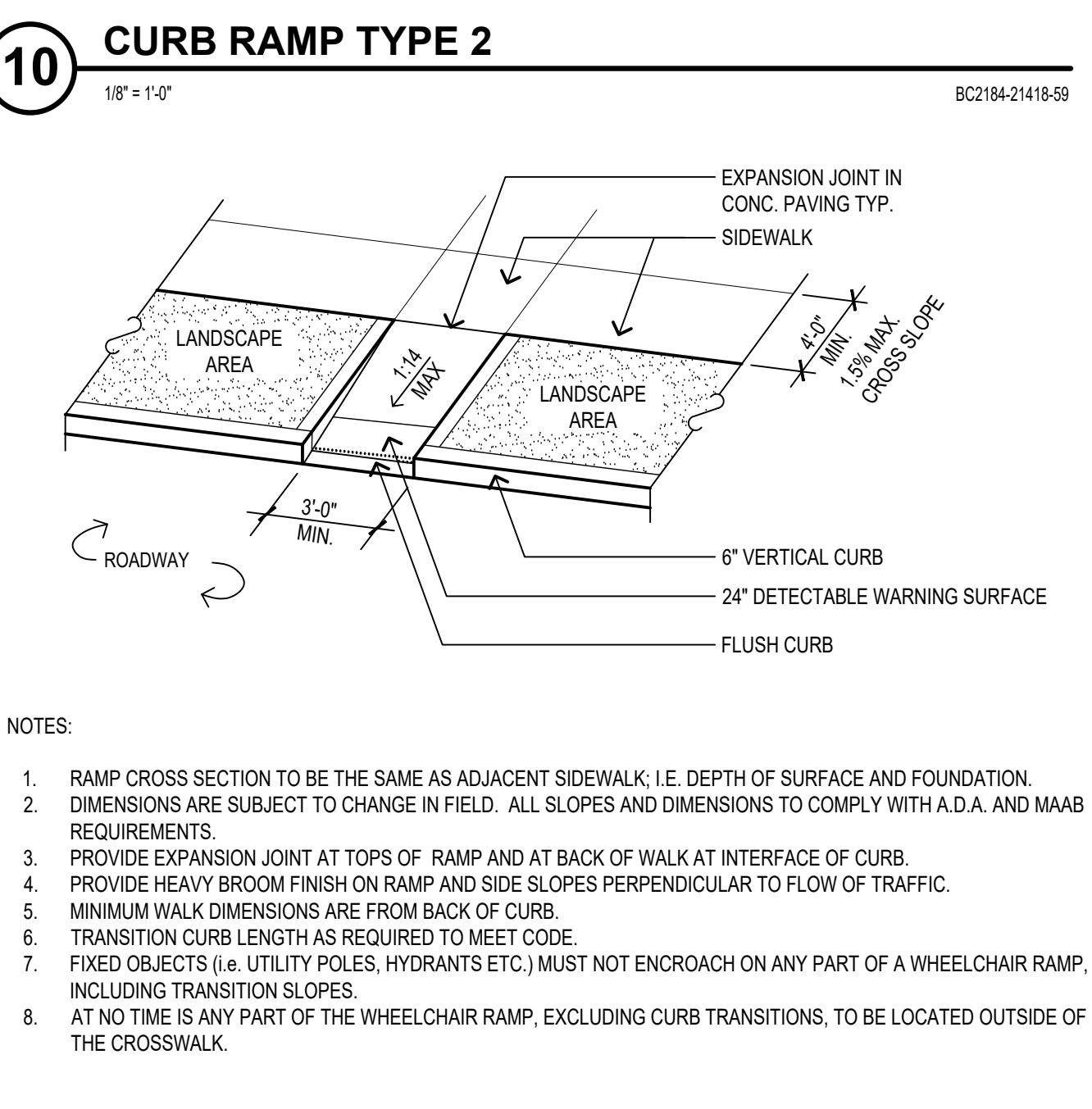
2 GRANITE UNITE PAVERS
1" x 1/4" BC2184-21418-14



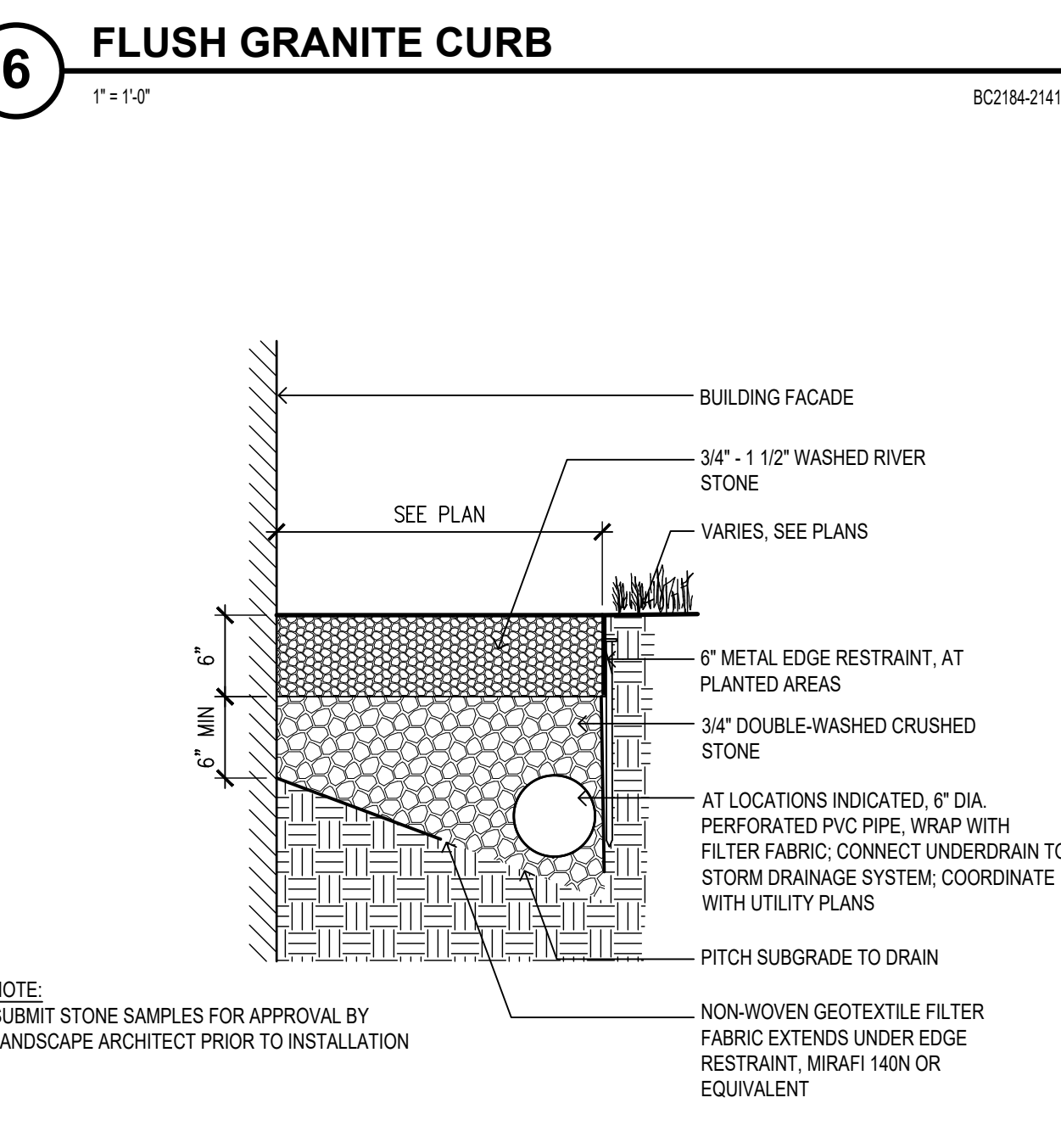
13 BICYCLE RACK
3/4" x 1/4" BC2184-21418-25



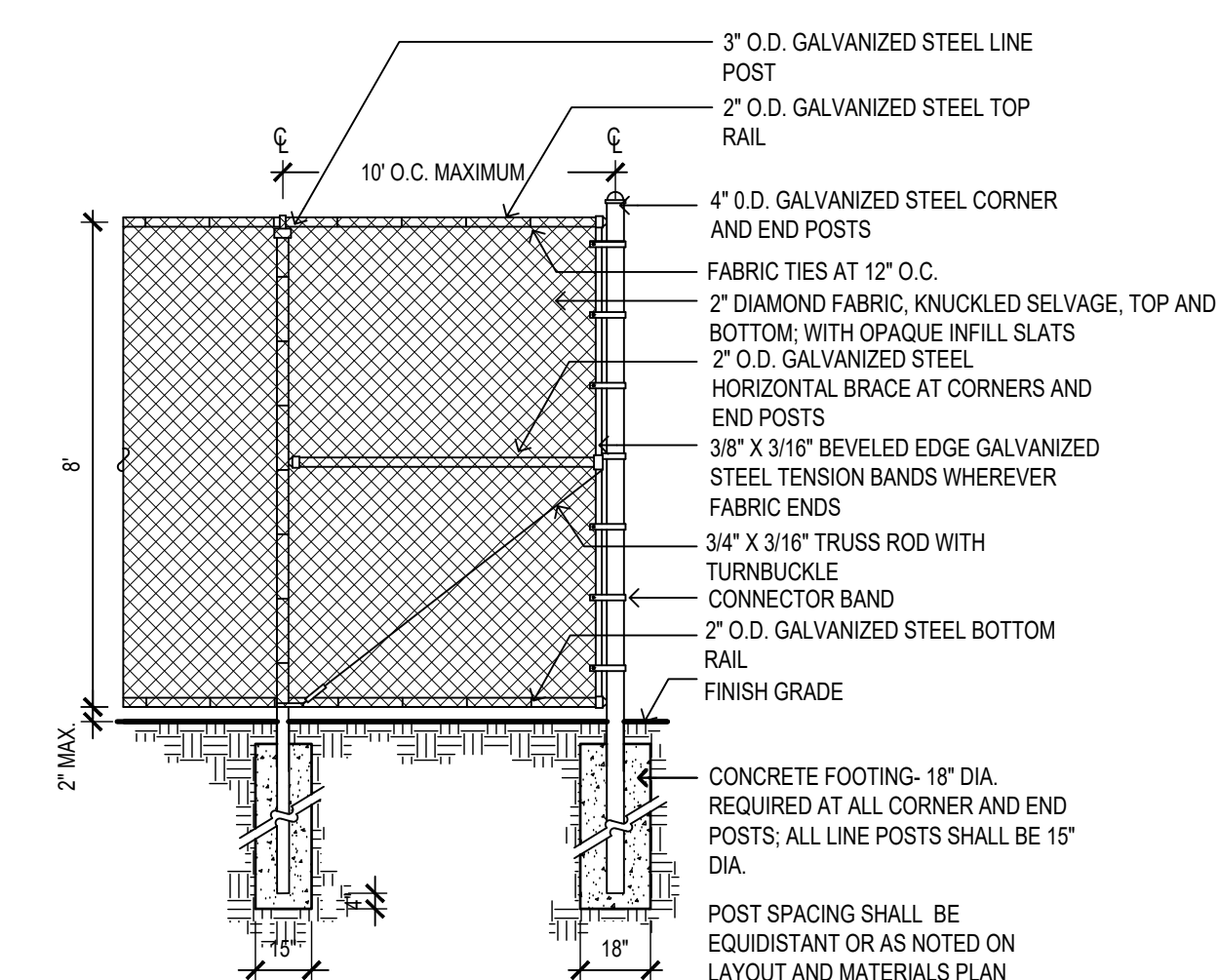
9 CURB RAMP TYPE 1
1/8" x 1/4" BC2184-21418-21



5 STONE MAINTENANCE EDGE
1" x 1/4" BC2184-21418-48

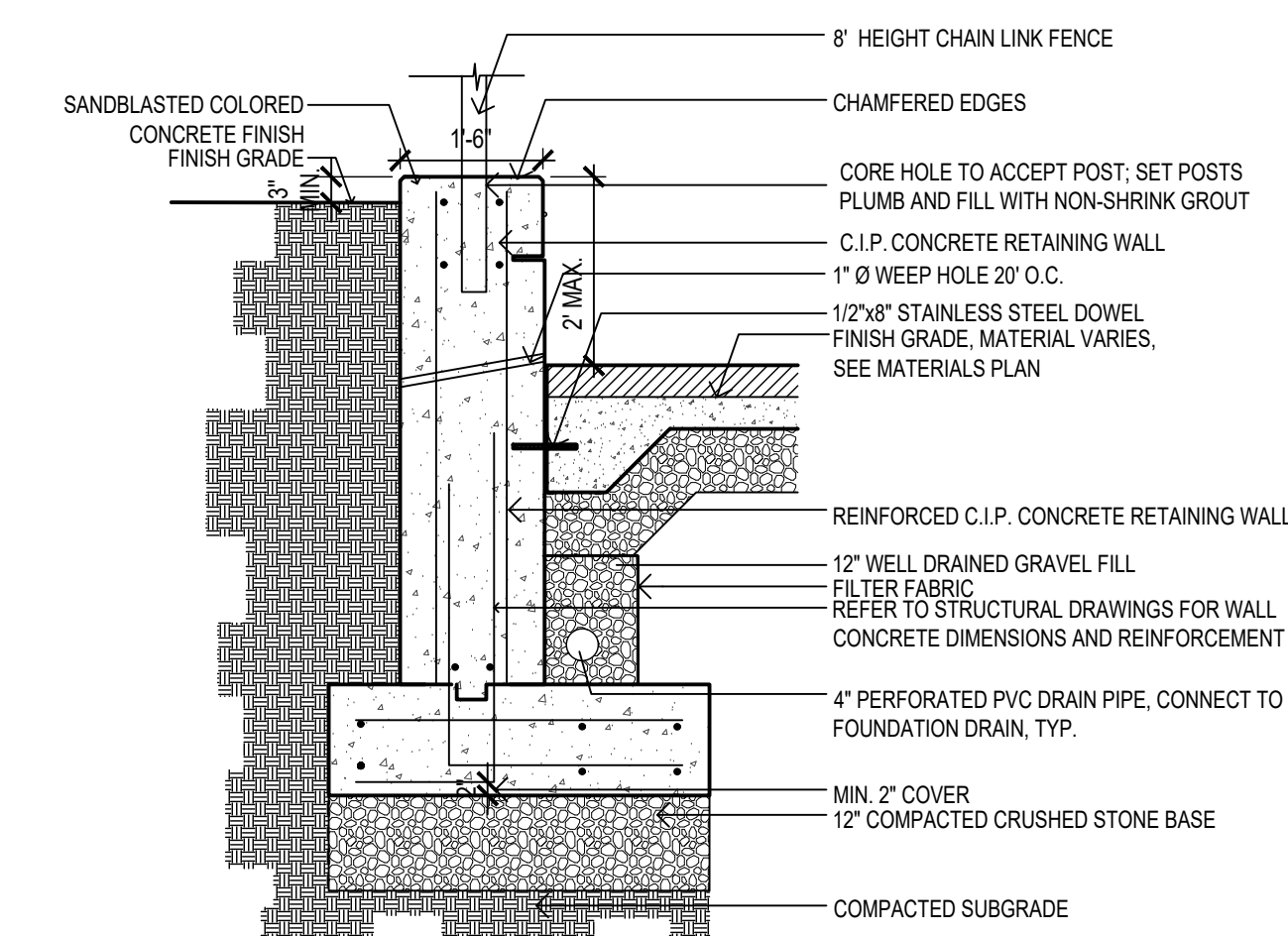


1 CONCRETE PAVING
1 1/2" x 1/4" BC2184-21418-08



4 8' HT. CHAIN LINK FENCE

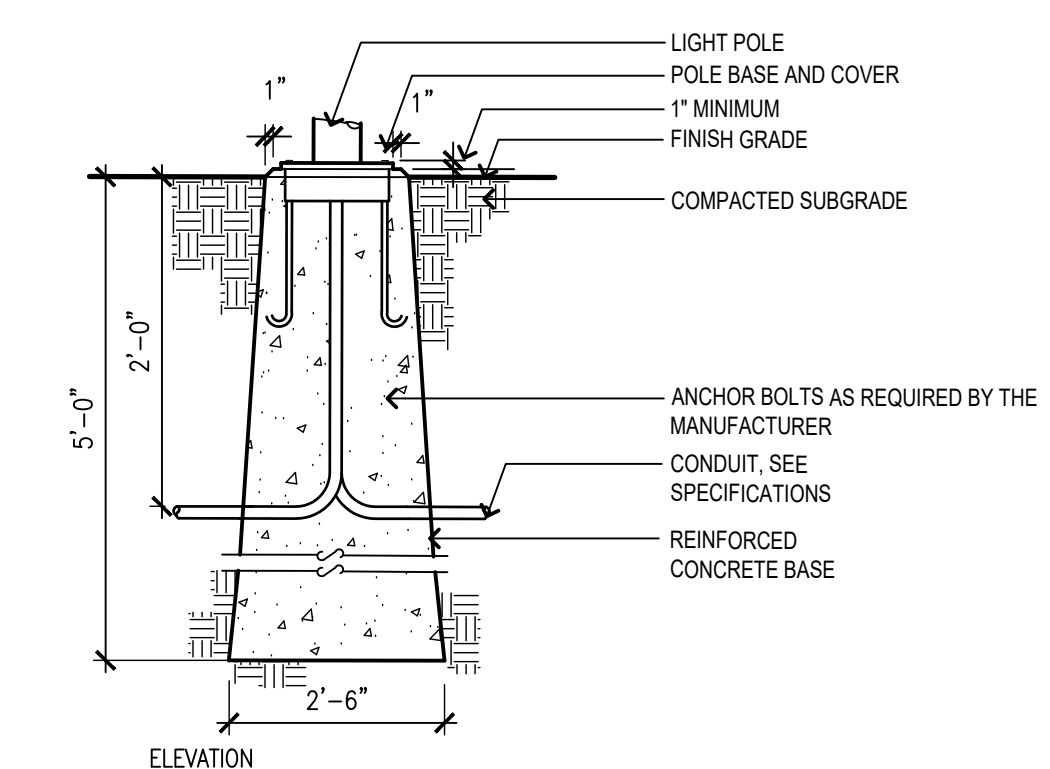
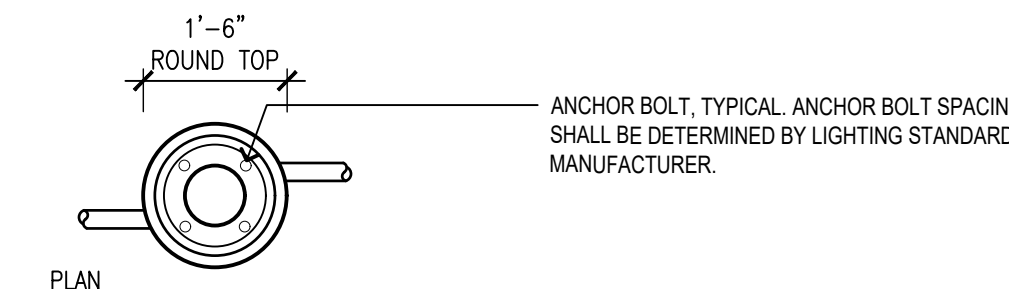
1/4" = 1'-0" BC2184-21418-38



NOTES: 1. STRUCTURAL ENGINEER SHALL REVIEW SIZING AND STRUCTURAL REINFORCEMENT OF THE WALL. THIS DETAIL IS NOT FOR CONSTRUCTION.

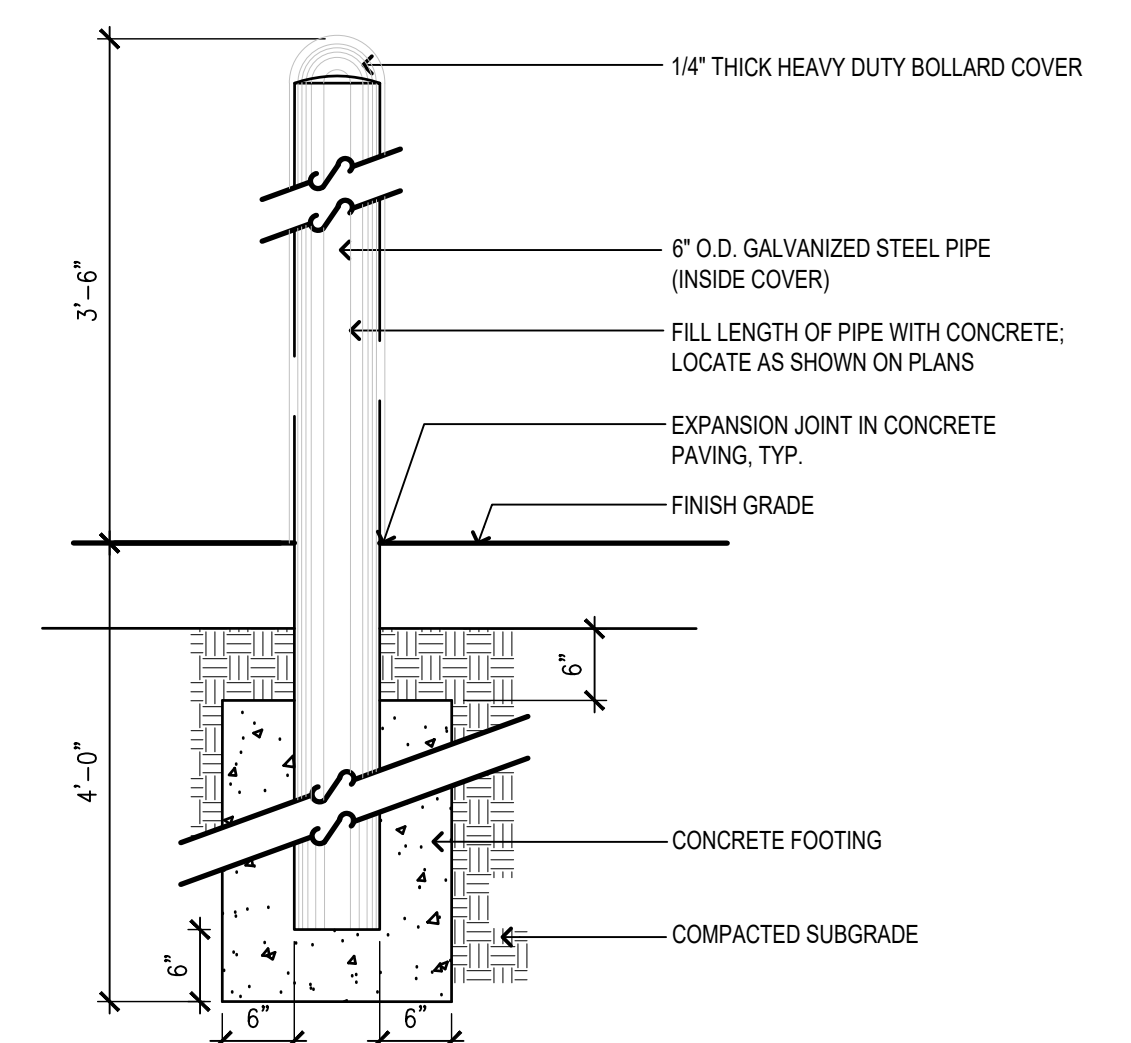
3 CIP CONCRETE RETAINING WALL WITH FENCE ON TOP

1/2" = 1'-0" BC2184-21418-43



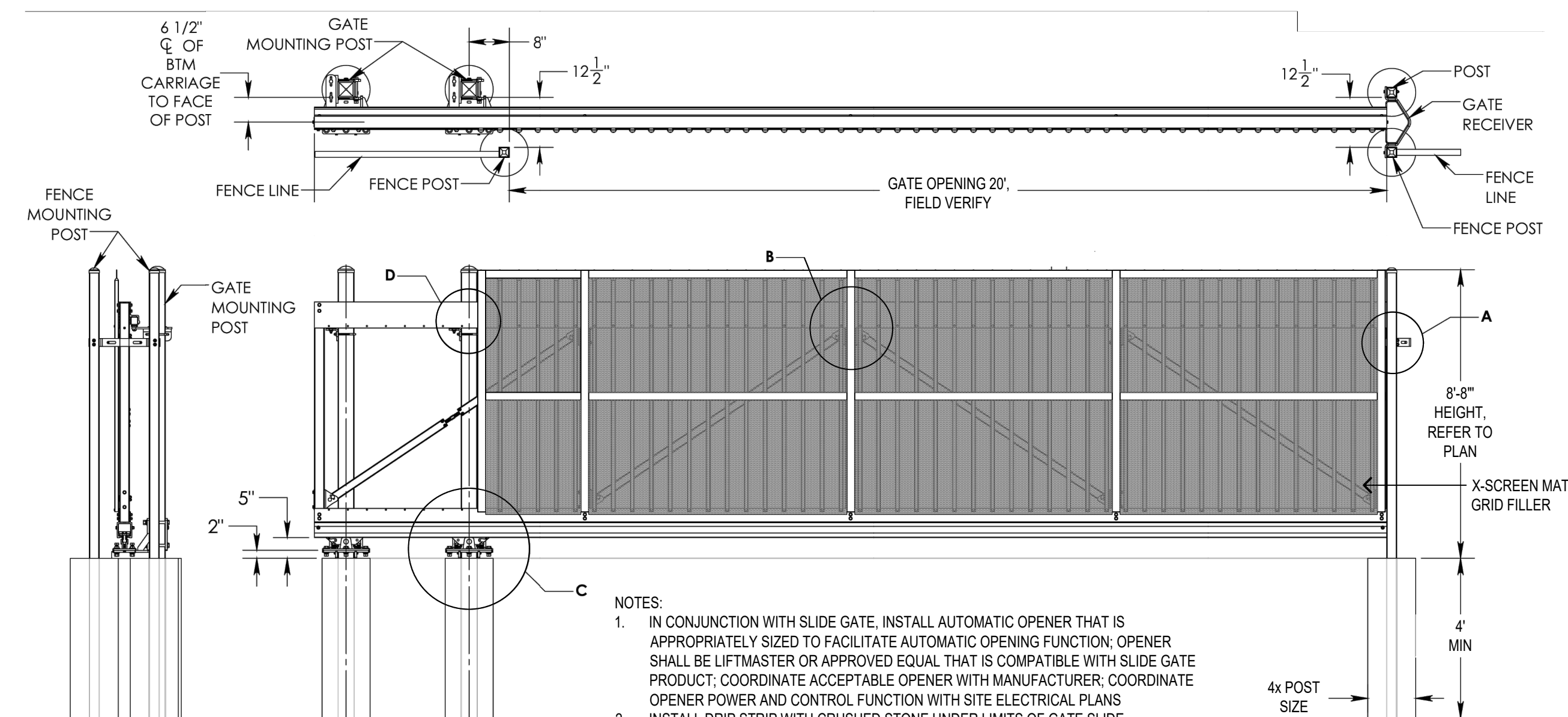
2 PRECAST LIGHT POLE FLUSH BASE

1/2" = 1'-0" BC2184-21418-36



1 6\"/>

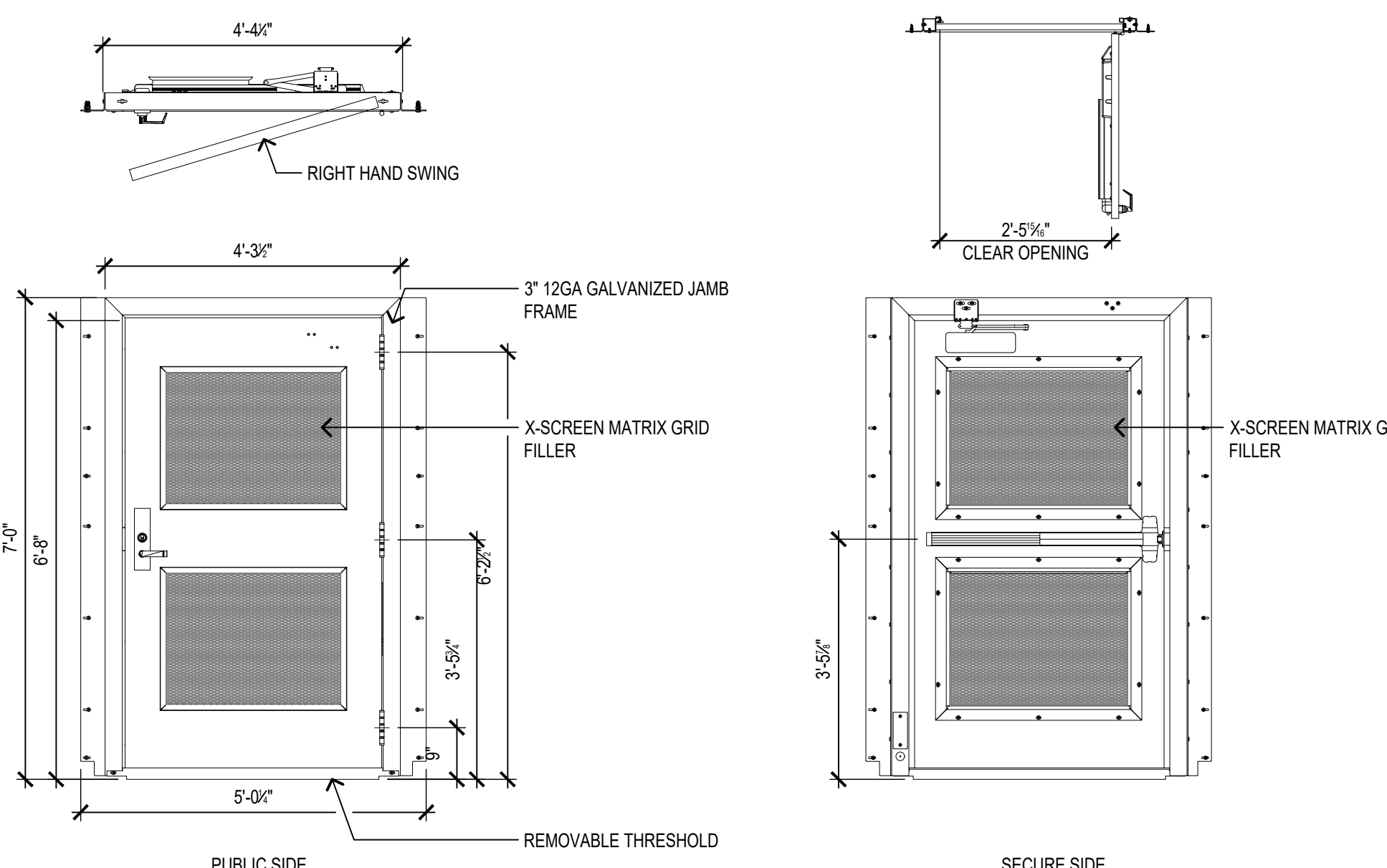
3/4" = 1'-0" BC2184-21418-20



- NOTES:
- 1. IN CONJUNCTION WITH SLIDE GATE, INSTALL AUTOMATIC OPENER THAT IS APPROPRIATELY SIZED TO FACILITATE AUTOMATIC OPENING FUNCTION. OPENER SHALL BE LIFMASTER OR APPROVED EQUAL THAT IS COMPATIBLE WITH SLIDE GATE PRODUCT. COORDINATE ACCEPTABLE OPENER WITH MANUFACTURER, COORDINATE OPENER POWER AND CONTROL FUNCTION WITH SITE ELECTRICAL PLANS
 - 2. INSTALL DRIP STRIP WITH CRUSHED STONE UNDER LIMITS OF GATE SLIDE
 - 3. MAX. DISTANCE BETWEEN BOTTOM OF GATE AND FINISH GRADE SHALL BE 4"

7 20' WIDE SLIDE GATE WITH MOTOR

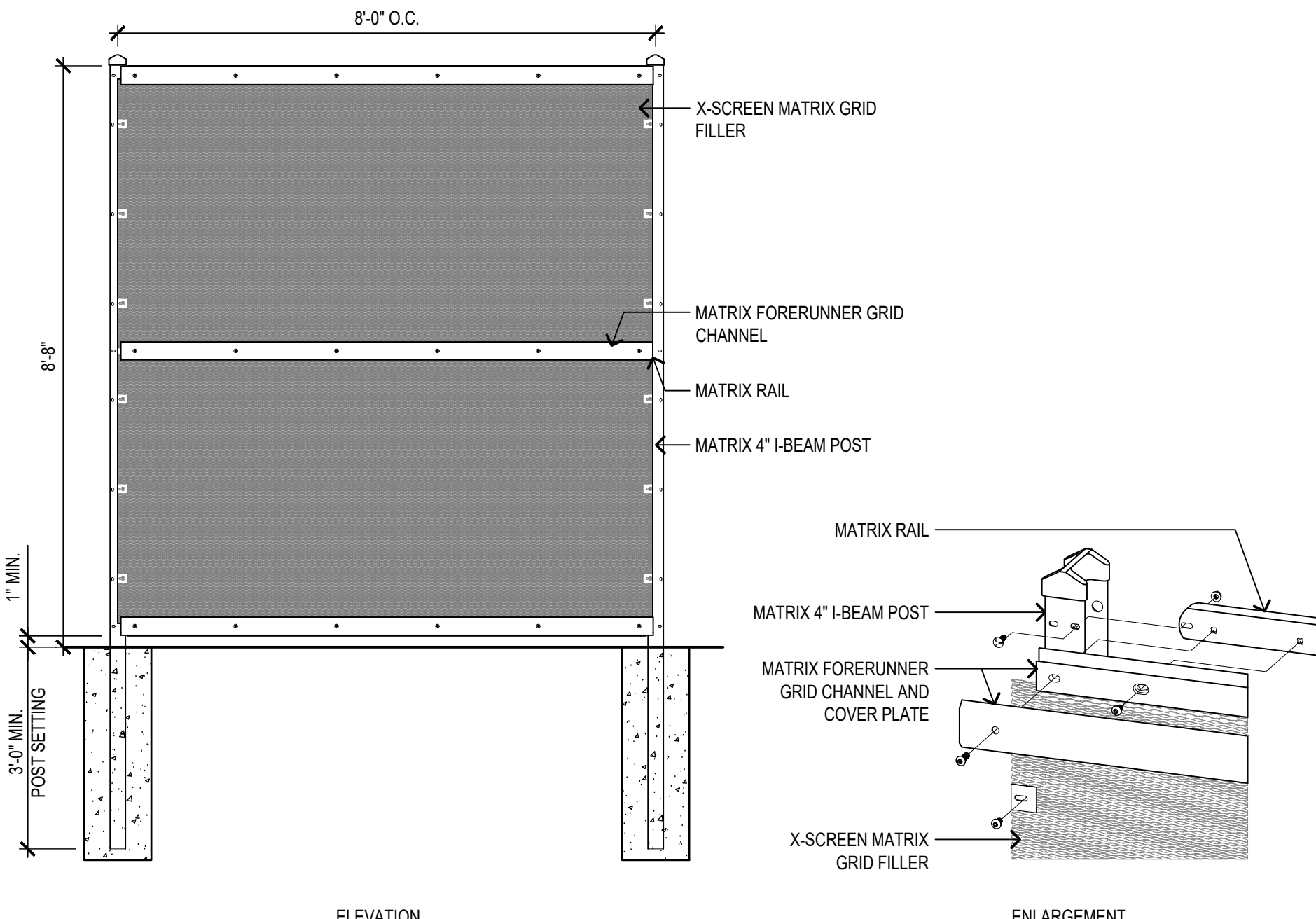
1/4" = 1'-0" BC2184-21418-85



6 PEDESTRIAN GATE IN METAL FENCE

1/2" = 1'-0" BC2184-21418-62

- NOTES:
- 1. VALUES SHOWN ARE NOMINAL AND NOT TO BE USED FOR INSTALLATION PURPOSES. SEE PRODUCT SPECIFICATIONS FOR INSTALLATION REQUIREMENTS.



