

PRELIMINARY SITE PLAN DOCUMENTS

FOR

SLV ASHLAND, LLC

PROPOSED

40B DEVELOPMENT

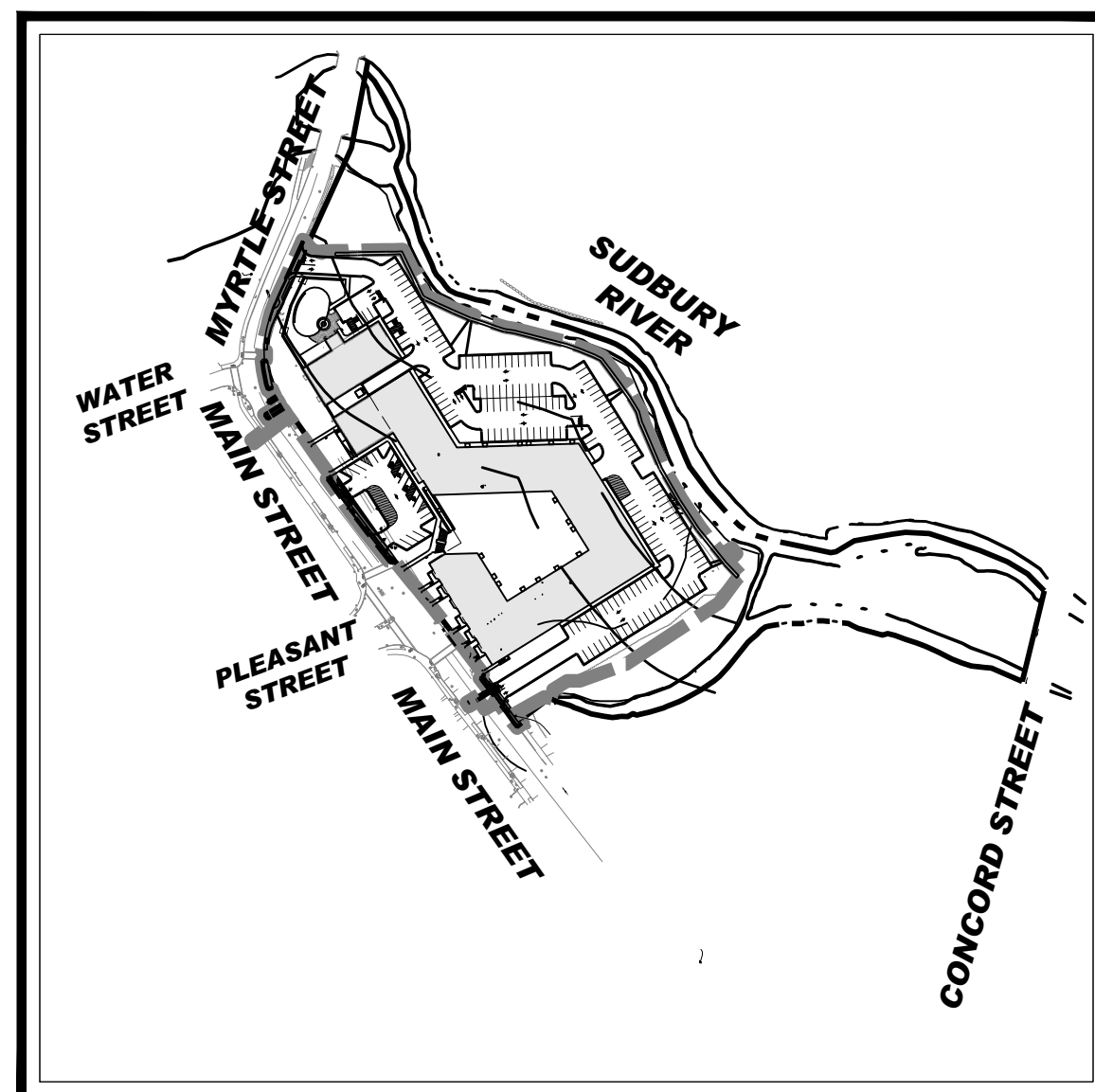
"THE SANCTUARY AT ASHLAND MILLS"

50 MAIN STREET, TOWN OF ASHLAND
MIDDLESEX COUNTY, MASSACHUSETTS
MAP 14, LOT 128

REFERENCES AND CONTACTS

REFERENCES
 ♦ ALL TAINSPS LAND TITLE SURVEY:
 FELDMAN GEOSPATIAL
 152 HAMPDEN STREET
 BOSTON, MA 02118
 DATED: 08/23/2024
 JOB # / SURVEY JOB #2400483-EX
 ELEVATIONS: NAVD 1988
 ♦ ARCHITECTURAL PLAN:
 EMBARC
 580 HARRISON AVENUE, SUITE 2W
 BOSTON, MA 02118
 DATED: 05/17/2024

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS. HOWEVER, BOHLER DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.



LOCATION MAP

SCALE: 1" = 250'

PREPARED BY

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EXISTING CONDITIONS PLAN OF 10-50 MAIN STREET IN ASHLAND, MA (BY OTHER)	3 SHEETS



REVISIONS

REV	DATE	COMMENT	CHECKED BY
1	07/15/2024	ADDED EPA MONITORING WELLS	JDG
2	08/01/2024	COMPREHENSIVE PERMIT	CSE
3	02/25/2025	TRAFFIC COMMENTS	LEC
4	03/12/2025	RESPONSE TO HANCOCK COMMENTS	EKR



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PROJECT No.: MAA230359-00-3A
 DRAWN BY: CSE
 CHECKED BY: JAK
 DATE: 02/25/2025
 CAD ID: P-CIVIL-CNDS

PRELIMINARY SITE DEVELOPMENT PLANS

FOR
SLV ASHLAND, LLC
 PROPOSED
 40B DEVELOPMENT
 "THE SANCTUARY AT ASHLAND MILLS"
 MAP: 14 | LOT: 128
 50 MAIN STREET
 TOWN OF ASHLAND
 MASSACHUSETTS

BOHLER //

352 TURNPIKE ROAD, 3rd FLOOR
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900

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SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

REVISION 4 - 03/12/2025

GENERAL NOTE:
 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL, STATE AND FEDERAL CODES.

I:\BOHLER\NET\SHARES\BMA\PROJECTS\2023\MAA230359-00-3A\DRAWINGS\PLAN SETS\DEVIL SITE PLAN\BP-CIVIL-CNDS-MAA230359-00-3A-LAYOUT-C-01.COV

ZONING TABLE

ZONE: INDUSTRIAL (ADD A OVERLAY DISTRICT)
 USE: MIXED-USE AND MULTIFAMILY RESIDENTIAL
 MAP: 14 LOT: 128

APPLICANT/ OWNER INFORMATION

APPLICANT: SLV ASHLAND, LLC
 257 HILLSIDE AVENUE
 NEEDHAM, MA 02464

PROPERTY OWNER: ASHLAND PROPERTIES LLC
 330 HOPPING BROOK ROAD
 HOLLISTON, MA 01746

BULK REQUIREMENTS

ITEM	CODE	PERMITTED	EXISTING	PROPOSED
MIN LOT AREA	§ 8.5.6.1	35,000 SF	±340,142 SF (±7.8 AC)	NO CHANGE
MIN LOT FRONTAGE	§ 8.5.6.1	100'	±1,031.13'	NO CHANGE
MIN YARD SETBACKS				
FRONT YARD	§ 8.5.6.1	8' MIN / 15' MAX.	16.2'	16.3' (BUILDING) 12.9' (RETAINING WALL)
SIDE YARD	§ 8.5.6.1	0' IF COMMON WALL / 10' MIN. OTHERWISE	56.8'	79.8'
REAR YARD	§ 8.5.6.4	12' MIN.	±609.2'	±529.5'
MAX PERMITTED HEIGHT	§ 8.5.6.1	38' (3 STORIES)	±1.2 STORIES	69' - 11" (8 STORIES) (3) FIVE STORIES OVER PARKING GARAGE ±1.67' - 11" FROM STREET GRADE
LOT COVERAGE	NIS	NIS	±26.8%	±24.0%
IMPERVIOUS COVERAGE	NIS	NIS	±57.7%	±48.1%
WETLAND AREA	NIS	N/A	±24.9%	NO CHANGE
FLOODPLAIN AREA	NIS	N/A	±31.5% (4)	±38.9% (5)

PARKING REQUIREMENTS

FRONT PARKING SETBACK	§ 5.1.3	10' MIN. FROM ROW	4.8(E)	25.3'
PARKING STALL CRITERIA STANDARD: 9 FT X 18 FT	§ 5.1.2	331 (1)		371 (2)
ACCESSIBLE PARKING CRITERIA STANDARD: 9 FT X 18 FT STALL (MIN.) 5 FT X 18 FT AISLE (MIN.) VAN: 8 FT X 18 FT STALL (MIN.) 8 FT X 18 FT AISLE (MIN.)	N/A	PER 521 CMR 10.3 - ACCESSIBLE SPACES. SHALL BE PROVIDED IN SUFFICIENT NUMBERS TO MEET THE NEEDS OF THE DWELLING UNIT OCCUPANTS.		7 SURFACE SPACES 7 COVERED SPACES

KEY:
 (E) - EXISTING
 (P) - SEE NOTE #



(1) PER SECTION 8.5.13 OF THE TOWN OF ASHLAND ZONING BYLAWS, IN THE ASHLAND DOWNTOWN DISTRICT, THE NUMBER OF PARKING SPACES REQUIRED FOR EACH USE SHALL BE 75% OF THOSE STATED IN SECTION 5.1 OF THE TOWN OF ASHLAND ZONING BYLAWS, WHERE THERE IS A MIXTURE OF LAND USES ON ONE LOT. THE NUMBER OF PARKING SPACES REQUIRED SHALL BE ONLY 75% OF THOSE STIPULATED ABOVE. THAT IS, WHERE THERE IS A MIXTURE OF USES THE PARKING REQUIREMENT WILL BE 56.25% (75% TIMES 75%).

USE/CATEGORY: MIXED-USE RESIDENTIAL, RETAIL & RESTAURANT
 REQUIRED PARKING CALCULATION:
 RESIDENTIAL:
 2 SPACES PER DWELLING UNIT:
 (2 SPACES / D.U.) X 250 UNITS = 500 SPACES

RETAIL:
 1 SPACE PER 180 SF OF LEASABLE FLOOR SPACE:
 (1 SPACE / 180 SF) X 6,500 SF = 36.1 = 37 SPACES

RESTAURANT:
 1 SPACE PER 4 SEATS:
 (1 SPACE / 4 SEATS) X 168 SEATS = 42 SPACES

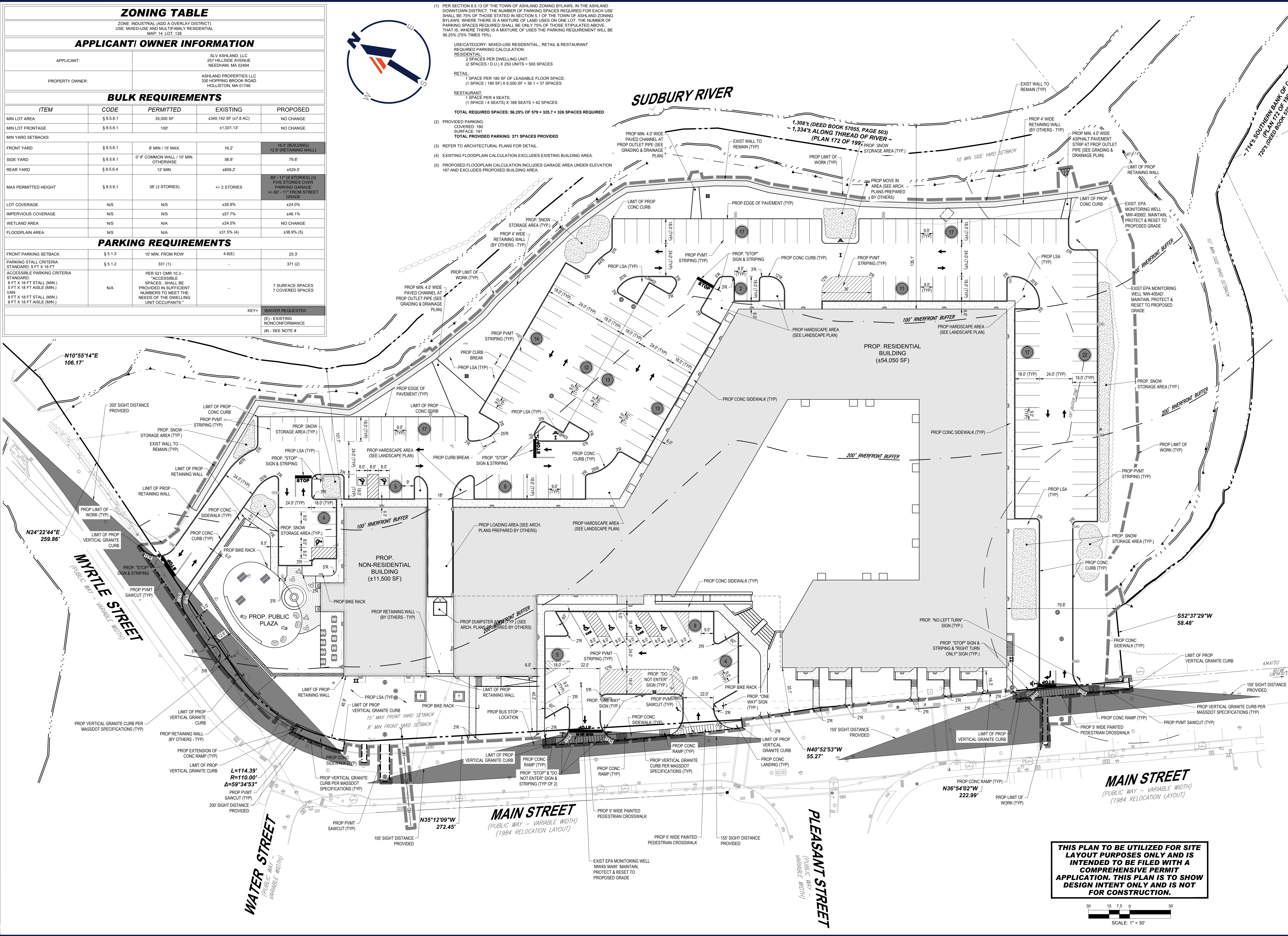
TOTAL REQUIRED SPACES: 56.25% OF 579 = 325.7 = 326 SPACES REQUIRED

(2) PROVIDED PARKING:
 COVERED: 180
 SURFACE: 191
TOTAL PROVIDED PARKING: 371 SPACES PROVIDED

(3) REFER TO ARCHITECTURAL PLANS FOR DETAIL.

(4) EXISTING FLOODPLAIN CALCULATION EXCLUDES EXISTING BUILDING AREA.

(5) PROPOSED FLOODPLAIN CALCULATION INCLUDES GARAGE AREA UNDER ELEVATION 187 AND EXCLUDES PROPOSED BUILDING AREA.