5 METAL FENCE

1/2" = 1'-0" BC2184-21418-61

NO.	DATE	ISSUED/REVISION	BY

PRELIMINARY NOT FOR CONSTRUCTION

Scale 1"=20'
Project No. 218421418

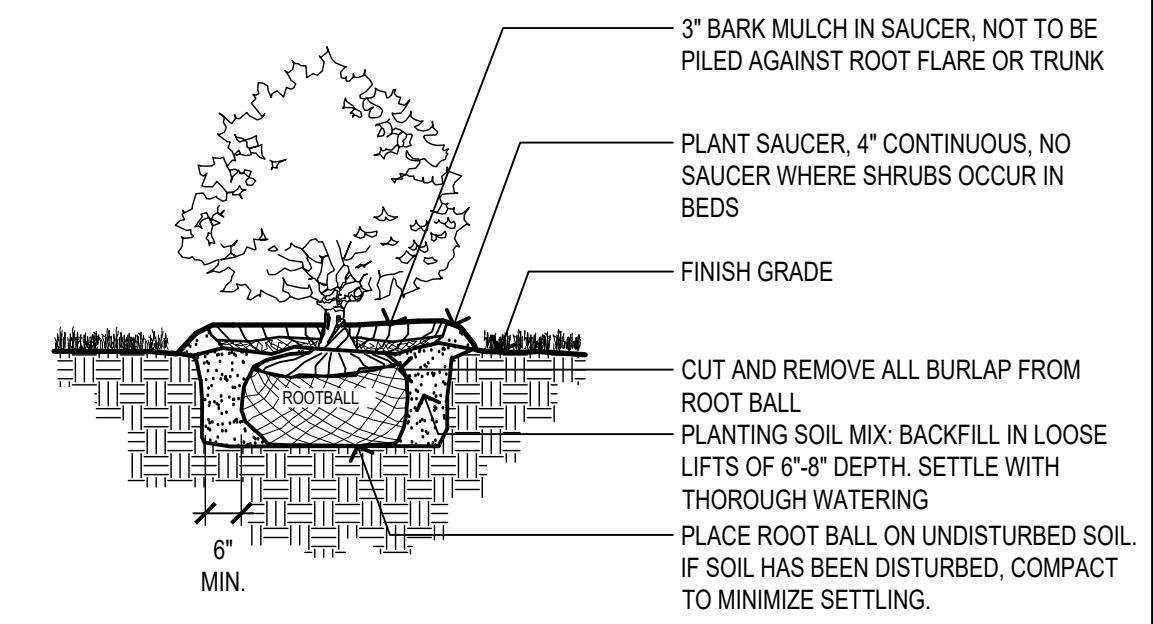
SITE DETAIL 2

Consultant



Key Plan

Notes



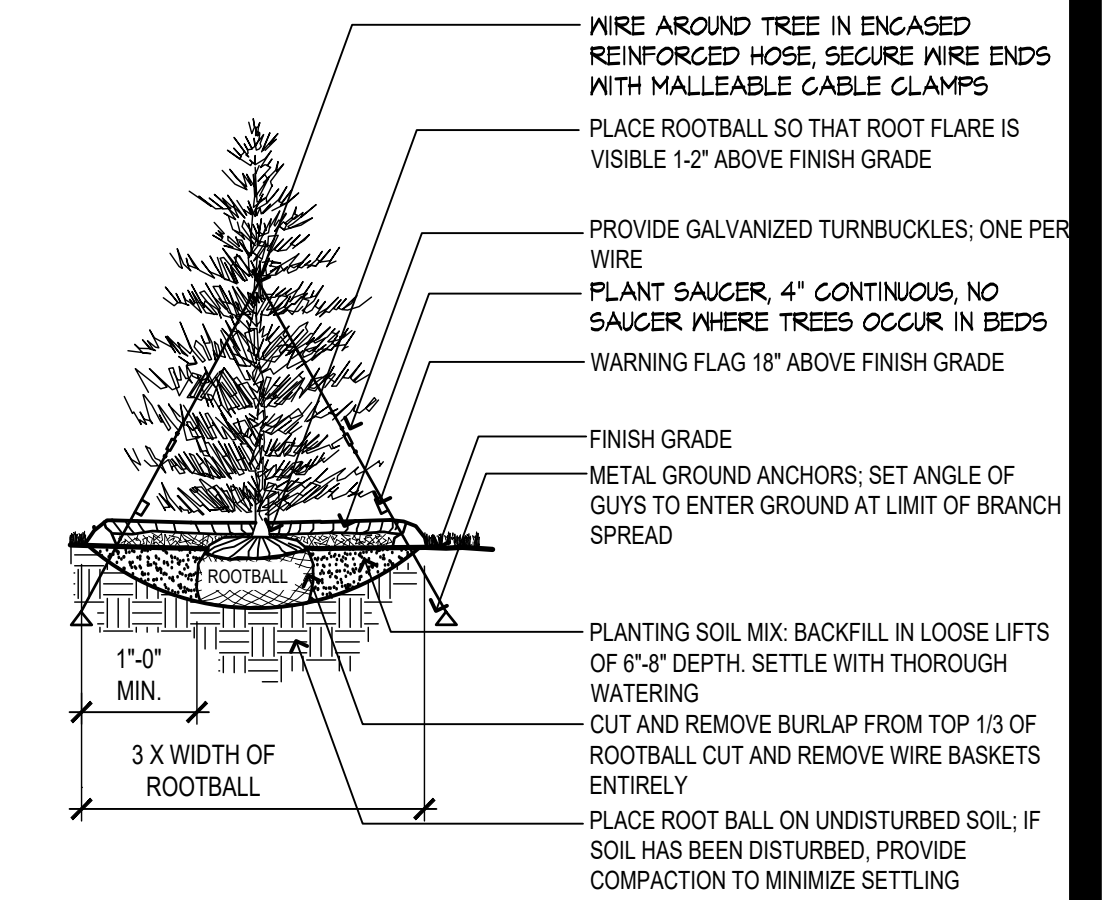
NOTES:

- SHRUB SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT BORE TO NURSERY OR FIELD GRADE.
- WHERE SHRUBS OCCUR IN GROUPINGS IN PLANT BEDS, PROVIDE 2-FOOT DEEP CONTINUOUS LOAM BED.

4 SHRUB PLANTING

3/8" x 1'-0"

BC2184-21418-32



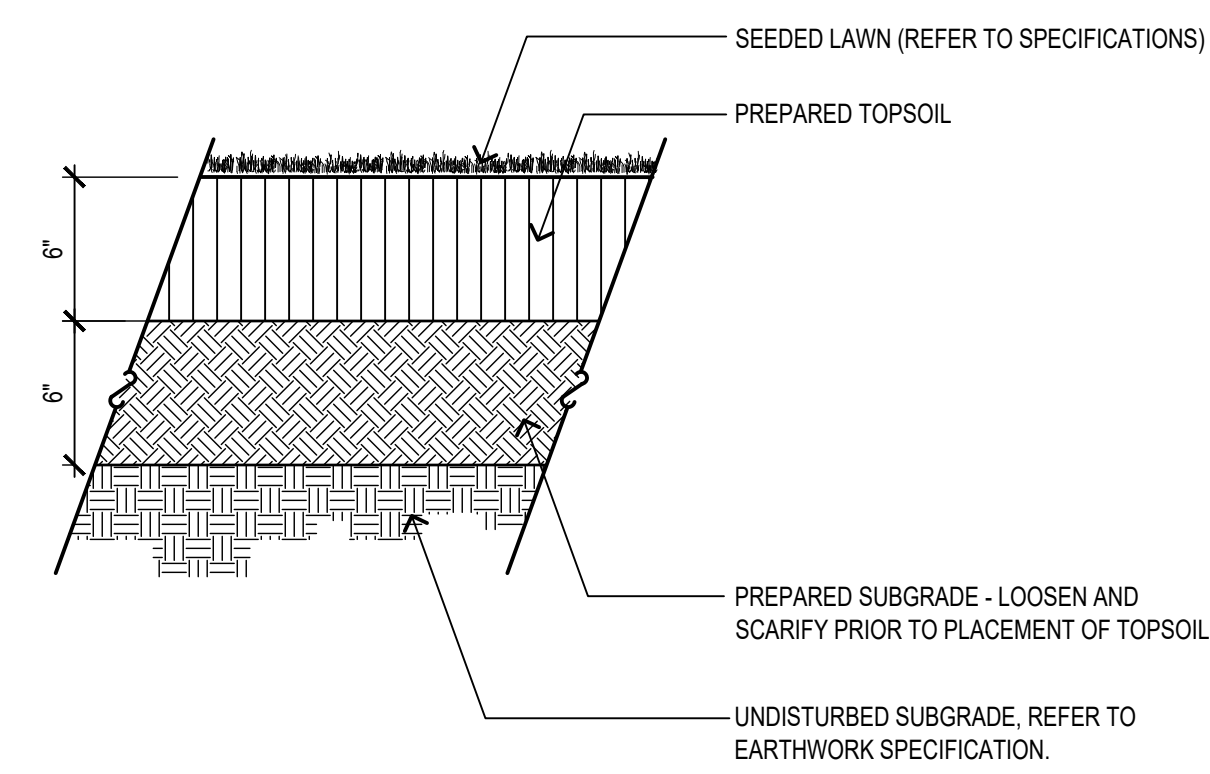
NOTE:

- TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT BORE TO NURSERY OR FIELD GRADE.
- INSTALL THREE GUYS PER TREE, EQUALLY SPACED AROUND BALL. ATTACH GUYS AT 2/3 HEIGHT OF TREE. USE DOUBLE STRAND GALVANIZED STEEL WIRE.
- ROOT FLARE SHALL BE VISIBLE 1-2" ABOVE FINISH GRADE.

3 EVERGREEN TREE PLANTING

1/8" x 1'-0"

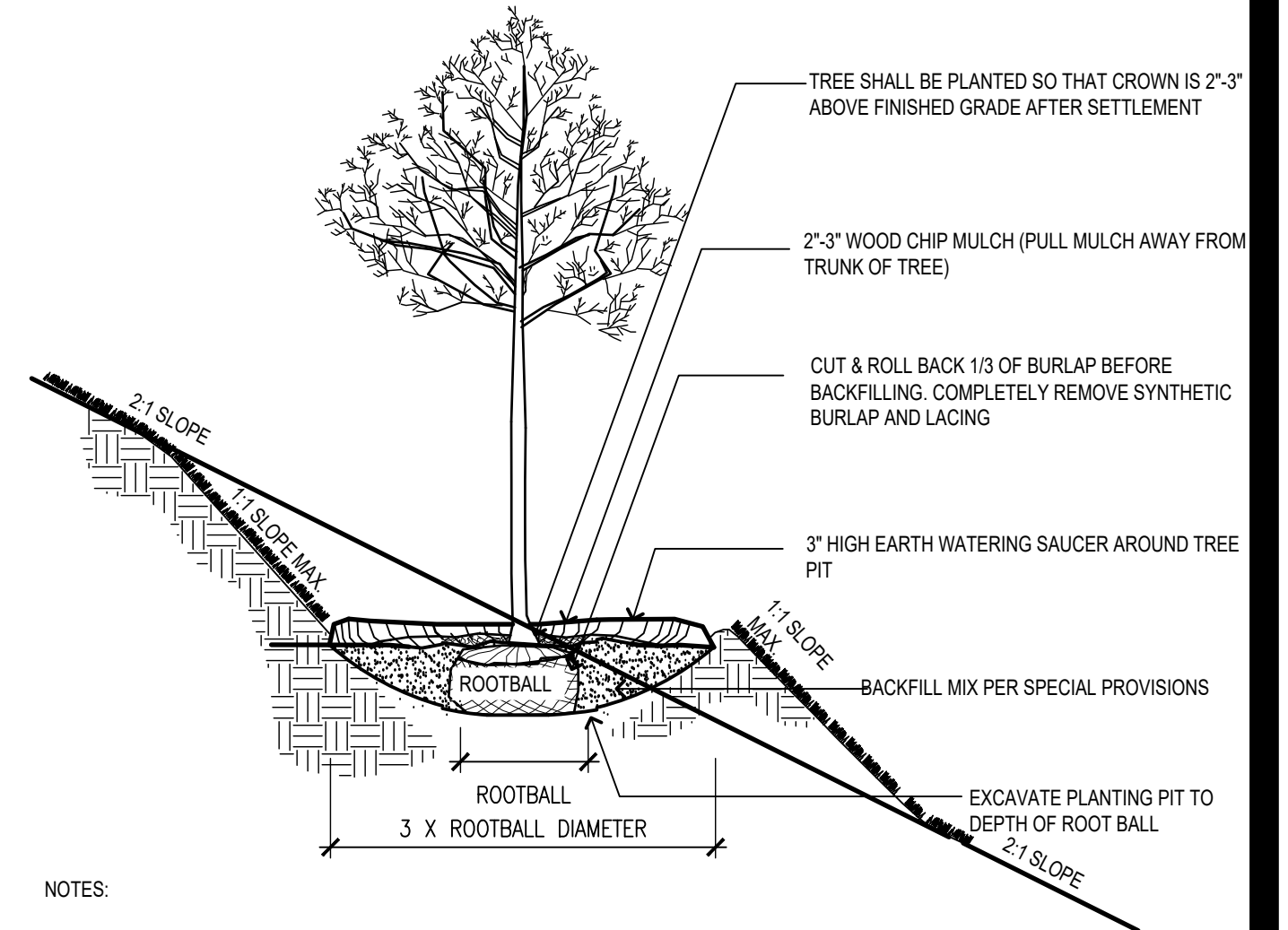
BC2184-21418-31



6 LOAM AND SEED OR SOD PLANTING

1/32" x 1'-0"

BC2184-21418-34



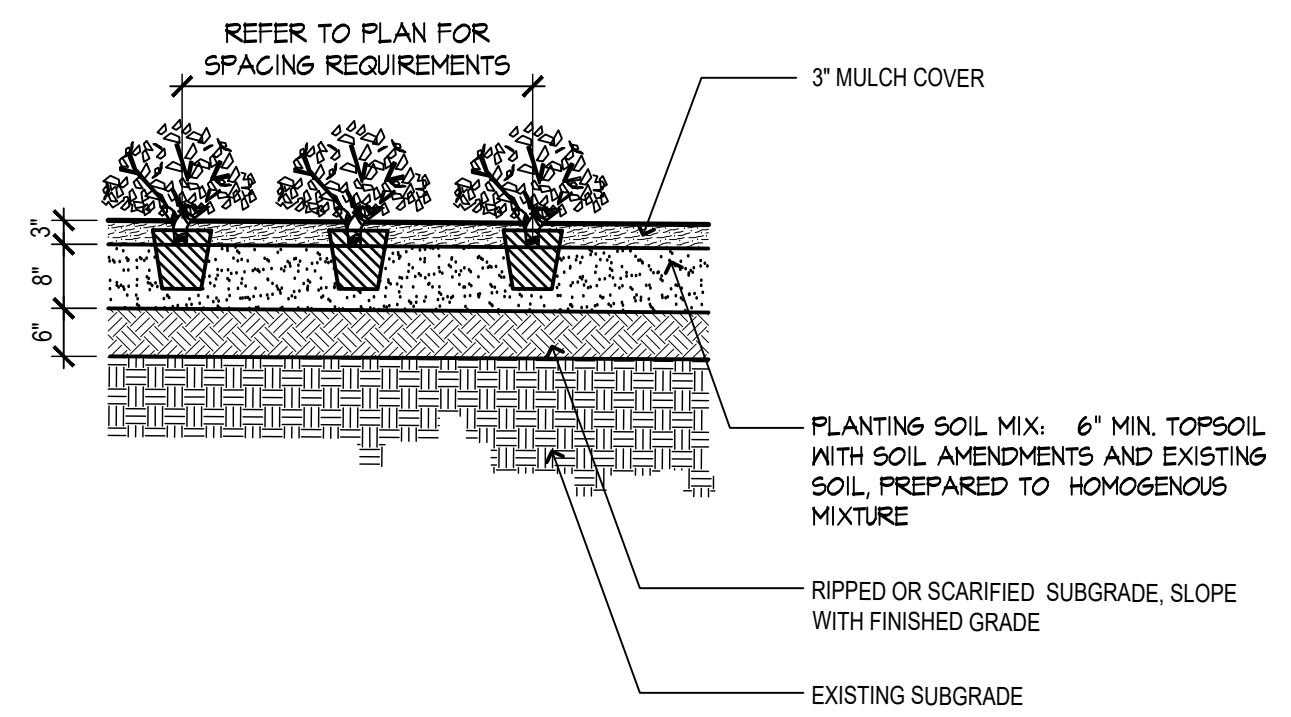
NOTES:

- WATERING SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING. DO NOT CUT LEADER. TREE SHALL BE SET PLUMB.

2 DECIDUOUS TREE PLANTING IN A SLOPE

3/32" x 1'-0"

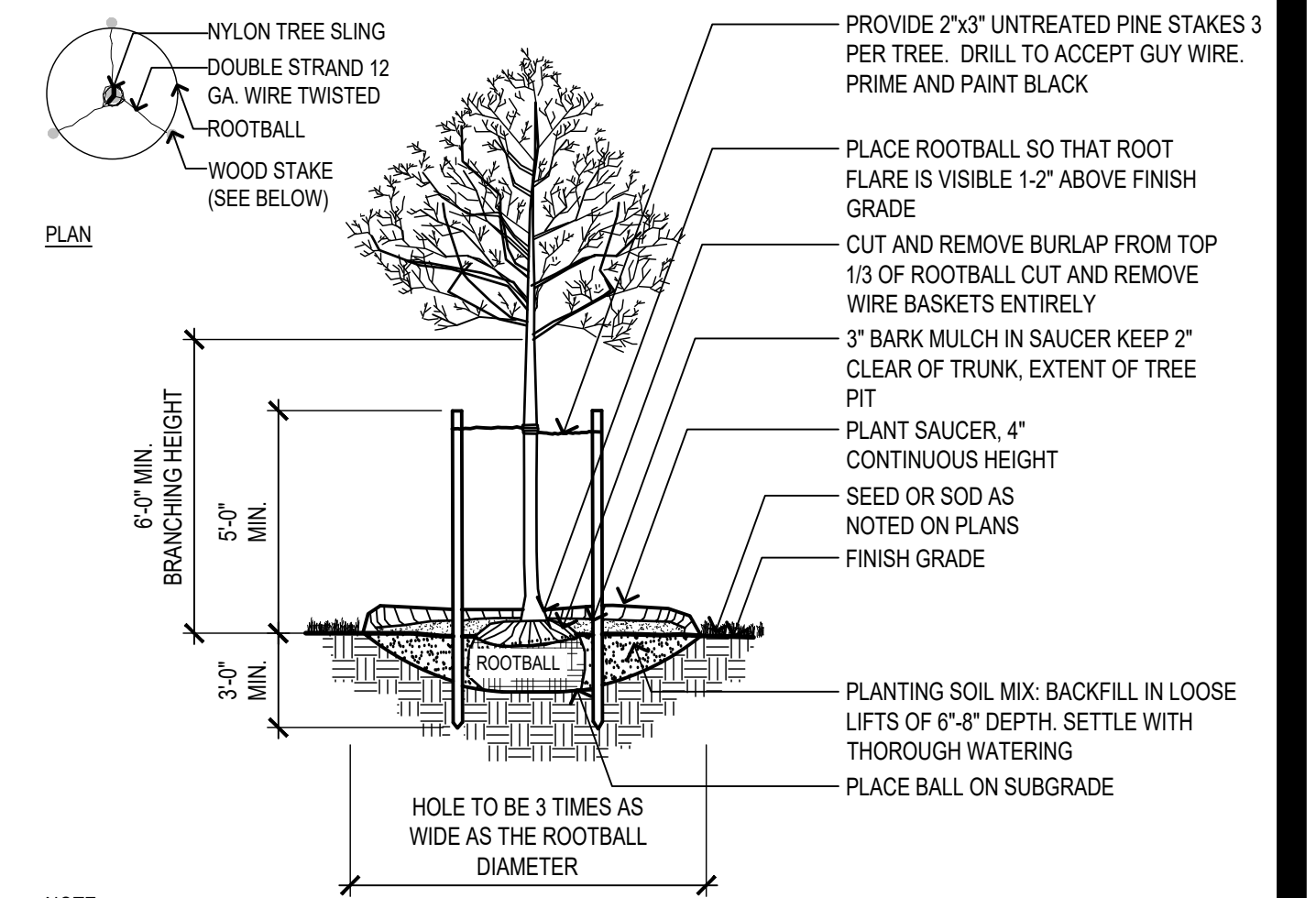
BC2184-21418-30



5 GROUND COVER PLANTING

1/2" x 1'-0"

BC2184-21418-33



NOTE:

- TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT BORE TO NURSERY OR FIELD GRADE.
- CONTRACTOR MAY USE PLASTIC TREE GUYING CHAIN IF APPROVED BY LANDSCAPE ARCHITECT.

1 DECIDUOUS TREE PLANTING WITH GUYING

1/4" x 1'-0"

BC2184-21418-29

3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.13
1	SCHEMATIC DESIGN	2023.10.04

Issued/Revision YYYMMDD

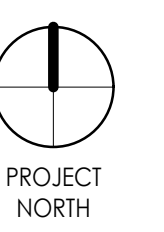
Permit/Seal

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NOT FOR
CONSTRUCTION**

Scale 1"=20'

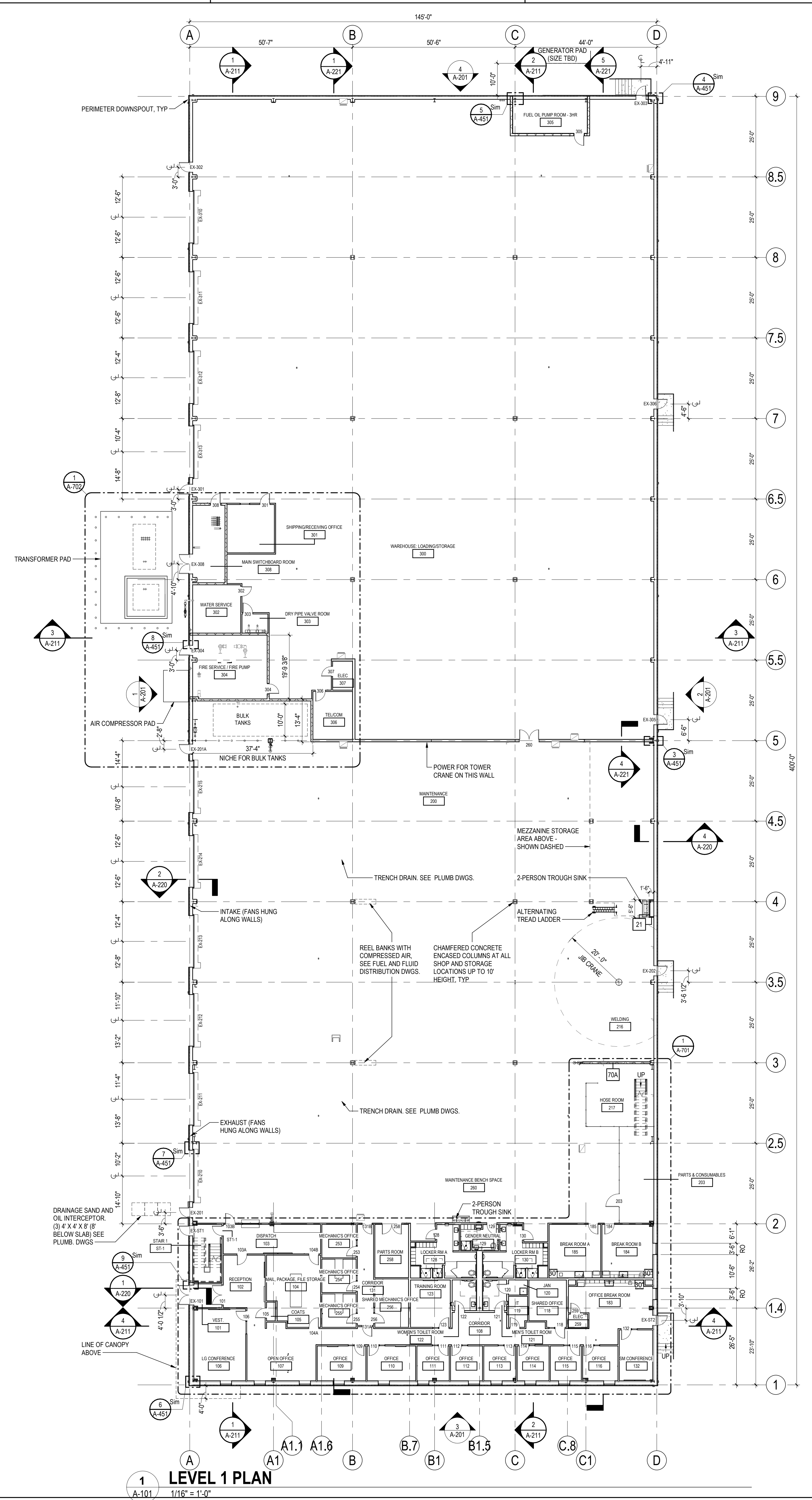
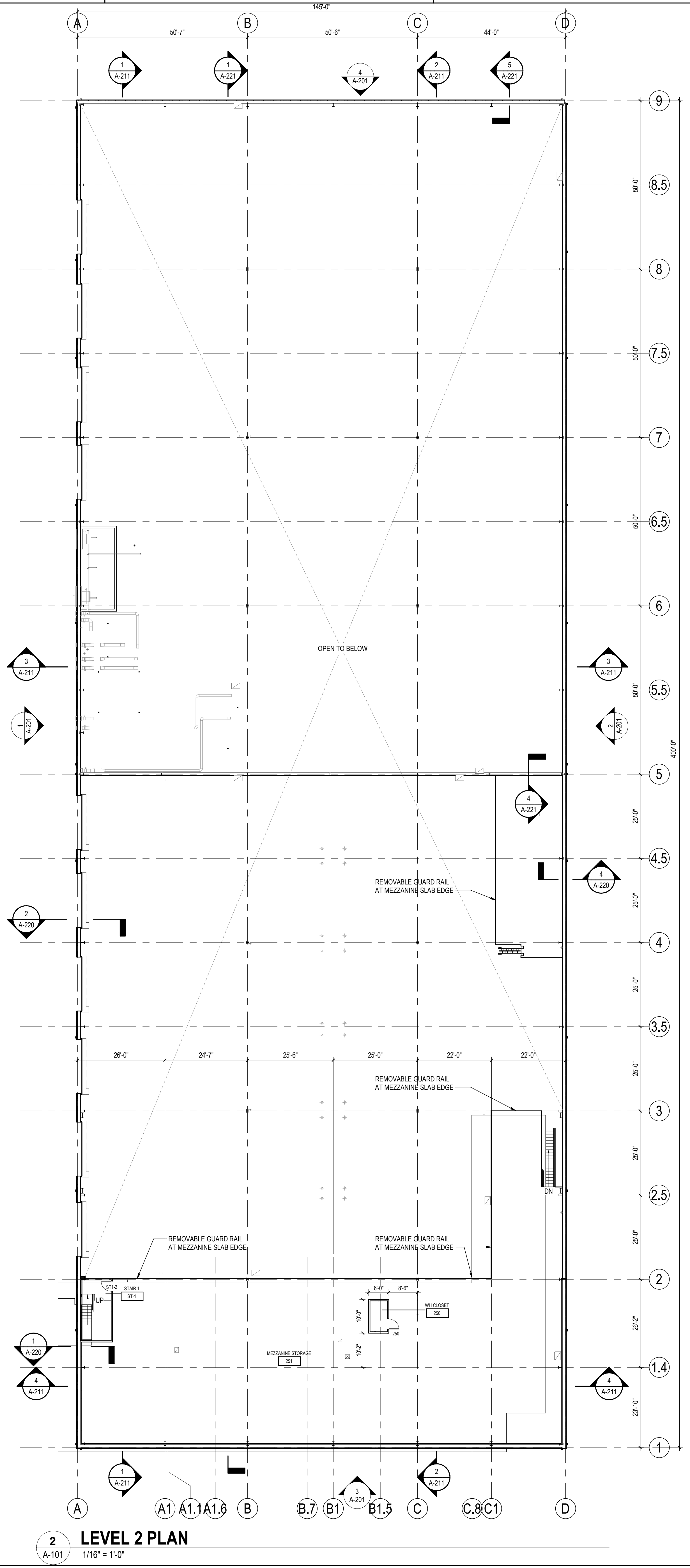
Project No. 218421418

PLANTING DETAILS



1	SCHEMATIC DESIGN	2023.10.04
2	DESIGN DEVELOPMENT	2023.12.15
3	ISSUED FOR PERMIT	2024.02.16
4	CONSTRUCTION DOCUMENTS	2024.02.16
Issued/Revision		YYYYMMDD

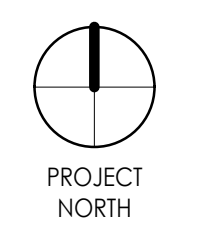
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CONSTRUCTION**





Key Plan

RANDOLPH NORTH BUILDING A



Notes

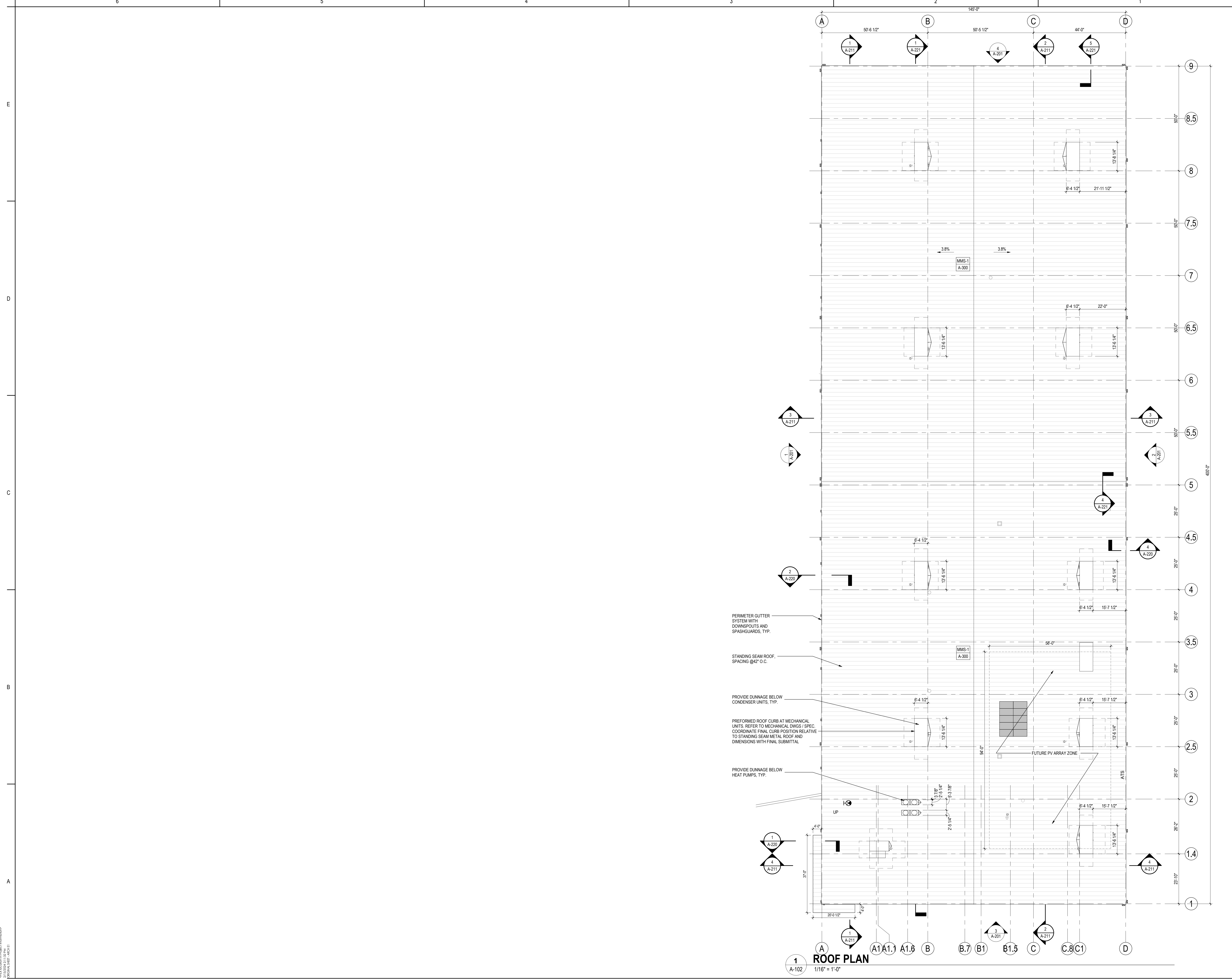
3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEMATIC DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

Permit/Seal

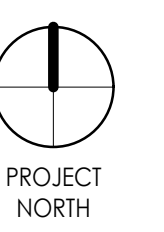
**PRELIMINARY
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CONSTRUCTION**