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REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
1	07/15/2024	ADDED EPA MONITORING WELLS	JAK	JAK
2	08/01/2024	COMPREHENSIVE PERMIT	JAK	CSE
3	02/25/2025	TRAFFIC COMMENTS	JAK	LEC
4	03/12/2025	RESPONSE TO HANCOCK COMMENTS	JAK	EKR

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COMPREHENSIVE PERMIT PLANS

PROJECT No.: MAA230359 00-3A
 DRAWN BY: CSE
 DATE: 02/25/2025
 CAD ID: P-CIVL-PROP

PRELIMINARY SITE DEVELOPMENT PLANS

FOR
SLV ASHLAND, LLC
 PROPOSED 40B DEVELOPMENT "THE SANCTUARY AT ASHLAND MILLS"
 MAP: 14 | LOT: 128
 50 MAIN STREET
 TOWN OF ASHLAND MASSACHUSETTS

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 352 TURNPIKE ROAD, 3rd FLOOR
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J.A. BOHLER CIVIL
 JOHN A. BOHLER
 CIVIL ENGINEER
 No. 41530
 MAINE PROFESSIONAL ENGINEER
 15476
 19177
 MAINE LICENSE No. 9616
 MAINE LICENSE No. 12553

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C-301

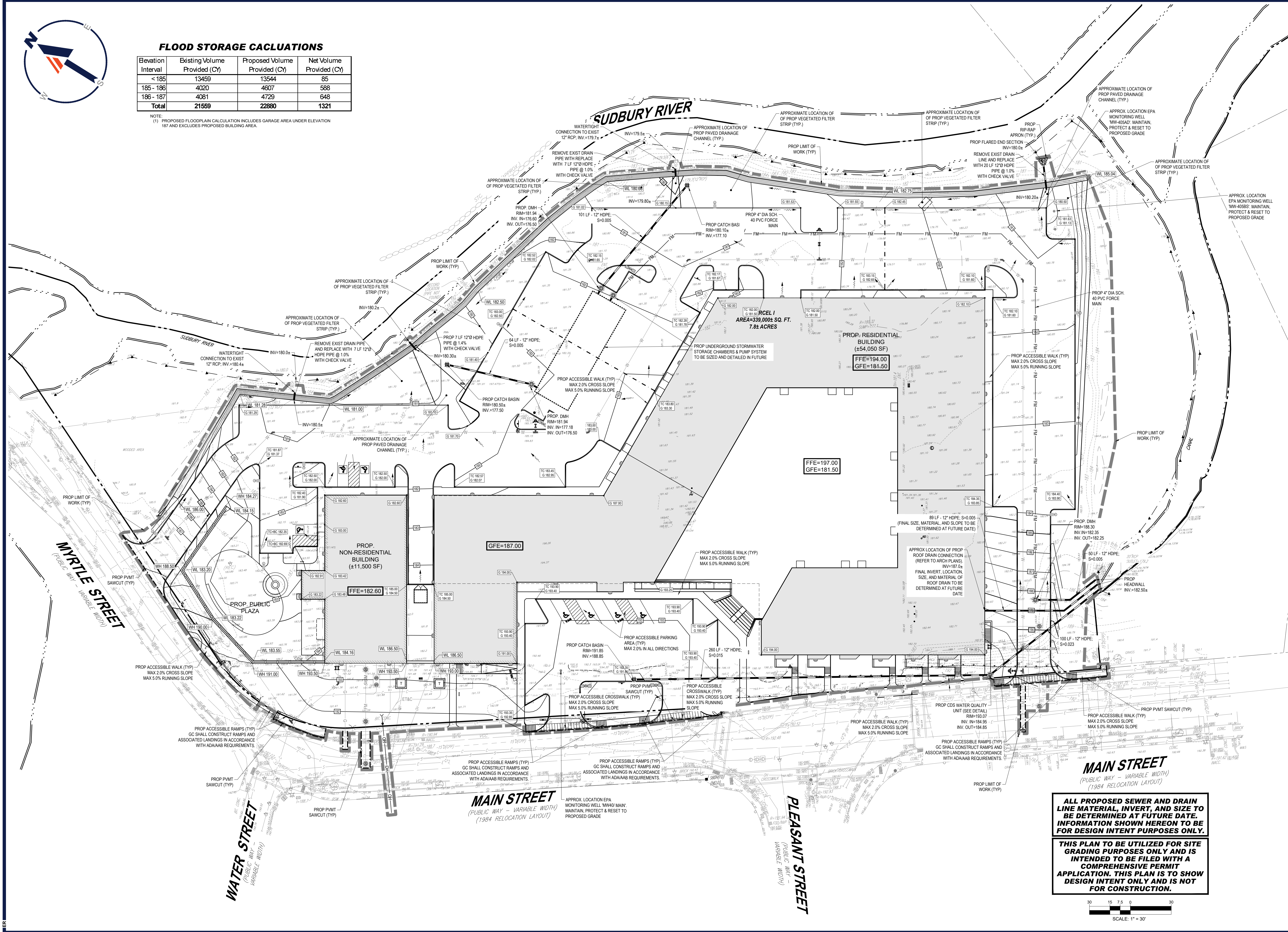
REVISION 4 - 03/12/2025



FLOOD STORAGE CALCULATIONS

Elevation Interval	Existing Volume Provided (Cy)	Proposed Volume Provided (Cy)	Net Volume Provided (Cy)
< 185	13459	13544	85
185 - 186	4020	4607	588
186 - 187	4081	4729	648
Total	21559	22880	1321

NOTE:
 (1) PROPOSED FLOODPLAIN CALCULATION INCLUDES GARAGE AREA UNDER ELEVATION 187 AND EXCLUDES PROPOSED BUILDING AREA



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 MA 01907
 NEW HAMPSHIRE No. 15476
 CONN. No. 19177
 RHODE ISLAND No. 0616
 MAINE LICENSE No. 12553

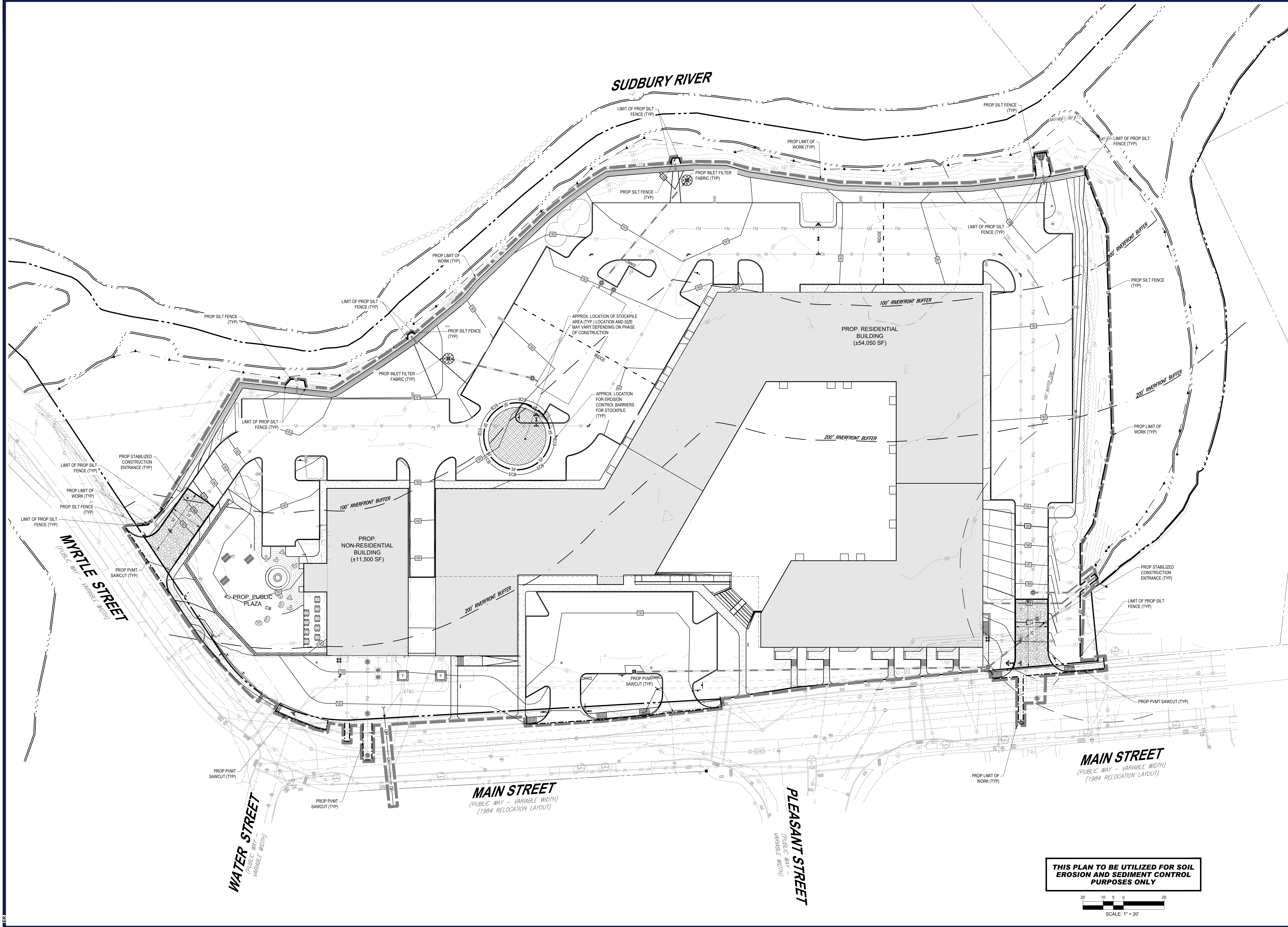
SHEET TITLE:
GRADING PLAN
 SHEET NUMBER:
C-401
 REVISION 4 - 03/12/2025

ALL PROPOSED SEWER AND DRAIN LINE MATERIAL, INVERT, AND SIZE TO BE DETERMINED AT FUTURE DATE. INFORMATION SHOWN HEREON TO BE FOR DESIGN INTENT PURPOSES ONLY.

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY AND IS INTENDED TO BE FILED WITH A COMPREHENSIVE PERMIT APPLICATION. THIS PLAN IS TO SHOW DESIGN INTENT ONLY AND IS NOT FOR CONSTRUCTION.

SCALE: 1" = 30'

BOHLER ENGINEERING, INC. PROJECT: MAA230359-00-3A - LAYOUT: C-401 (GRAD)



REVISIONS

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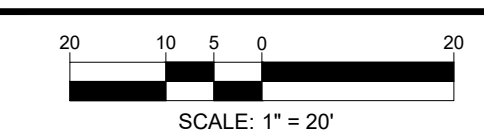
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No. 41530
MAINE PROFESSIONAL ENGINEER
15476
1947
RHODE ISLAND LICENSE No. 9516
MAINE LICENSE No. 12553