Scale
 Project No. 218421418
ROOF PLAN

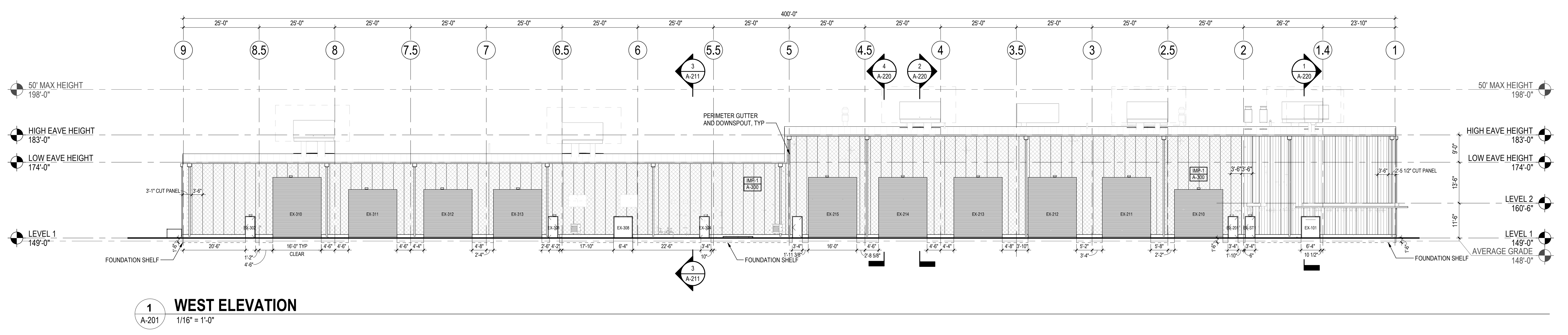
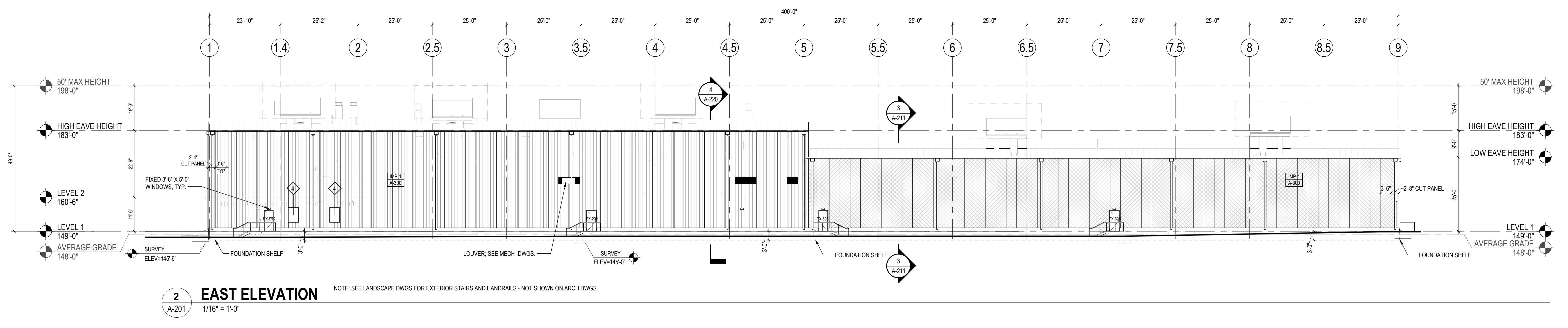
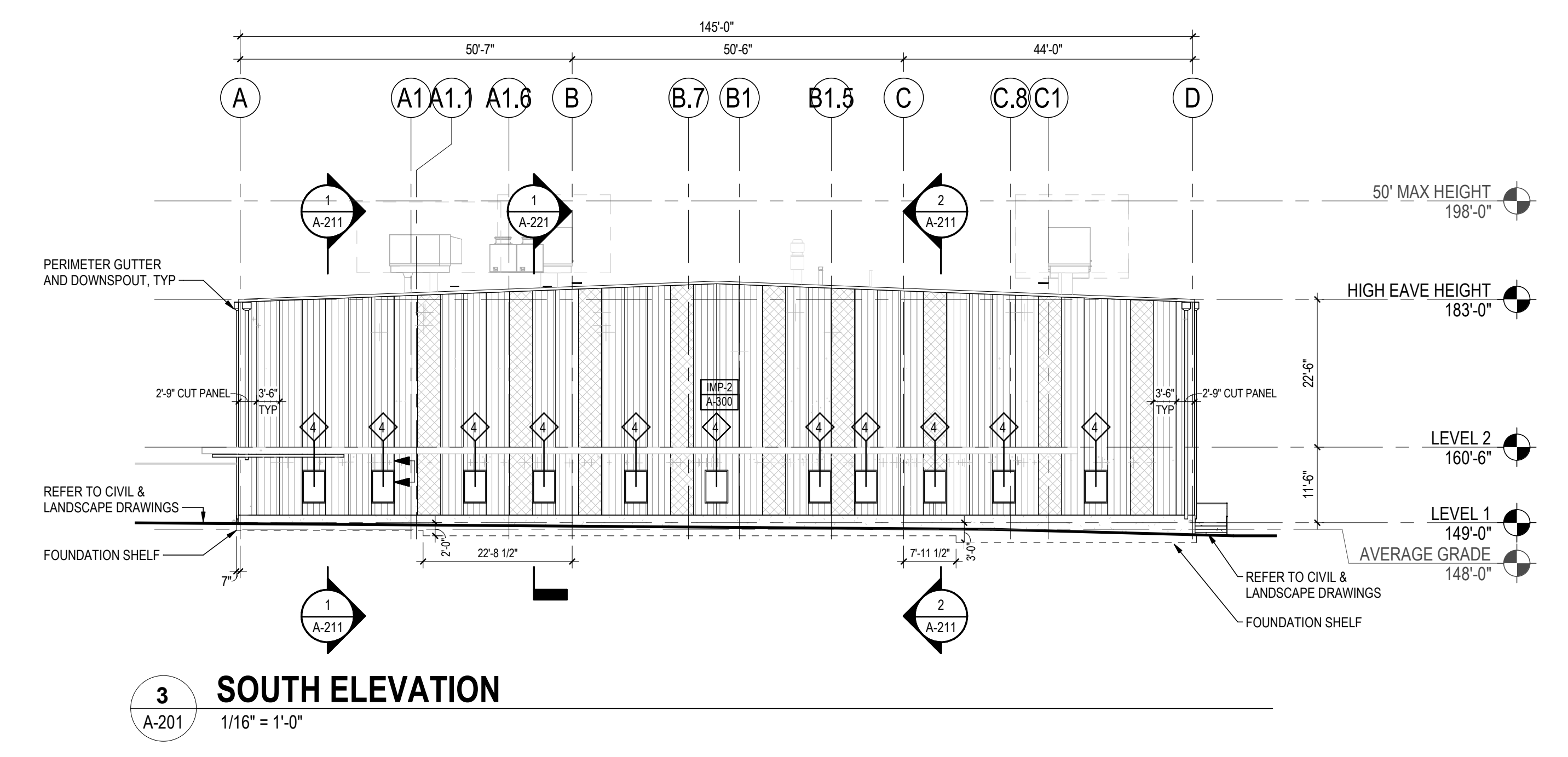
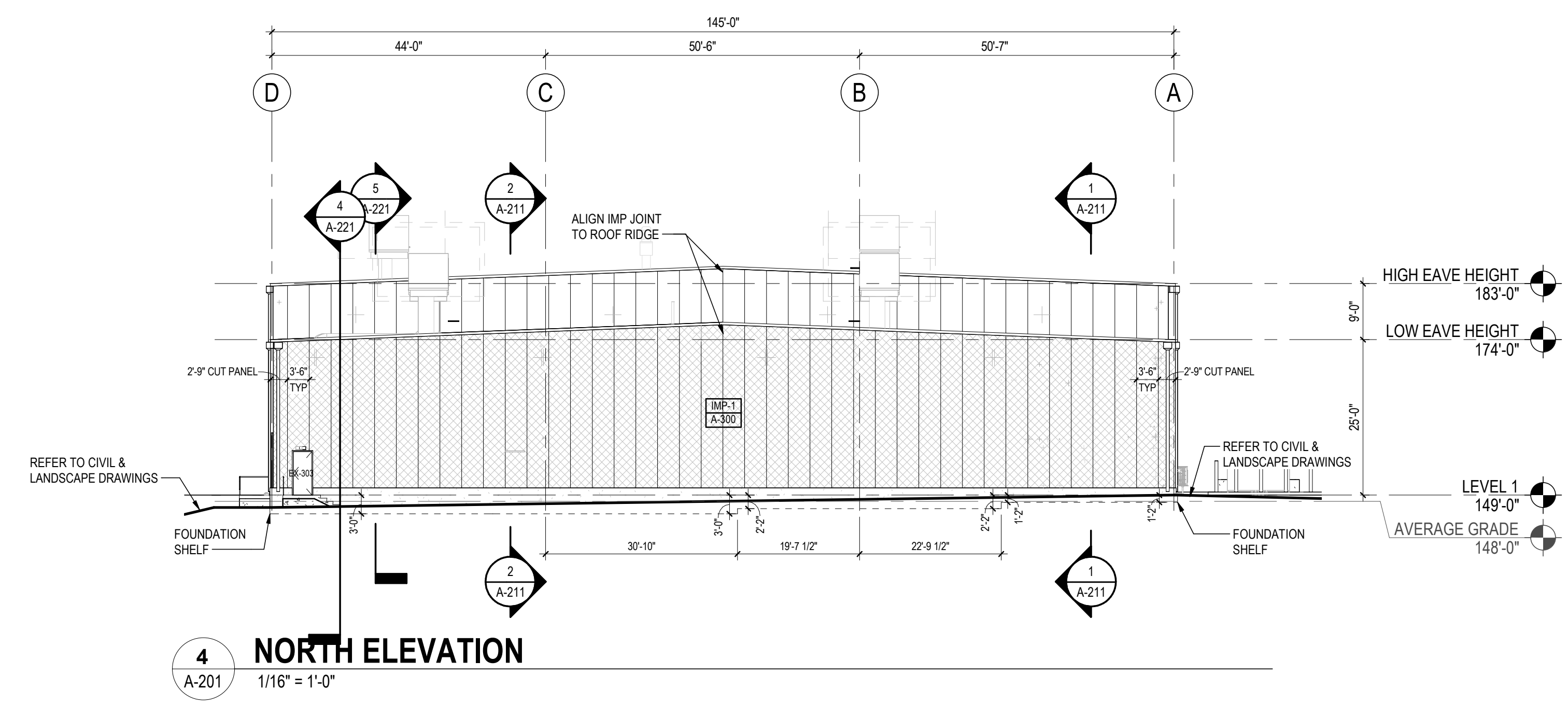
A-102



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 1/16" = 1'-0"



MATERIAL LEGEND	
	INSULATED METAL PANEL - REGAL GRAY BOD: METL-SPAN CF LIGHT MESA PROFILE PANELS (42" WIDTH)
	INSULATED METAL PANEL - REGAL GRAY BOD: METL-SPAN CF FLUTE PROFILE PANELS (42" WIDTH)



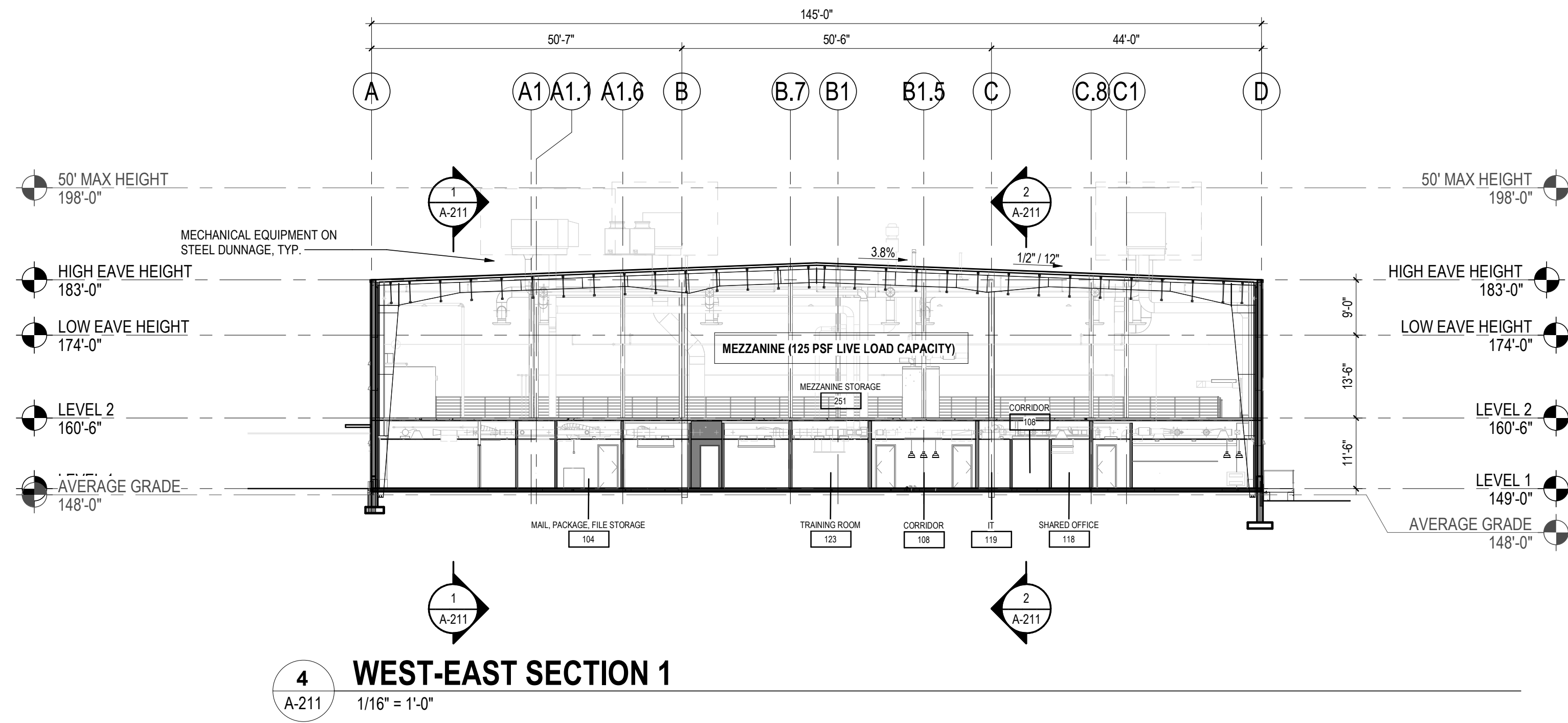
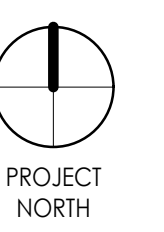
NO.	DESCRIPTION	DATE
3	ISSUE FOR CONSTRUCTION	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEMATIC DESIGN	2023.10.04
	Issued/Revision	YYYYMMDD

Permit/Seal

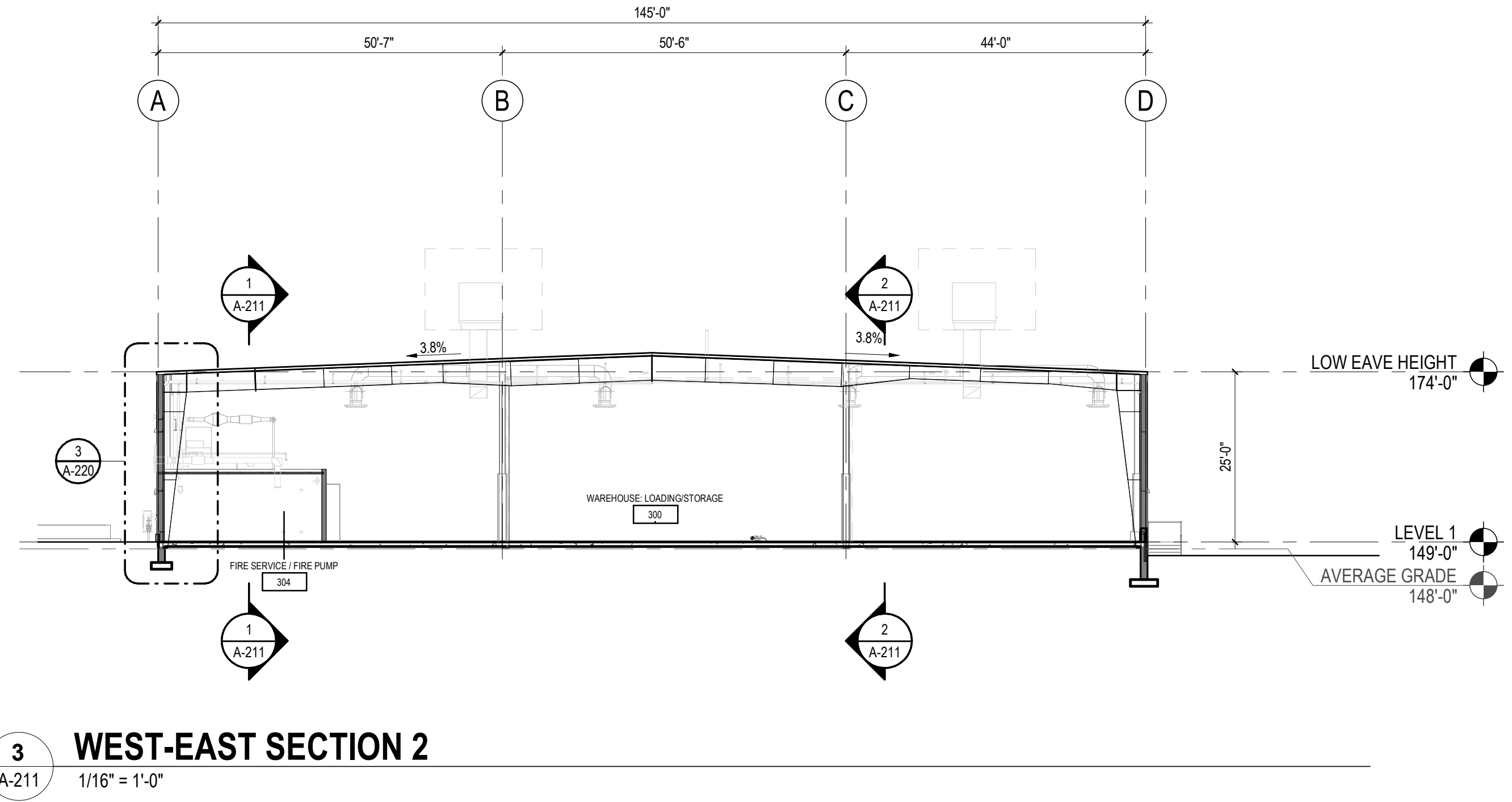
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 CONSTRUCTION**

Scale As indicated
 Project No. 218421418
EXTERIOR ELEVATIONS

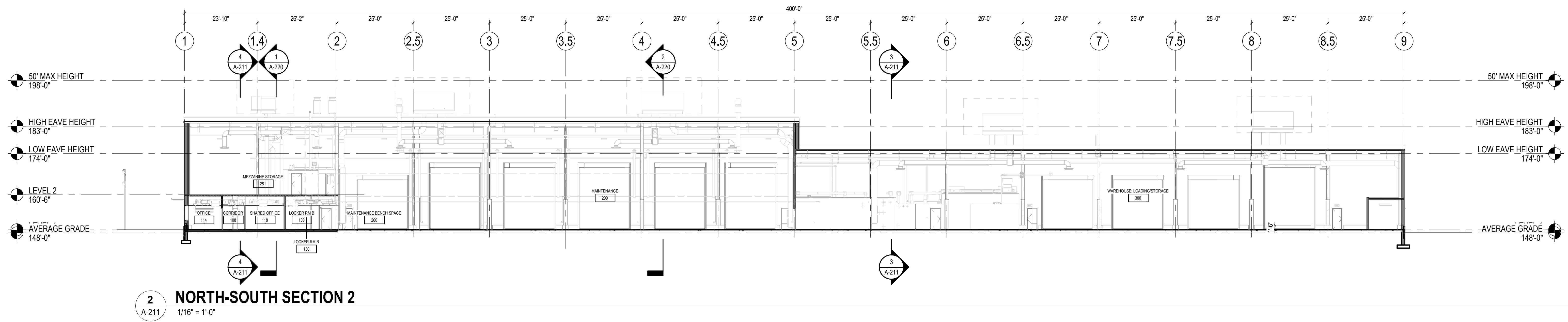
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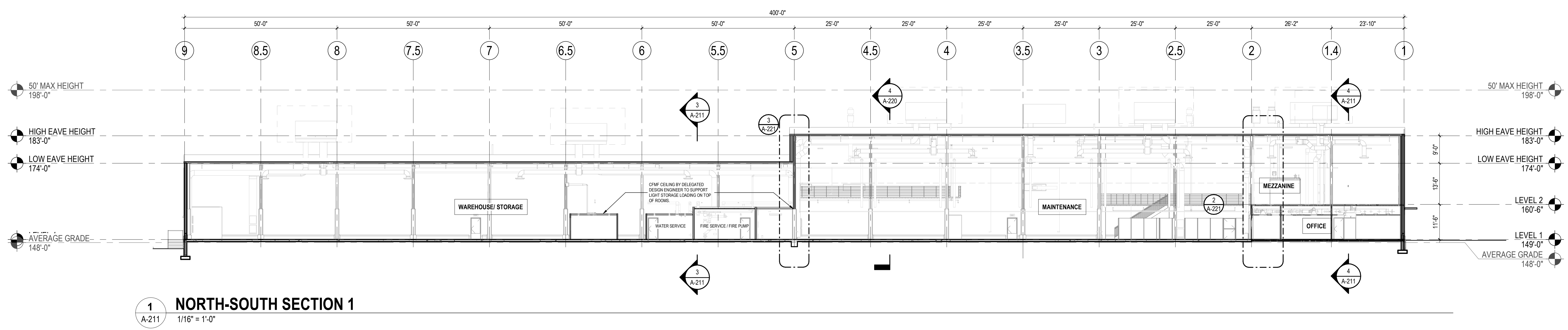
4 WEST-EAST SECTION 1
A-211 1/16" = 1'-0"



3 WEST-EAST SECTION 2
A-211 1/16" = 1'-0"



2 NORTH-SOUTH SECTION 2
A-211 1/16" = 1'-0"



1 NORTH-SOUTH SECTION 1
A-211 1/16" = 1'-0"

NO.	DESCRIPTION	DATE
3	SITE CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEMATIC DESIGN	2023.10.04
Issued/Revision		YYYYMMDD

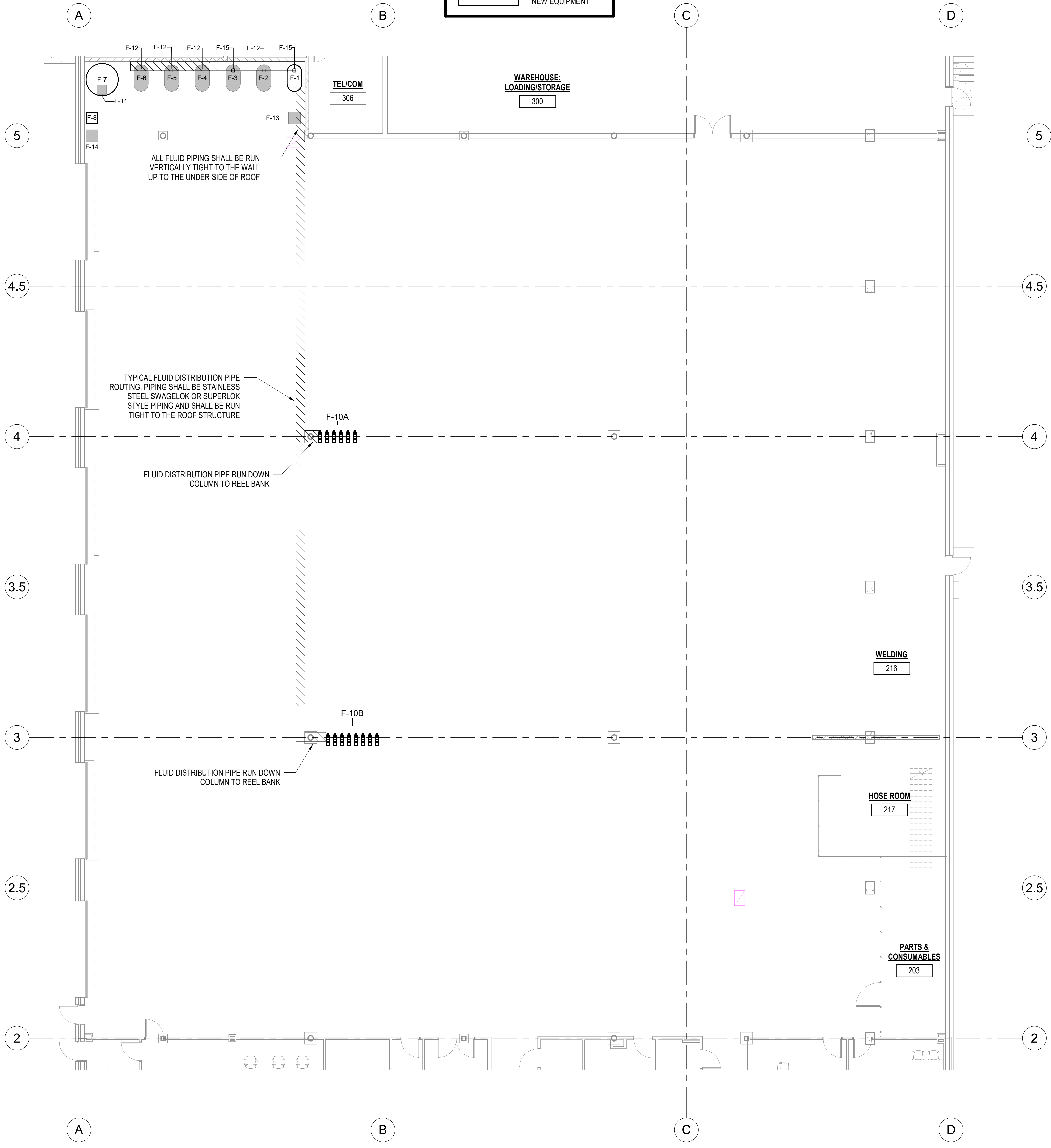
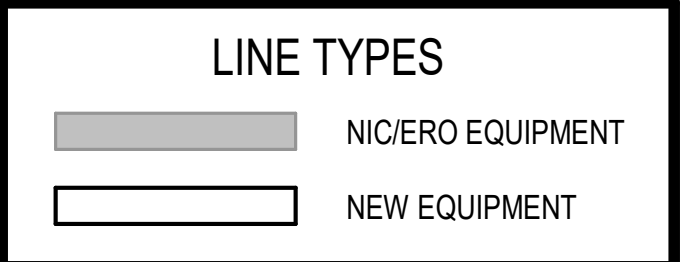
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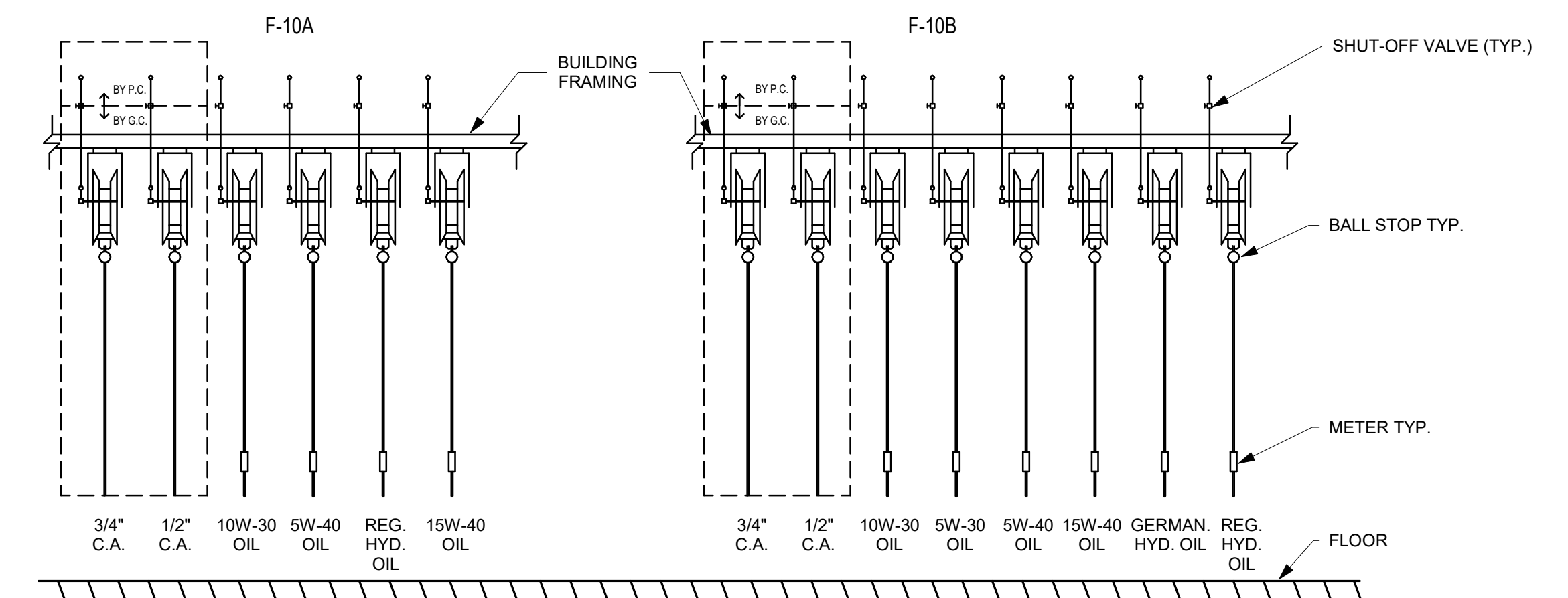
Scale 1/16" = 1'-0"
Project No. 218421418

BUILDING SECTIONS

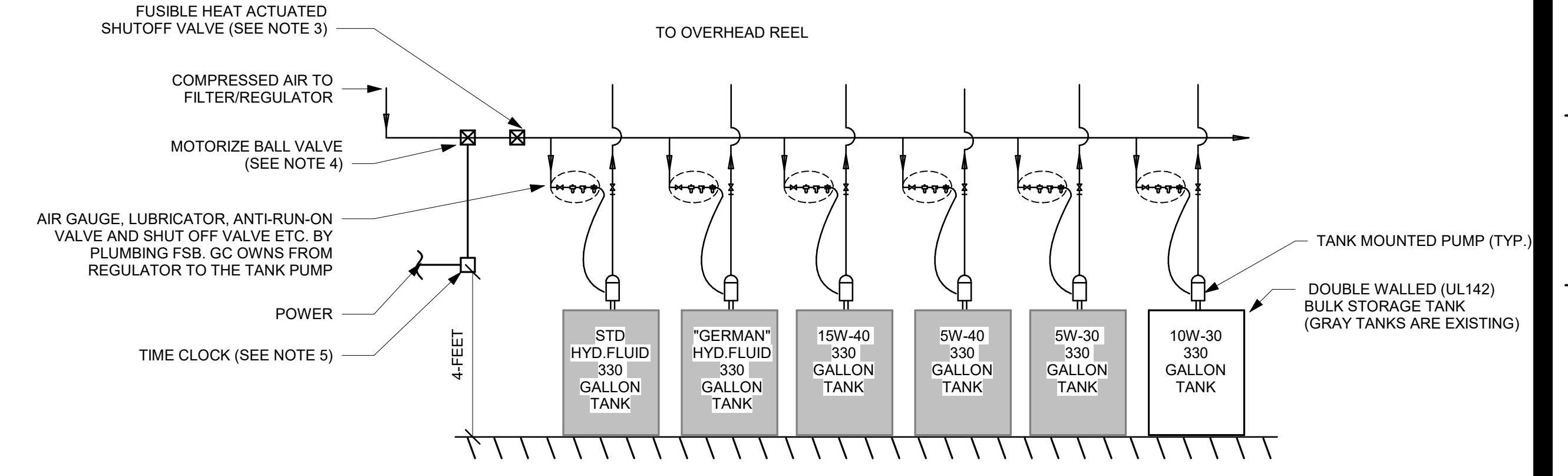
A-211



1 FLUID DISTRIBUTION PLAN
1/8" = 1'-0"



2 REEL BANK DETAIL
N.T.S.



3 GENERAL TANK PIPING ARRANGEMENT
N.T.S.

Fluid Distribution Schedule					
EQ Number	Description	Count	Equipment Type	Spec Number	Notes
F-1	330 Gallon Standard Hydraulic Fluid Tank	1	N	11 11 29	
F-2	330 Gallon "German" Hydraulic Fluid Tank	1	ERO	11 11 29	
F-3	330 Gallon 15W-40 Tank	1	ERO	11 11 29	
F-4	330 Gallon 5W-40 Tank	1	ERO	11 11 29	
F-5	330 Gallon 5W-30 Tank	1	ERO	11 11 29	
F-6	330 Gallon 10W-30 Tank	1	ERO	11 11 29	
F-7	1,000 Gallon Waste Oil Tank	1	N	11 11 29	
F-8	Oil Filter Crusher	1	N	11 11 29	
F-10A	Lube Reel Bank	1	N	11 11 29	
F-10B	Lube Reel Bank	1	N	11 11 29	
F-11	Waste Oil Transfer Pump	1	ERO	11 11 29	
F-12	Existing Tank Mounted Lube Pumps	4	ERO	11 11 29	SEE NOTE 4
F-13	Lube Trolley - 55 Gallon ATF	1	ERO	11 11 29	
F-14	Lube Trolley - 55 Gallon Gear Oil	1	ERO	11 11 29	
F-15	Tank Mounted Lube Pump	2	N	11 11 29	

- ABBREVIATIONS:
- N NEW EQUIPMENT TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
 - ERO EXISTING EQUIPMENT TO BE RELOCATED AND INSTALLED BY THE OWNER. UTILITIES FOR ERO EQUIPMENT TO BE PROVIDED BY THE FILED SUB-BID CONTRACTORS.
 - ERC EXISTING EQUIPMENT TO BE RELOCATED AND INSTALLED BY THE CONTRACTOR. UTILITIES FOR ERC EQUIPMENT TO BE PROVIDED BY THE FILED SUB-BID CONTRACTORS
 - NIC NEW EQUIPMENT PROVIDED AND INSTALLED BY THE OWNER (NOT IN CONTRACT), HOWEVER UTILITIES FOR THIS EQUIPMENT SHALL BE PROVIDED BY THE FILED SUB-BID CONTRACTORS.

- GENERAL NOTES:
- EQUIPMENT LAYOUTS ARE SCHEMATIC. GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT LOCATIONS WITH OWNER AND MANUFACTURER REQUIREMENTS. COORDINATE ALL UTILITY REQUIREMENTS WITH SUB-CONTRACTORS. FINAL EQUIPMENT LOCATIONS SHALL BE CONFIRMED BY THE OWNER PRIOR TO RUNNING UTILITIES AND INSTALLATION EQUIPMENT.
 - GENERAL CONTRACTOR SHALL COORDINATE UTILITY REQUIREMENTS OF EXISTING EQUIPMENT PRIOR TO INSTALLATION OF SERVICES.
 - SEE SPECIFICATION SECTION 11 11 29 - FLUID DISTRIBUTION SYSTEM FOR ADDITIONAL INFORMATION AND SCOPE DELINEATION FOR THE FLUID DISTRIBUTION SYSTEM.
 - THE LUBE SYSTEM CONTRACTOR SHALL VERIFY THE EXISTING LUBE PUMPS ARE ADEQUATELY SIZED FOR THE FLUID TYPE AND PRESSURE LOSS ASSOCIATED WITH THE PROPOSED FLUID DISTRIBUTION SYSTEM. IF ANY OF THE EXISTING FLUID DISTRIBUTION PUMPS ARE FOUND INSUFFICIENT FOR THE FUNCTIONALITY OF THE PROPOSED SYSTEM, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PROVIDE HYDRAULIC CALCULATIONS AS REQUESTED IN SPECIFICATION SECTION 11 11 29.

3	50% CONSTRUCTION DOCUMENTS	2024.02.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEMATIC DESIGN	2023.10.06

Issued/Revision YYYMAM.DD

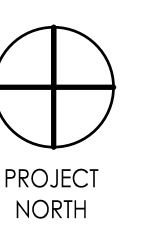
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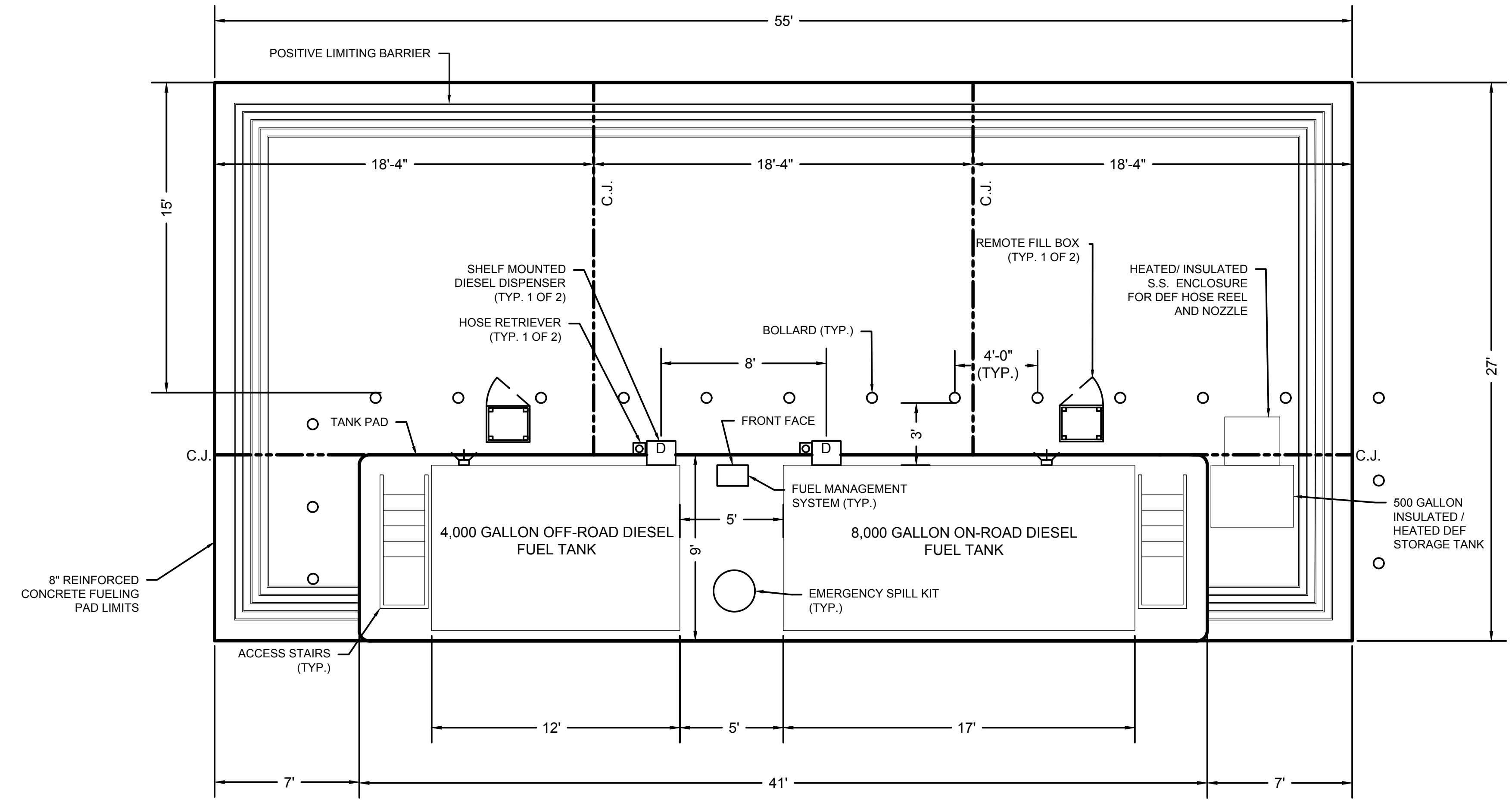
Scale As indicated
Project No. 218421418

FLUID DISTRIBUTION

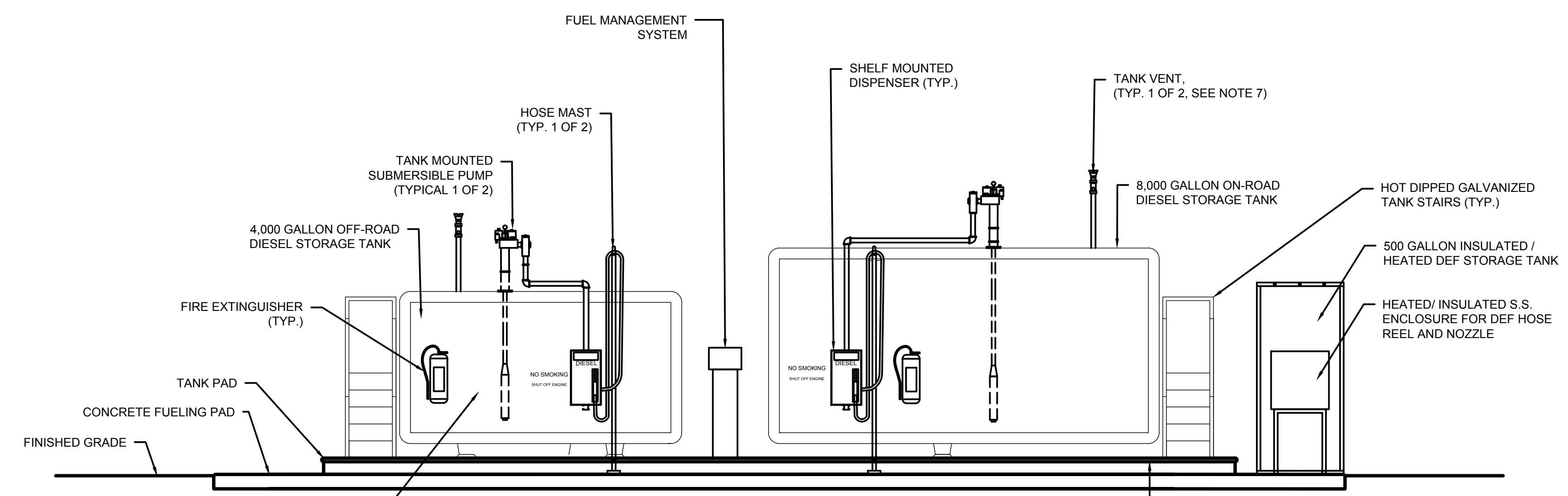
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FUEL PUMP ISLAND PLAN
SCALE: 1/4" = 1'-0"



FUEL PUMP ISLAND PLAN - ELEVATION
SCALE: 1/4" = 1'-0"

LEGEND:

- TANK MOUNTED HIGH LEVEL ALARM (VEEDER ROOT 790091-001, OR EQUAL)
- C.J. CONTROL JOINT

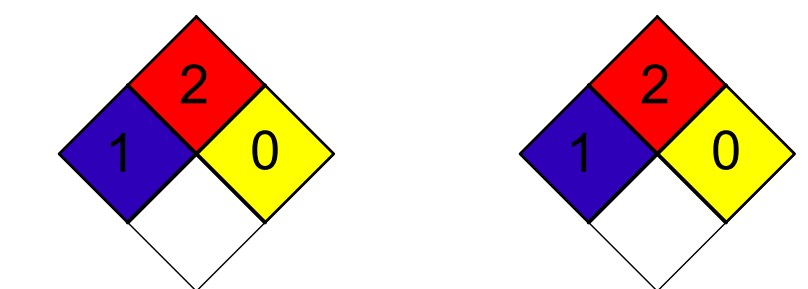
FUEL SYSTEM NOTES:

1. CONCRETE SLAB PITCH SHALL BE AS SHOWN IN THE GRADING AND DRAINAGE PLAN.
2. FINAL LOCATIONS TO BE APPROVED BY THE ENGINEER FOR TANK MOUNTED HIGH LEVEL ALARMS, EXTINGUISHERS, EMERGENCY PUMP SHUTOFF SWITCHES, AND FIRE SUPPRESSION ACTIVATION SWITCHES.
3. SEAL CONTROL JOINT PENETRATIONS THROUGH POSITIVE LIMITING BARRIER WITH PETROLEUM RESISTANT SEALANT (SIKA DUOFLEX SL, OR EQUAL) AS WELL AS ALL PENETRATIONS THROUGH THE FUELING PAD.
4. TANK VENTS SHALL EXTEND TO 12' ABOVE THE SURROUNDING FUELING PAD GRADE.
5. CONTRACTOR SHALL CONFIRM ALL BOLLARD LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
6. ALL SPOT ELEVATIONS LOCATED AROUND THE TANK PAD SHOW THE ELEVATION WHERE THE DRIVE PAD MEETS THE STAINLESS STEEL ISLAND FORM.

CONSTRUCTION NOTES:

1. TANK SHALL BE LABELED WITH A MINIMUM OF 2-INCH LETTERING WITH THE FOLLOWING INFORMATION:

TANK ID:	#1	#2
CONTENTS:	OFF-ROAD DIESEL	ON-ROAD DIESEL
SAFE FILL VOLUME (HEIGHT):	4,000 GALLONS (X'-X")	8,000 GALLONS (X'-X")
NFPA HAZARD ID:		



*CONTRACTOR TO PROVIDE HEIGHT "X" BASED ON MANUFACTURER DATA AND FINAL APPROVED SHOP DRAWING AND LABEL TANK AS SHOWN ABOVE

2. THE SAFE FILL LEVEL SHALL BE 90% OF THE TANK VOLUME. THE AUDIBLE AND VISUAL ALARM SHALL BE ACTIVATED AT THIS LEVEL. THE OVERFILL PREVENTION VALVE SHALL BE ACTIVATED AT 95% OF THE TANK VOLUME. INSTALLER SHALL VERIFY THAT THE 95% SHUTOFF VALVE FULLY STOPS FLOW AT THE SPECIFIED LEVEL.
3. VALVES, GAUGES, SENSORS, PIPES AND PUMPS ARE SHOWN AT APPROXIMATE LOCATIONS. THESE SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATION.
4. THE INSTALLER SHALL VERIFY THAT THE TANK IS TESTED BY THE MANUFACTURER. IF TANK IS DELIVERED TO THE SITE UNDER VACUUM AND MAINTAINS ITS VACUUM THROUGH FINAL PLACEMENT, IT SHALL BE CONSIDERED SUCCESSFULLY TESTED. IF NOT, THE INSTALLER SHALL TEST THE TANK PER NFPA 30 CHAPTER 21.5. TANKS AND INTERSTITIAL SPACE SHALL BE TESTED FOR TIGHTNESS BY POSITIVE AIR PRESSURE OR HYDROSTATICALLY AT PRESSURE BETWEEN 3 AND 5 PSI FOR A MINIMUM OF 1.0 HOUR WITHOUT MEASURABLE LOSS.
5. PIPING SHALL BE TESTED AFTER INSTALLATION. PIPING SHALL BE TESTED PER NFPA 30 CHAPTER 27.7. PIPING SHALL BE TESTED PNEUMATICALLY AT 110% OF THE MAXIMUM ANTICIPATED PRESSURE. THE MAXIMUM PRESSURE OF PIPE SYSTEM PRODUCED AT THE PUMP IS APPROXIMATELY 31 PSI. TEST PRESSURE SHALL BE 110% OF 31 PSI OR 34 PSI. THE TEST PRESSURE SHALL BE MAINTAINED WHILE A COMPLETE VISUAL INSPECTION OF ALL JOINTS AND CONNECTIONS IS CONDUCTED. THE TEST SHALL BE MAINTAINED FOR A MINIMUM OF 10 MINUTES WITHOUT MEASURABLE LOSS.
6. THE TANK AND PIPING SHALL HAVE PROTECTIVE COATINGS AS SPECIFIED IN NFPA 30.
7. THE TANK, PIPING AND ASSOCIATED EQUIPMENT SHALL BE DESIGNED, INSTALLED AND OPERATED TO PREVENT ELECTROSTATIC IGNITION PER THE REQUIREMENTS OF NFPA 30 CHAPTER 6.5.4. TANK, PIPING AND ASSOCIATED EQUIPMENT SHALL BE GROUNDED AND TESTED FOR CONTINUITY PRIOR TO BEING PLACED INTO OPERATION.
8. WARNING SIGN(S) SHALL BE CONSPICUOUSLY POSTED IN THE DISPENSING AREA STATING THE FOLLOWING (DIMENSION OF SIGN TO BE DETERMINED. LETTERHEAD SHALL BE MINIMUM OF 1" HIGH):

WARNING:
IT IS UNLAWFUL AND DANGEROUS TO DISPENSE FUEL INTO UNAPPROVED CONTAINERS.
NO SMOKING.
STOP MOTOR.
NO FILLING OF PORTABLE CONTAINERS IN OR ON A MOTOR VEHICLE.
PLACE CONTAINER ON GROUND BEFORE FILLING.
DISCHARGE YOUR STATIC ELECTRICITY BEFORE FUELING BY TOUCHING A METAL SURFACE AWAY FROM THE NOZZLE.
DO NOT RE-ENTER YOUR VEHICLE WHILE FUEL IS PUMPING.
IF A FIRE STARTS, DO NOT REMOVE NOZZLE - BACK AWAY IMMEDIATELY.
DO NOT ALLOW INDIVIDUALS UNDER LICENSED AGE TO USE THE PUMP.

NO.	DESCRIPTION	DATE
1	SITE CONSTRUCTION DOCUMENTS	2024.09.16
2	DESIGN DEVELOPMENT	2023.12.15
1	SCHEDULED PERSON	2023.10.04
Issued/Revision		YYYYMMDD

Permit/Seal

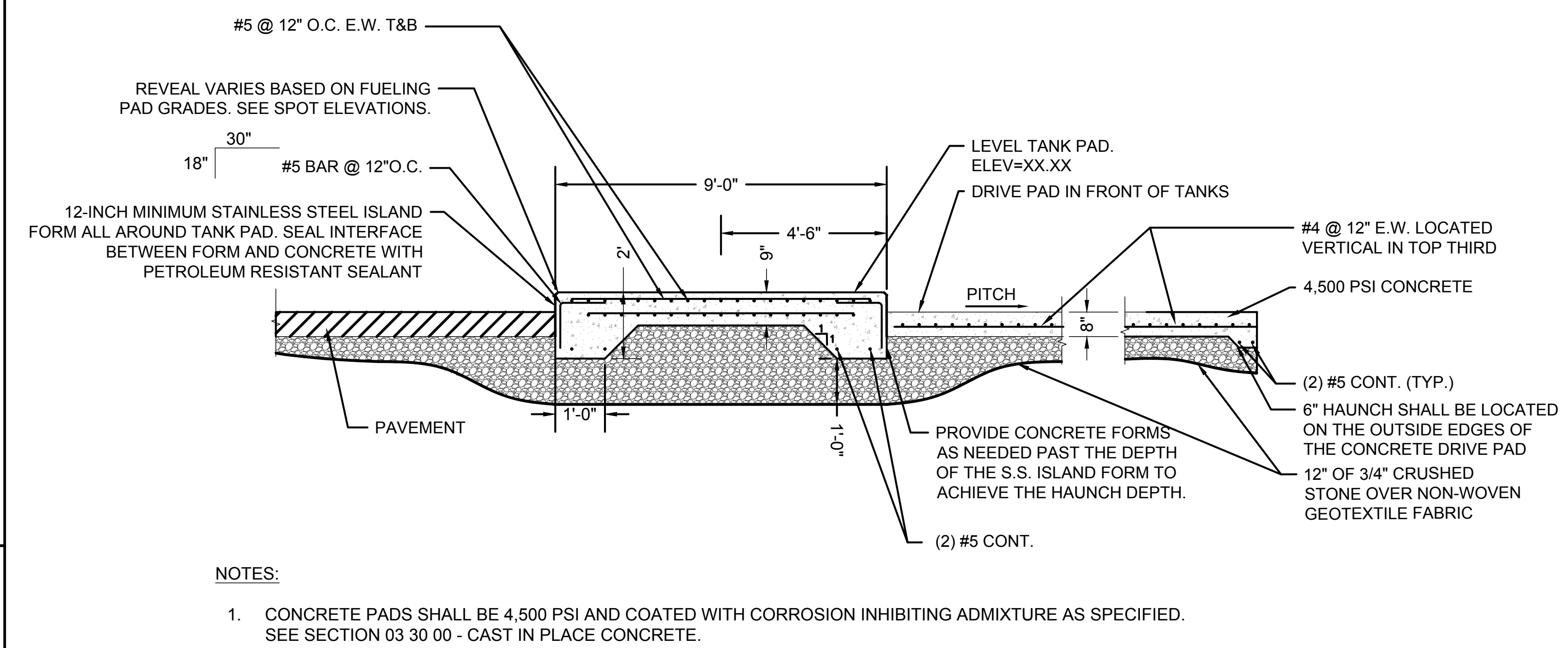
**PRELIMINARY
NOT FOR
CONSTRUCTION**

Scale AS INDICATED
Project No. 218421418

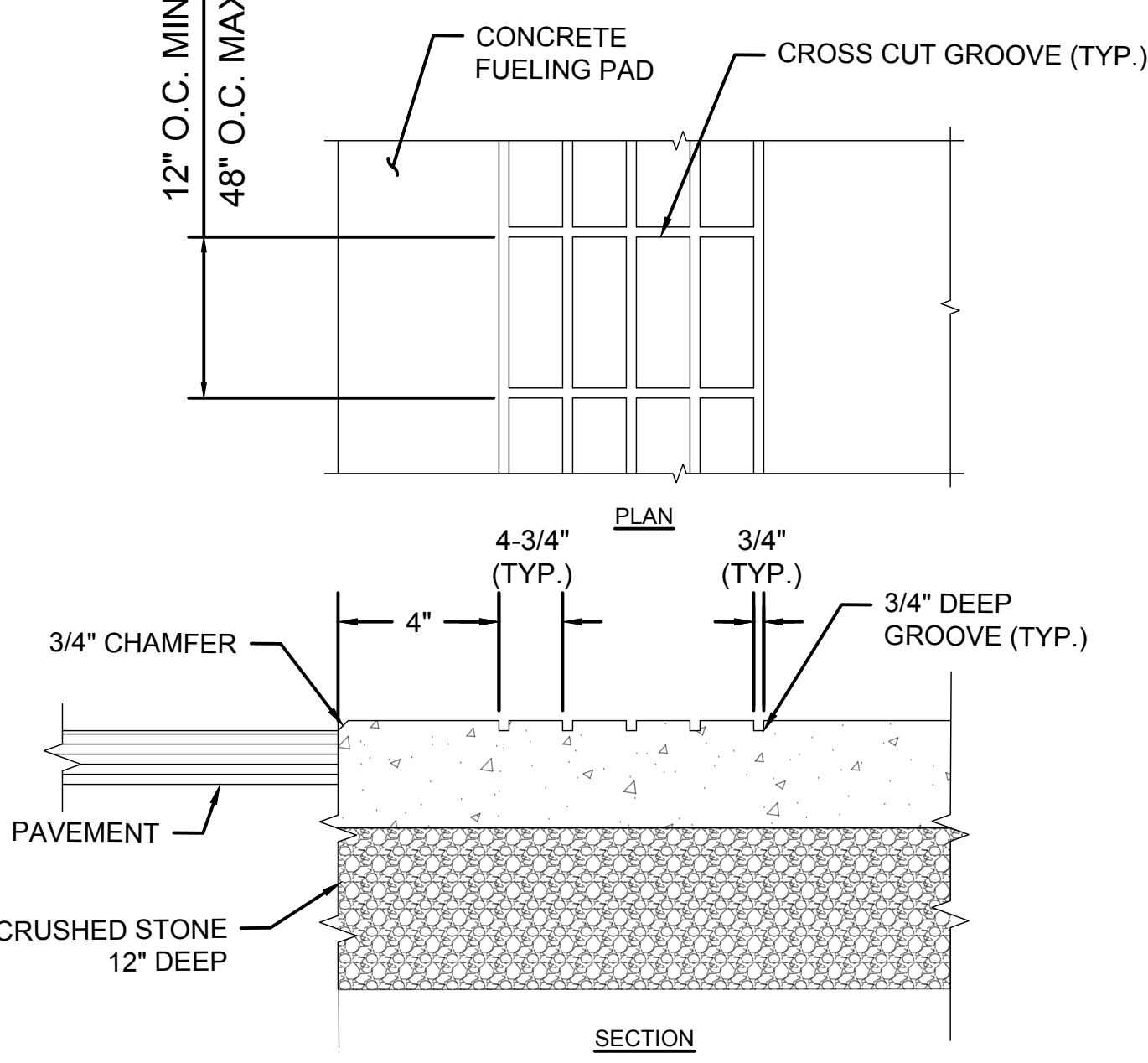
FUEL ISLAND LAYOUT



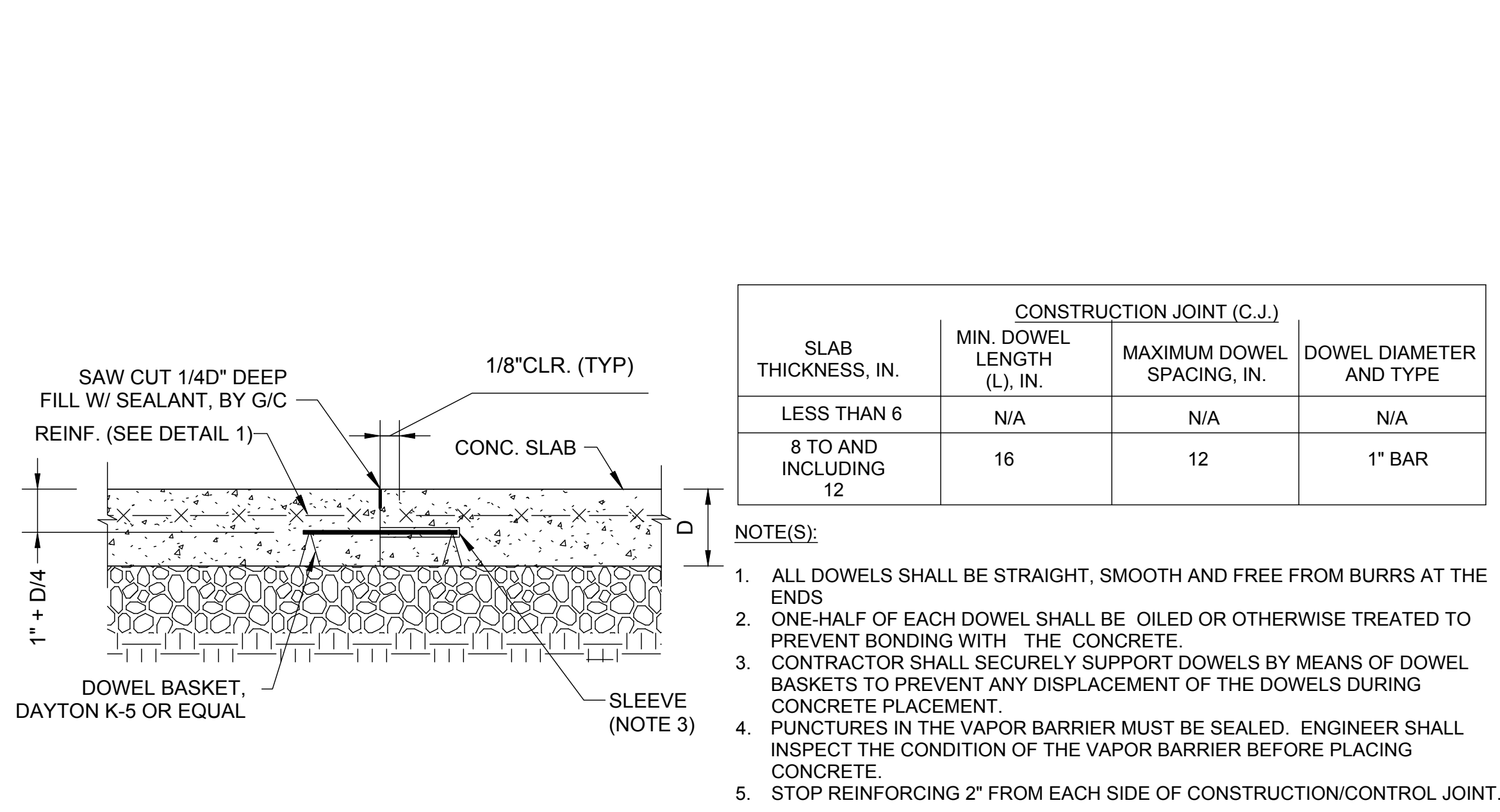
NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	02/24/18
2	DESIGN DEVELOPMENT	02/23/17
3	SCHEMATIC DESIGN	02/21/16
Issued/Revision		YYYYMMDD



1 CONCRETE TANK AND DRIVE PAD SECTION
SCALE: N.T.S.



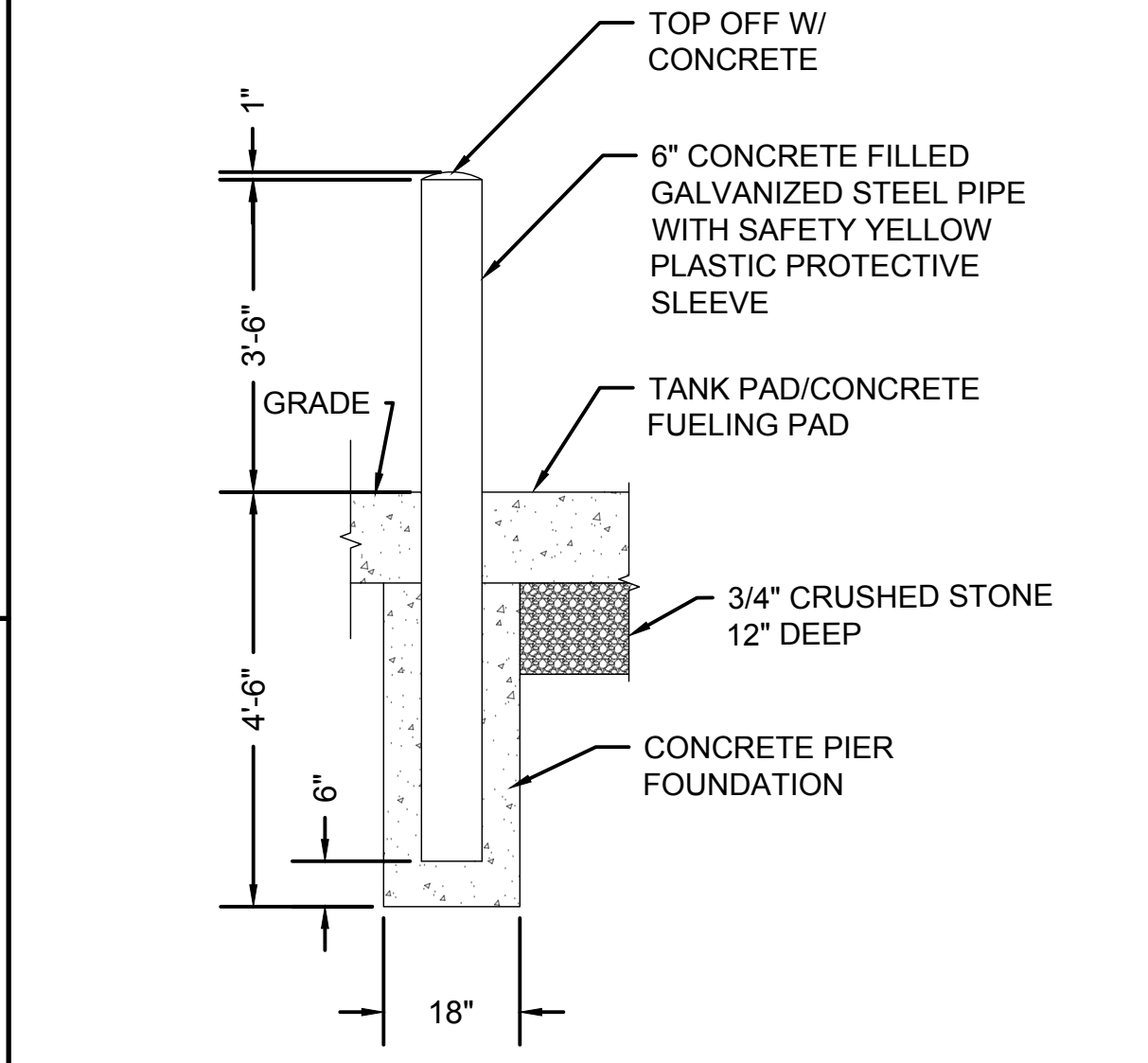
2 POSITIVE LIMITING BARRIER DETAIL
SCALE: N.T.S.



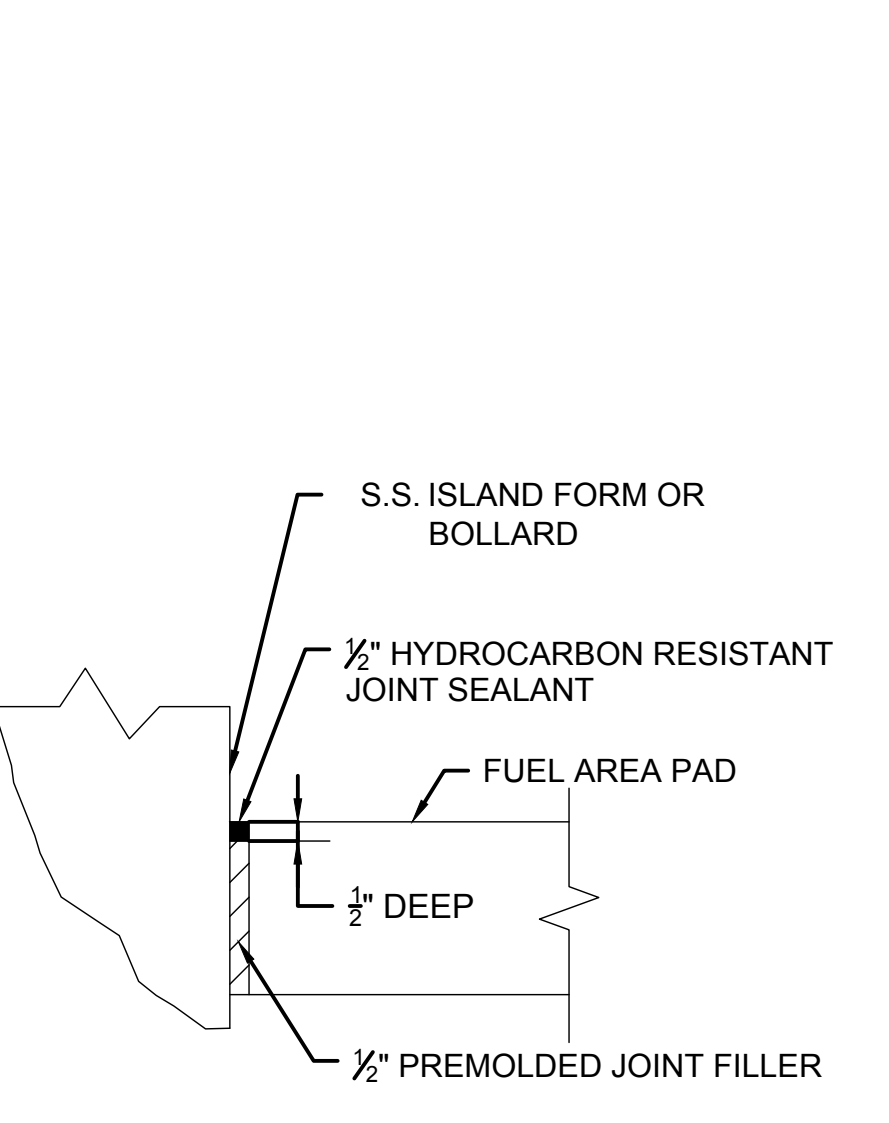
3 TYPICAL CONSTRUCTION JOINT DETAIL
SCALE: N.T.S.

SLAB THICKNESS, IN.	CONSTRUCTION JOINT (C.J.)		DOWEL DIAMETER AND TYPE
	MIN. DOWEL LENGTH (L), IN.	MAXIMUM DOWEL SPACING, IN.	
LESS THAN 6	N/A	N/A	N/A
8 TO AND INCLUDING 12	16	12	1" BAR

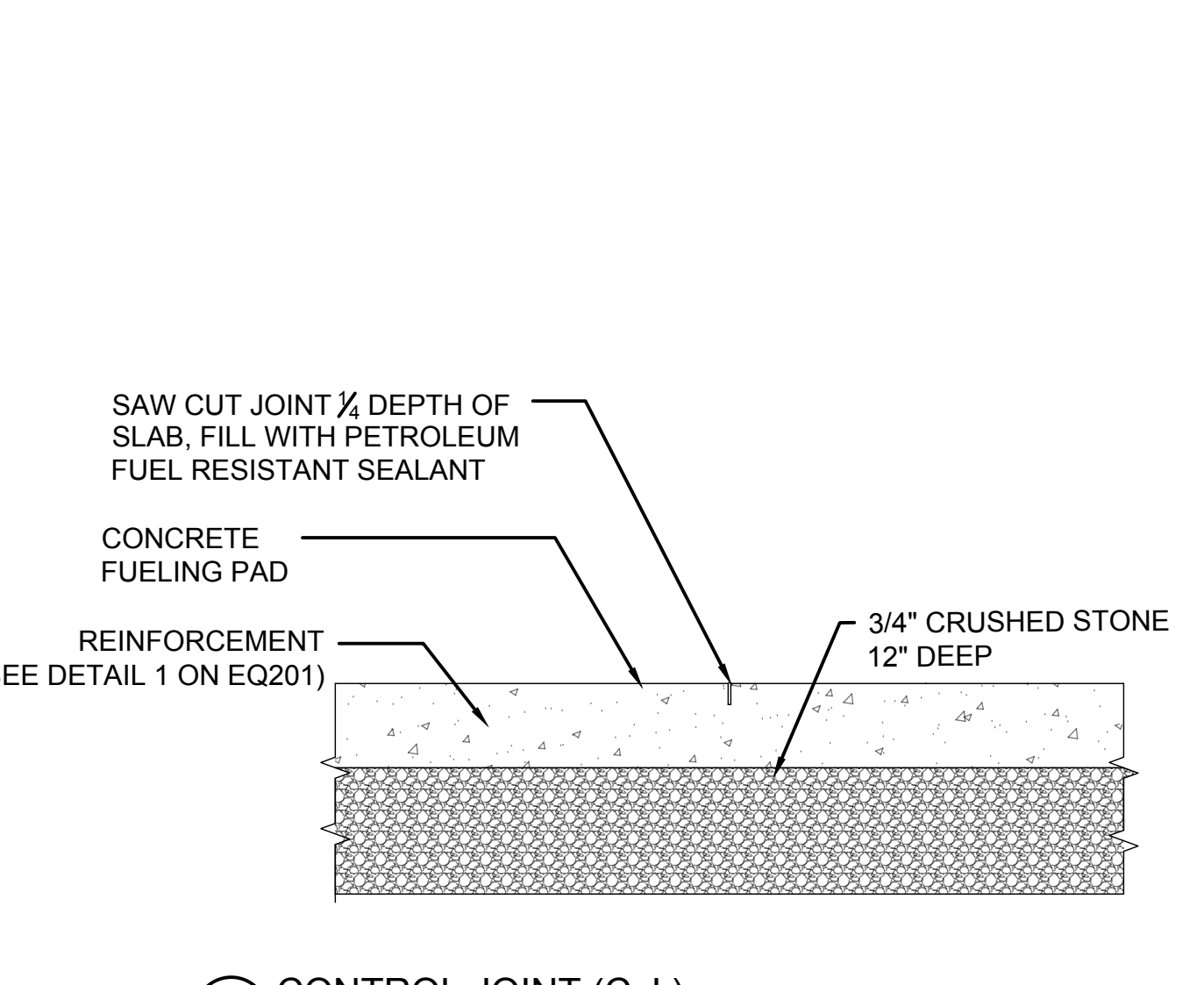
- NOTE(S):
- ALL DOWELS SHALL BE STRAIGHT, SMOOTH AND FREE FROM BURRS AT THE ENDS
 - ONE-HALF OF EACH DOWEL SHALL BE OILED OR OTHERWISE TREATED TO PREVENT BONDING WITH THE CONCRETE
 - CONTRACTOR SHALL SECURELY SUPPORT DOWELS BY MEANS OF DOWEL BASKETS TO PREVENT ANY DISPLACEMENT OF THE DOWELS DURING CONCRETE PLACEMENT.
 - PUNCTURES IN THE VAPOR BARRIER MUST BE SEALED. ENGINEER SHALL INSPECT THE CONDITION OF THE VAPOR BARRIER BEFORE PLACING CONCRETE
 - STOP REINFORCING 2" FROM EACH SIDE OF CONSTRUCTION/CONTROL JOINT.