SHEET TITLE:
SOIL EROSION AND SEDIMENT CONTROL PLAN

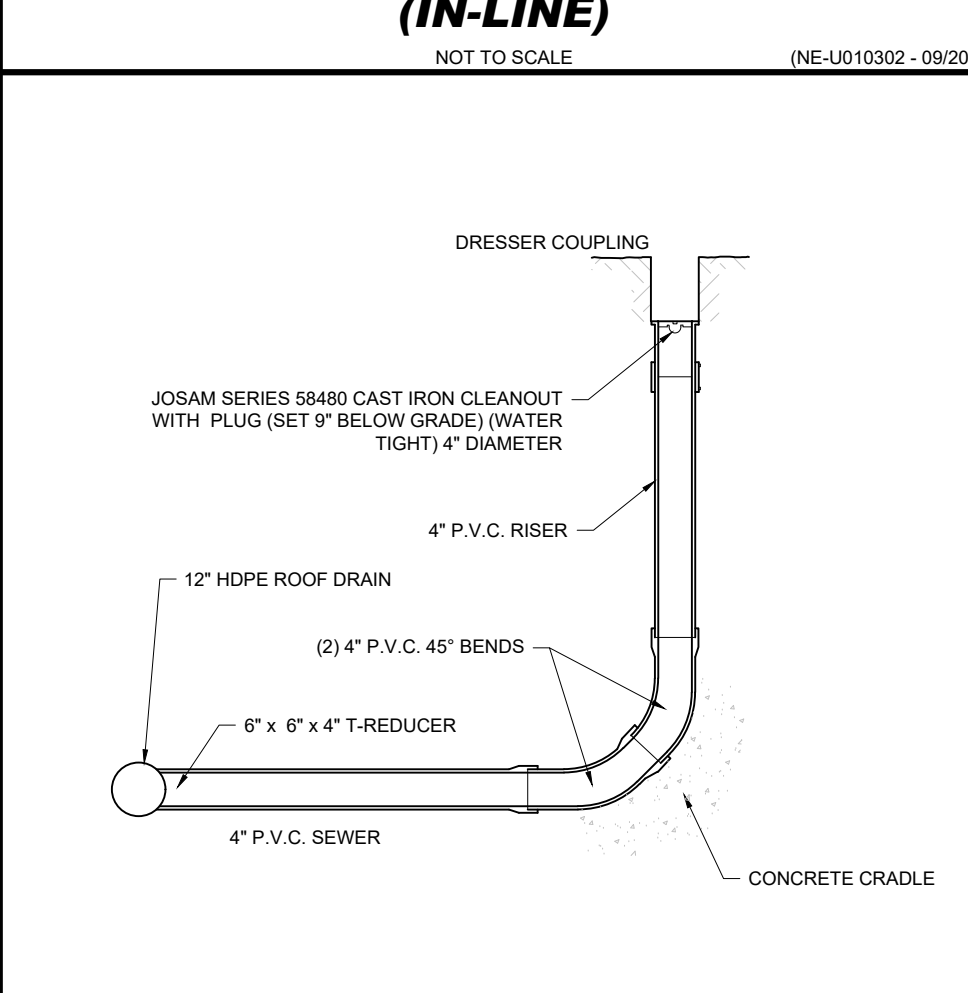
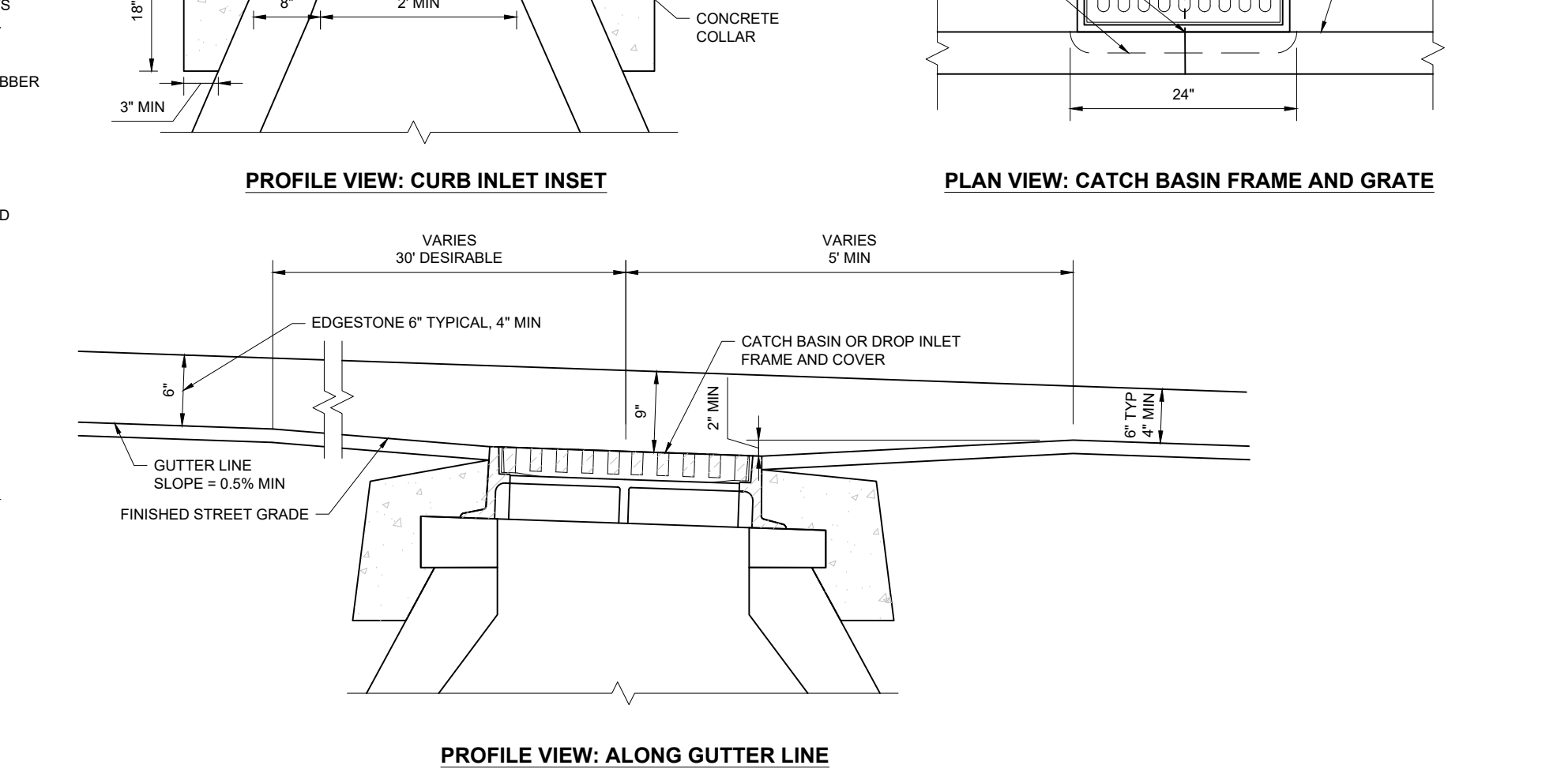
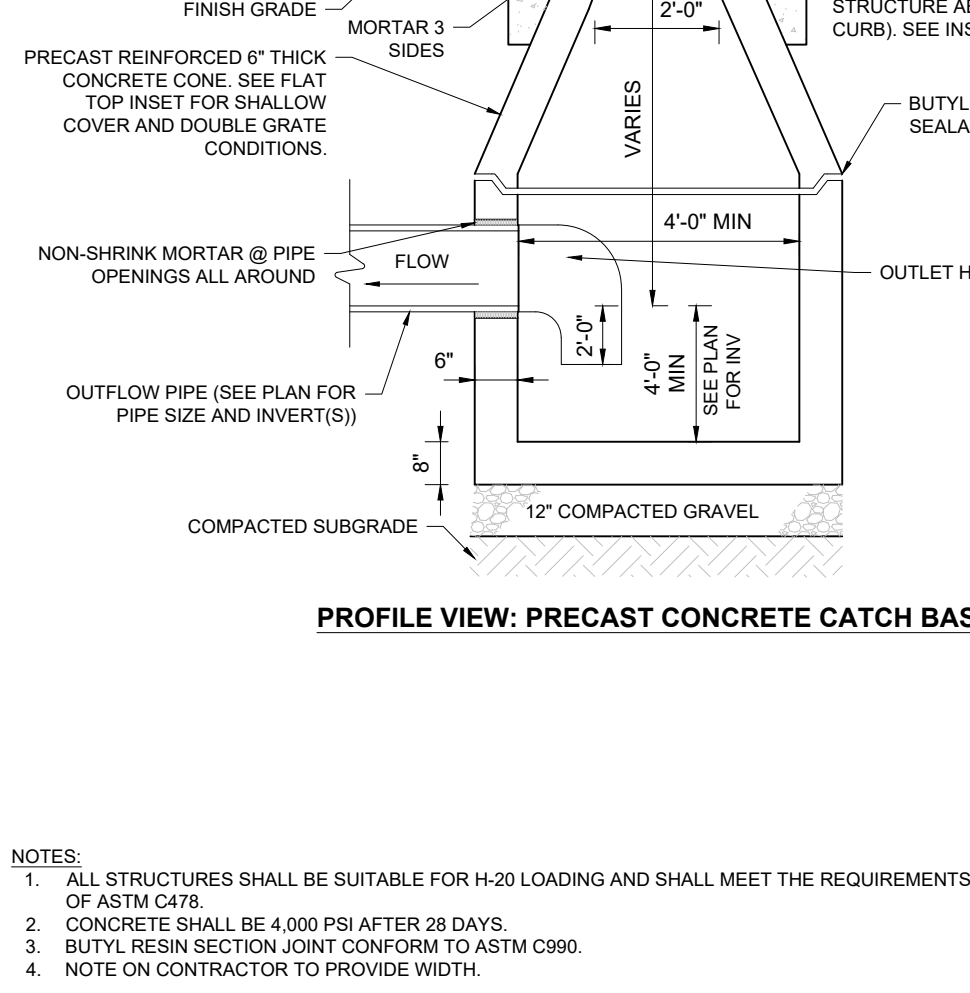
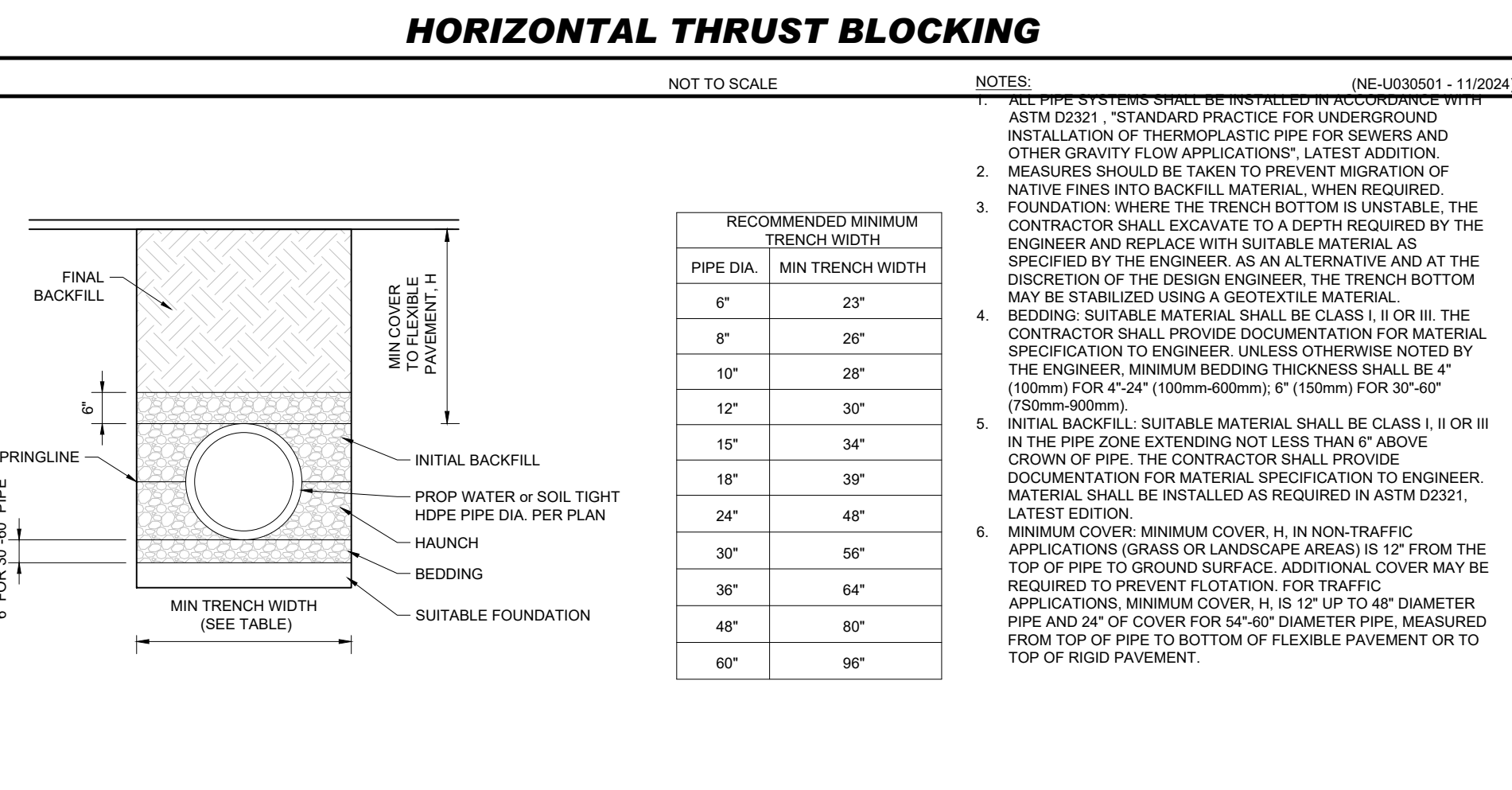
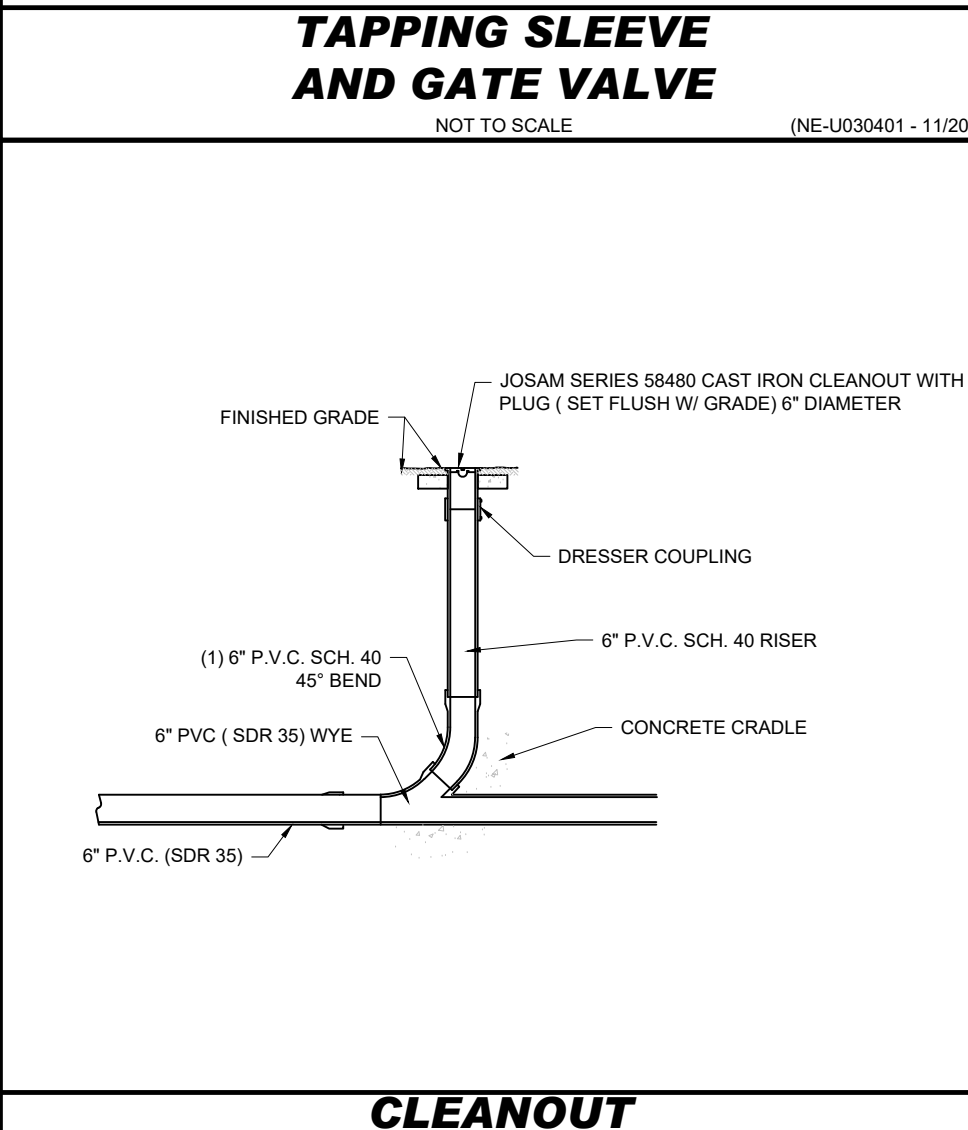
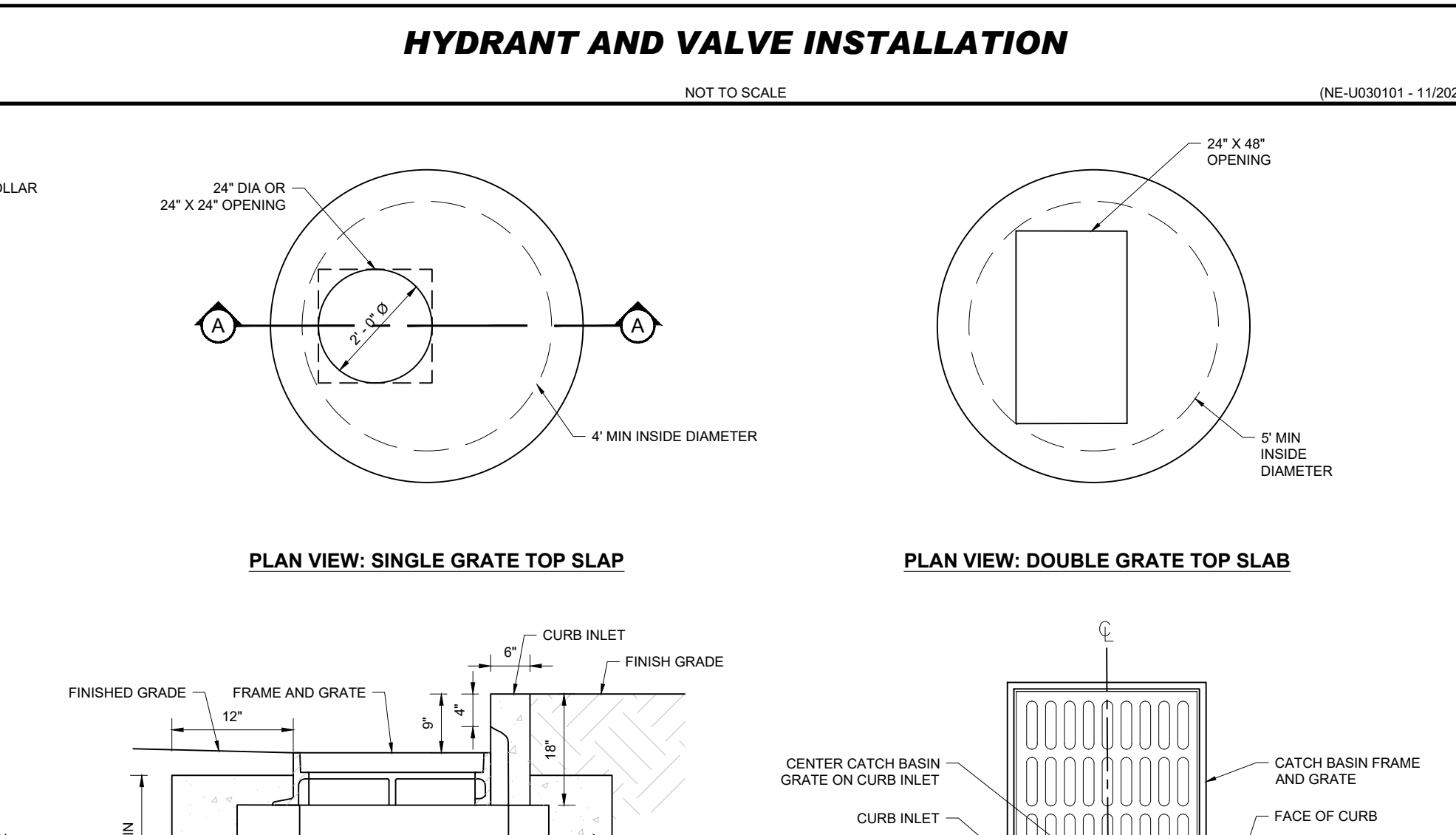
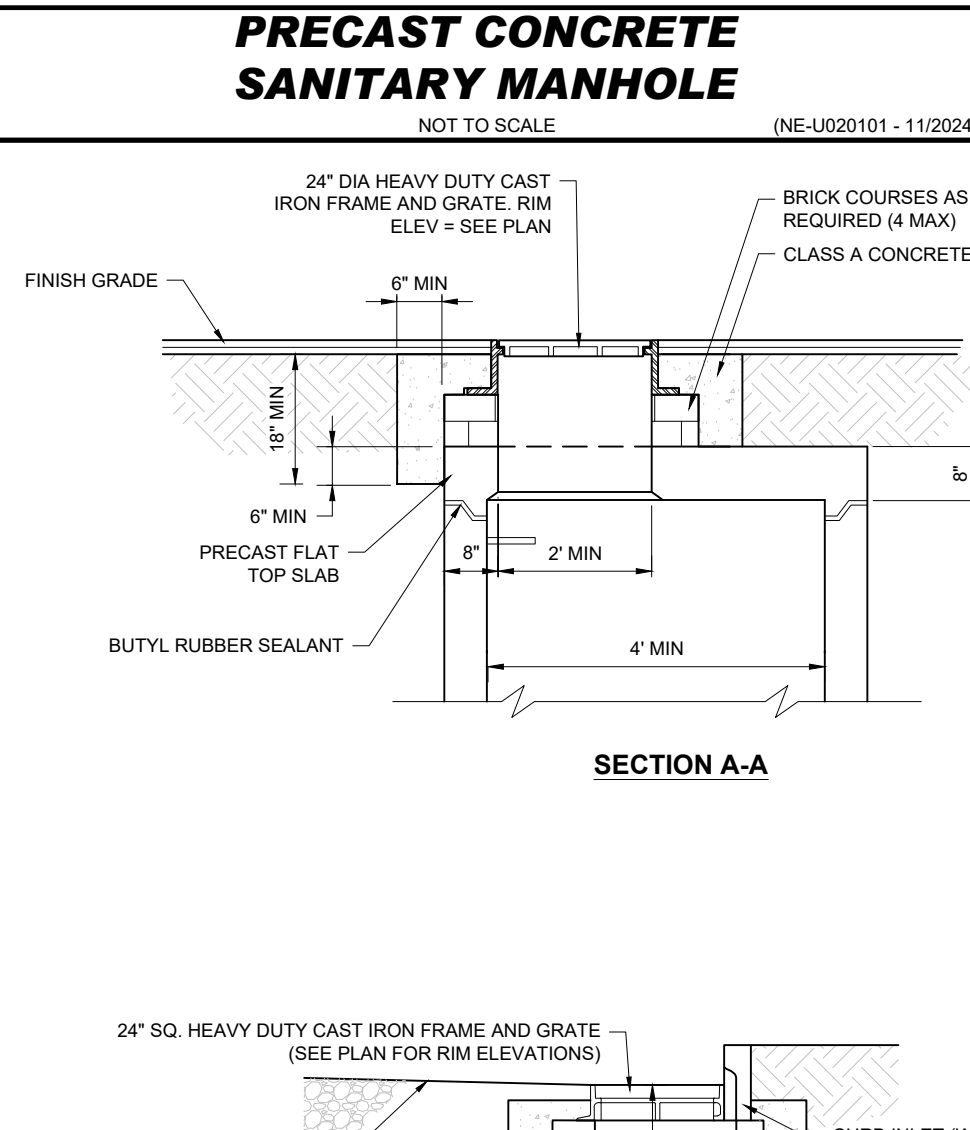
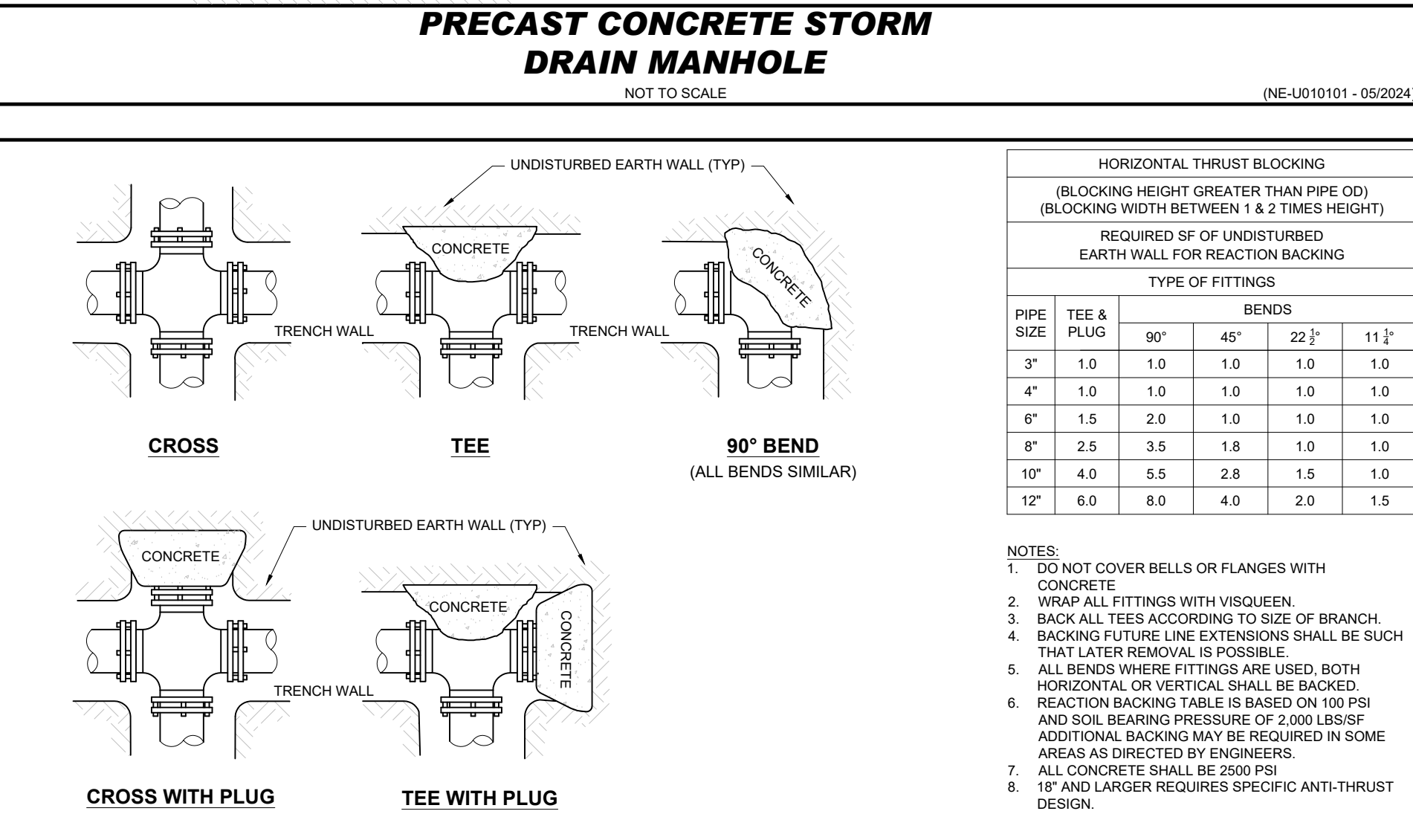