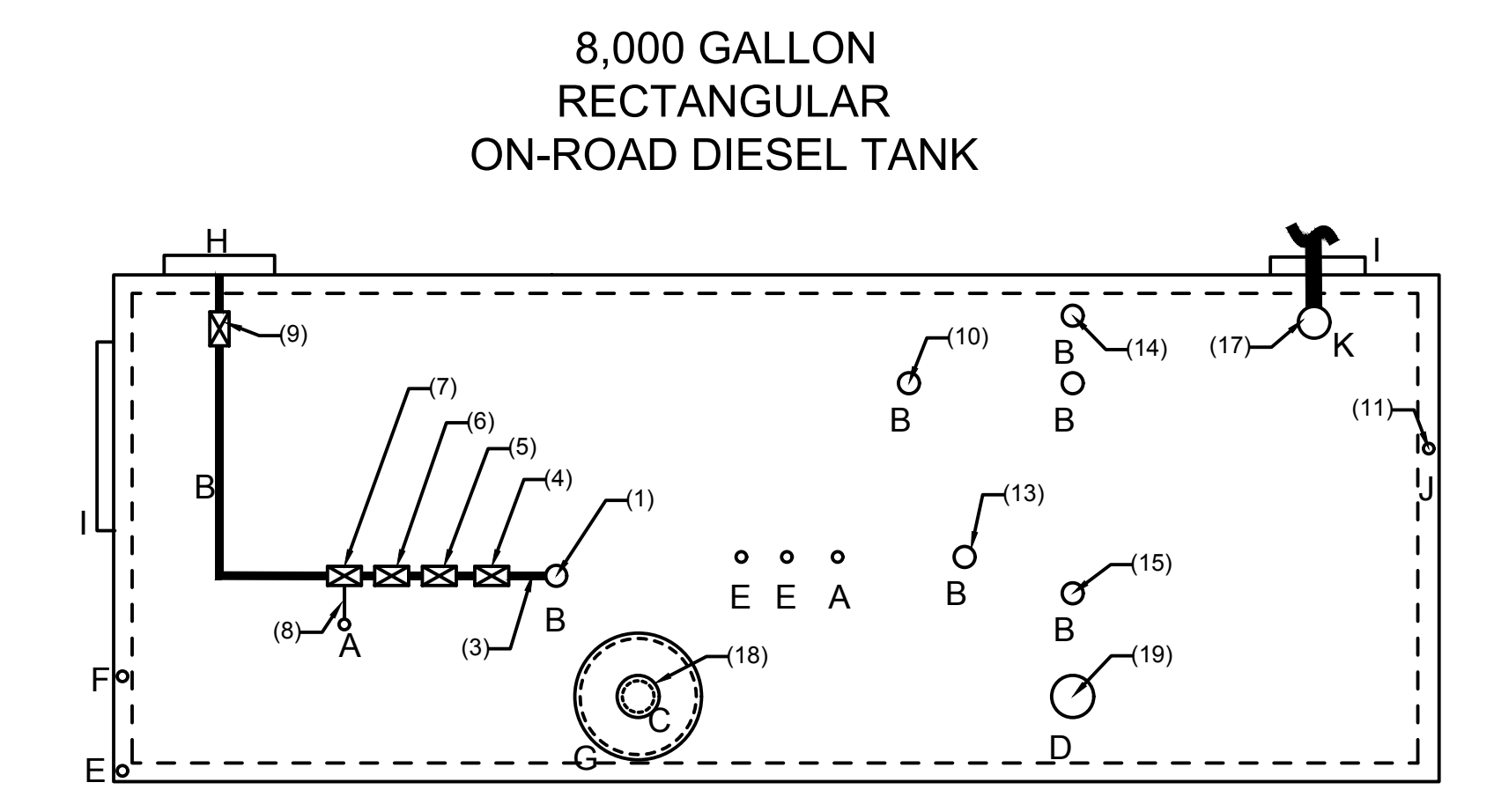
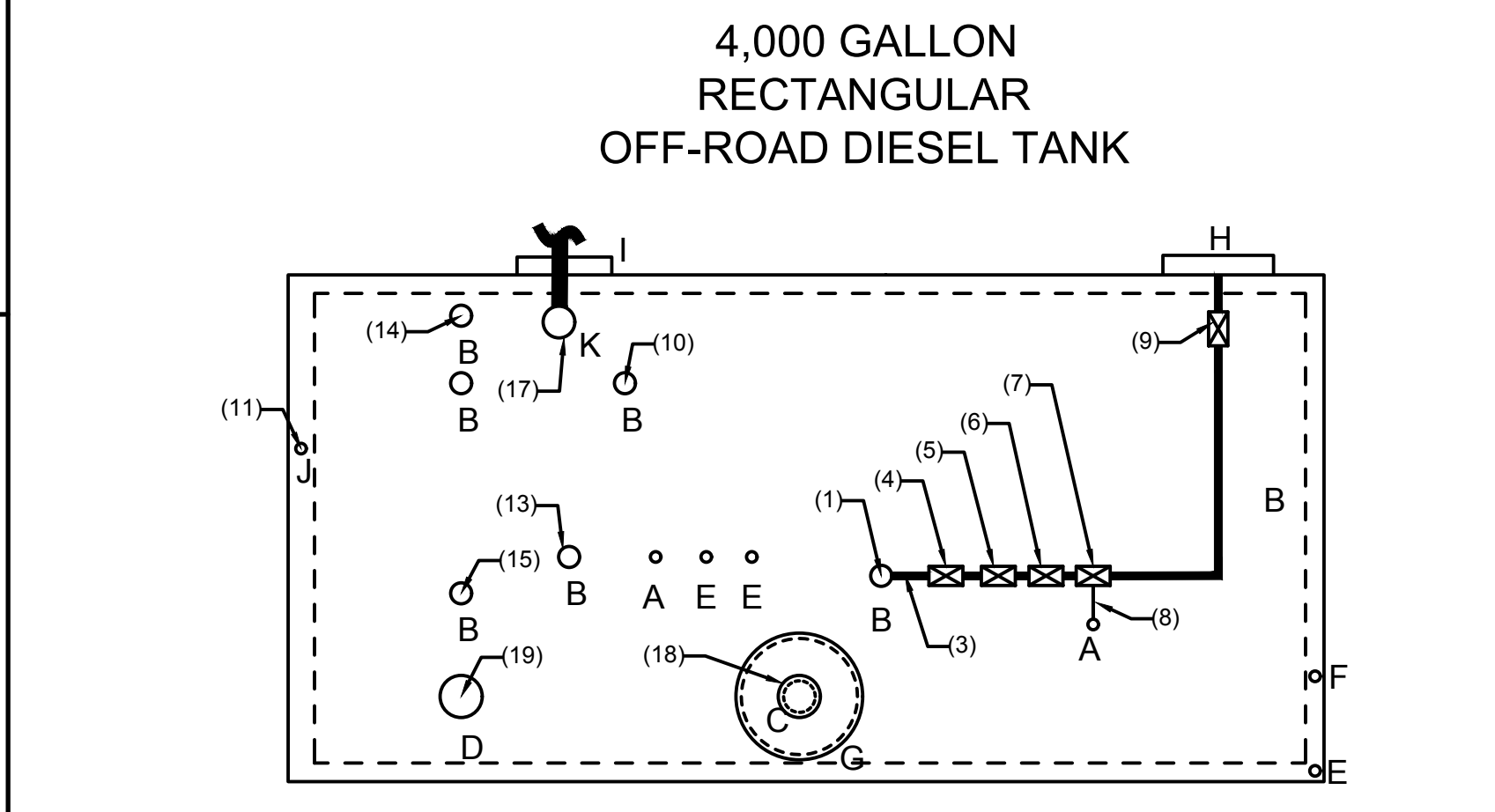
4 BOLLARD DETAIL
SCALE: N.T.S.



5 ISOLATION JOINT DETAIL
SCALE: N.T.S.



6 CONTROL JOINT (C.J.)
SCALE: N.T.S.

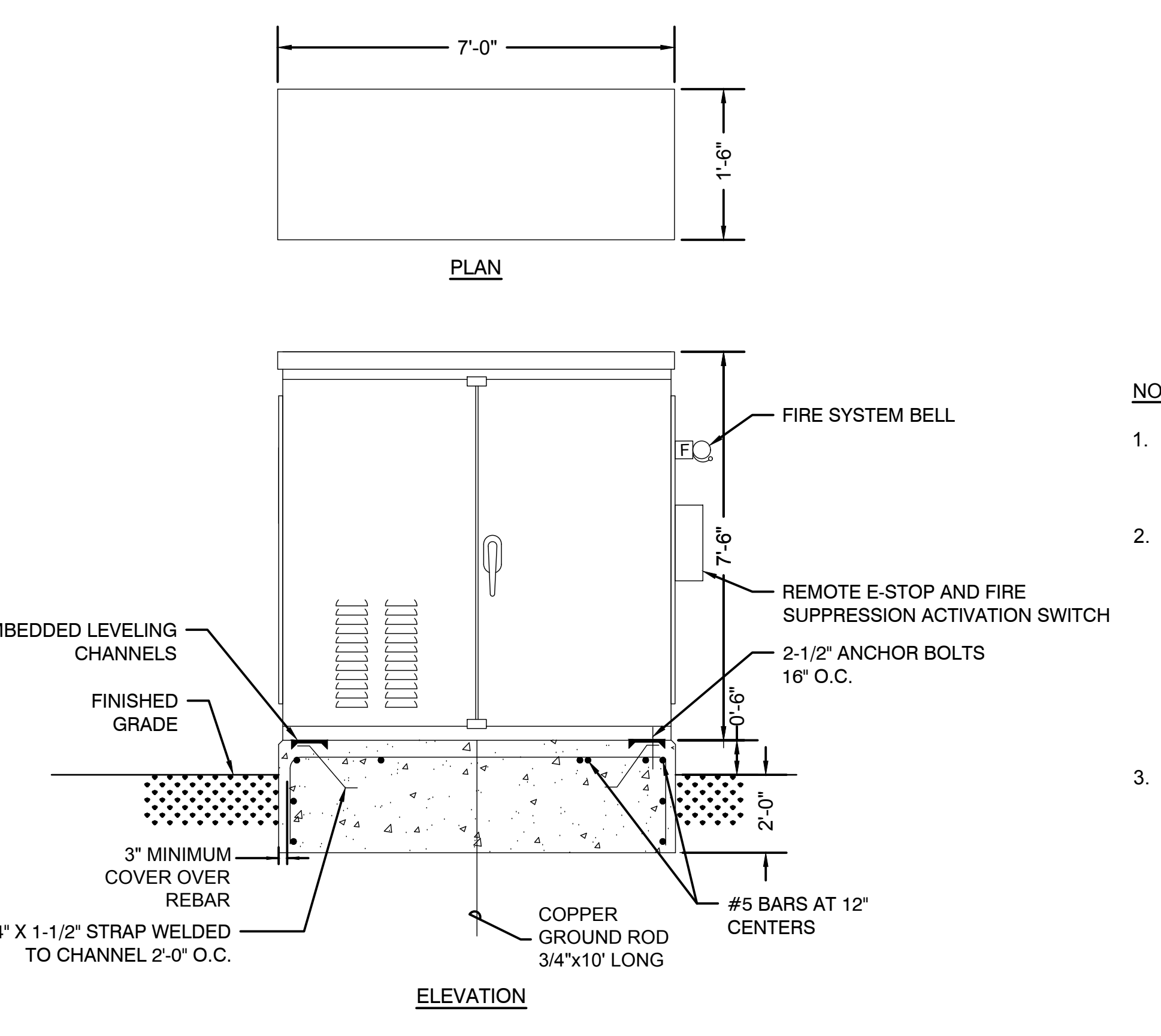


- LEGEND:**
- A. 2" FEMALE FIREGUARD COUPLING
 - B. 4" FEMALE FIREGUARD COUPLING
 - C. 8" FFSO 150# FLANGE - PRIMARY EMERGENCY VENT USE ONLY
 - D. 8" FFSO 150# FLANGE THROUGH OUTER SHELL ONLY. MARK WITH SPECIAL WARNING LABEL "INTERSTITIAL EMERGENCY VENT USE ONLY"
 - E. 2" FITTING THROUGH OUTER SHELL ONLY WITH CAST IRON PLUG - FOR MFG USE ONLY
 - F. 2" INTERSTITIAL MONITOR PIPE - MALE NPT END
 - G. 24" TIGHT BOLT MANWAY WITH "C" MOUNTED IN COVER
 - H. DISPENSER BRACKET MOUNTED TO SIDE OF TANK
 - I. PIPING SUPPORT BRACKET
 - J. 2" INTERSTITIAL MONITOR PIPE - MALE NPT END - BULK HEAD MONITOR USE
 - K. 6" FEMALE FIREGUARD COUPLING

- SCHEDULE:**
1. 1.5 HP RED JACKET PUMP
 2. NOTE USED
 3. 1.5" SCH 40 CARBON STEEL PIPE
 4. 1.5" THREADED GATE VALVE
 5. 1.5" EMERGENCY VALVE (MORRISON BROS. 346DI-0400 AV)
 6. 1.5" SOLENOID VALVE (MORRISON BROS. 710SS-2150 1V)
 7. 0.5" EXPANSION RELIEF VALVE (MORRISON BROS. 078DI-0200 AV)
 8. 0.5" SCH 40 CARBON STEEL PIPE FROM EXP. RELIEF VALVE TO TANK
 9. 1.5" BALL VALVE (MORRISON BROS. 691 BSS)
 10. TANK LEVEL PROBE/HIGH LEVEL SENSOR (VEEDER ROOT 846391-399)
 11. INTERSTITIAL SENSOR (VEEDER ROOT 794390-420)
 12. NOT USED
 13. 3" CARBON STEEL VENT PIPE WITH ATMOSPHERIC VENT CAP (OPW 23-0055)
 14. CLOCK GAUGE (MORRISON BROS. 818-0400AGEVR)
 15. GAUGE STICK PORT WITH CAP (MORRISON BROS. 305GSP2000AKEVR)
 16. NOT USED
 17. PRODUCT FILL
 18. PRIMARY EMERGENCY VENT (MORRISON BROS. 244OF-0200AEVR)
 19. SECONDARY EMERGENCY VENT (MORRISON BROS. 244OF-0100AEVR)

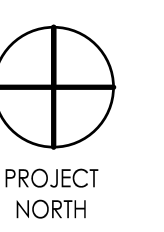
- NOTES:**
- SEE PIPING NOTES ON EQ202 FOR ADDITIONAL INFORMATION/REQUIREMENTS.
 - FINAL TANK FITTING LAYOUT AND QUANTITY TO BE ADJUSTED AS NEEDED AND CONFIRMED DURING THE SUBMITTAL PROCESS TO MEET THE DESIGN LAYOUT AND TO MEET MANUFACTURER AND CODE REQUIREMENTS.
 - TANK TOP PIPING SUPPORT BRACKETS (NOT SHOWN) SHALL BE INCLUDED TO SUPPORT DISPENSER PIPING AS NEEDED.

3 FUEL SYSTEM COMPONENT SCHEDULE
SCALE: N.T.S.



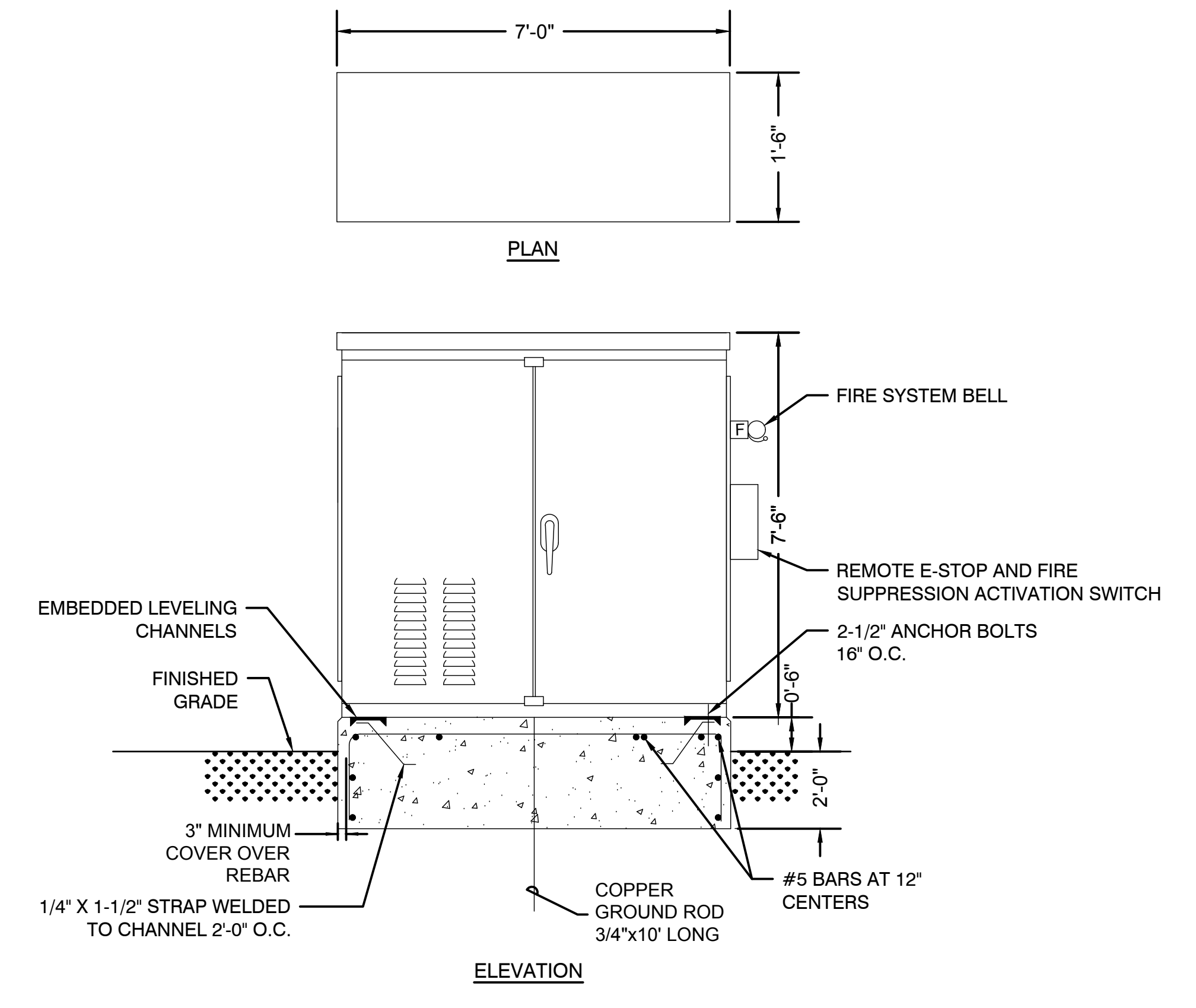
5 PAD MOUNTED ELECTRICAL CABINET DETAIL
SCALE: N.T.S.

- NOTES:**
- CONTRACTOR SHALL COORDINATE WITH THE EXACT CABINET SIZE WITH ALL MANUFACTURER EQUIPMENT SIZES PRIOR TO SUBMITTING THE CABINET FOR APPROVAL. PROVIDE A SCALED DRAWING SHOWING ALL EQUIPMENT.
 - FUEL ISLAND ELECTRICAL CABINET SHALL BE STAINLESS STEEL NEMA 3R RATED CABINET WITH THE FOLLOWING MINIMUM REQUIREMENTS:
 - 2.1. SLOPED ROOF AND OPEN BOTTOM
 - 2.2. CONTINUOUS STAINLESS STEEL HINGES
 - 2.3. FILTERED LOUVERS IN LEFT HAND DOOR
 - 2.4. STAINLESS STEEL 3-POINT PAD LOCKABLE HANDLE
 - 2.5. TWO STEEL BACK PANELS PAINTED WHITE FOR MOUNTING DEVICES IN CABINET
 - CONTRACTOR SHALL INSTALL 3/4-INCH HARD BOARD INSULATION ALONG THE SIDE WALLS, ROOF AND DOORS USING CONSTRUCTION ADHESIVE. WHEN INSTALLING INSULATION ON DOORS, CUT AND SHAPE INSULATION BOARD AS NEEDED TO AVOID THE DOOR LOCKING HARDWARE AND LOUVER IN LEFT HAND DOOR.



NO.	DESCRIPTION	DATE
1	SITE CONSTRUCTION DOCUMENTS	2024.09.16
2	DESIGN DEVELOPMENT	2023.12.13
3	PERMIT DESIGN	2025.01.04
Issued/Revision		YYYYMMDD

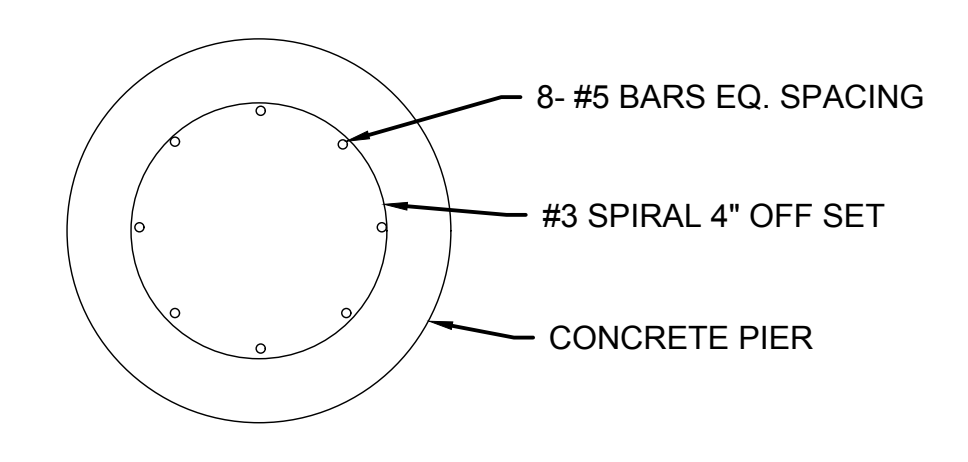
**PRELIMINARY
NOT FOR
CONSTRUCTION**



5 PAD MOUNTED ELECTRICAL CABINET DETAIL
 SCALE: N.T.S.

NOTES:

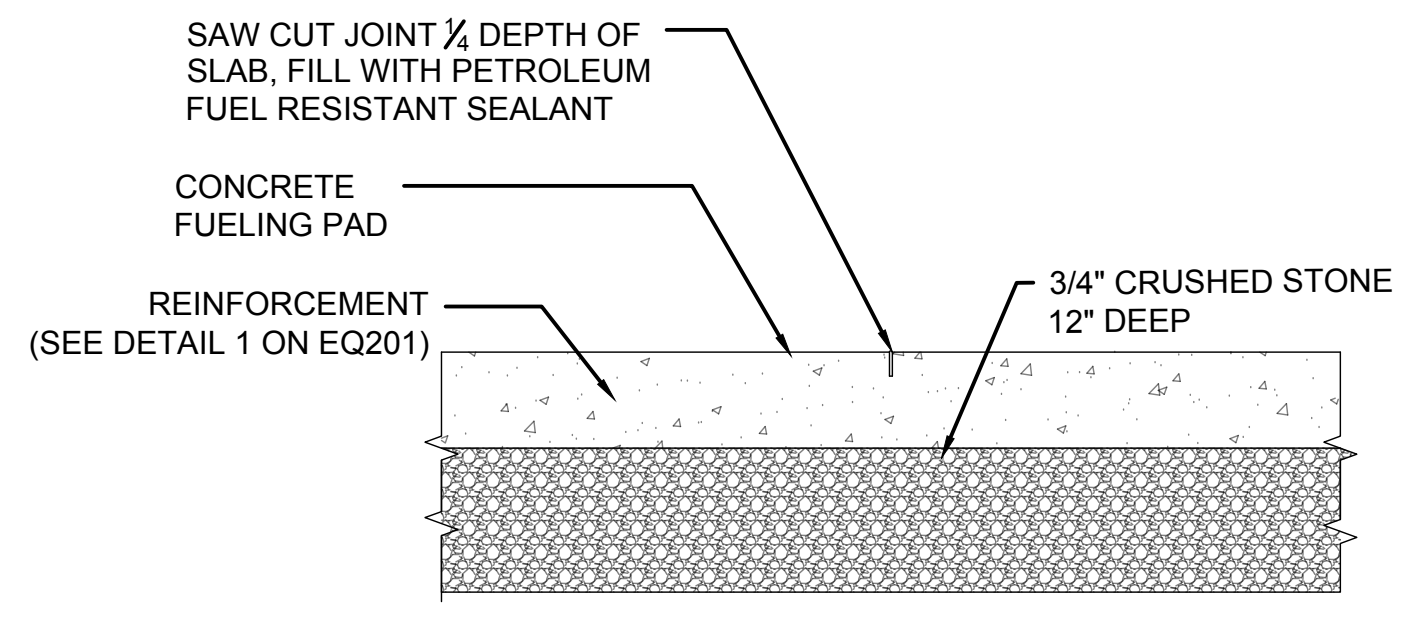
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 - CONTINUOUS STAINLESS STEEL HINGES
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 - TWO STEEL BACK PANELS PAINTED WHITE FOR MOUNTING DEVICES IN CABINET
- CONTRACTOR SHALL INSTALL 3/4-INCH HARD BOARD INSULATION ALONG THE SIDE WALLS, ROOF AND DOORS USING CONSTRUCTION ADHESIVE. WHEN INSTALLING INSULATION ON DOORS, CUT AND SHAPE INSULATION BOARD AS NEEDED TO AVOID THE DOOR LOCKING HARDWARE AND LOUVER IN LEFT HAND DOOR.



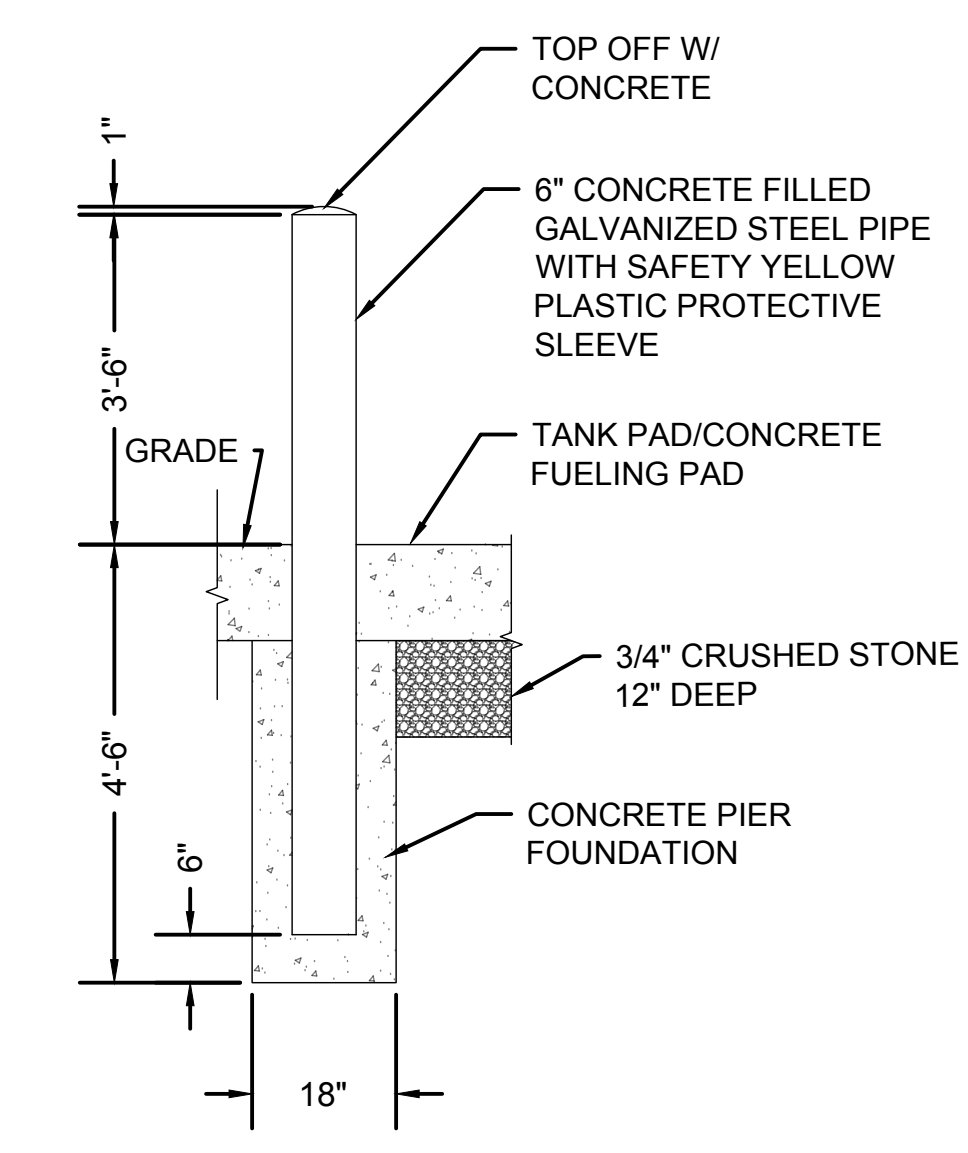
SECTION B-B

NOTES:

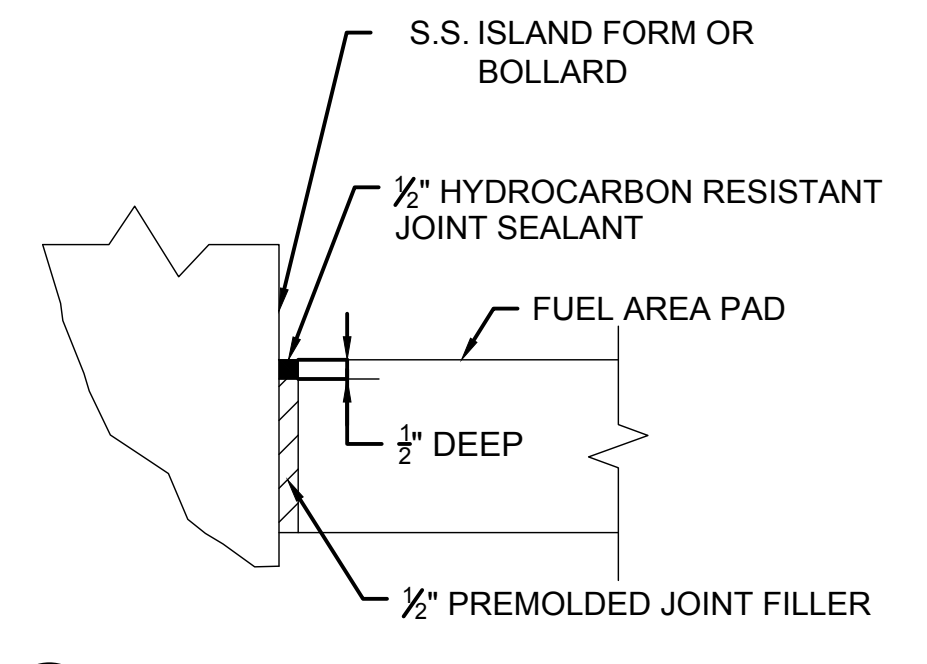
- IF ADD ALTERNATE 2A IS SELECTED, CONTRACTOR SHALL NOT INSTALL POLE MOUNTED LIGHTS. INSTEAD, CONTRACTOR SHALL INSTALL LIGHTS MOUNTED IN CANOPY. IF ADD ALTERNATE 2A IS NOT SELECTED, CONTRACTOR SHALL PROVIDE TWO (2) POLE MOUNTED LED LIGHTS, ONE PER DISPENSER. REFER TO THE ELECTRICAL DRAWINGS FOR LIGHT SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE FIRE SUPPRESSION ENGINEERING DRAWINGS STAMPED BY A NEW YORK PROFESSIONAL ENGINEER. REFER TO SPECIFICATION SECTION 21 24 00 FUEL ISLAND FIRE SUPPRESSION SYSTEM FOR ADDITIONAL INFORMATION.
- CONCRETE SHALL BE 4,000 PSI. SEE SECTION 03 30 00 - CAST IN PLACE CONCRETE.



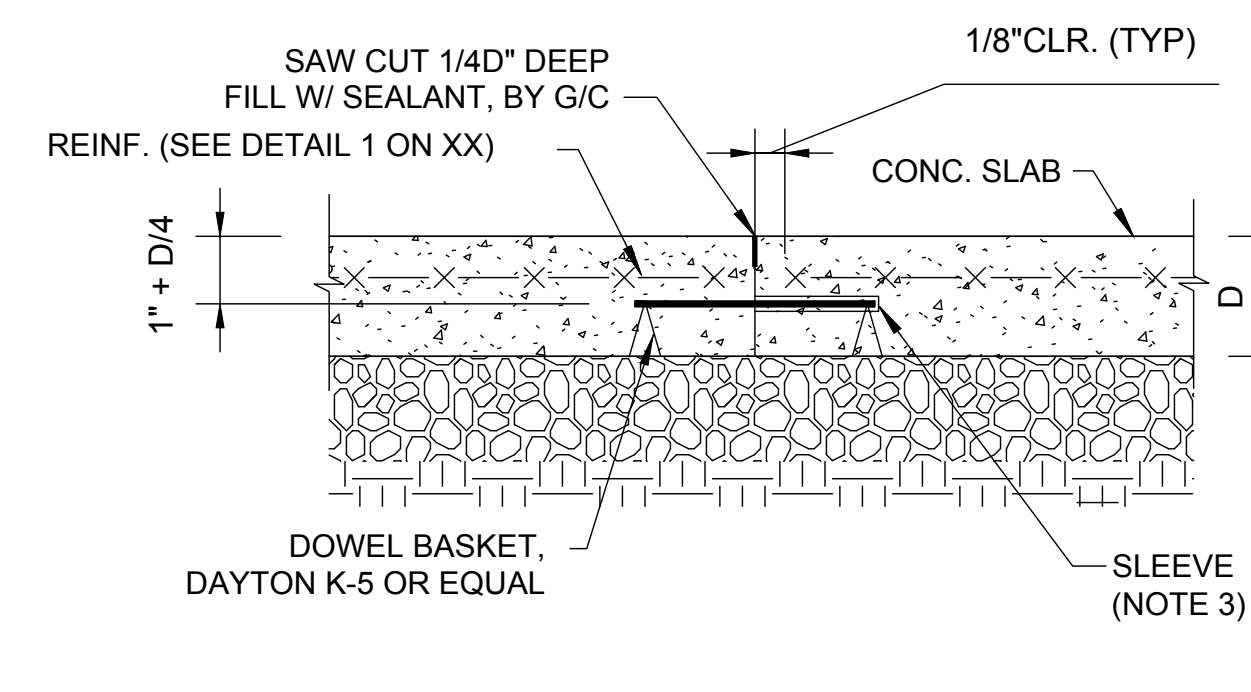
2 CONTROL JOINT (C.J.)
 SCALE: N.T.S.