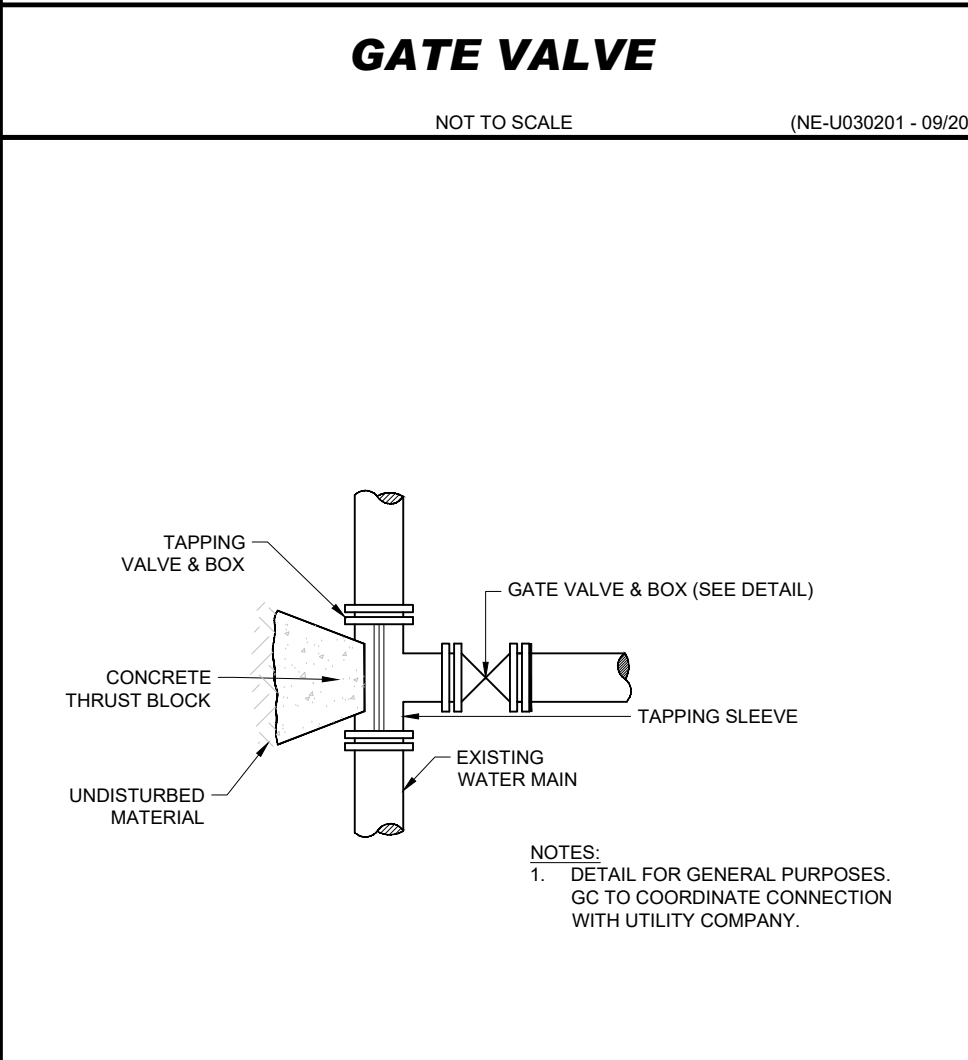
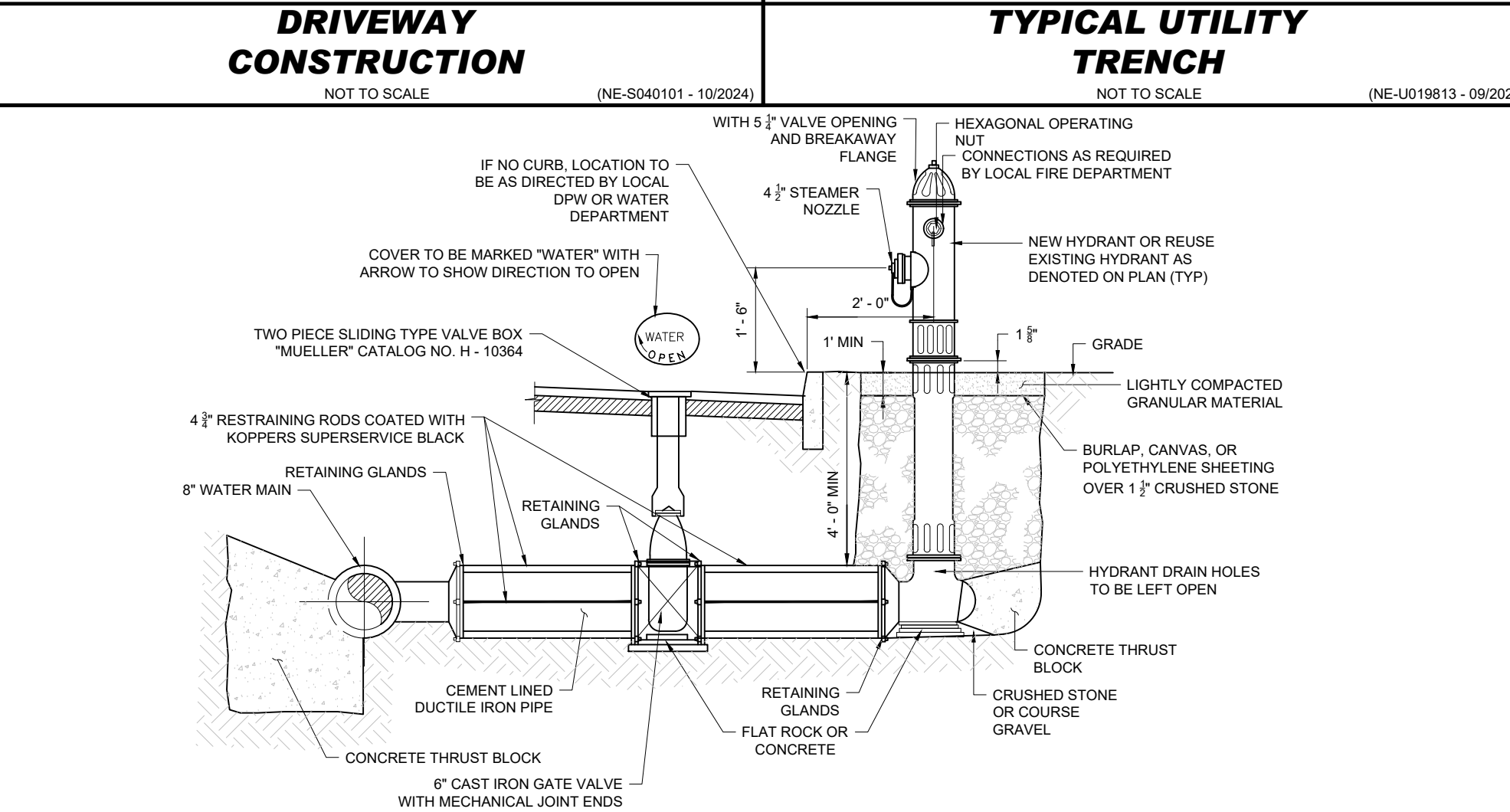
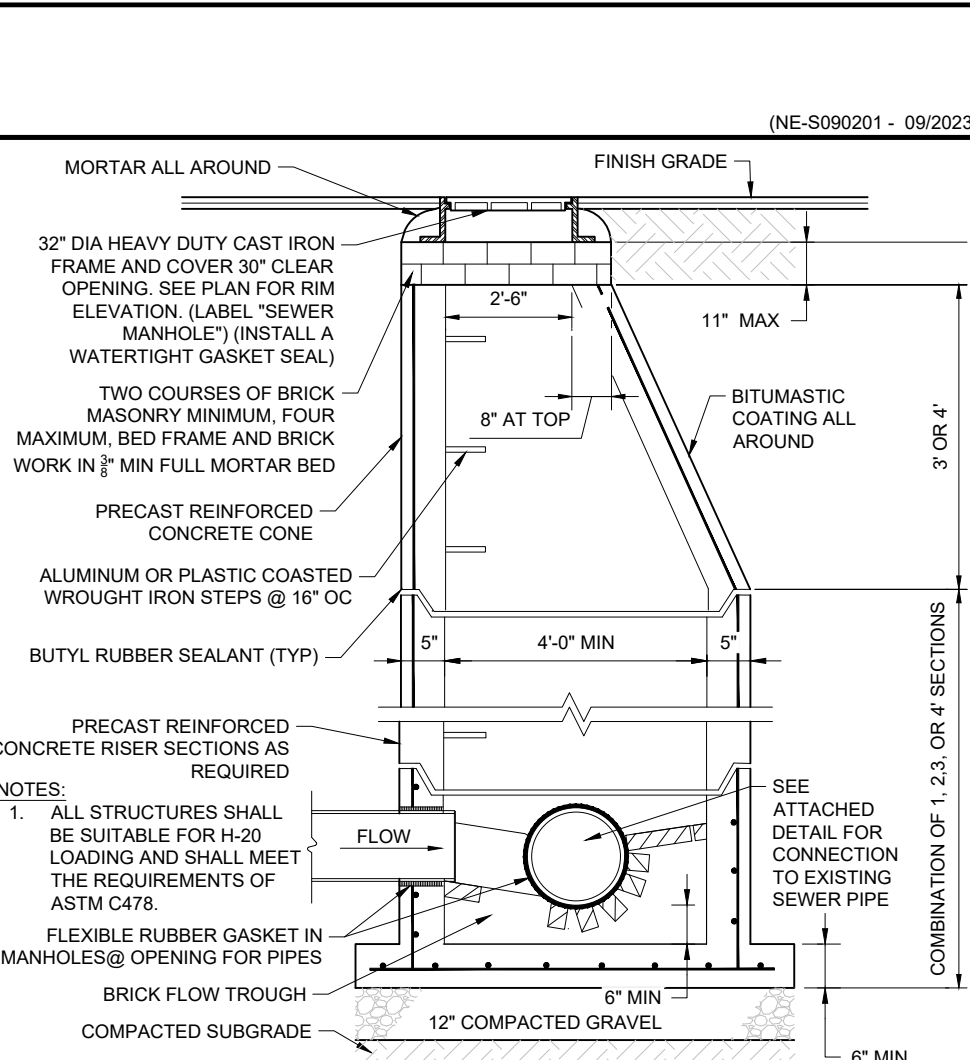
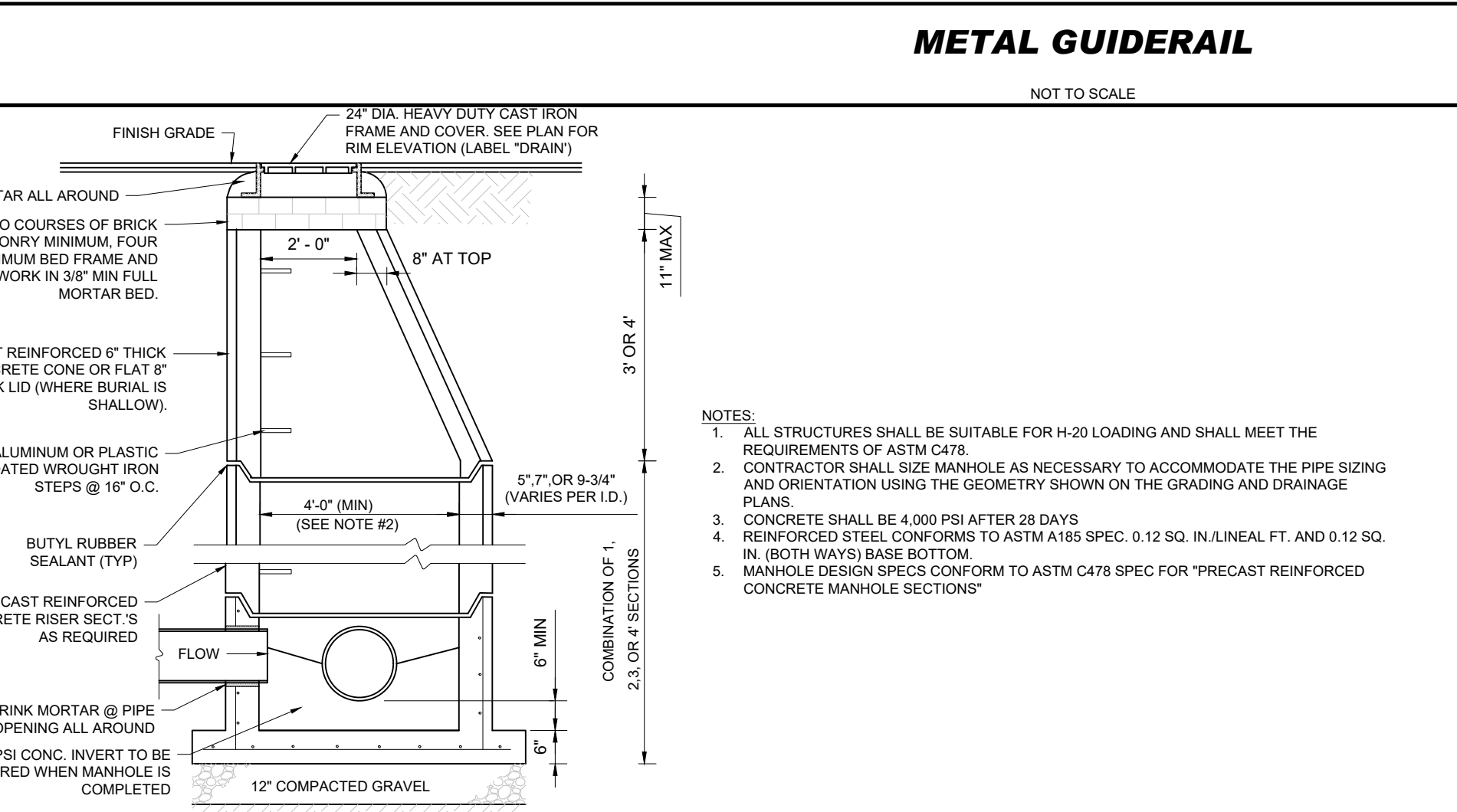
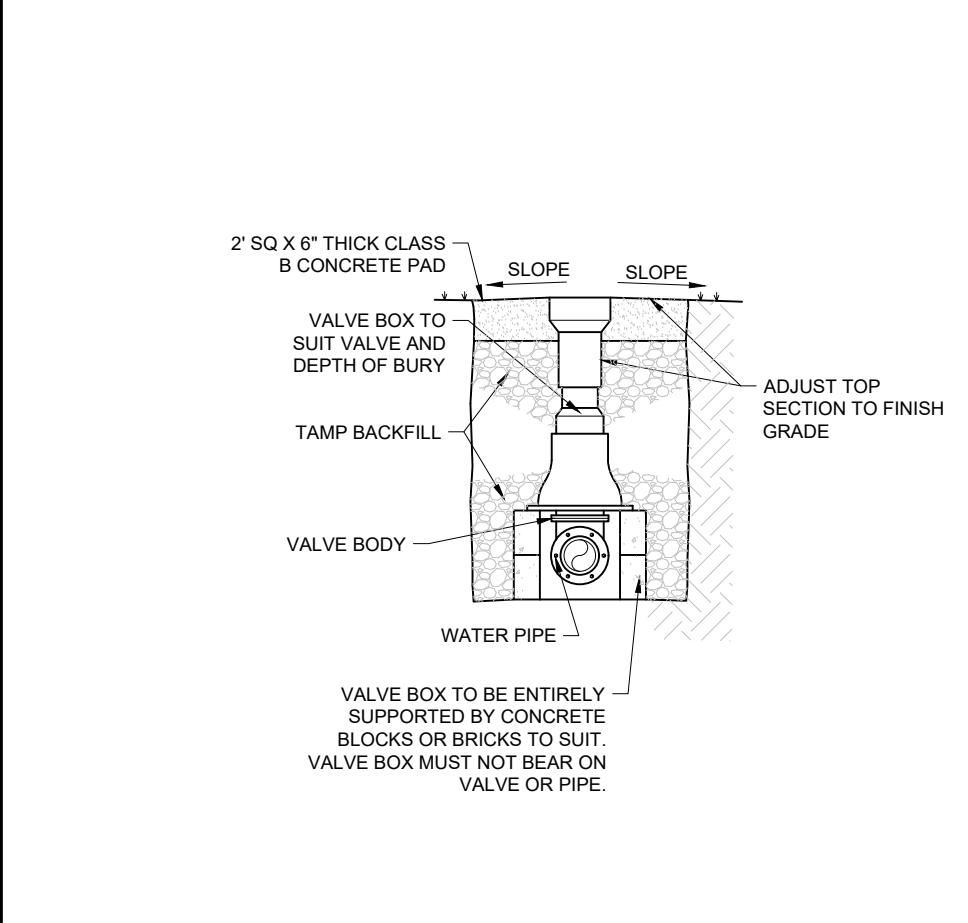
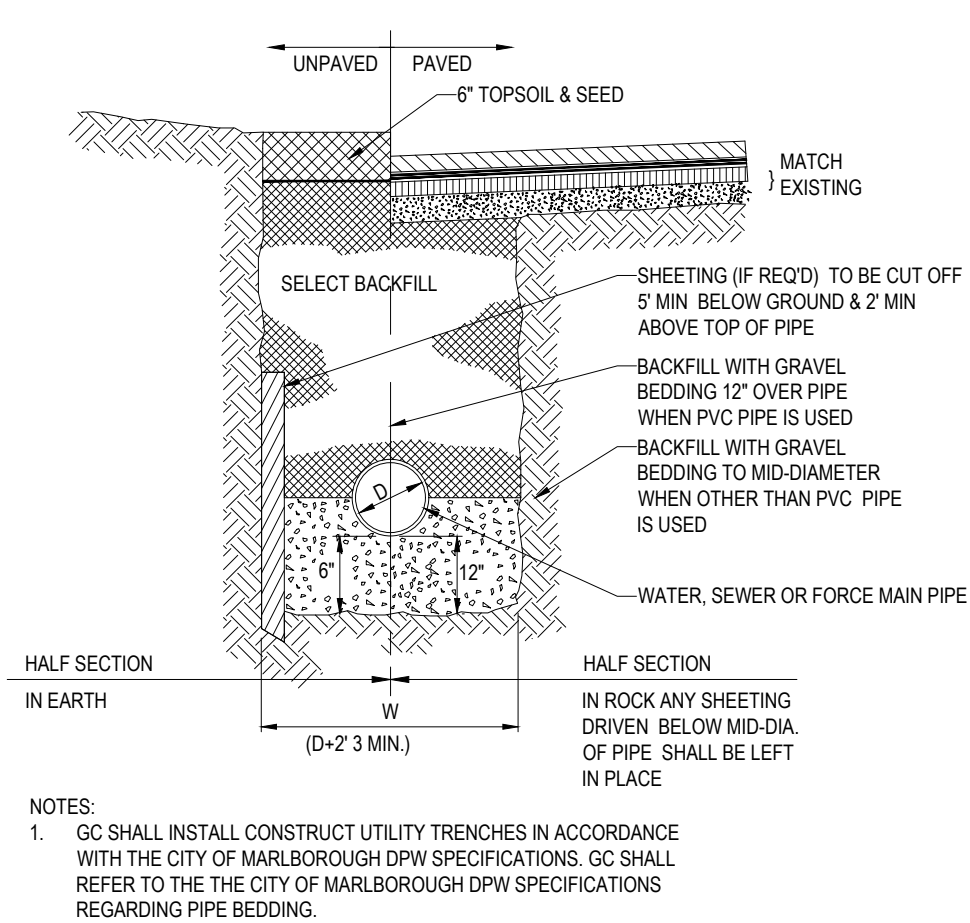
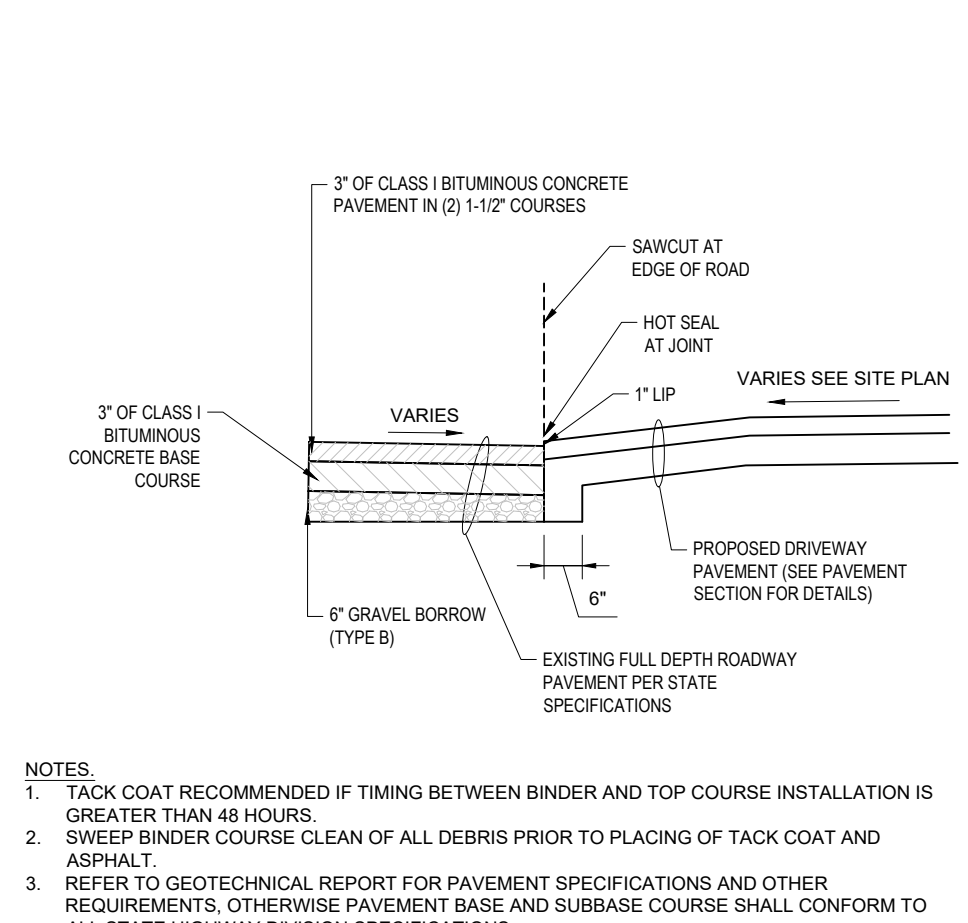
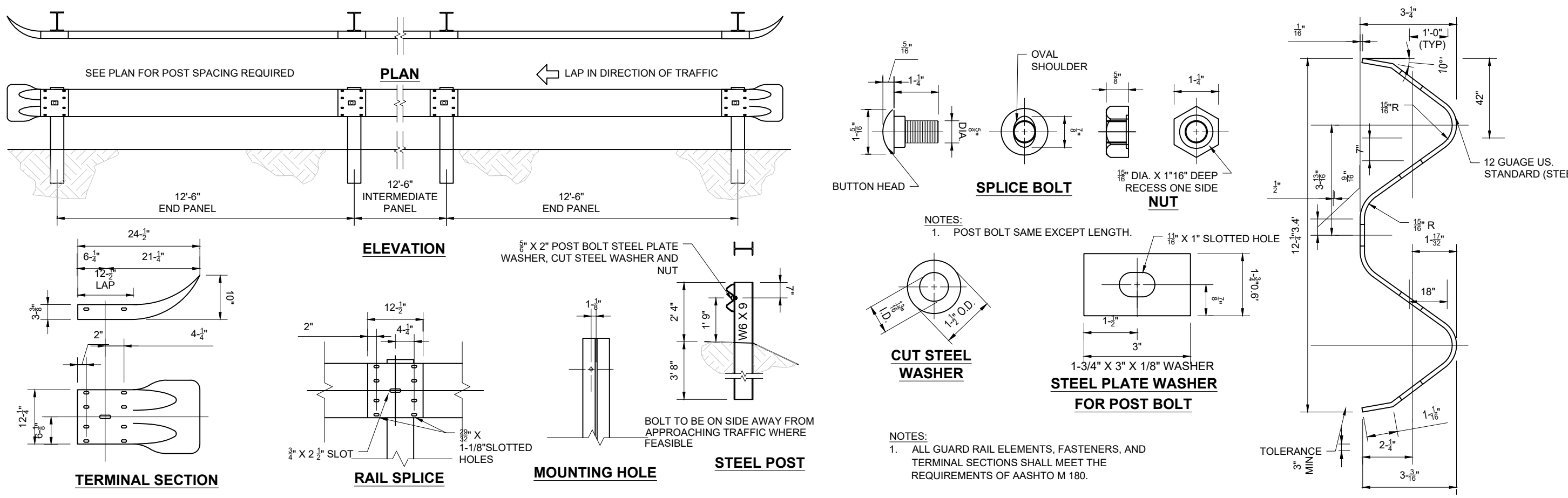
SHEET NUMBER:
C-801

REVISION 4 - 03/12/2025

THIS PLAN TO BE UTILIZED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY



BOHLER ENGINEERING, INC. PROJECT: 2023/03/15/2025 MAA230359 00-3A LAYOUT: C-801 EROSION



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1	07/15/2024	ADDED EPA MONITORING WELLS	JAK	JDG
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3	02/25/2025	TRAFFIC COMMENTS	LEC	JAK
4	03/12/2025	RESPONSE TO HANCOCK COMMENTS	EKR	JAK

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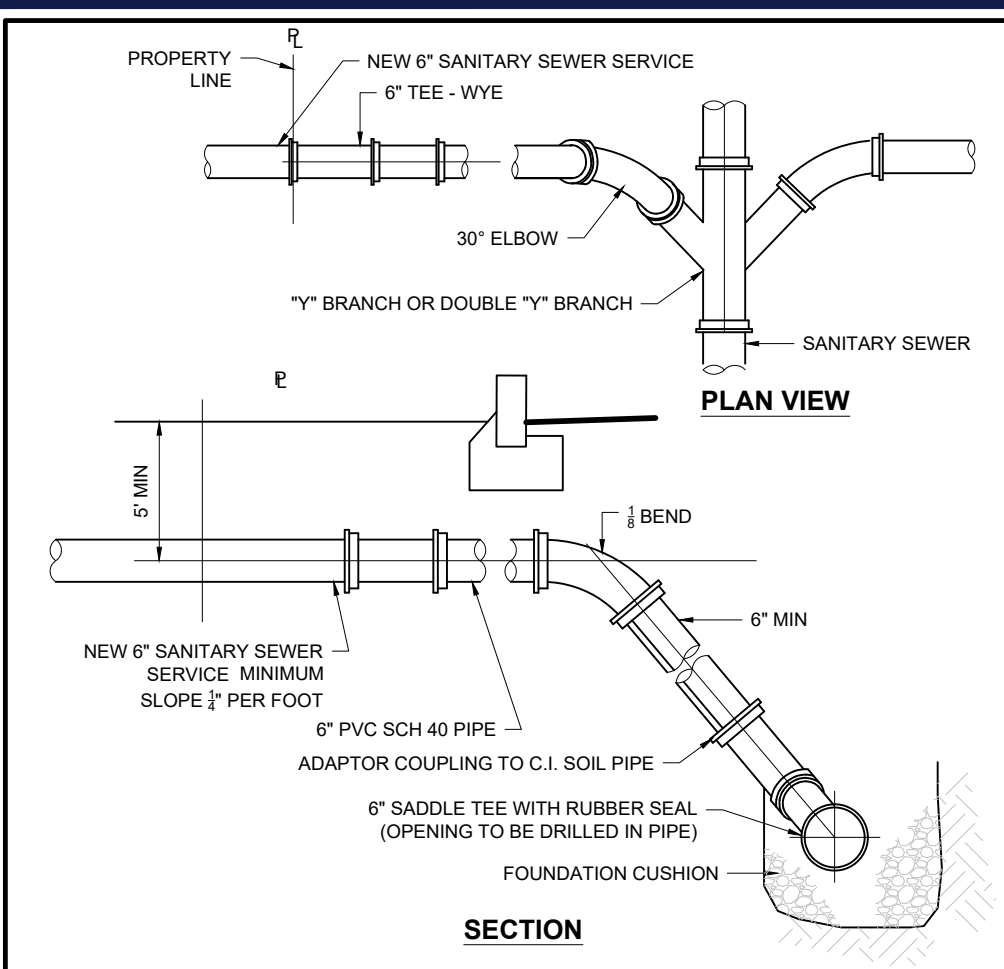
PROJECT No.: MAA230359 00-3A
DRAWN BY: CSE
CHECKED BY: DATE: 02/25/2025
DATE: P-CIVIL-CND
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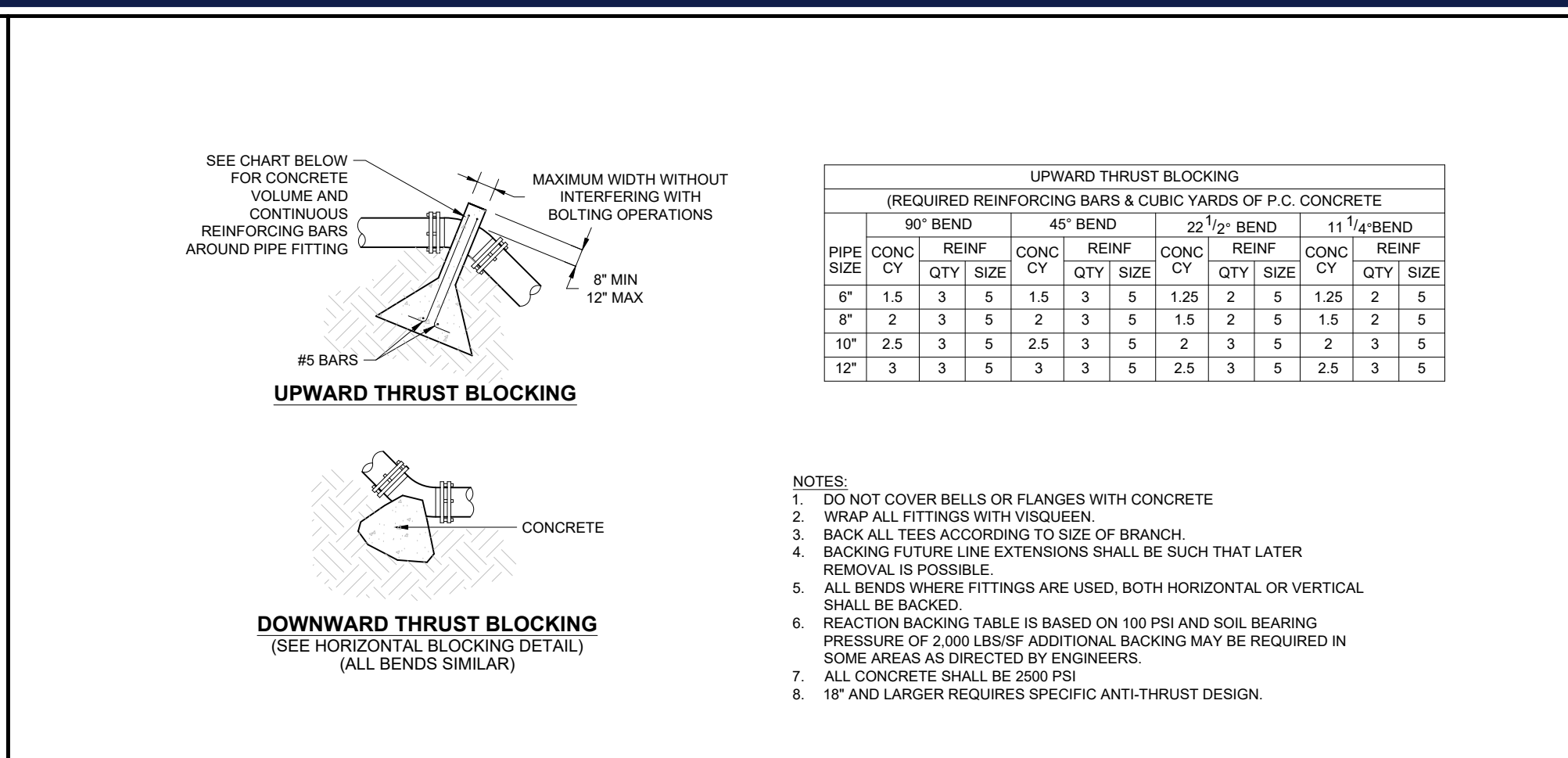
J. BOHLER
REGISTERED PROFESSIONAL ENGINEER
No. 41530
MASSACHUSETTS
PHYSICAL ADDRESS: No. 9516
MAINE LICENSE No. 12599