4 BOLLARD DETAIL
 SCALE: N.T.S.



1 ISOLATION JOINT DETAIL
 SCALE: N.T.S.

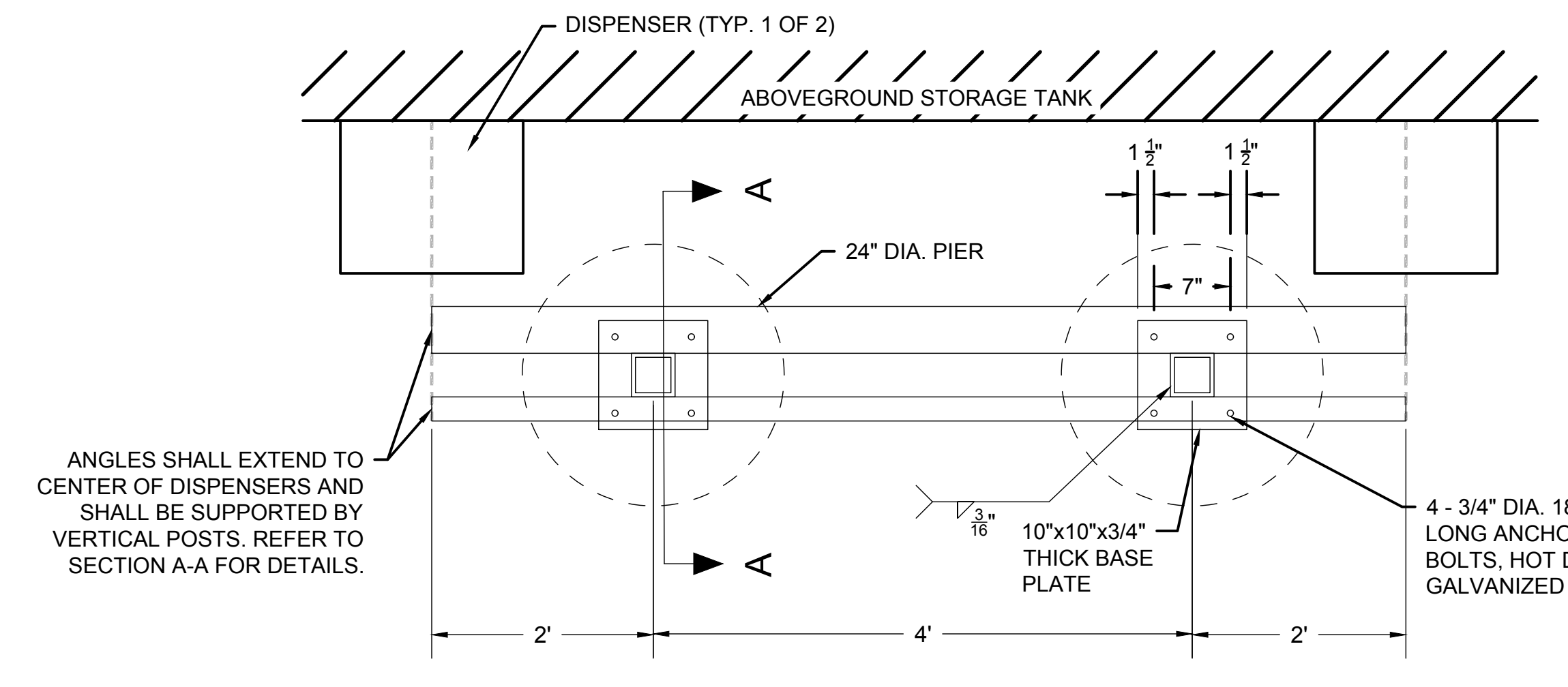


3 TYPICAL CONSTRUCTION JOINT DETAIL
 SCALE: N.T.S.

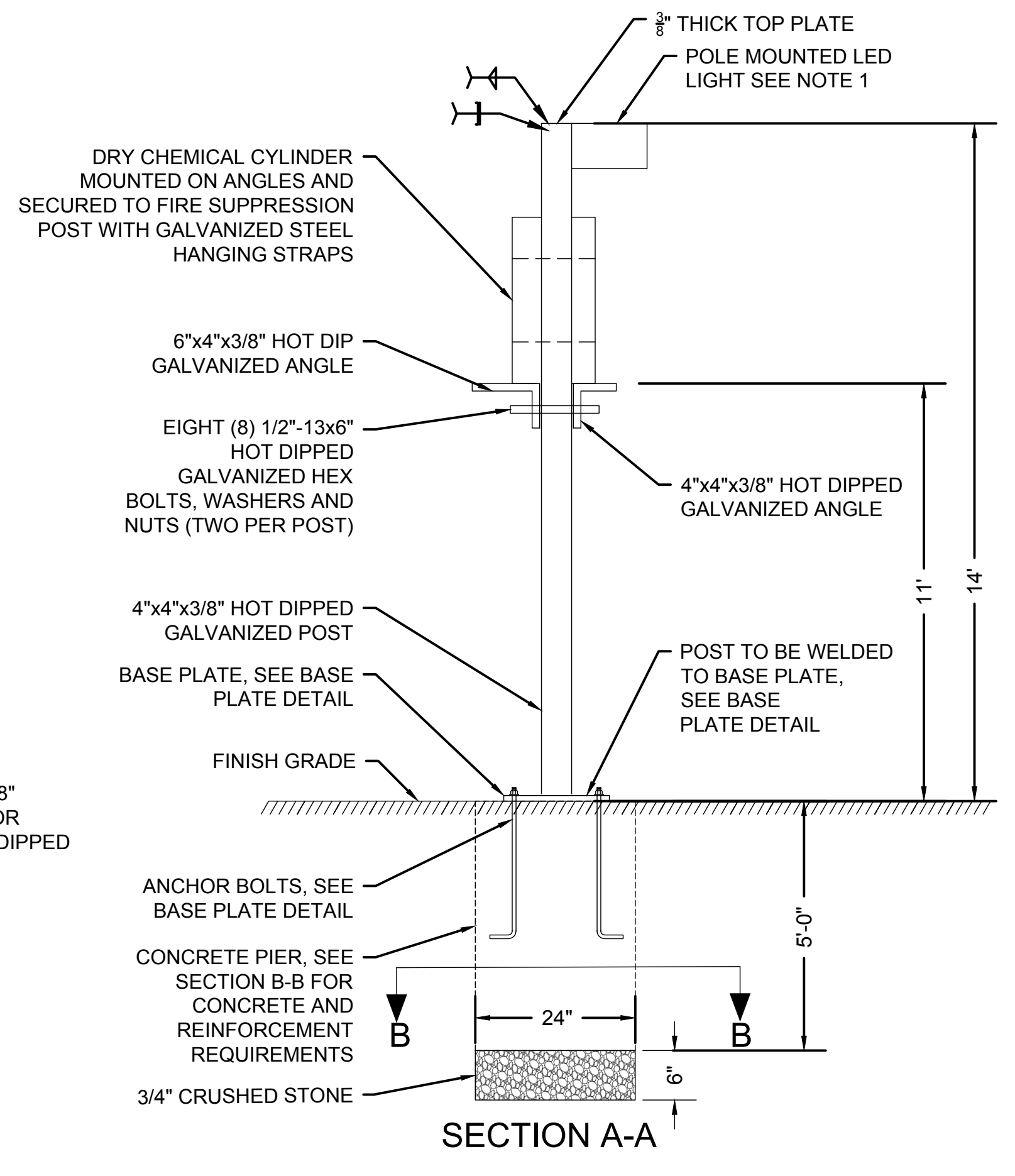
SLAB THICKNESS, IN.	CONSTRUCTION JOINT (C.J.)		
	MIN. DOWEL LENGTH (L), IN.	MAXIMUM DOWEL SPACING, IN.	DOWEL DIAMETER AND TYPE
LESS THAN 6	N/A	N/A	N/A
8 TO AND INCLUDING 12	16	12	1" BAR

NOTE(S):

- ALL DOWELS SHALL BE STRAIGHT, SMOOTH AND FREE FROM BURRS AT THE ENDS
- ONE-HALF OF EACH DOWEL SHALL BE OILED OR OTHERWISE TREATED TO PREVENT BONDING WITH THE CONCRETE.
- CONTRACTOR SHALL SECURELY SUPPORT DOWELS BY MEANS OF DOWEL BASKETS TO PREVENT ANY DISPLACEMENT OF THE DOWELS DURING CONCRETE PLACEMENT.
- PUNCTURES IN THE VAPOR BARRIER MUST BE SEALED. ENGINEER SHALL INSPECT THE CONDITION OF THE VAPOR BARRIER BEFORE PLACING CONCRETE.
- STOP REINFORCING 2" FROM EACH SIDE OF CONSTRUCTION/CONTROL JOINT.



6 FIRE SUPPRESSION SUPPORT BASE PLATE DETAIL
 SCALE: N.T.S.



SECTION A-A

E
D
C
B
A

File Attachments for Item:

1. Site Plan & Design Review - Short Street

9 SHORT STREET REAR YARD MODIFICATION RANDOLPH, MASSACHUSETTS

NOVEMBER 17, 2023 PERMIT & CONSTRUCTION SET



46 Waltham Street, Suite 2A
Boston, Massachusetts 02118
617-542-4522



PROPOSED RENDERING

**CRAWFORD SQUARE BUSINESS DISTRICT
CSBD**

USE	REQ./ALLOWED	EXISTING BUSINESS	PROPOSED BUSINESS	COMMENTS
MIN LOT AREA	5,000 SF	4,159 SF	4,159 SF	EXISTING NON-CONFORMING
BLDG LOT COVERAGE	60%	41% EST	41% EST	
IMPERVIOUS	30%	22% EST	34% EST	
GREEN AREA	10%	0%	0%	
MAX. COVERAGE	90%	63% EST	75% EST	
STORIES	3	1-1/2	1-1/2	
HEIGHT	40 FT	22 FT EST	22 FT EST	
MIN. FRONTAGE	25 FT	66.25 FT	66.25 FT	
MIN. DEPTH	75 FT	74.49 FT	74.49 FT	
MIN. WIDTH	25 FT	42.25 & 66.25 FT	42.25 & 66.25 FT	STREET FRONT ALIGNMENT
FRONT SETBACK	15 FT	0'	0'	
SIDE YARD	0 FT	0'	0'	
REAR YARD	15 FT	19.9 FT	19.9 FT	

NOTE:
VALUES ABOVE ARE ESTIMATED AND SHOULD BE CONFIRMED BY SURVEYOR

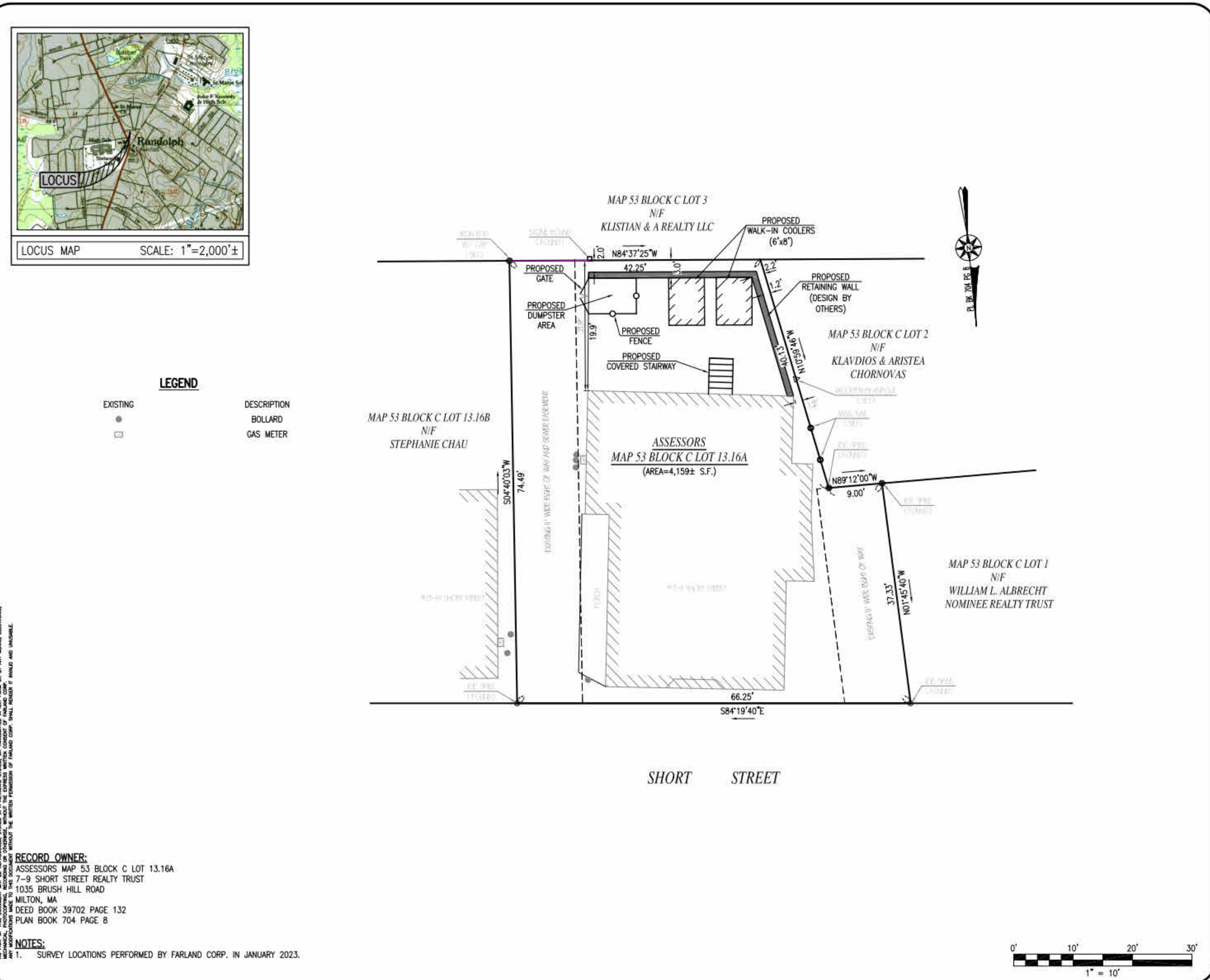
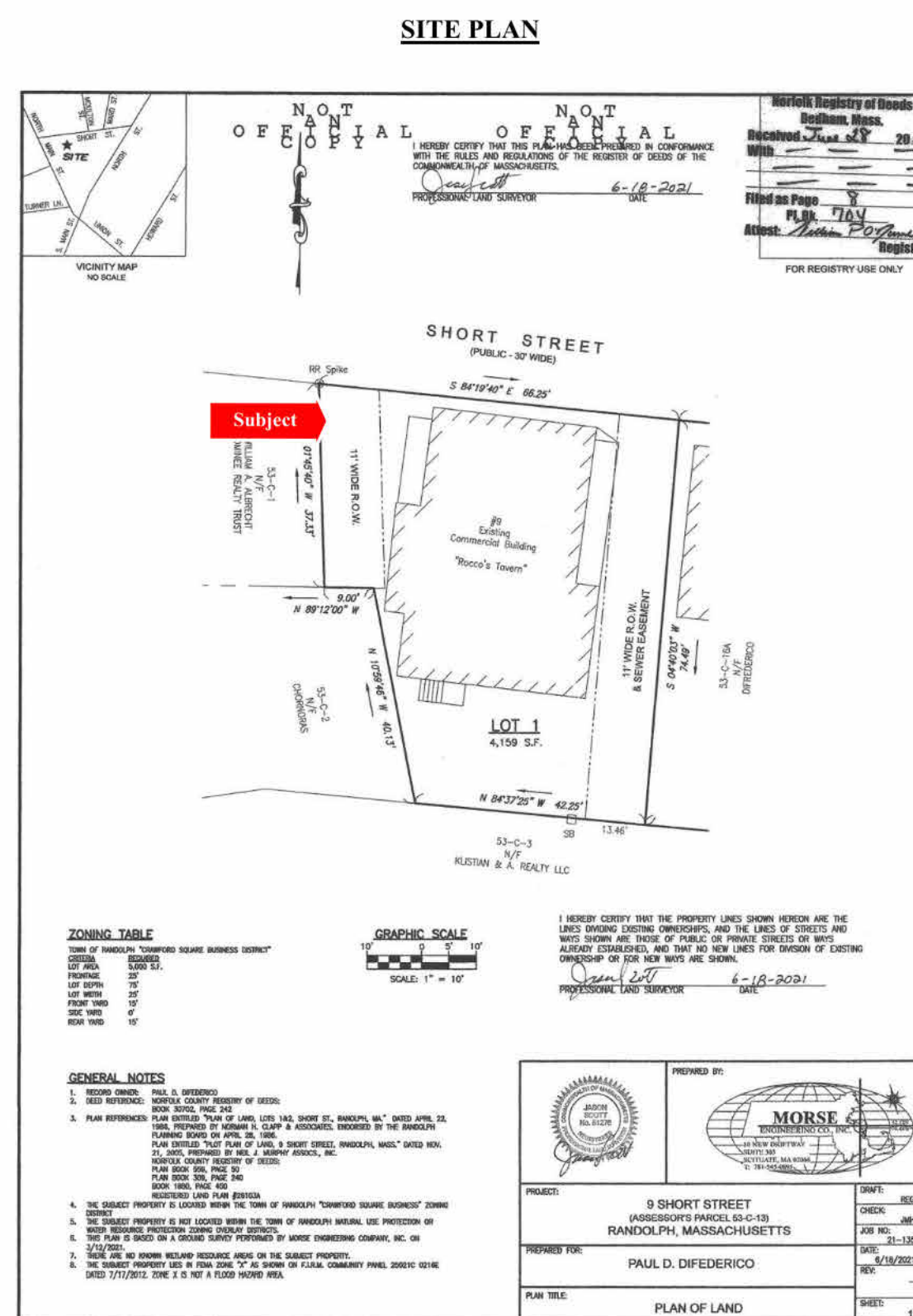
ZONING INFORMATION
1/4" = 1'-0"

Sheet List	
Sheet Number	Sheet Name
001	COVER
1/1	EXISTING PLOT PLAN & CERTIFIED PLOT PLAN
A101	FLOOR PLANS
A102	SECTIONS, ELEVATIONS & REAR YARD PERSPECTIVE
S-1	FOUNDATION, FIRST FLOOR PLAN & SECTIONS

001

7-9 SHORT STREET

RANDOLPH, MA



REVISIONS

No.	Date	Revision
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FARLAND CORP.

www.FarlandCorp.com
 154 HUTTLESTON AVENUE
 FAIRHAVEN, MA 02719
 P 508.747.3479
 • ENGINEERING
 • SITEWORK
 • LAND SURVEYING
 • DEVELOPMENT

DRAWN BY: SB
 DESIGNED BY: ***
 CHECKED BY: BJM

CERTIFIED PLOT PLAN
 7-9 SHORT STREET
 ASSESSORS MAP 53 BLOCK C LOT 13.16A
 RANDOLPH, MASSACHUSETTS

PREPARED FOR: DENIS REICHMAN
 469 WINDSET AVENUE
 BOSTON, MA 02122

JANUARY 24, 2023
 SCALE: 1"=10'
 JOB NO. 22-589
 LATEST REVISION:

SHEET 1 OF 1

Eric Wolff & Associates 22

No.	Date	Revision
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Seal

Drawing Title

EXISTING PLOT PLAN & CERTIFIED PLOT PLAN

7-9 SHORT STREET

RANDOLPH, MA

1 9/14/23 DOUBLE DOOR

No. Date Revision

Seal

Drawing Title

FLOOR PLANS

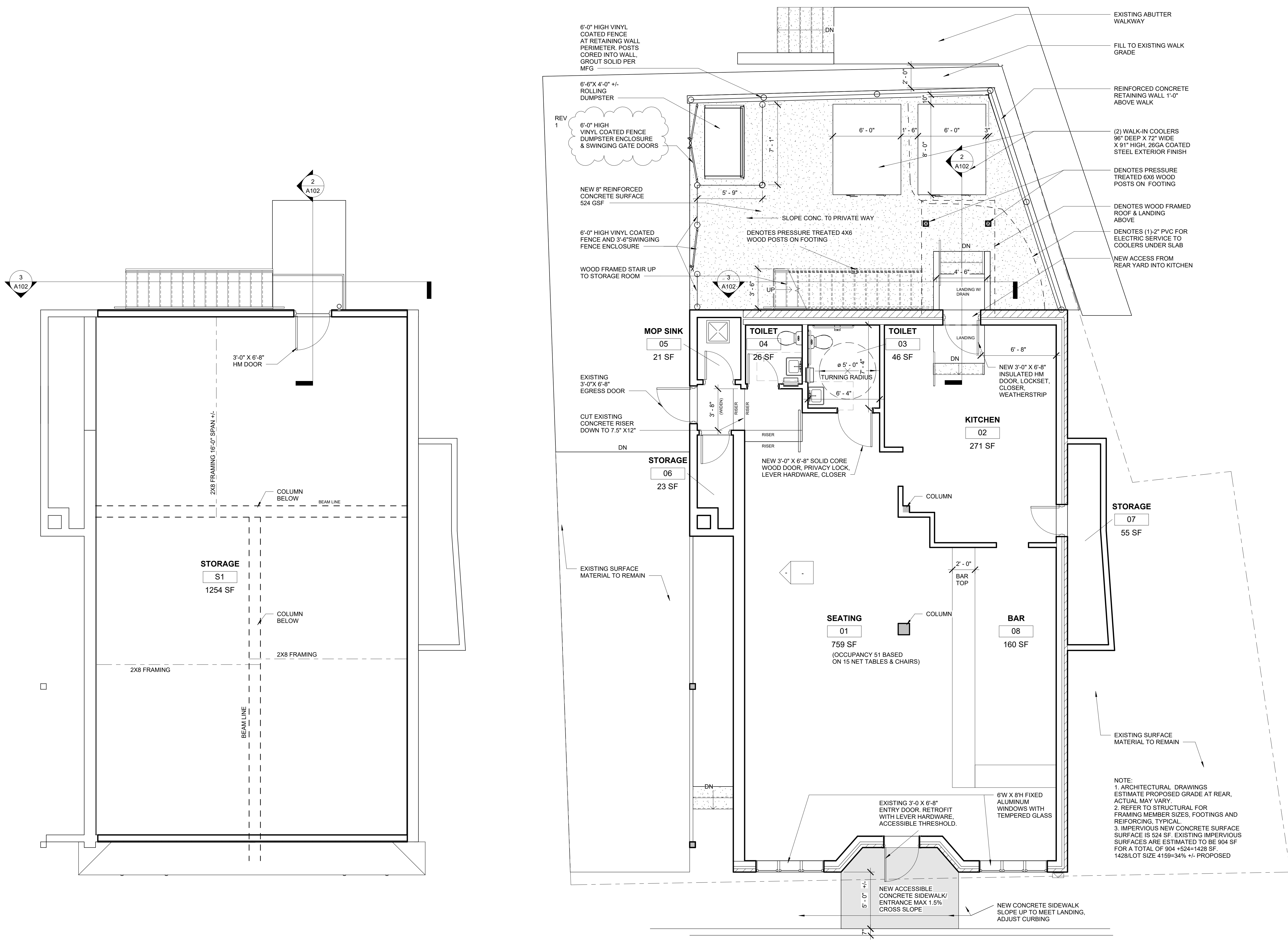
Project No. 7-9 SH 2022

Date 10/19/23

Scale 1/4" = 1'-0"

Drawn By GEO Checked By CFT

A101

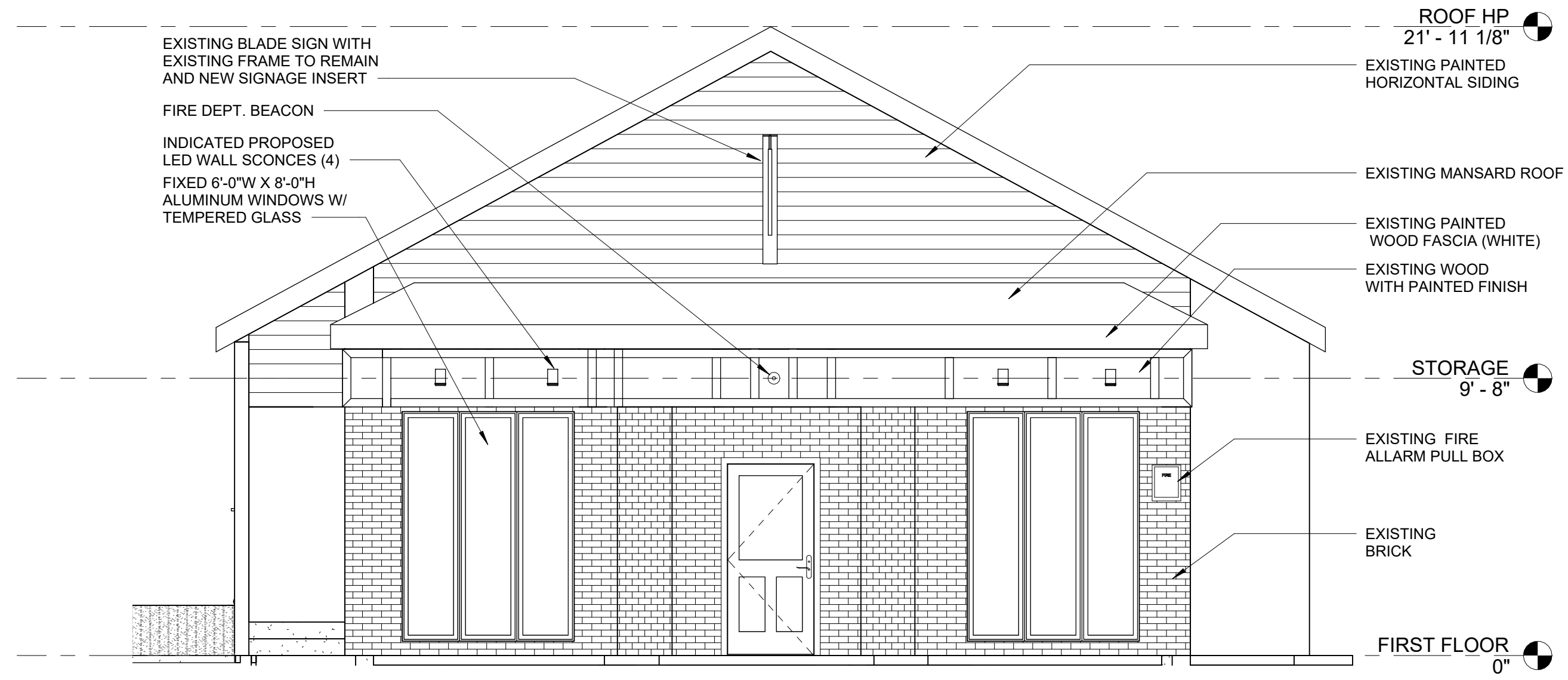


④ ATTIC STORAGE
1/4" = 1'-0"

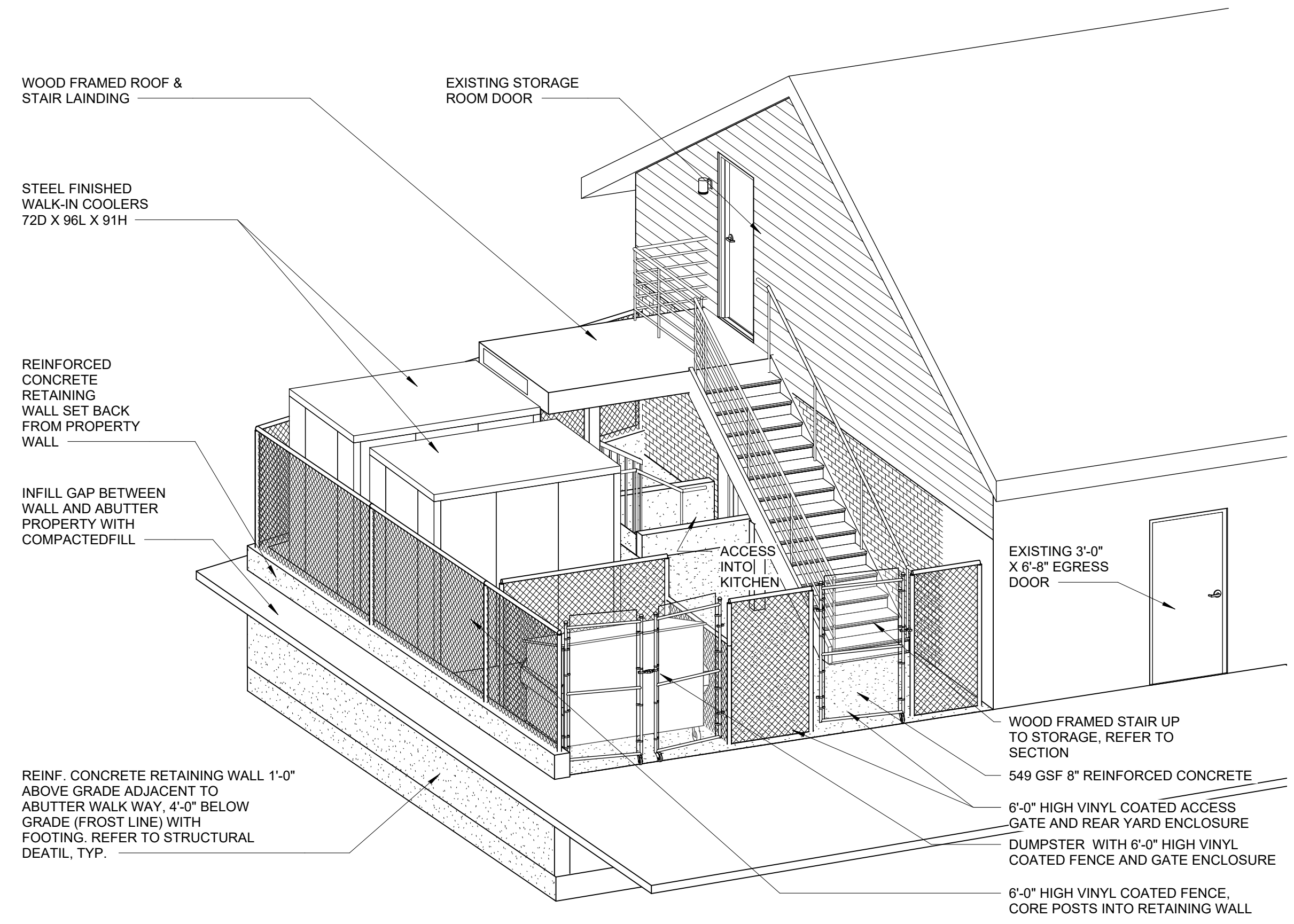
① FIRST FLOOR PLAN
1/4" = 1'-0"

7-9 SHORT STREET

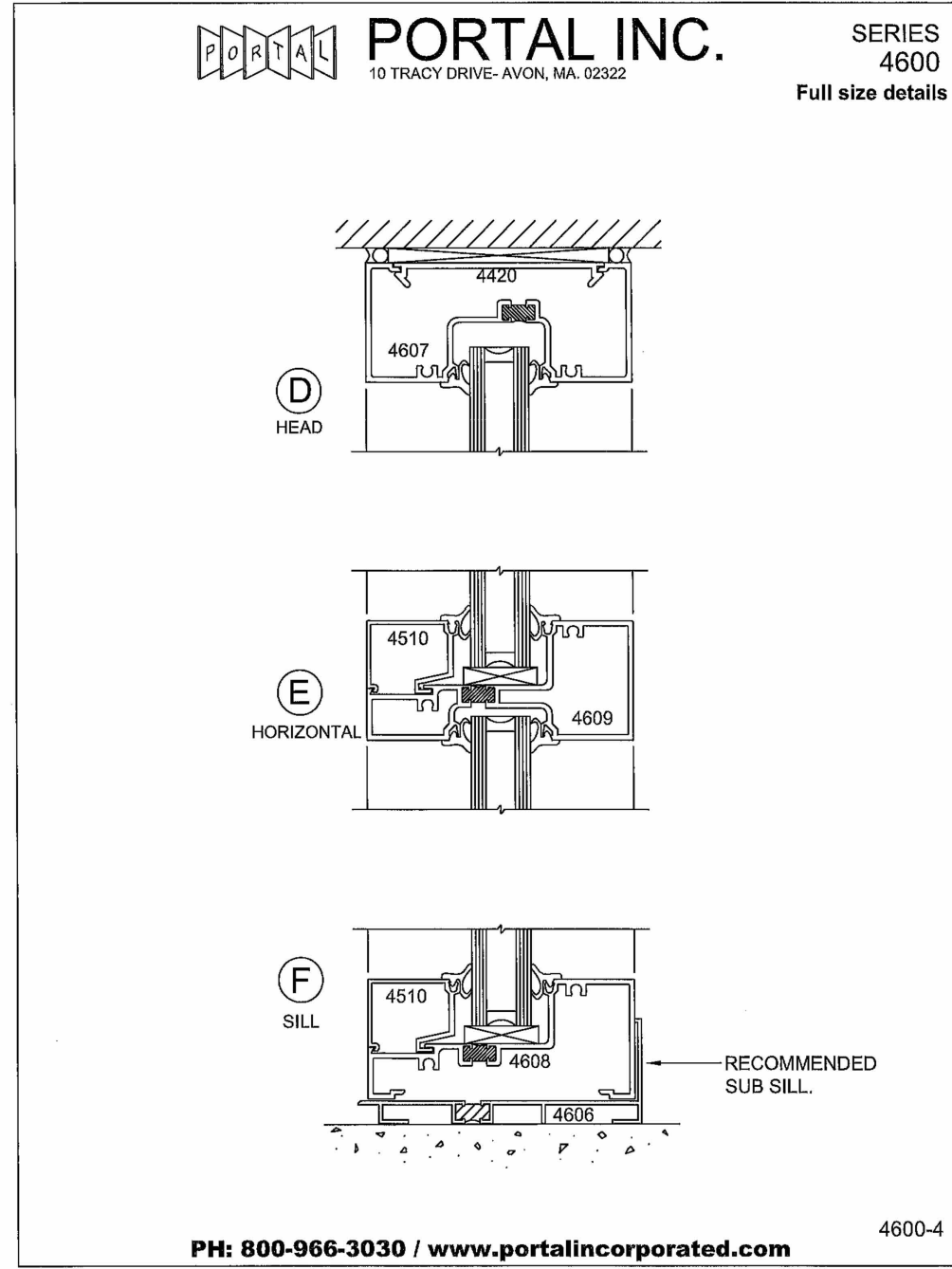
RANDOLPH, MA



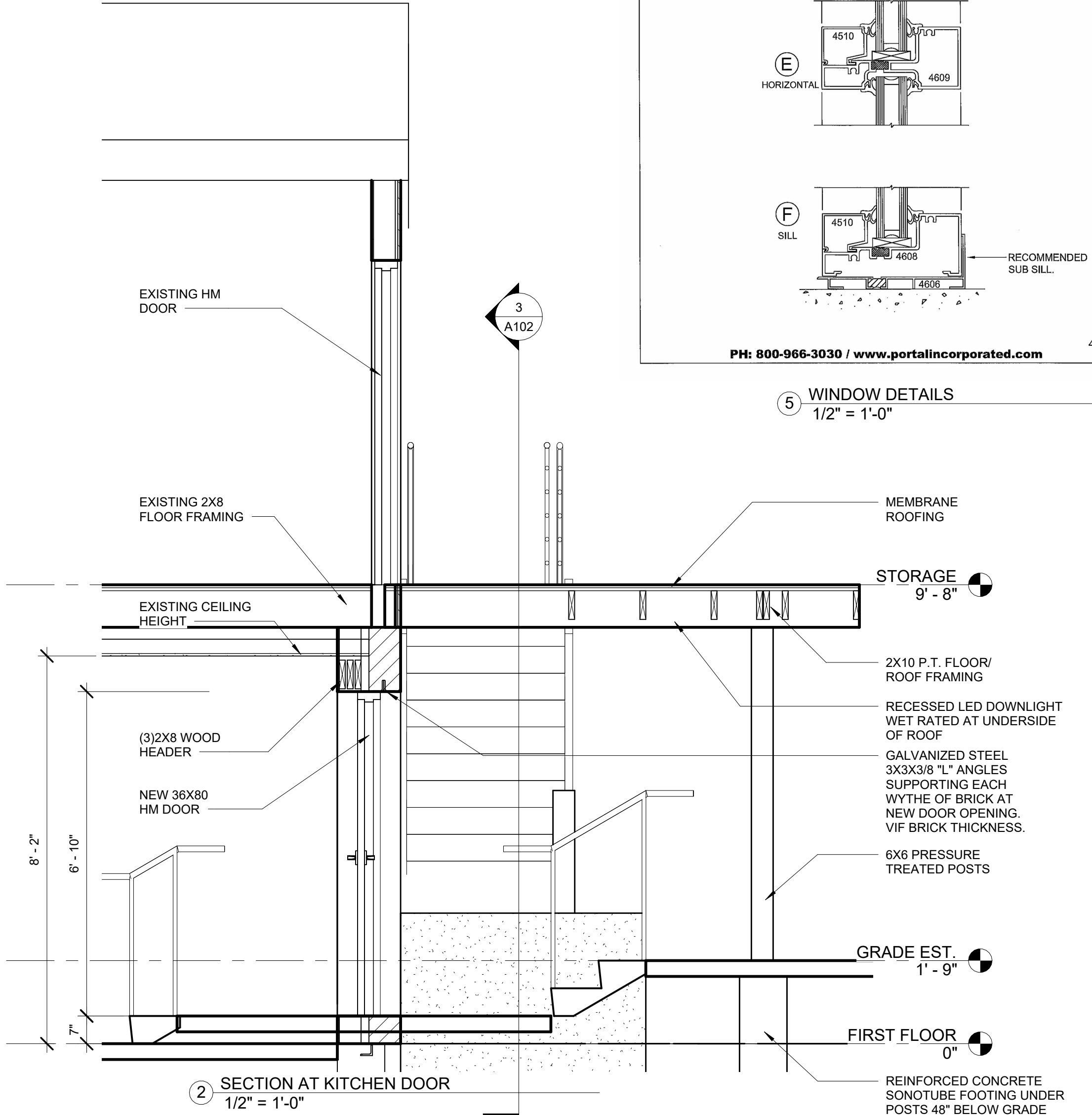
4 SHORT STREET ELEVATION
1/4" = 1'-0"