SHEET TITLE: **CONSTRUCTION DETAILS**
SHEET NUMBER: **C-902**
REVISION 4 - 03/12/2025

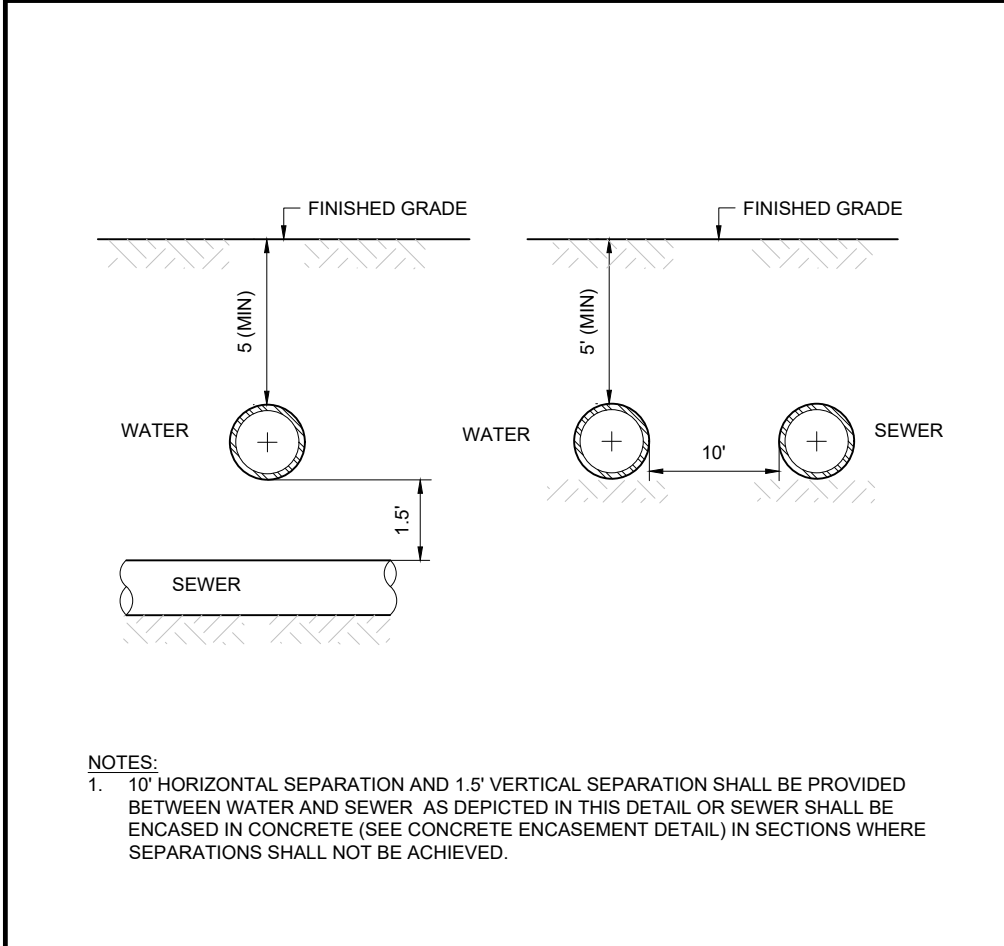
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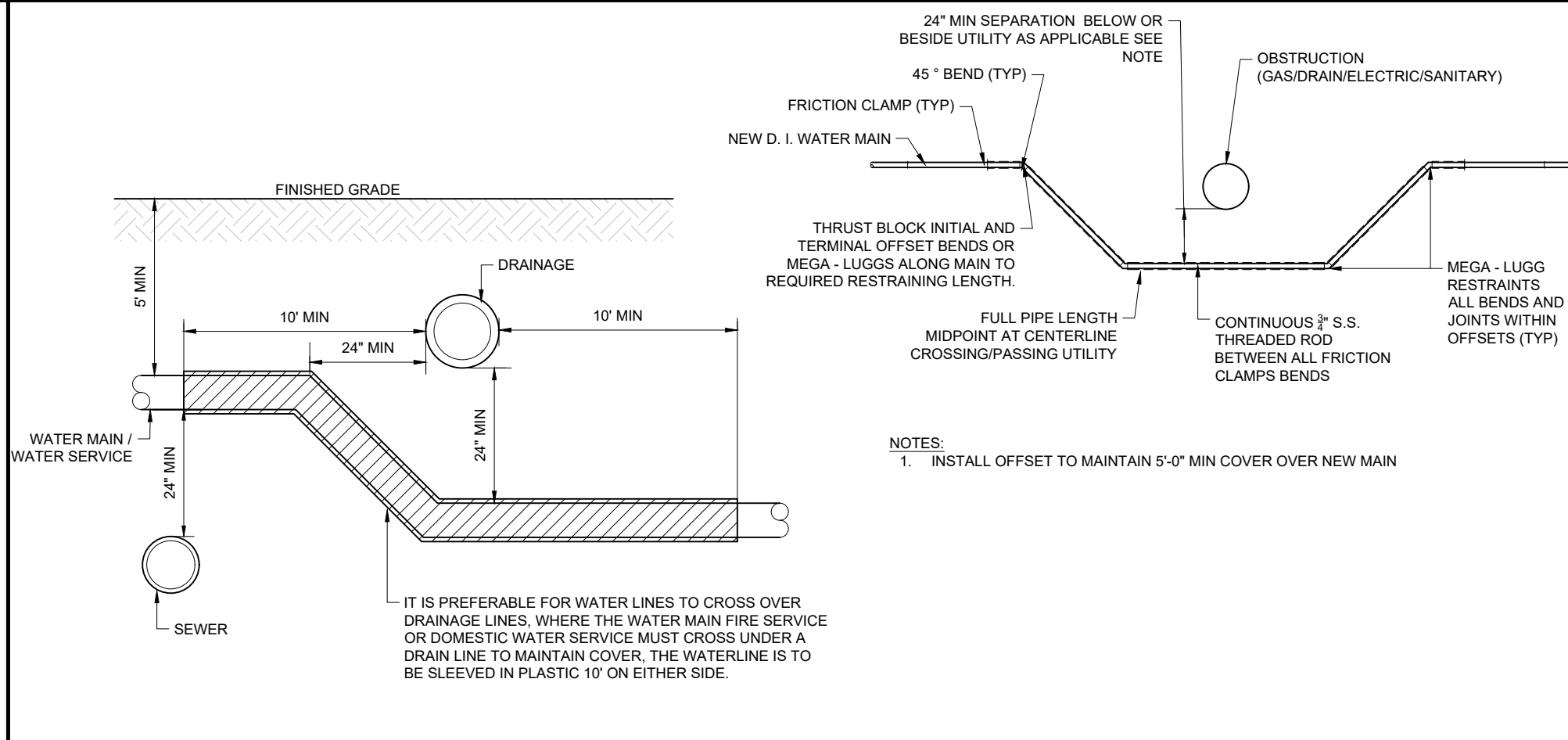
SANITARY MAIN CONNECTION
NOT TO SCALE (NE-U020401 - 09/2023)



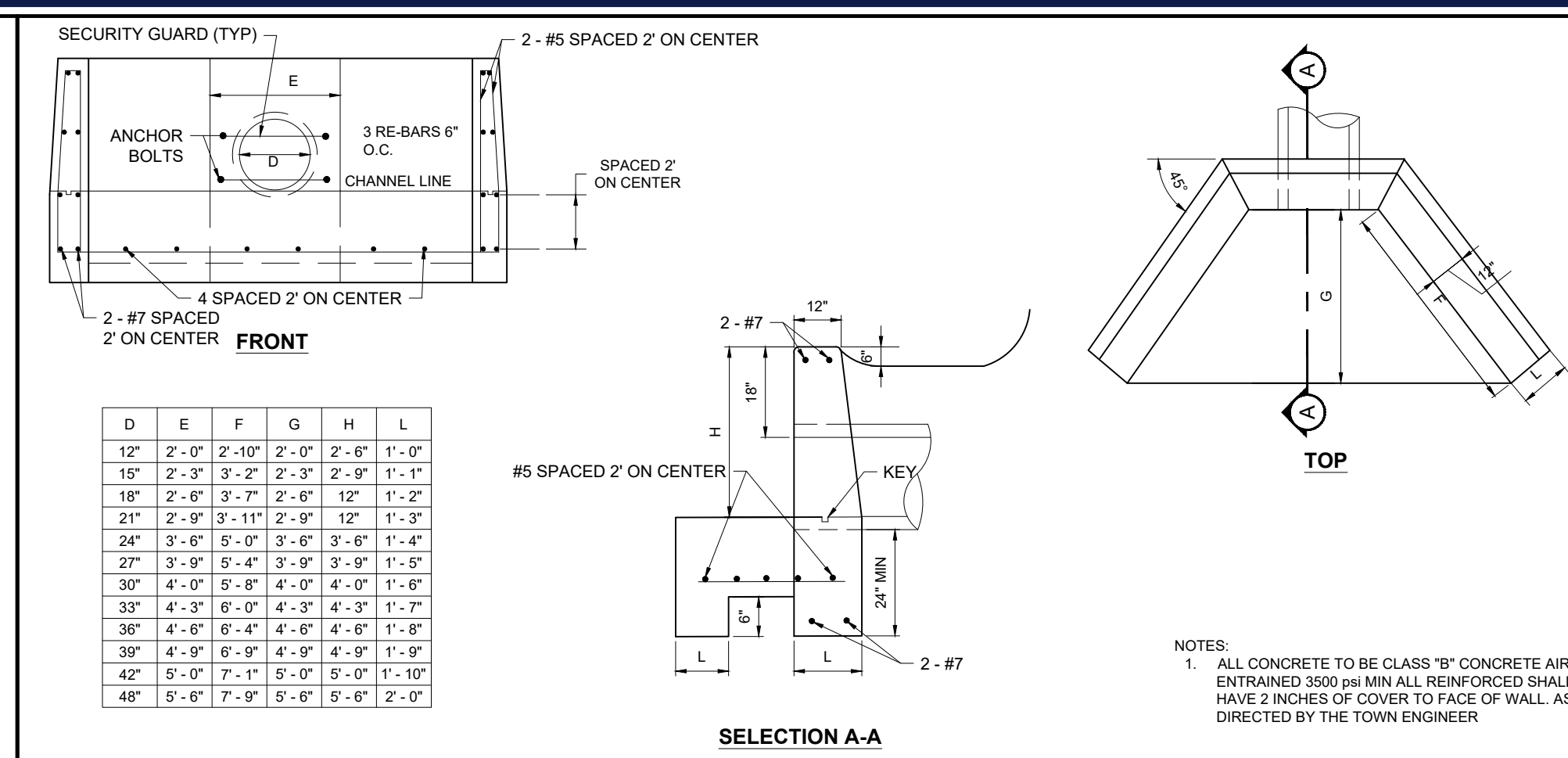
VERTICAL THRUST BLOCKING
NOT TO SCALE (NE-U030502 - 11/2024)



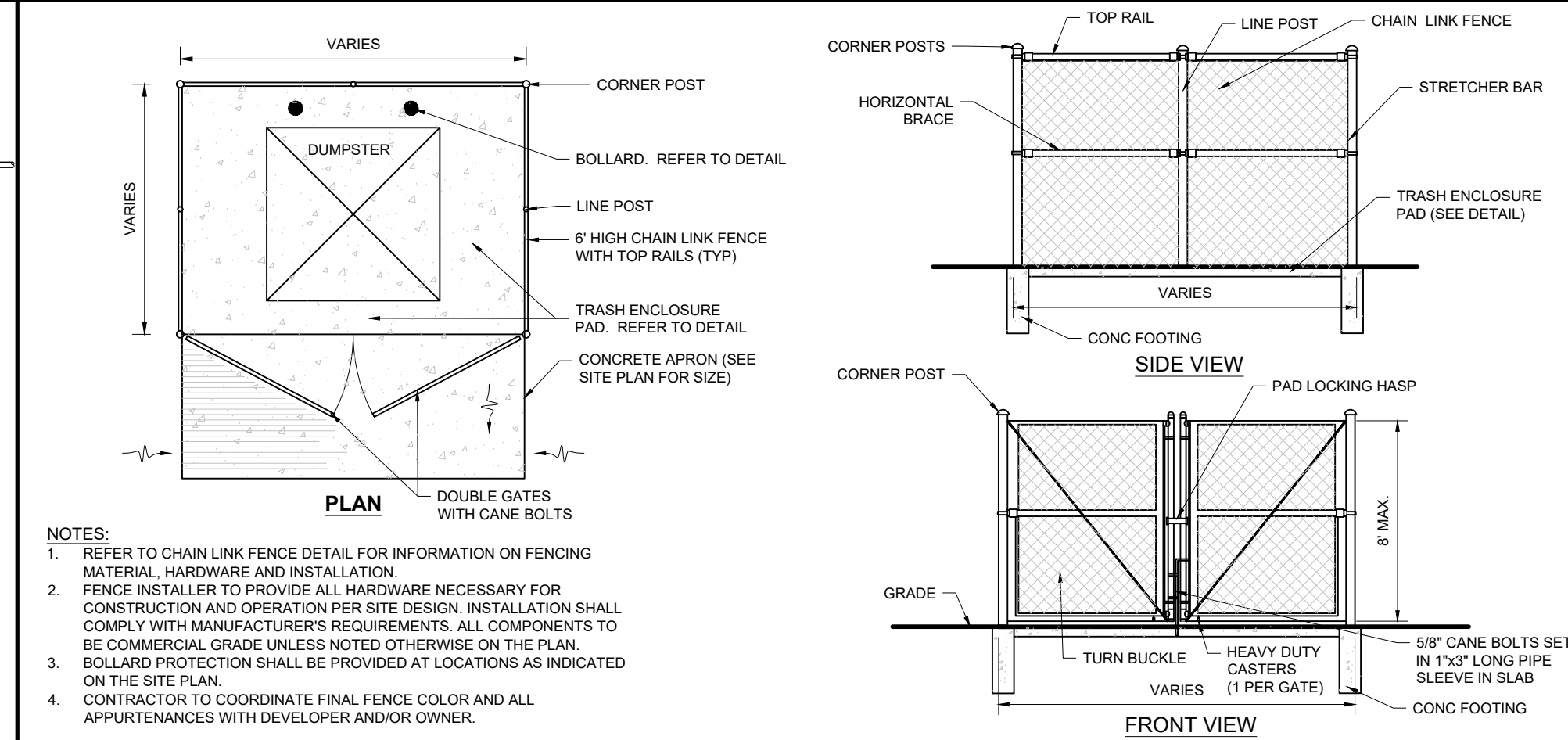
WATER AND SEWER UTILITY CROSSING
NOT TO SCALE (NE-U050101 - 09/2023)



WATER SERVICE OR MAIN AT UTILITY CROSSING
NOT TO SCALE (NE-U050102 - 09/2023)



HEADWALL
NOT TO SCALE (NE-U010404 - 09/2023)



TRASH ENCLOSURE WITH CHAIN LINK FENCE
NOT TO SCALE (NE-S100401 - 12/2024)

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2. WHERE AN ORIGINAL DETAIL BY OTHERS HAS BEEN MODIFIED, THE MODIFICATIONS ARE IDENTIFIED BY REVISION CLOUDS.
3. REFER TO OUTSIDE SOURCE NOTES ON THE GENERAL NOTES AND LEGEND SHEET.
4. WHEN THE SOURCE OF THE DETAIL IS A REVIEWING/REGULATORY AGENCY, FABRICATION AND INSTALLATION SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. WHEN APPROPRIATE, SHOP DRAWINGS SHALL BE FORWARDED TO THE REVIEWING/REGULATORY AGENCY PRIOR TO FABRICATION.

DETAILS BY OTHERS DISCLAIMER

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4	03/12/2025	RESPONSE TO HANCOCK COMMENTS	EKR

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COMPREHENSIVE PERMIT PLANS

PROJECT No.: MAA230359 00-3A
DRAWN BY: CSE
CHECKED BY: JAK
DATE: 02/25/2025
CAD ID: P-CIVL-CND5

PRELIMINARY SITE DEVELOPMENT PLANS
FOR
SLV ASHLAND, LLC
PROPOSED 40B DEVELOPMENT "THE SANCTUARY AT ASHLAND MILLS"
MAP: 14 | LOT: 128
50 MAIN STREET
TOWN OF ASHLAND MASSACHUSETTS

BOHLER
352 TURNPIKE ROAD, 3rd FLOOR
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

JOHN A. BOHLER
REGISTERED PROFESSIONAL ENGINEER
MAINE LICENSE NO. 12595

CONSTRUCTION DETAILS
SHEET NUMBER: **C-903**
REVISION 4 - 03/12/2025

CDS1515-3-C DESIGN NOTES
CDS1515-3-C RATED TREATMENT CAPACITY IS 1.0 CFS. OR PER LOCAL REGULATIONS. THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.

GENERAL NOTES:
1. CONTRACTOR TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contech-es.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET ASHTO H20-22.5 LOAD RATING, ASSUMING EARTH COVER OF 0'-2" AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET ASHTO M508 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND ASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES:
A. ANY SUB-BASE, BACKFILL, DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLY STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
8025 Centre Pointe Dr. Suite 400, West Chester, OH 45399
800-338-1122 513-945-7000 513-645-7993 FAX

CDS1515-3-C ONLINE CDS STANDARD DETAIL

ITEM	QTY.	DESCRIPTION	MAT'L
1	1	ULTRAFLEX CHECKMATE CHECK VALVE	MUST BE SUPPLIED
2	1	CLAMP	MUST BE SUPPLIED

NOTES:
1. PIPE INSIDE DIAMETER - [MUST BE SUPPLIED] (MINIMUM ALLOWABLE PIPE DIAMETER - 11.50 INCHES)
2. CLAMP INSTALLED IN UPSTREAM OR DOWNSTREAM CUFF DEPENDING ON INSTALLATION ORIENTATION
3. MAXIMUM ALLOWABLE BACK PRESSURE - [68.0 FEET]
4. IT IS RECOMMENDED TO BOLT OR PIN CHECKMATE TO PIPE AS SHOWN, 4 PLACES 90° APART

*** PATENT PENDING ***

PROPRIETARY NOTICE
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF THE RED VALVE COMPANY, INC. IT IS LOANED BY RED VALVE COMPANY, INC. SUBJECT TO THE CONDITIONS THAT IT AND THE INFORMATION EMBODIED THEREIN SHALL BE USED ONLY FOR RECORD AND REFERENCE PURPOSES. IT SHALL NOT BE USED OR CAUSED TO BE USED IN A WAY PREJUDICIAL TO THE INTERESTS OF THE RED VALVE COMPANY. IT SHALL NOT BE REPRODUCED, IN WHOLE OR IN PART, OR DISCLOSED TO ANYONE WITHOUT THE WRITTEN PERMISSION OF THE RED VALVE COMPANY, INC., AND SHALL BE RETURNED UPON REQUEST.

Red Valve Tideflex
750 HOLIDAY DR. #400
Foster Plaza #9
PITTSBURGH, PA 15220
412.279.0044
REDVALVE.com

OPPORTUNITY No: XXXXXX SALES ORDER No: TXX-XXXX
DR. BY: TLM DATE: XX-XX-XX CHKD. BY: DATE:
CAD SCALE: FULL DOC No: DWG
PLOT SCALE: 1 = 1 DWG No: TTS-DWG

TT PRODUCT: 12" ULTRAFLEX CHECKMATE CHECK VALVE
TT PART No: CMCBUF-120-APPROVAL

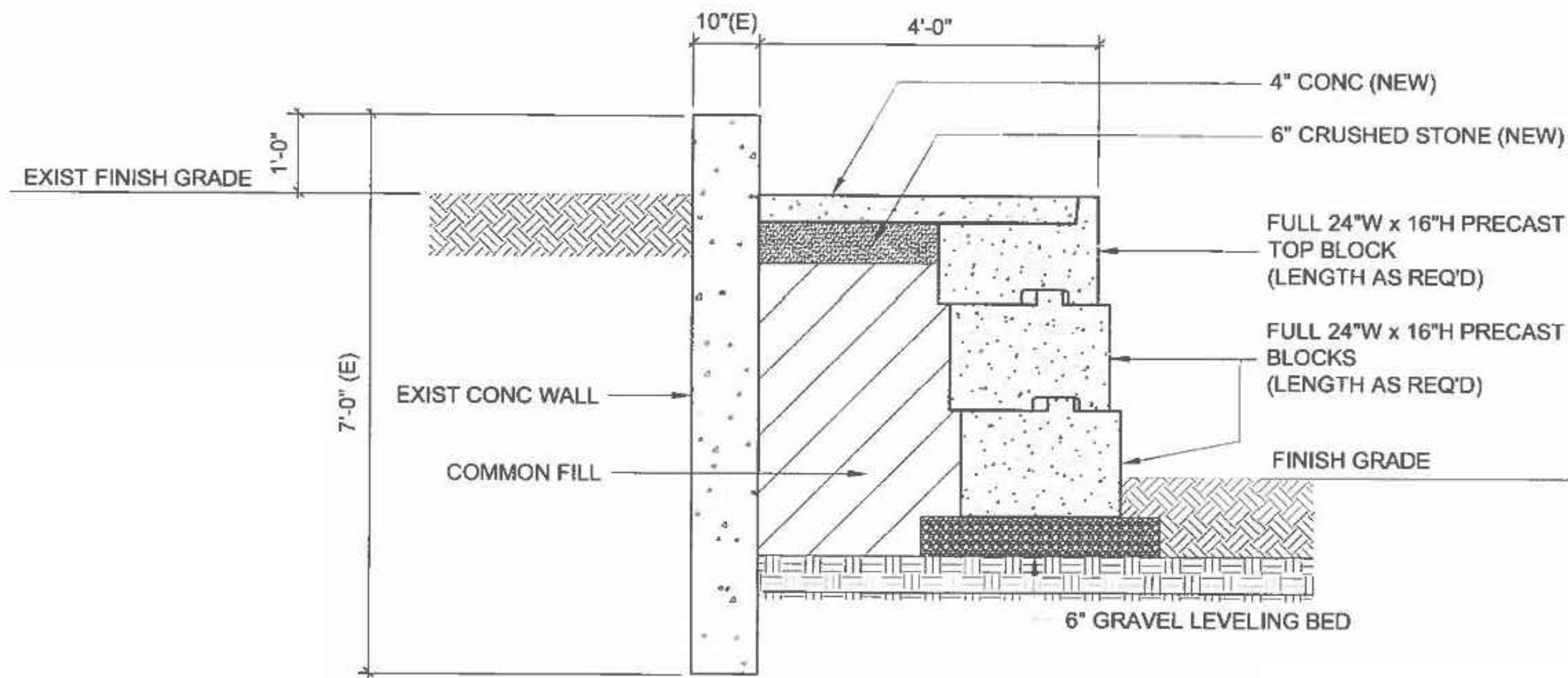
CUSTOMER: XXX
P.O. No: XXX

I. STRUCTURAL GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE 2015 INTERNATIONAL BUILDING CODE AND ALL APPLICABLE MASSACHUSETTS 780 CMR REFERENCED AMENDMENTS.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE FOR A SAFE AND EFFICIENT METHOD OF SHORING AND/OR BRACING THE STRUCTURE DURING ALL CONSTRUCTION PHASES. SUBMIT AN OUTLINE OF PROPOSED PROCEDURE TO THE ENGINEER BEFORE CONSTRUCTION COMMENCES.
- PRECAST RETAINING BLOCK WALL SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND ACCORDING TO DETAIL SHOWN ON THIS DRAWING.

II. CONCRETE

- CONCRETE SHALL HAVE THE FOLLOWING 28 DAY COMPRESSIVE STRENGTH:
 - SLABS.....3000 PSI



PROPOSED RETAINING WALL

1/2" = 1'-0"

1/2" = 1'-0"	RETAINING WALL SECTION	PROJECT AT 10 MAIN STREET ASHLAND, MA.	TESTA ENGINEERING Structural Engineering	SK.1
RM				
RJT				
10/26/2023				

NOTES REGARDING DETAILS BY OTHERS:

- DETAILS PREPARED BY OTHERS ARE IDENTIFIED AS SUCH BY WAY OF A TITLE BLOCK, REFERENCE, LOGO, OR OTHER NOTATION.
- WHERE AN ORIGINAL DETAIL BY OTHERS HAS BEEN MODIFIED, THE MODIFICATIONS ARE IDENTIFIED BY REVISION CLOUDS.
- REFER TO OUTSIDE SOURCE NOTES ON THE GENERAL NOTES AND LEGEND SHEET.
- WHEN THE SOURCE OF THE DETAIL IS A REVIEWING/REGULATORY AGENCY, FABRICATION AND INSTALLATION SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. WHEN APPROPRIATE, SHOP DRAWINGS SHALL BE FORWARDED TO THE REVIEWING/REGULATORY AGENCY PRIOR TO FABRICATION.

DETAILS BY OTHERS DISCLAIMER

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	07/15/2024	ADDED EPA MONITORING WELLS	JDG	JAK
2	08/01/2024	COMPREHENSIVE PERMIT	CSE	JAK
3	02/25/2025	TRAFFIC COMMENTS	LEC	JAK
4	03/12/2025	RESPONSE TO HANCOCK COMMENTS	EKR	JAK



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COMPREHENSIVE PERMIT PLANS

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	MAA230359 00-3A
DRAWN BY:	CSE
CHECKED BY:	JAK
DATE:	02/25/2025
CAD ID:	P-CIVL-CNDS

PRELIMINARY SITE DEVELOPMENT PLANS

FOR
SLV ASHLAND, LLC
PROPOSED
40B DEVELOPMENT
"THE SANCTUARY AT
ASHLAND MILLS"
MAP: 14 | LOT: 128
50 MAIN STREET
TOWN OF ASHLAND
MASSACHUSETTS

BOHLER
352 TURNPIKE ROAD, 3rd FLOOR
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J. A. BOHLER
JOHN A. BOHLER
CIVIL ENGINEER
No. 41530
REGISTERED PROFESSIONAL ENGINEER
MASSACHUSETTS
NEW HAMPSHIRE
RHODE ISLAND
MAINE LICENSE NO. 12559

CONSTRUCTION DETAILS

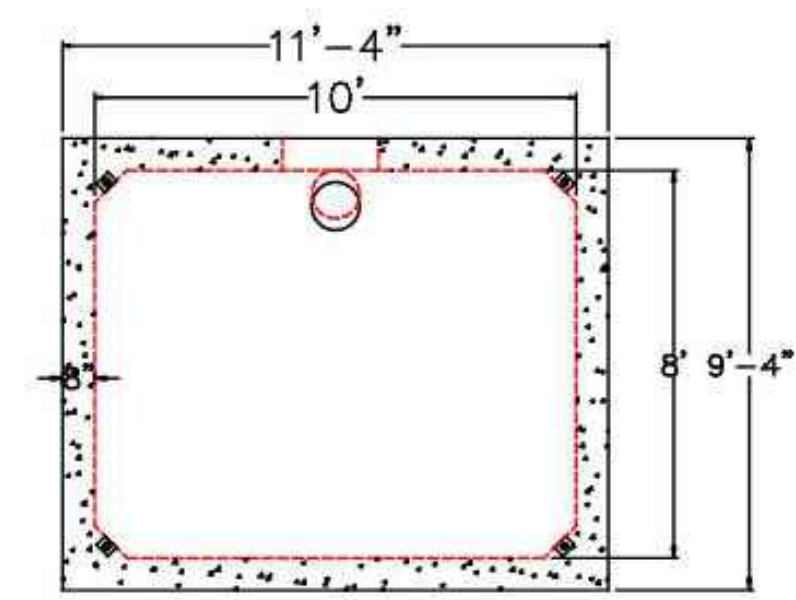
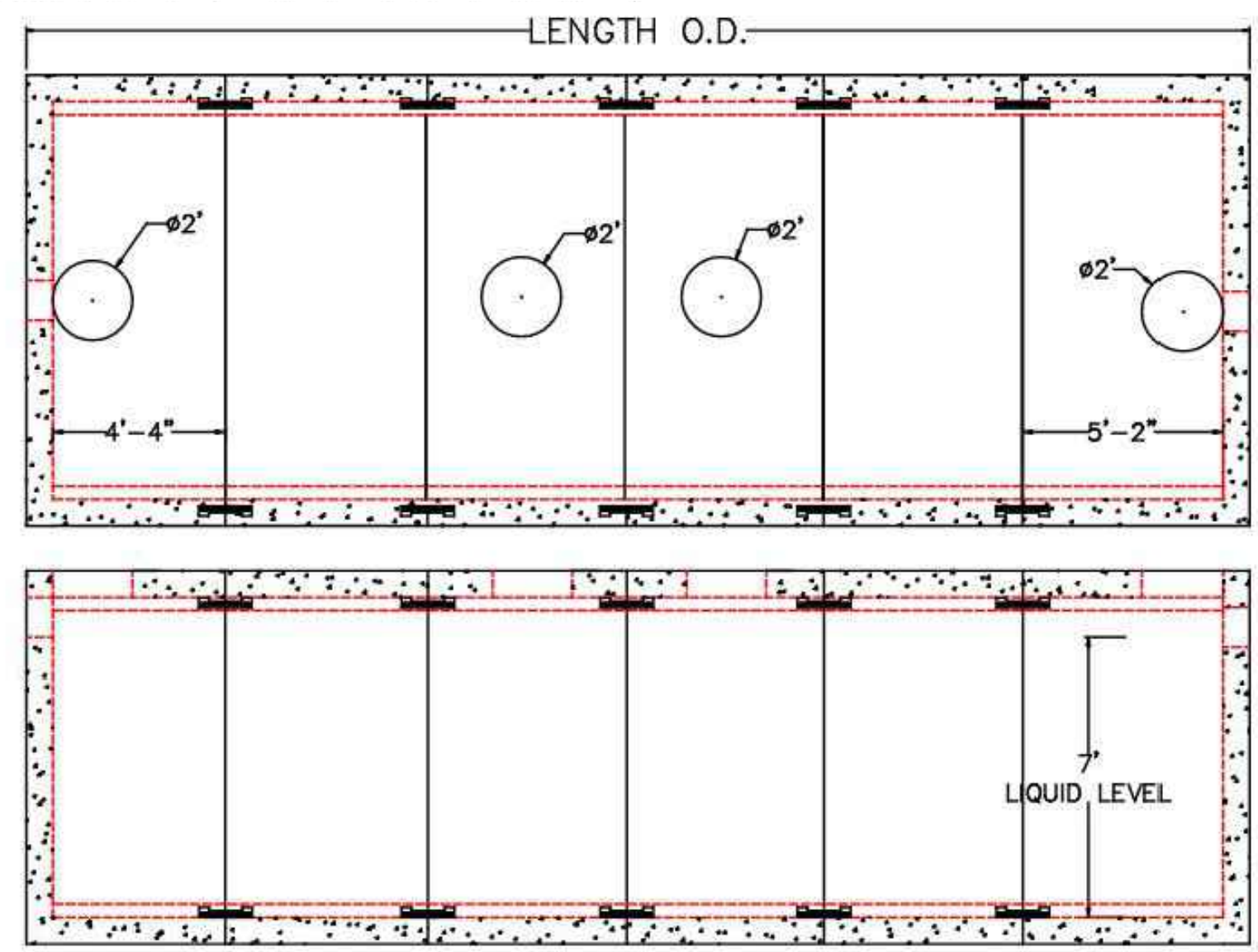
SHEET NUMBER:
C-904

REVISION 4 - 03/12/2025

SCITUATE RAY PRECAST
120 CLAY PIT ROAD
MARSHFIELD, MA 02050
PHONE # 1-800-440-0009
FAX # 781-837-4320

CONTRACTOR:	JOB NAME:	
DATE:	DRAWING: ST-__KTT-20	DRAWING BY: C. J. SCOTT
10,000 GALLON TO 40,000 GALLON H-20 TANK		

- NOTES:
- TANKS SHALL BE WATERTIGHT.
 - CONCRETE MIN. 5,000 PSI AFTER 28 DAYS.
 - TANK SHALL BE H-20 LOADING RATED.
 - TANK SIZE TO BE DETERMINED DURING DESIGN OF STORMWATER PUMP SYSTEM.