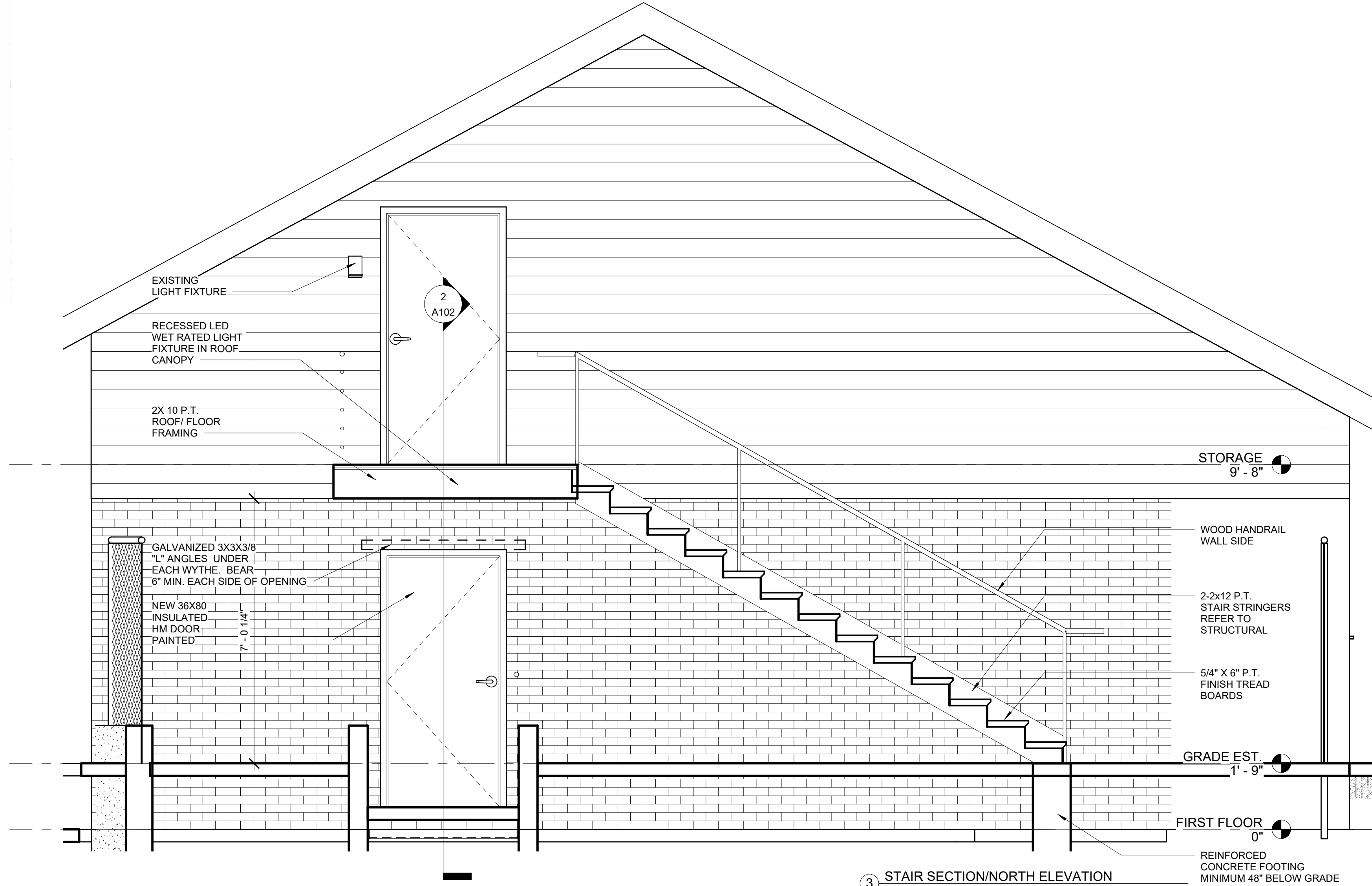
1 3D VIEW



5 WINDOW DETAILS
1/2" = 1'-0"



2 SECTION AT KITCHEN DOOR
1/2" = 1'-0"



3 STAIR SECTION/NORTH ELEVATION
1/2" = 1'-0"

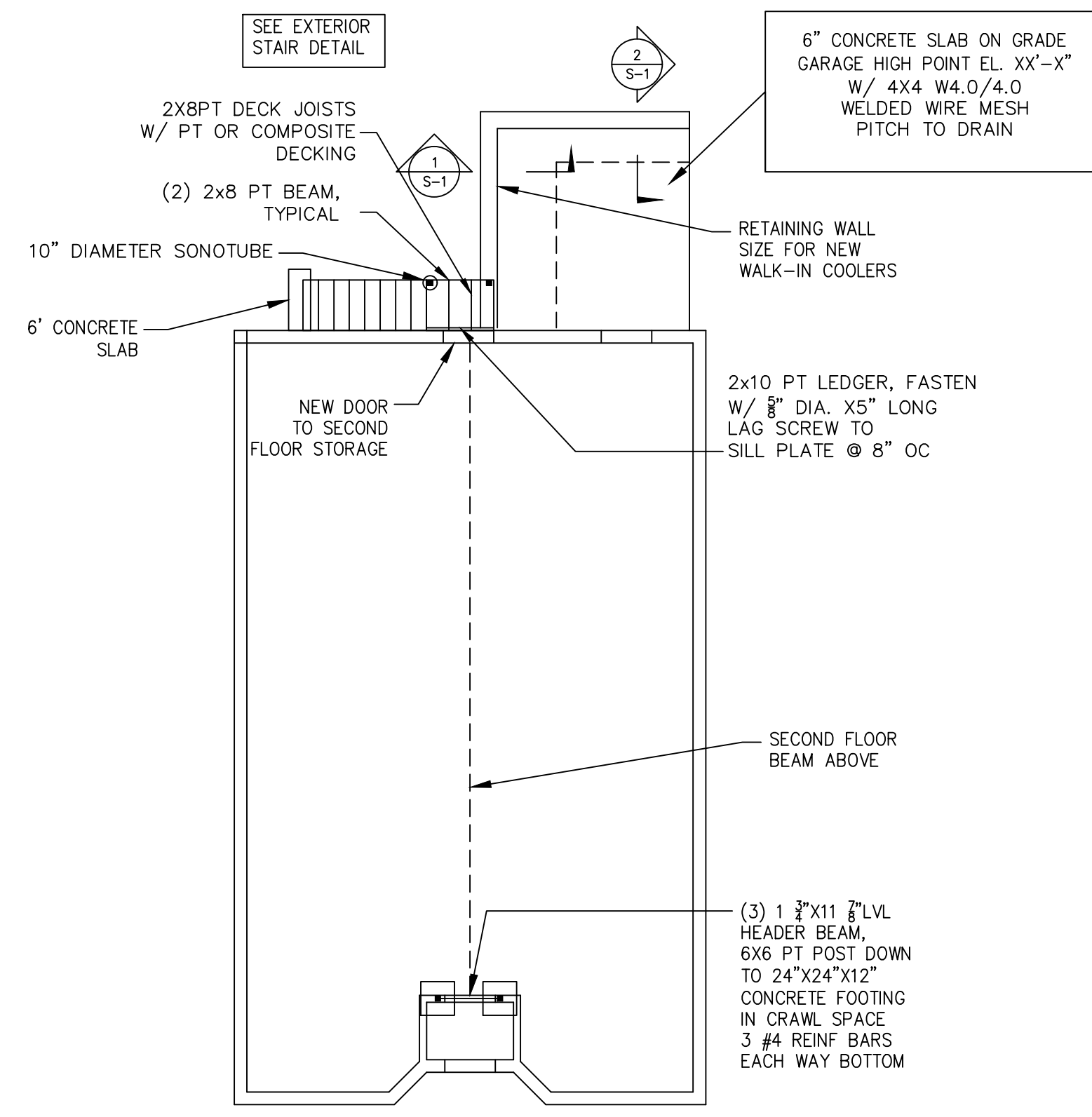
No.	Date	Revision
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Seal

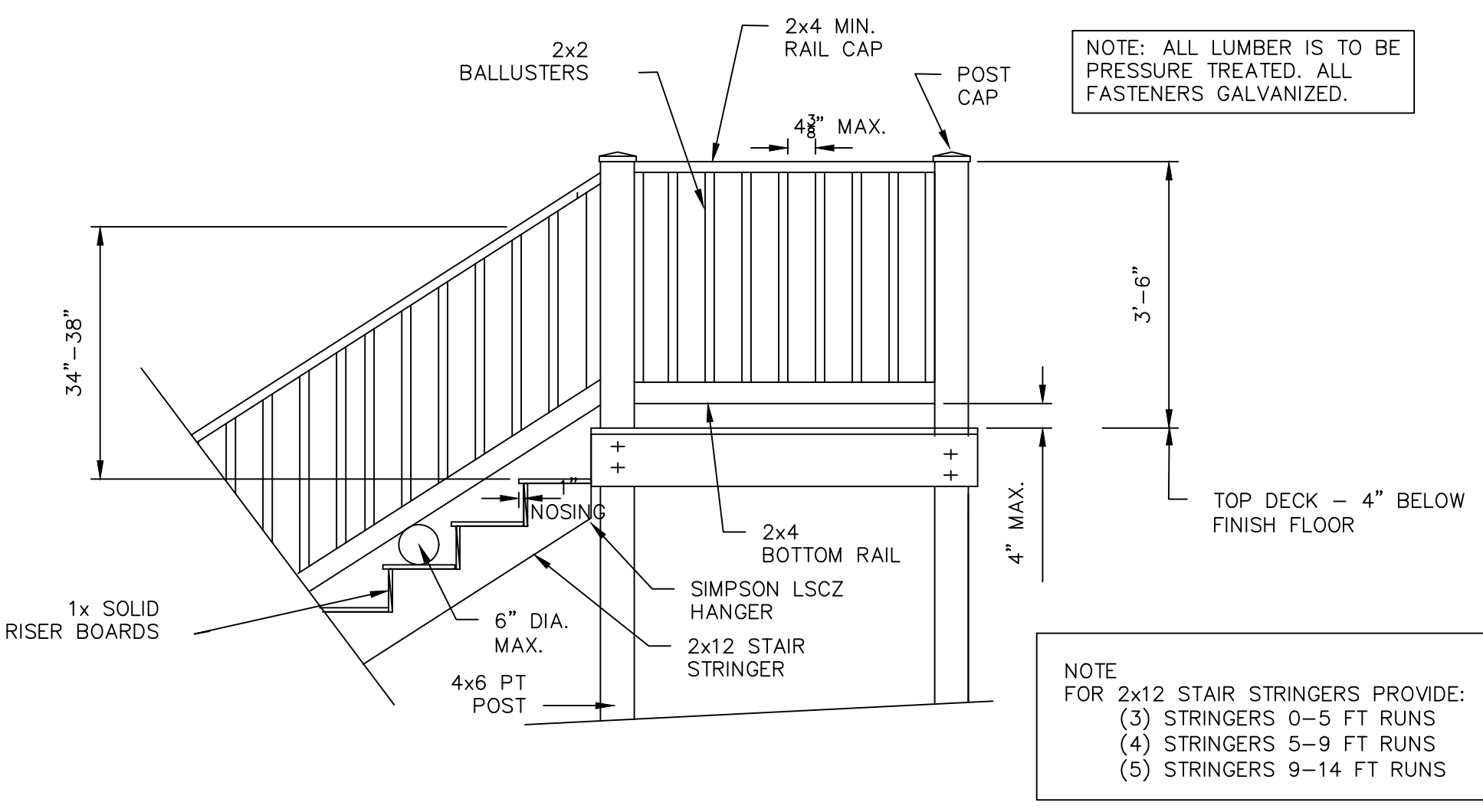
Drawing Title

SECTIONS, ELEVATIONS & REAR YARD PERSPECTIVE

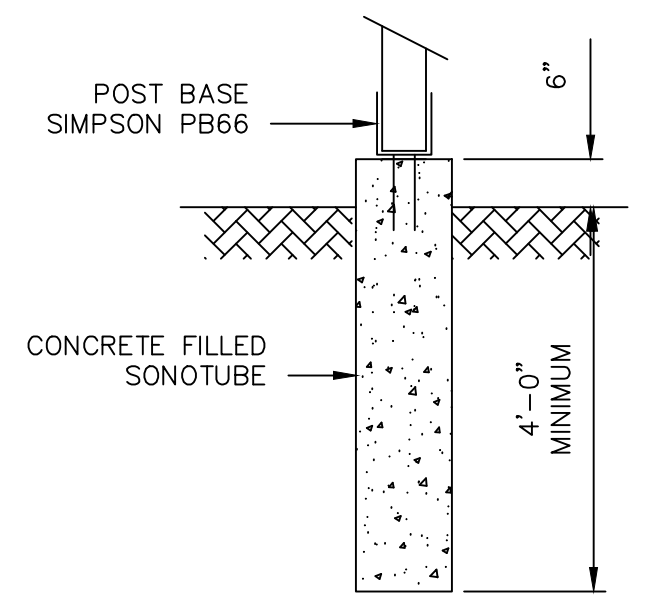
Project No.	7-9 SH 2022	Drawing No.	A102
Date	10 19 23	Scale	As indicated
Drawn By	GEO	Checked By	CFT



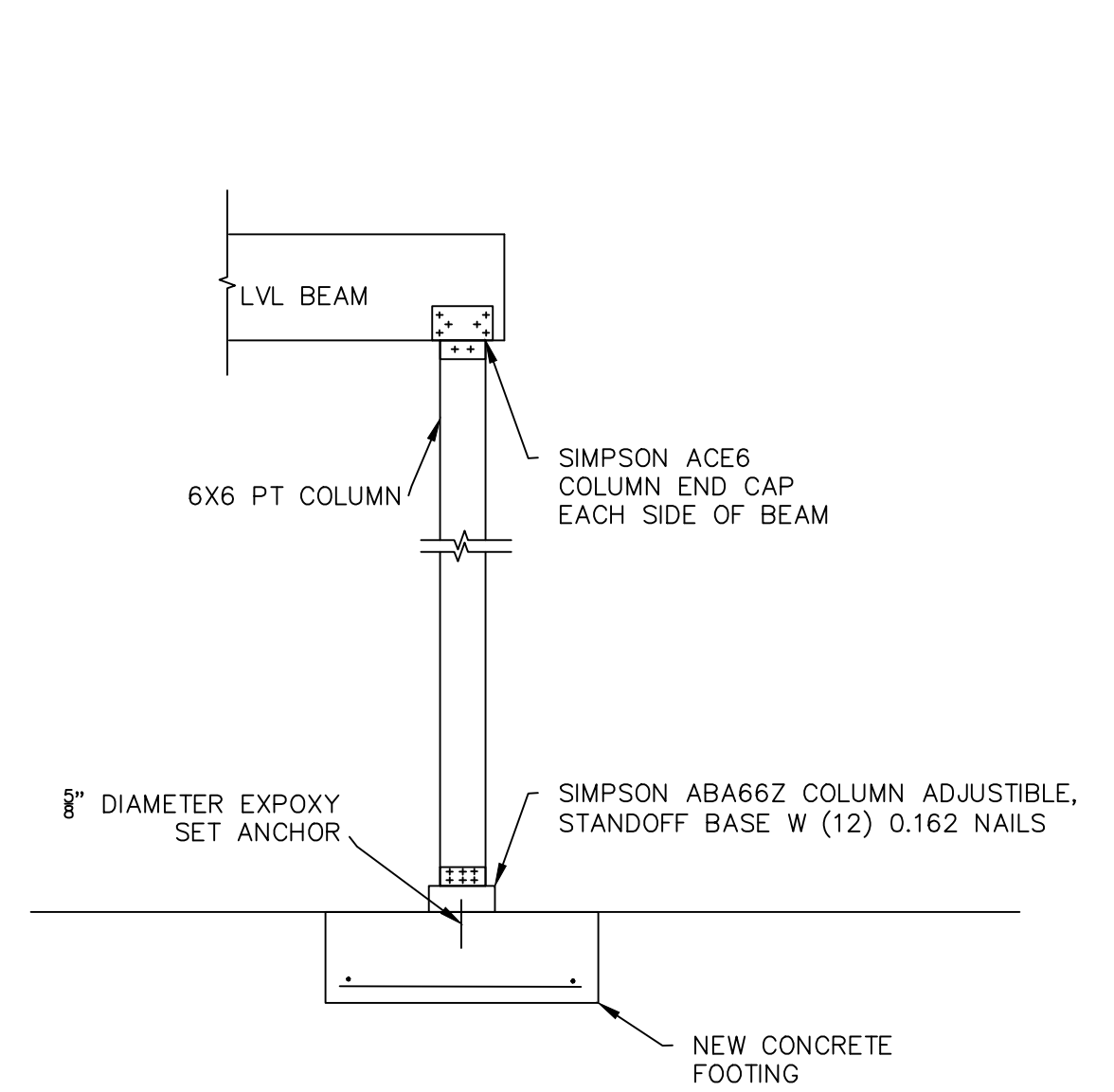
FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"



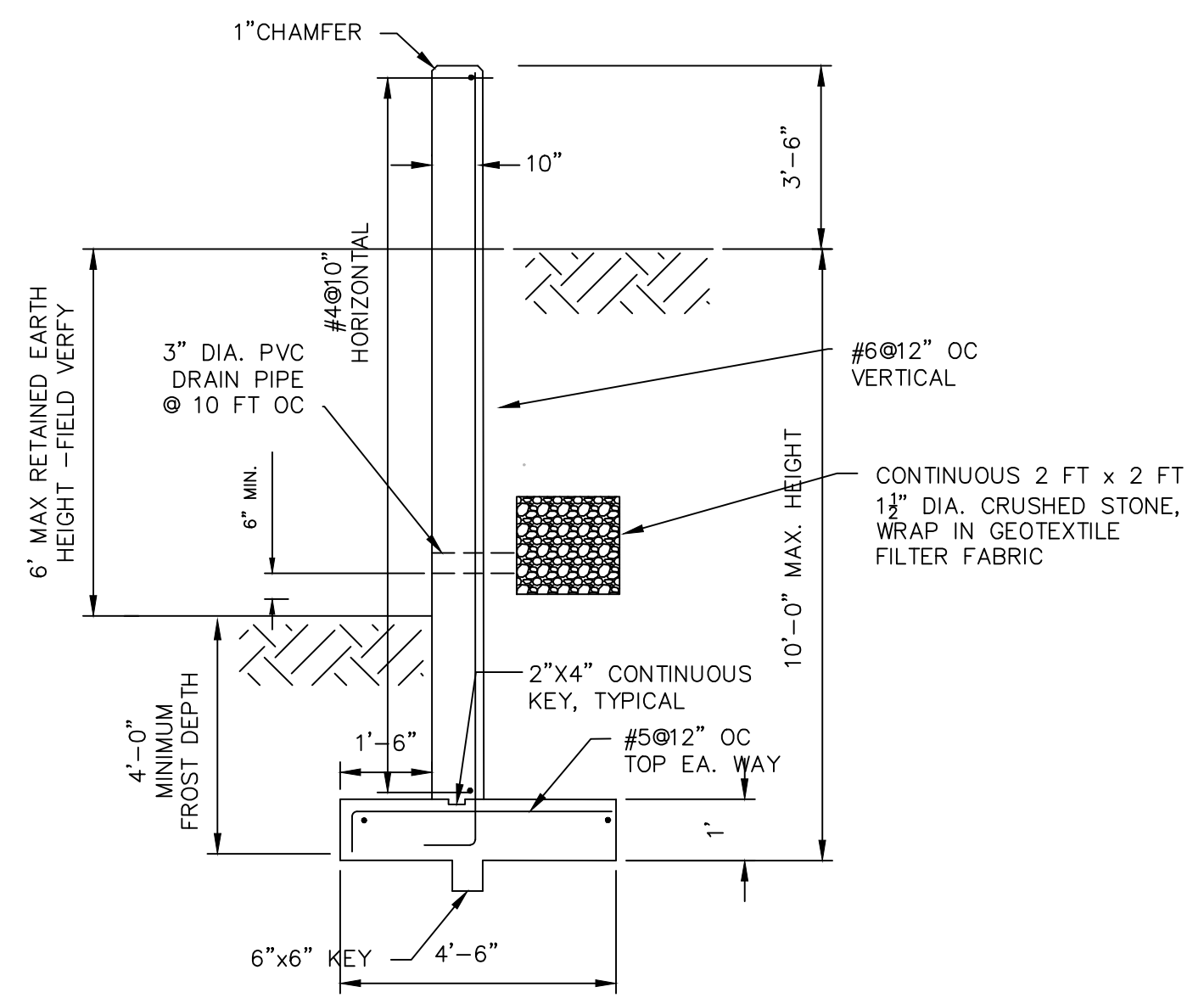
TYPICAL STAIR & PLATFORM RAILING
SCALE: 1/2"=1'-0"



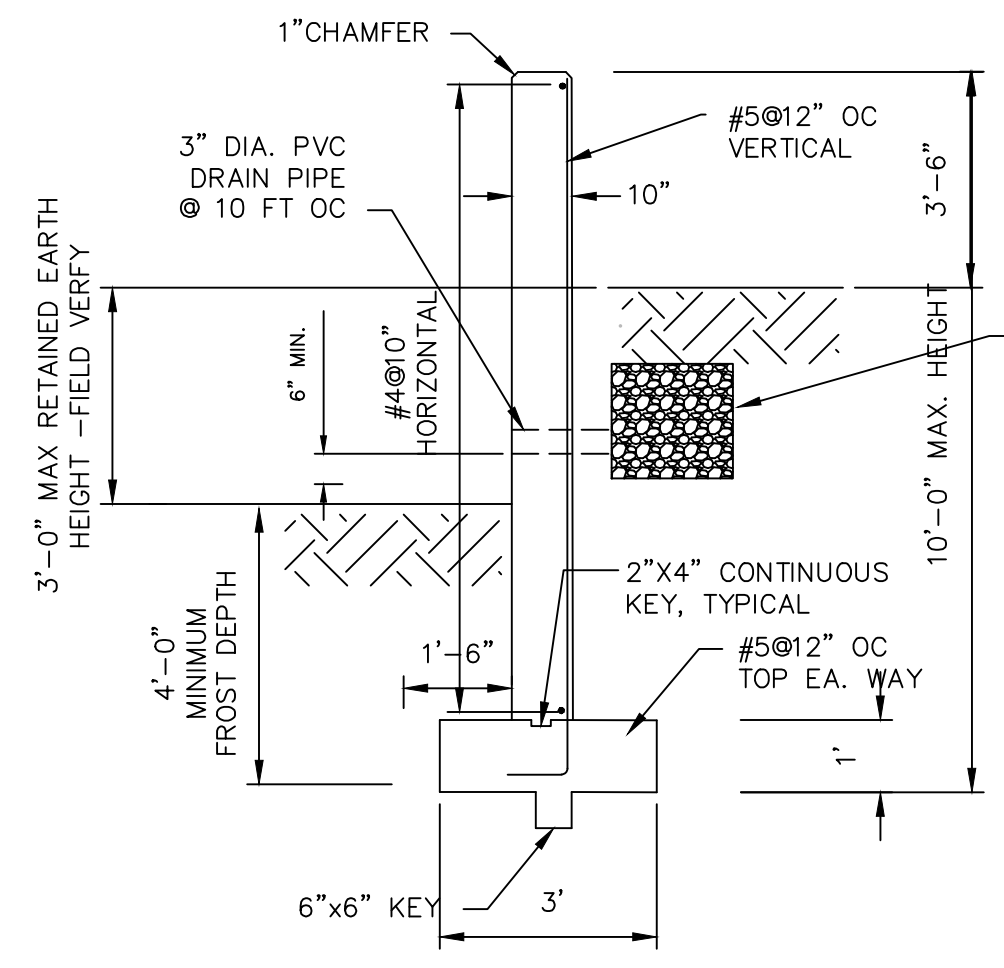
SONOTUBE FOUNDATION
SCALE: 1/2"=1'-0"



TYPICAL COLUMN/FOOTING CONNECTION DETAIL
SCALE: 1/2"=1'-0"



SECTION-1 RETAINING WALL
SCALE 3/8"=1'-0"



SECTION-2 RETAINING WALL
SCALE 3/8"=1'-0"

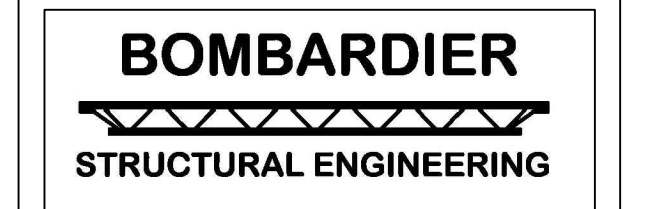
- GENERAL**
1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS STATE BUILDING CODE (780 CMR) 9TH EDITION (IBC 2015 AND MASSACHUSETTS AMENDMENTS)
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDITIONS AND DIMENSIONS AFFECTING THE WORK. DISCREPANCIES SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER
 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN, IN THE COURSE OF THE WORK, CONDITIONS ARE UNCOVERED WHICH ARE UNANTICIPATED OR OTHERWISE APPEAR TO PRESENT A DANGEROUS CONDITION.
 4. STRUCTURAL MATERIALS AND COMPONENTS SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. MATERIAL SAMPLES OR CERTIFICATES AND INSTALLATION SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL PARTS OF THE WORK FOR APPROVAL, ALLOWING SUFFICIENT TIME FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
 5. MODIFICATIONS TO THE WORK SHALL NOT BE PERFORMED WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER.
 6. STRUCTURAL CONSTRUCTION SHALL BE PRECEDED BY ADEQUATE SHORING AND TEMPORARY BRACING UNTIL ALL MEMBERS ARE PLACED AND TRUE TO PROVIDE ADEQUATE VERTICAL AND LATERAL SUPPORT.
 7. THE CONTRACTOR SHALL EXAMINE ALL ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS (INCLUDING OWNER FURNISHED EQUIPMENT DRAWINGS) FOR VERIFICATION, LOCATION, AND DIMENSIONS OF EMBEDDED ITEMS, SLEEVES, CHASES, INSERTS, WASHES, DRIPS, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS EFFECTING THE STRUCTURAL WORK.
 8. OPENINGS SHOWN ON DRAWINGS SHALL NOT BE REVISED OR NEW OPENINGS ADDED TO THE WORK WITHOUT PRIOR APPROVAL OF THE ENGINEER
 9. TYPICAL DETAILS AND NOTES ON THE STRUCTURAL DRAWINGS SHALL BE APPLICABLE TO ALL PARTS OF THE STRUCTURAL WORK.
- STRUCTURAL DESIGN LOADS**
1. SNOW LOADS 35 PSF GROUND SNOW
30 PSF FLAT ROOF SNOW
 2. WIND LOADS BASIC WIND SPEED ULTIMATE 131 MPH
RISK CATEGORY II
 3. LIVE LOADS COMMERCIAL SPACE 100 PSF
- SHORING AND BRACING**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SHORING AND BRACING OF EXCAVATIONS, FOUNDATIONS, AND ALL CONSTRUCTION IN THE WORK.
 2. TEMPORARY SHORES SHALL BE INDIVIDUALLY DESIGNED, ERECTED, SUPPORTED, BRACED AND MAINTAINED BY THE CONTRACTOR TO SAFELY SUPPORT ALL LOADS BEING CARRIED BY EXISTING STRUCTURE MEMBERS AND THEIR FOUNDATIONS BEING REMOVED, ALTERED, AND/OR UNDERMINED BY THE WORK.
- PROJECT GEOTECHNICAL ENGINEER**
1. NO GEOTECHNICAL REPORT WAS AVAILABLE AT THE TIME OF THIS DESIGN. IT IS THE RESPONSIBILITY OF THE OWNER TO RETAIN A GEOTECHNICAL ENGINEER TO ESTABLISH FOUNDATION APPROACH, SOIL BEARING CAPACITY, AND GROUND WATER ELEVATIONS. PRIOR TO RECEIPT OF REPORT, SOIL BEARING CAPACITY WILL BE ASSUMED AS 2,000 PSF AND SOILS SUITABLE FOR EXTERIOR GRADE WALL AND INTERIOR ISOLATED FOOTINGS.
- FOUNDATIONS**
1. EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN BELOW FINISHED EXTERIOR GRADE TO A MINIMUM DEPTH OF 4'-0", UNLESS OTHERWISE NOTED.
 2. SURFACE AND SUBSURFACE WATER SHALL BE CONTROLLED DURING CONSTRUCTION TO ENSURE THAT ALL FOUNDATION CONCRETE WORK IS DONE IN DRY CONDITIONS. IF REQUIRED, PROVIDE SHEETING, WELL POINTS, AND/OR DE-WATERING WELLS AS REQUIRED FOR PROPER EXCAVATION AND PLACEMENT OF CONCRETE.
 3. CONCRETE SHALL BE PLACED ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL MATERIAL.
 4. NO FOUNDATION CONCRETE SHALL BE PLACED IN WATER OR ON FROZEN SUB-GRADE MATERIAL.
 5. IN-PLACE FOUNDATIONS AND SLABS SHALL BE PROTECTED FROM FROST PENETRATION UNTIL THE PROJECT IS COMPLETE.
 7. REMOVAL OF DISTURBED AND UNSUITABLE MATERIALS AND PLACING, COMPACTING AND TESTING OF COMPACTED FILL SHALL ONLY BE PERFORMED BY THE GENERAL CONTRACTOR WHILE A PROFESSIONAL GEOTECHNICAL ENGINEER, REGISTERED IN THE STATE OF MASSACHUSETTS AND RETAINED BY THE OWNER, IS OBSERVING THE WORK.
 8. BOTTOM OF FOOTING ELEVATIONS SHOWN ON THE CONTRACT DOCUMENTS ARE MINIMUM DEPTHS AND ARE NOT TO BE CONSTRUED AS LIMITING IN ANY WAY THE AMOUNT OF EXCAVATION NECESSARY TO REACH A SUFFICIENT BEARING STRATUM.
- CONCRETE**
1. CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE (ACI) - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI-318) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI-301).
 2. ALL STRUCTURAL CONCRETE, UNLESS OTHERWISE NOTED, SHALL BE NORMAL WEIGHT (145 PCF) AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
 3. ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR ENTRAINED.
 4. CONCRETE PLACEMENTS SHALL BE LIMITED TO A 30 FOOT LENGTH MAXIMUM TO CONSTRUCTION JOINT. ADJACENT CONCRETE PLACEMENTS SHALL BE AFTER 72 HOURS OF CURING TIME.
 5. MINIMUM PROTECTIVE COVER FOR CONCRETE REINFORCING STEEL SHALL BE AS FOLLOWS:
A) UNFORMED SURFACES CAST AGAINST EARTH - 3 INCHES
B) FORMED SURFACES NOT IN CONTACT TO EARTH - 3/4 INCHES
OR EXPOSED TO WEATHER, WALLS AND SLABS, #11 BARS OR SMALLER
C) FORMED SURFACES IN CONTACT TO EARTH OR EXPOSED TO WEATHER, WALLS AND SLABS, #6 TO #18 BARS - 2 INCHES
#5 AND SMALLER - 1 1/2 INCHES
- CARPENTRY**
1. ALL STRUCTURAL LUMBER SHALL BE GRADE STAMPED PER STANDARD GRADING RULES. UNLESS OTHERWISE NOTED, ALL STRUCTURAL LUMBER SHALL BE SPRUCE-PINE-FIR.
NO. 2 KD 15% INTERIOR.
 2. NON-BEARING STUD WALLS SHALL BE STUD GRADE.
 3. PLYWOOD SHEATHING SHALL BE DFPA GRADE STAMPED, TYPE CDS 5 PLY WITH EXTERIOR GLUE UNLESS OTHERWISE NOTED ON PLANS. WALLS SHALL BE A MINIMUM OF 1/2 INCH THICK SHEATHING AND FLOORS 3/4 INCH.
 4. PRE-DRILL ALL HOLES FOR 20D AND LARGER NAILS AND LAG BOLTS.
 5. DOUBLE TOP PLATES ON ALL EXTERIOR AND BEARING PARTITIONS (NOT OTHERWISE DETAILED). PLATES SHALL LAP 4'-0" MINIMUM AND 8'-0" MAXIMUM AT SPLICES. AND HAVE (14) 16D NAILS MINIMUM THROUGH EACH SIDE OF SPLICE.
 6. SILLS AND ROOF BLOCKING SHALL BE PRESSURE TREATED WITH WATERBORNE SALT PRESERVATIVES.
- WOOD FLOOR & WALL SHEATHING**
1. ALL METAL CONNECTORS FOR WOOD CONSTRUCTION SHALL BE HOT-DIPPED GALVANIZED METAL SHAPES AS MANUFACTURED BY "SIMPSON STRONG-TIE COMPANY, INC." AND BE ATTACHED BY THE GENERAL CONTRACTOR AS PER THE "SIMPSON STRONG-TIE" SPECIFICATIONS.

CLIENT:
KEOHANE COMPANY LTD
BOSTON, MA

DRAWING NOTES:
1. EXISTING CONDITIONS MAY VARY FROM THOSE SHOWN. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
2. THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF LEON A. BOMBARDIER, PE ANY USE WITHOUT WRITTEN CONSENT IS PROHIBITED.

ARCHITECT:
ROUGE DESIGN
JAMES CHRISTIANSON

OWNER:
-



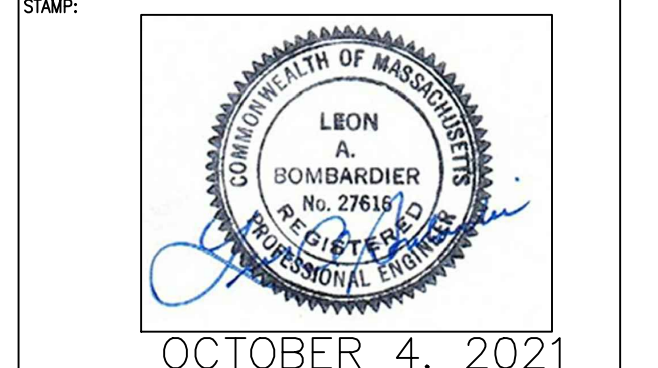
#	REVISIONS	DATE

LEON A. BOMBARDIER, PE
Structural Engineer
131 Lincoln Street
Abington, MA 02351

email: bse05@verizon.net
phone: (508) 631-3332 fax: (781) 878-7986

PROJECT:
RETAIL ALTERATIONS
7-9 SHORT STREET
RANDOLPH, MA

DRAWING TITLE:
BASEMENT
FOUNDATION &
FIRST FLOOR PLAN
& SECTIONS



SCALE:
AS NOTED
DATE:
10/04/2021
DRAWN BY:
LAB
CHECKED BY:
LAB
PROJECT #:
2021-76

S-1



9 SHORT ST, RANDOLPH, MA

EXTERIOR RENOVATIONS



EXTERIOR RENOVATION CALL OUTS

1. Existing brick will be painted BM Amherst Gray HC-167 with contrasting accents of BM Black 2132-10. The rendering suggests the application for the paint.
2. Cut sheets have been provided for the front windows in this package of submittal.
3. Clapboard on the front of the building to be painted BM
4. Down lights on the front of the building are Cylinder Outdoor Up/Down Wall Sconce by Kichler, specs have been included in this packet.
5. The panel behind the front lights is the existing material, to be painted the BM Black 2132-10.
6. The new logo and restaurant sign will be applied the existing sign frame. Colors are black and white.
7. Fencing and gates at rear will be white vinyl 6'H x 8'W purchased from Lowes. Product information included in this packet.
8. The new rear decking and stairs will be pressure treated lumber material.
9. The porch railing will be deck mounted cable railing components, specs attached.









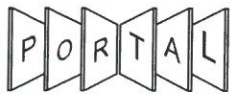
PORTAL INC.
10 TRACY DRIVE- AVON, MA. 02322

Section E, Item 1.
**SERIES
4600**

SERIES 4600

2" X 4-1/2" THERMAL FLUSHGLAZED FOR 1" GLAZING

INDEX:	_____	1
ELEVATIONS:	_____	2
JAMBS:	_____	3
HORIZONTALS:	_____	4
ALT. HORIZONTALS:	_____	5
TRANSOM BARS:	_____	6
CORNER POSTS:	_____	7
SPECIFICATIONS & DESIGN DATA:	_____	8

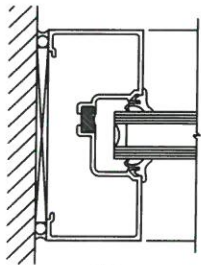
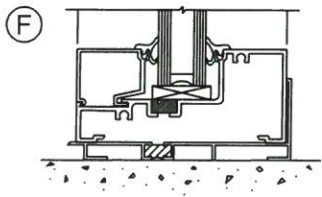
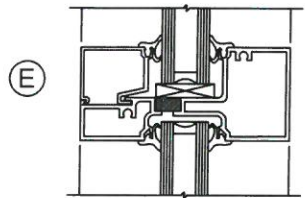
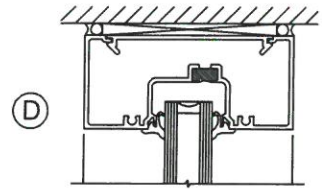
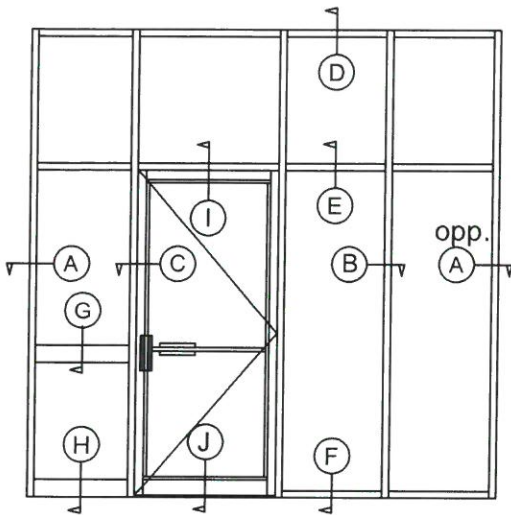


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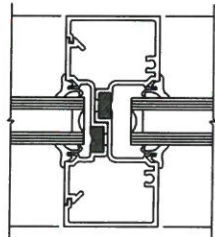
10 TRACY DRIVE- AVON, MA. 02322

SERIES
4600

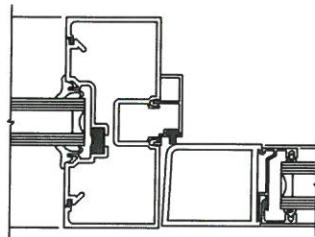
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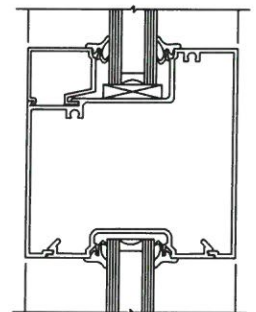
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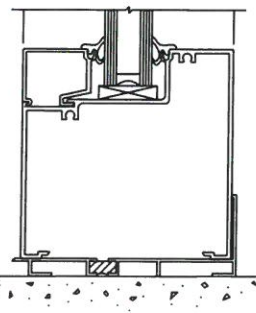
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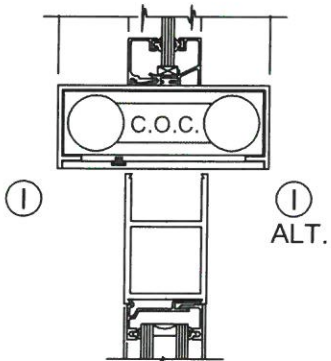
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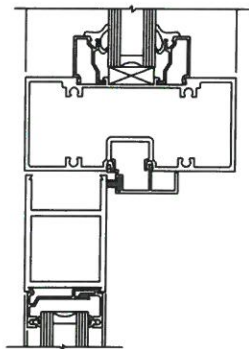


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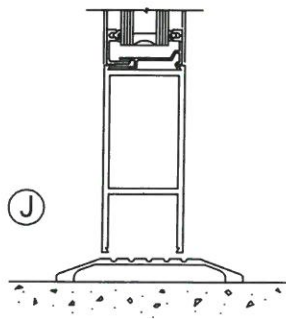


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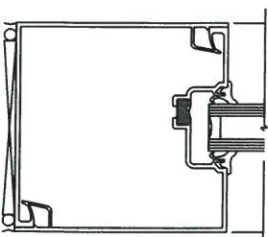
ALT.



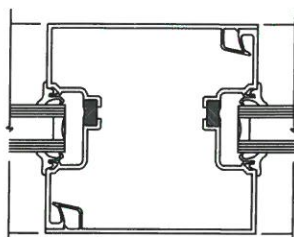
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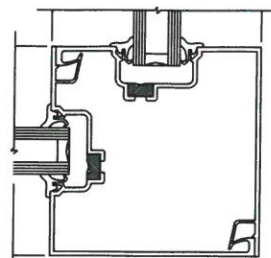
CORNER POSTS:



K



L



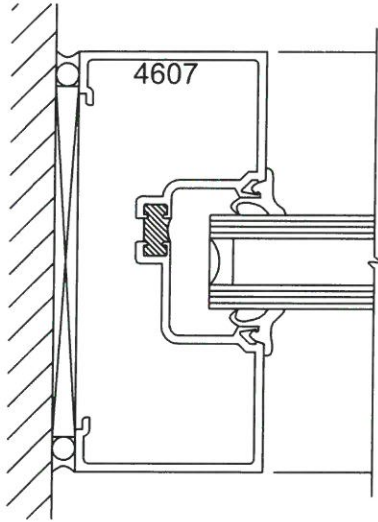
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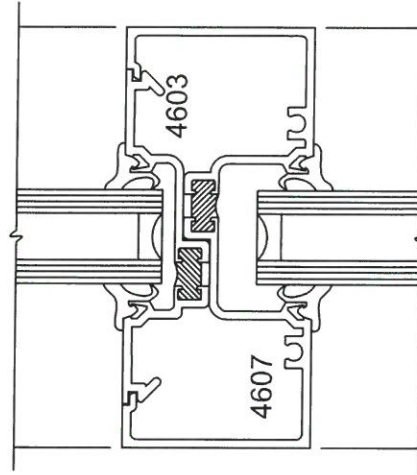
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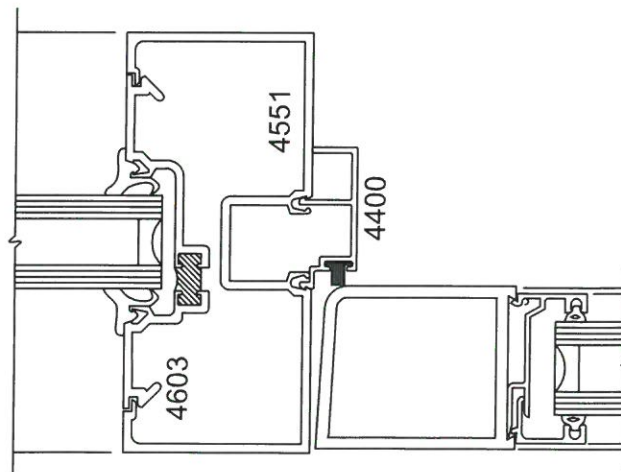
SERIES
4600
Full size details



A JAMB



B MULLION



C DOOR JAMB

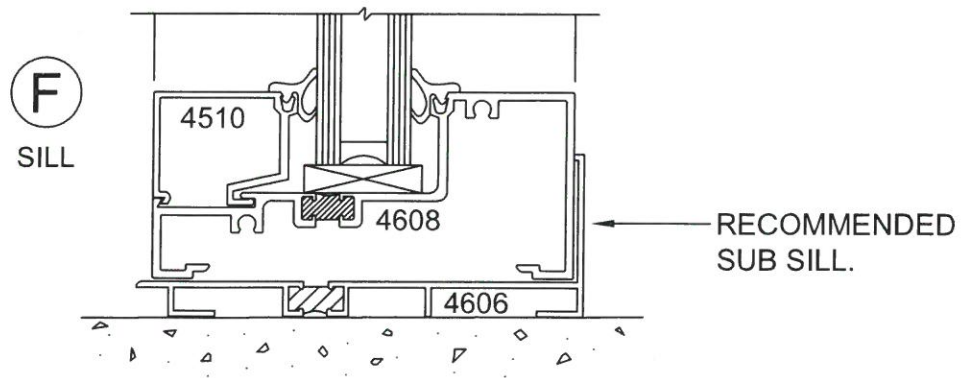
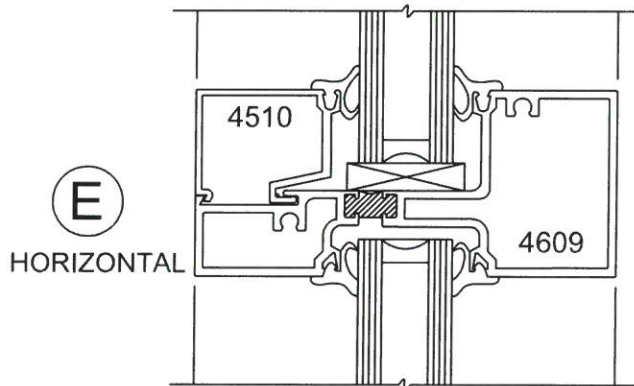
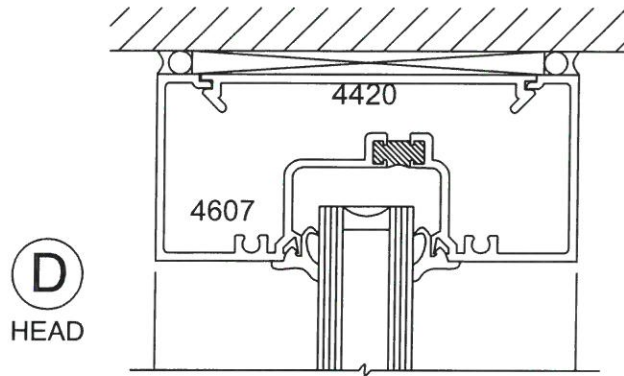


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Full size details



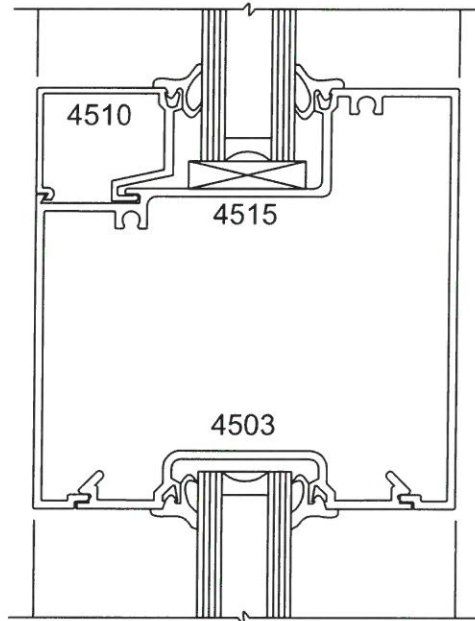


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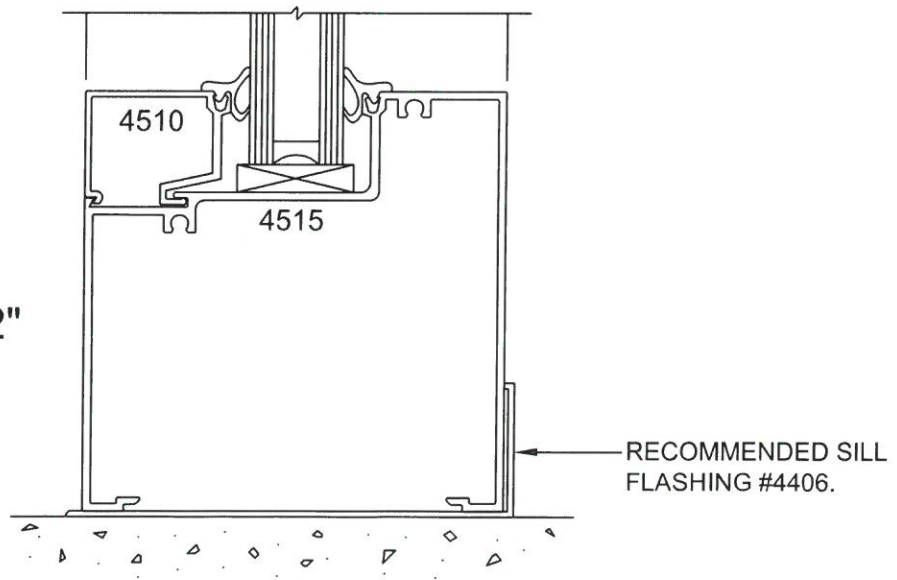
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**SERIES
4600**
Full size details

(G)
4-1/2" X 4-1/2"
HORIZONTAL



(H)
4-1/2" X 4-1/2"
SILL

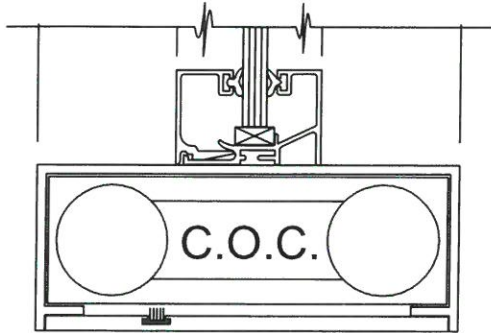




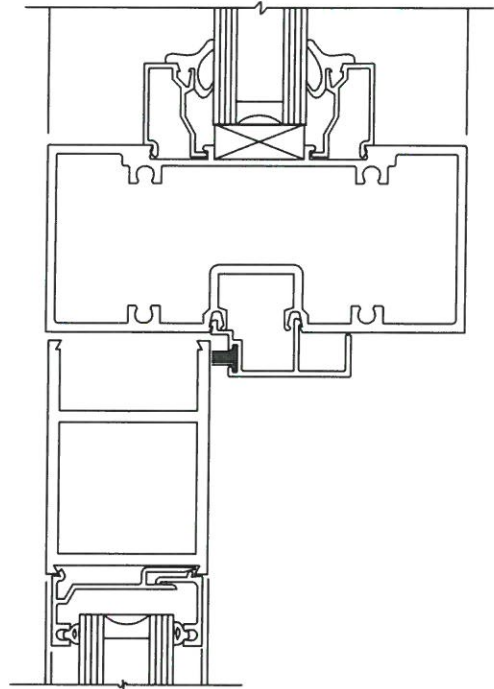
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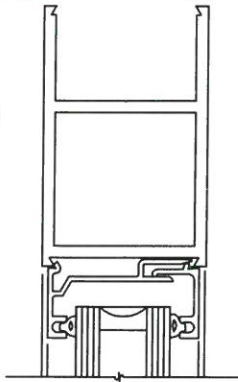
**SERIES
4600
Full size details**



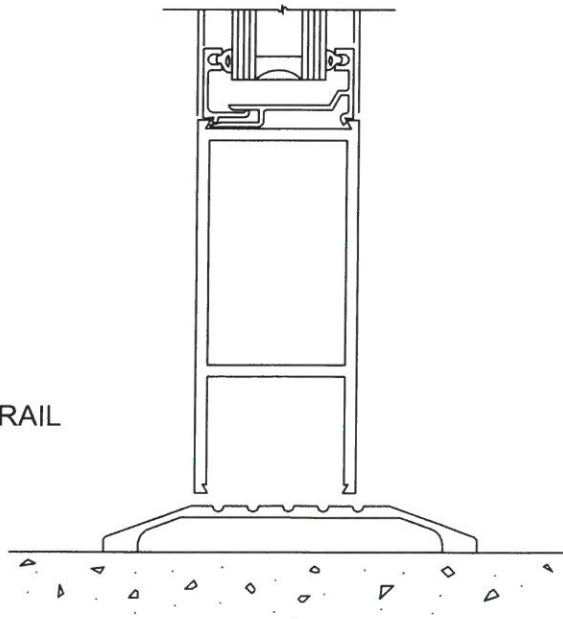
①
TRANSOM BAR

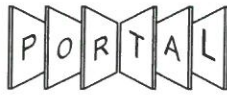


①
ALT.
TRANSOM BAR



②
BOTTOM RAIL



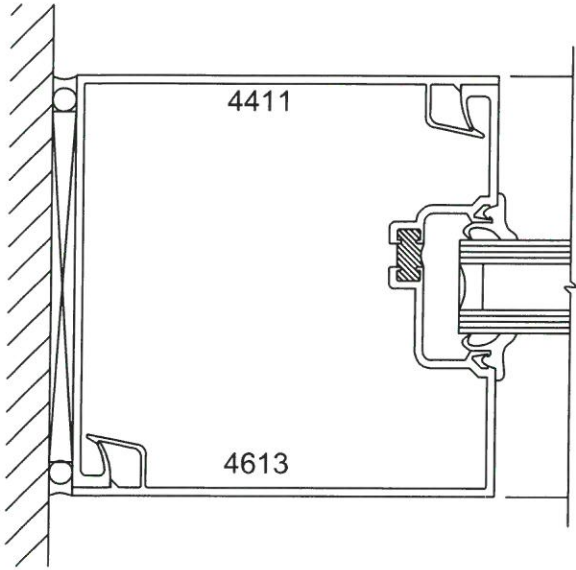


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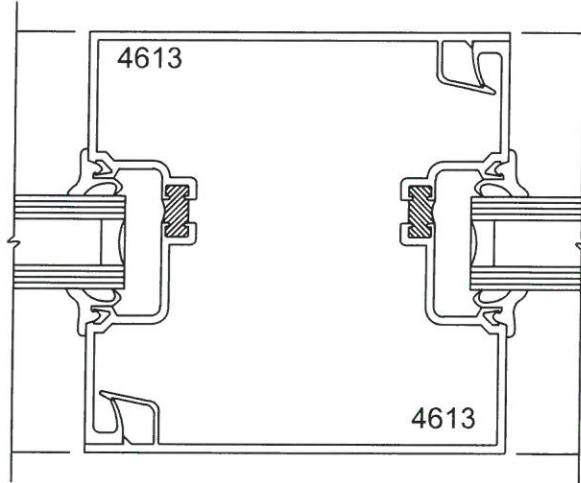
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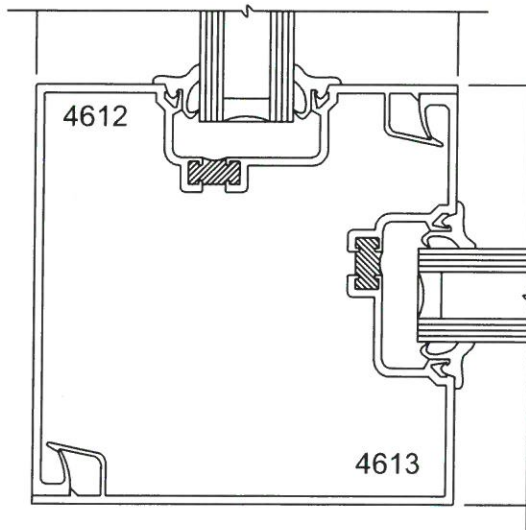
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4-1/2" X 4-1/2" JAMB



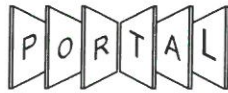
(L)

4-1/2" X 4-1/2" MULLION



(M)

4-1/2" X 4-1/2" CORNER



SPECIFICATIONS
SERIES 4600
1" THERMAL FLUSH GLAZING SYSTEM

1. GENERAL

DESCRIPTION:

WORK INCLUDED: Furnish all necessary materials, labor and equipment for the complete installation of aluminum framing as shown on the drawings and herein specified.

WORK NOT INCLUDED: Non-integrated structural support of the framing system, adjoining interior and / or exterior trim or flashing.

RELATED WORK SPECIFIED ELSEWHERE

QUALITY ASSURANCE:

Drawings and specifications are based on series #4600 as manufactured by Portal, Inc. Whenever substitute products are to be considered, supporting technical literature, samples, drawings and performance data shall be submitted for comparison prior bid date.

PERFORMANCE:

air infiltration shall be tested in accordance with ASTM 283, infiltration shall not exceed .06 CFM per square foot of fixed area. Water infiltration shall be tested in accordance with ASTM E 331. No water shall penetrate at test pressure of 6.25 PSF.

Structural performance shall be based on a maximum deflection of $\frac{1}{175}$ of the span when subjected to windload of 25 PSF.

2. PRODUCTS

MATERIALS:

Extrusions shall be of 6063 T5 aluminum alloy and temper per (ASTM B221 alloy G.S. 10A-T5) Exposed fasteners shall be aluminum, stainless steel or zinc plated steel in accordance with ASTM A164. Perimeter anchors shall be aluminum or steel properly isolated from the aluminum. Glazing Gaskets shall be either EPDM elastomeric or vinyl extrusions.

FINISH:

All exposed framing surfaces shall be free from scratches or other serious blemishes. Aluminum shall be given a caustic etch followed by an anodic oxide treatment to obtain (specify one of the following);

- . an architectural class 1 anodic coating conforming to Aluminum Association standard AA-M12 C22 A44 Dark bronze

or

- . a #100 clear anodic coating conforming to Aluminum Association standard AA-M12 C22 A31.

FABRICATION:

Horizontal heads, sills and intermediates shall be cut between two-piece interlocking vertical mullions and fastened to them with stainless steel screws into integral screw grooves in a concealed manner. One-piece vertical mullions shall have concealed shear blocks attached, to support horizontals when so specified. All cuts shall be made smooth square and true. Glazing beads shall snap in place and be flush. Nominal dimensions of framing members shall have a 1-3/4" face and depth of 4-1/2" with $\frac{5}{8}$ " wide glazing pockets for $\frac{1}{4}$ " glass.

3. EXECUTION

INSTALLATION:

All framing for glass shall be set in locations as shown in the details and shall be level, plumb, square and in alignment with other work in accordance with the manufacturers installation instructions and/or approved shop drawings. All joints between the framing and the building shall be securely sealed for a watertight installation.

PROTECTION:

After installation, the general contractor shall adequately protect exposed aluminum surfaces from damage by grinding and polishing compounds, plaster, lime, acid cement or other contaminants. The general contractor shall be responsible for final cleaning.

Outdoor Up/Down Cylinder Wall Sconce By Kichler



Call Us (877) 445-4486

Outdoor Up/Down Cylinder Wall Sconce
By Kichler

Product Options

Finish: Black,
Size: 12 inches

Details

Up and down light

Dimensions

12 inches Option Backplate: Width 4.5", Height 4.88"
12 inches Option Fixture: Width 4.75", Height 12",
Depth 7", Weight 1.95Lbs

Lighting

12 inches

Lamp Type	LED
Total Lumens	2100.0
# of Bulbs	2 (Not Included)
Bulb Type	11W BR30 E26
Volts	120
Color Temp	2700 (Warm)
Average Lifespan (Hours)	15,000
CRI	80
Equivalent Halogen, CFL or LED Bulb Can Be Used	Yes



Notes:

Empty box for notes

Prepared by:

Prepared for:
Project:
Room:
Placement:
Approval:

Additional Details

Product URL:
<https://www.lumens.com/outdoor-up-down-cylinder-wall-sconce-by-kichler-KCH2190685.html>

Rating: UL Listed Damp

ITEM#: KCH2190685



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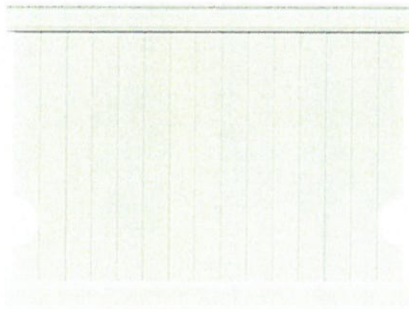
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Building Supplies / Fencing & Gates / Vinyl Fencing

Freedom Emblem 6-ft H x 8-ft W White Vinyl Fence Panel

Item #667016 | Model #73014714

Shop Freedom ★★★★☆ 15



TRENDING NOW

~~\$140.70~~

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Lowe's Pay 3 monthly installments of \$33.34 with Lowe's Pay [Learn How](#)

Panel comes unassembled, assembly required
Kit includes top and bottom rail, infill boards
Panel will follow the slope of your terrain - up to 1 inch per foot

Pickup
Ready by Tue, Nov 21 (Est.)

Delivery
As soon as Fri, Nov 24

FREE Pickup at Warwick Lowe's

- +

Add to Cart

Maximum Qty of 30

⚠ Lifestyle/in use images; accessories are not included

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Feedback

Freedom Emblem 6-ft H x 8-ft W White Vinyl Fence Panel **\$99.98**

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Building Supplies / Decking / Deck Railing Systems

CityPost Deck Mount 8-ft x 5in x 36-in Black Steel Deck Cable Rail Kit

Item #4661717 | Model #CP-8-B-D

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\$540.00

\$513.00 when you choose

5% savings on eligible purchases every day. [Learn how](#)

OR

\$90/mo suggested

payments with 6 month special financing. [Learn how](#)



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All parts included for a complete install with one purchase
Cable and hardware: marine grade 316 stainless steel
For 3-sided deck, simply order (3) kits that match side lengths

Pickup
Ready by Mon, Nov 27 (Est.)

Delivery
As soon as Mon, Nov 27

FREE Pickup at Warwick Lowe's

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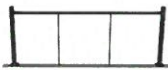
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Deckorators

Contemporary cable 8-ft ...

\$93.58



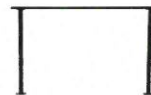
CityPost Stair Deck Mount 6-ft x 5in x 36-in Black Ste...

\$510.00



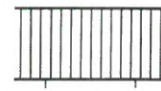
DOLLE InstaRail 72-in x 1-in x 24.5-in Stainless Steel...

\$110.86



CityPost Deck Mount 6-ft x 5in x 36-in Black Steel De...

\$510.00



Deckorators Pre-Assembled Aluminum 6-f...

\$164.00



Trex Enhanc x 36-in Charc

\$



Feedback

- All parts included for a complete install with one purchase
- Cable and hardware: marine grade 316 stainless steel
- For 3-sided deck, simply order (3) kits that match side lengths
- Modern sleek design in budget friendly kit
- 36 inch tall railing
- Unlimited railing combinations available in the dimension guide

 **HowTo Manual**
PDF

 **Installation Manual**
PDF

 **Dimensions Guide**
PDF

Specifications

General

Color/Finish Family	Black	Series Name	Deck Mount
Manufacturer Color/Finish	Black	Type	Cable rail kit

Dimensions

Actual Height (Inches)	36	Common Length (Feet)	8
Actual Length (Feet)	8	Common Width (Inches)	5
Actual Width (Inches)	5	Dimensions (L x W x H)	8-ft x 5in x 36-in
Common Height (Inches)	36		

Features

Assembly	Assembly required	Minimum Opening (Inches)	3
Baluster Material	Stainless steel	Orientation	Horizontal
Balusters Included	Yes	Post Caps Included	Yes
Cable Included	Yes	Post Sleeves Included	Yes
Green or Kiln-Dried	N/A	Posts Included	Yes
Hardware Included	Yes	Pressure Treated	No
Material	Steel	Rails Included	Yes

CityPost Deck Mount 8-ft x 5in x 36-in Black Steel Deck Cable Rail Kit **\$540.00**

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★★★★★  16





STAFF REPORT

File		Reported By	Michelle Tyler
Project Site	9 Short Street	Application Type	Tier 2 Site Plan
Site Visit Date	Multiple	Hearing Date	February 13, 2024

Project Summary

The applicant proposes modifications to an existing eating establishment including construction of a concrete pad for walk-in coolers, new covered egress, dumpster enclosure, lighting and architectural modifications

Zoning District

	Current Zoning	Existing Land Use
Subject	Crawford Square Business District	Restaurant/bar
North	Crawford Square Business District	Bank/Commercial building
South	Crawford Square Business District	Multiunit commercial use
East	Crawford Square Business District	Two-family residential
West	Crawford Square Business District	Multiunit commercial/retail

Documents Reviewed

- Application for Tier 2 review
- Existing plot plan and certified plot plan prepared by Farland Corp dated January 2023
- Site Plan Set prepared by Spaulding Tougias Architects, Inc. dated October 19, 2023
- Narrative summary with spec sheets (undated, preparer unknown)

Analysis

1. Summary of Land Use Designation

Crawford Square Business District (CSBD) - The Crawford Square Business District (CSBD) accommodates and encourages small-scale establishments offering a wide variety of goods and services. It also provides for family dwellings living in upper floors of business buildings. Intensive development oriented to pedestrians is encouraged.

2. Compliance with Regulations

- a. The parcel size is non-conforming with zoning. The Planning Board of 1986 endorsed an "Approval Not Required" separating a single lot that contained #9 Short Street and a two-family residence #13/15 Short Street. Said plan was never recorded at the Norfolk Registry of Deeds. The lot lost the 3-year zoning protection afforded by MGL Chapter 40A, section 6 and, as a result, became non-conforming with subsequent amendments to the Town's Zoning Bylaws/Ordinances.
- b. The proposed siting of the structure, height, side and rear setbacks comply with zoning.
- c. The front yard setback is pre-existing non-conforming.
- d. The proposed impervious lot coverage does not comply with zoning.
- e. The proposed green space requirement is not provided in the plan set for review.
- f. Off-street parking requirements are not met as the structure is pre-existing.

3. Consistency with Plans

There are no inconsistencies with the Comprehensive Master Plan last updated in 2017.

4. Compatibility with Surrounding Neighborhood

This parcel is within a commercial district and is compatible with most surrounding uses. The adjacent two-family residential structure is pre-existing. The layout and design of the structure and site have no negative visual impact to the street front and adjacent businesses. It may have minimal impact to the abutting residences due to the addition of refrigeration units.

Staff Comments

1. Plan Review

- a. Pictorial renderings (page 4) depict a new door on the eastern side of the structure but there is no corresponding reference on the civil plans A-101). Either the civil plan or the pictorial renderings submitted should be correct to accurately indicate the intent.
- b. The plan set (A-101) indicated concrete sloping to a “private way”. There is no private way associated with the parcel. Plan notes should be corrected.
- c. The plan set (A-101) indicates the fencing is vinyl coated fence but the narrative with spec sheets calls out a fence panel. Either the civil plan or the pictorial renderings submitted should be correct to accurately indicate the intent.
- d. The plan set (A-101) calls out a drain at the landing but no plan set includes the placement of a dry well.
- e. The plans do not call out roof drains and how the run-off will be managed.

2. Conservation Commission Review

- a. The proposal does not lie within a floodplain nor near any known wetlands. A review by Conservation does not appear to be required.

3. Stormwater

- a. The project does not propose earth disturbance that would trigger a stormwater review and approval.

4. Department of Public Works

- a. The plan set references modification of the public right of way at the entrance to the structure. This work must be coordinated with the Department of Public Works to the Town’s specifications. The replacement of the entire sidewalk in front of the structure should be replaced with a concrete sidewalk and granite curbing with a 6” reveal.

5. Site Generated Noise

- a. The site is anticipated to produce minimally more noise than previous use only due to the introduction of exterior refrigeration units.