BOHLER ENGINEERING, INC. PROJECT: 2023/MAA230359 00-3A - LAYOUT: C-904 (REV. 10/26/2023)

MASSACHUSETTS LANDSCAPE SPECIFICATION

1. SCOPE OF WORK:
- THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.
2. MATERIALS
- GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.
 - TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.
 - LAWN:
 - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 2" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN.
 - LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
 - SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
 - MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES / DETAILS.
 - FERTILIZER:
 - FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
 - FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.
 - PLANT MATERIAL:
 - ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSEYMEN).
 - IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
 - PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
 - TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/4", WHICH HAVE NOT BEEN COMPLETELY CALLEDUS, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
 - ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
 - CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
 - SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
 - TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.
3. GENERAL WORK PROCEDURES
- CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
 - WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY REMOVED AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.
4. SITE PREPARATIONS
- BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
 - ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
 - CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.
5. TREE PROTECTION
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
 - A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "VISI-FENCE", OR APPROVED EQUAL, MOUNTED ON 2" X 4" POSTS, SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
 - WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
 - AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.
6. SOIL MODIFICATIONS
- CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.
 - LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.
 - THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
 - TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
 - TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
 - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
7. FINISHED GRADING
- UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.
 - LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1").
 - ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.
 - ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.
8. TOPSOILING
- CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.
 - ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.
 - ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE FILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY (SEE SPECIFICATION 6.A.3)):
 - 20 POUNDS "GRO-POWER" OR APPROVED SOIL CONDITIONER/FERTILIZER
 - 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER
 - THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.
9. PLANTING
- INsofar THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.
 - PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.
 - ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
 - ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.
 - POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
 - PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:

SEASONS:

- PLANTS: MARCH 15 TO DECEMBER 15
 - LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
 - PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.
- FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM
BETULA VARIETIES
CARPINUS VARIETIES
CRATAEGUS VARIETIES
KOELREUTERIA
LIQUIDAMBAR STRACIFLUA
LIRIODENDRON TULIPIFERA

PLATANUS X ACERIFOLIA
POPULUS VARIETIES
PRUNUS VARIETIES
PYRUS VARIETIES
QUERCUS VARIETIES
TILIA TOMENTOSA
ZELKOVA VARIETIES

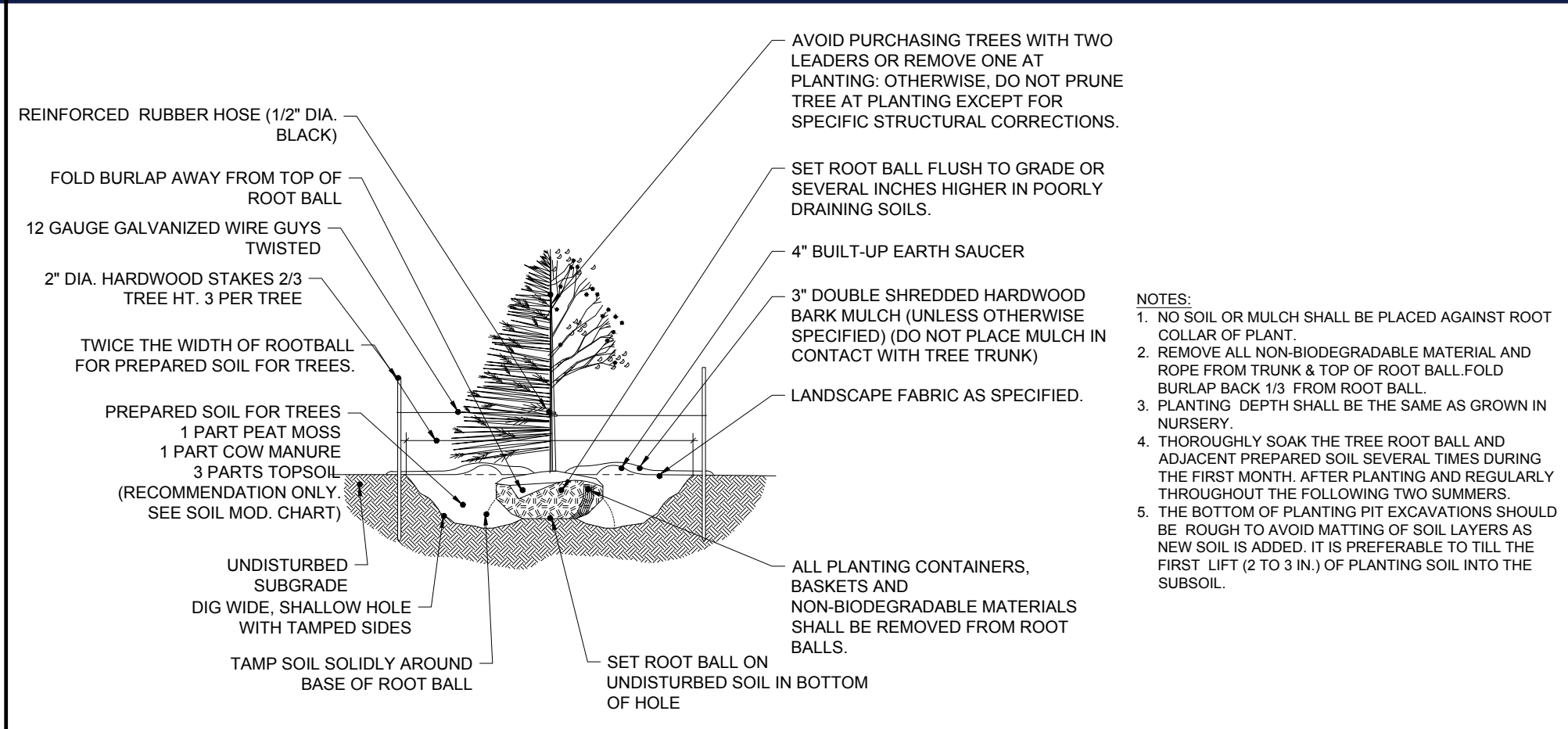
- PLANTING TREES SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
 - 1 PART PEAT MOSS
 - 1 PART COMPOSTED COW MANURE BY VOLUME
 - 3 PARTS TOPSOIL BY VOLUME
 - 21 GRAMS AGRIFORM PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
 - 2 TABLETS PER 1 GALLON PLANT
 - 3 TABLETS PER 5 GALLON PLANT
 - 4 TABLETS PER 15 GALLON PLANT
 - LARGER PLANTS: 2 TABLETS PER 1" CALIPER OF TRUNK
 - FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.
- ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
- ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.
- GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.
- NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.
- ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
- ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.
- TRANSPANTING (WHEN REQUIRED)
 - ALL TRANSPANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
 - IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
 - PLANTS SHALL NOT BE DUG FOR TRANSPANTING BETWEEN APRIL 10 AND JUNE 30.
 - UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
 - TRANSPANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
 - F TRANSPANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING

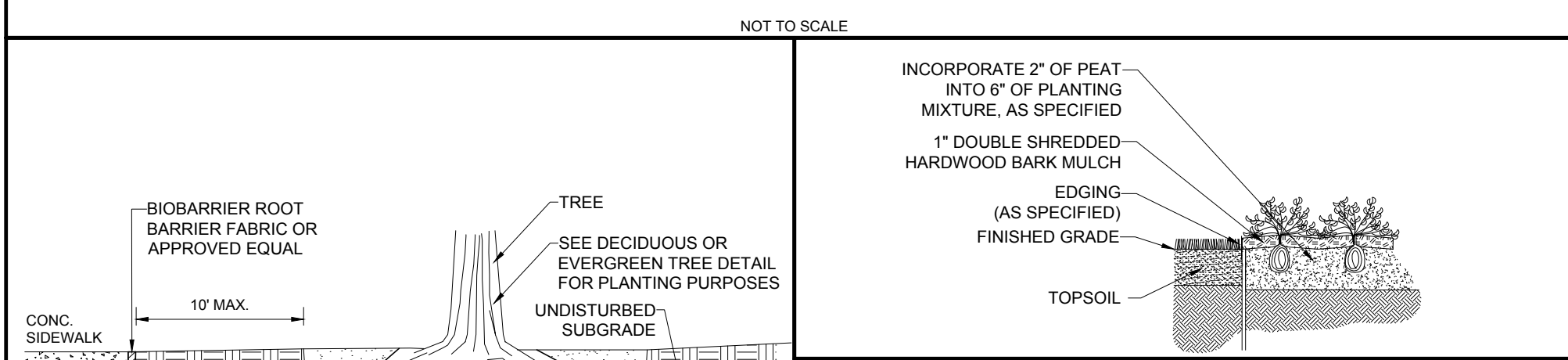
- NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.
- SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.
- IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE

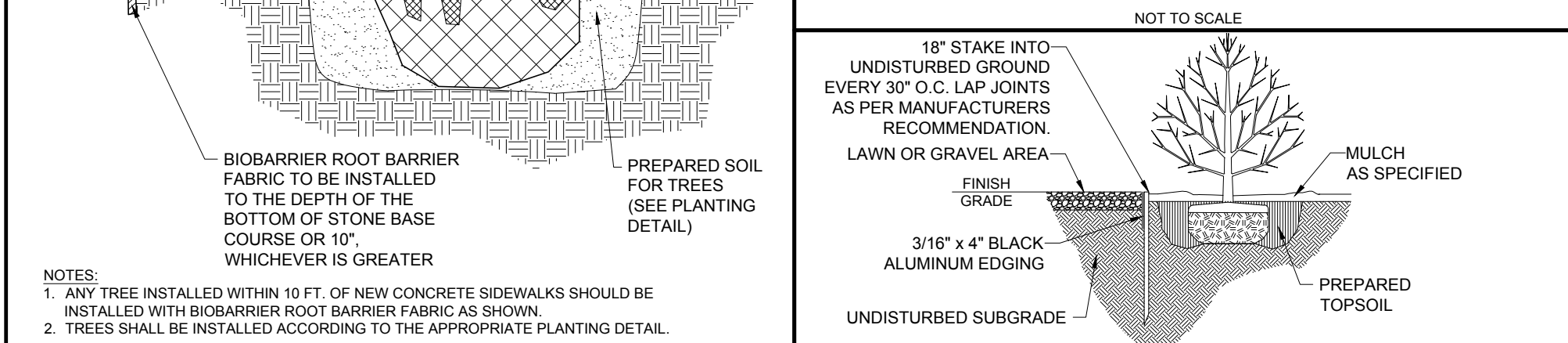
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
 - ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.
 - TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
 - LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.
13. CLEANUP
- UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.
 - THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
14. MAINTENANCE (ALTERNATIVE BID):
- A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MAINTAINED TO THE APPROVAL OF THE OWNER/OPERATOR.



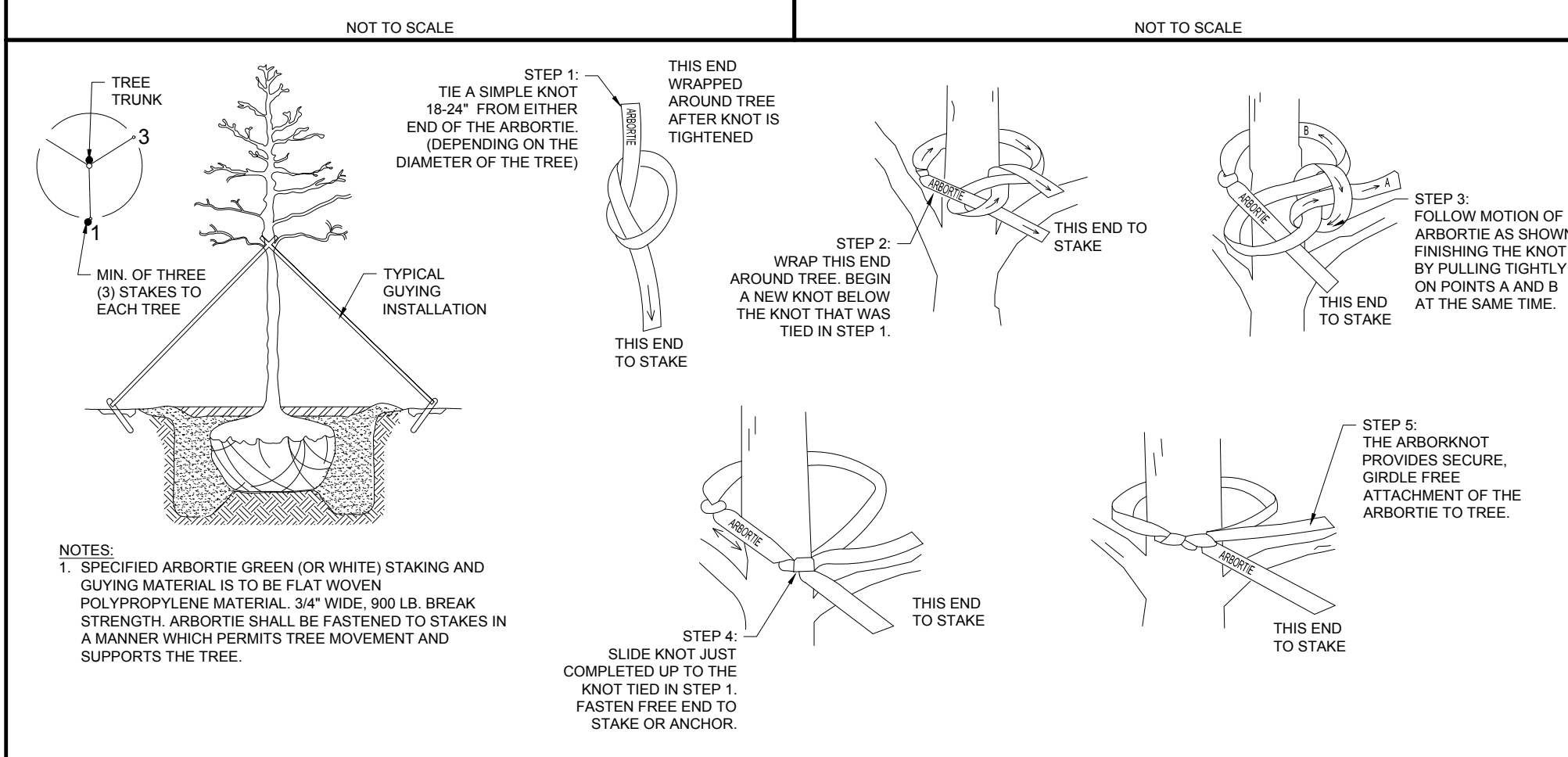
TREE PLANTING



GROUND COVER PLANTING



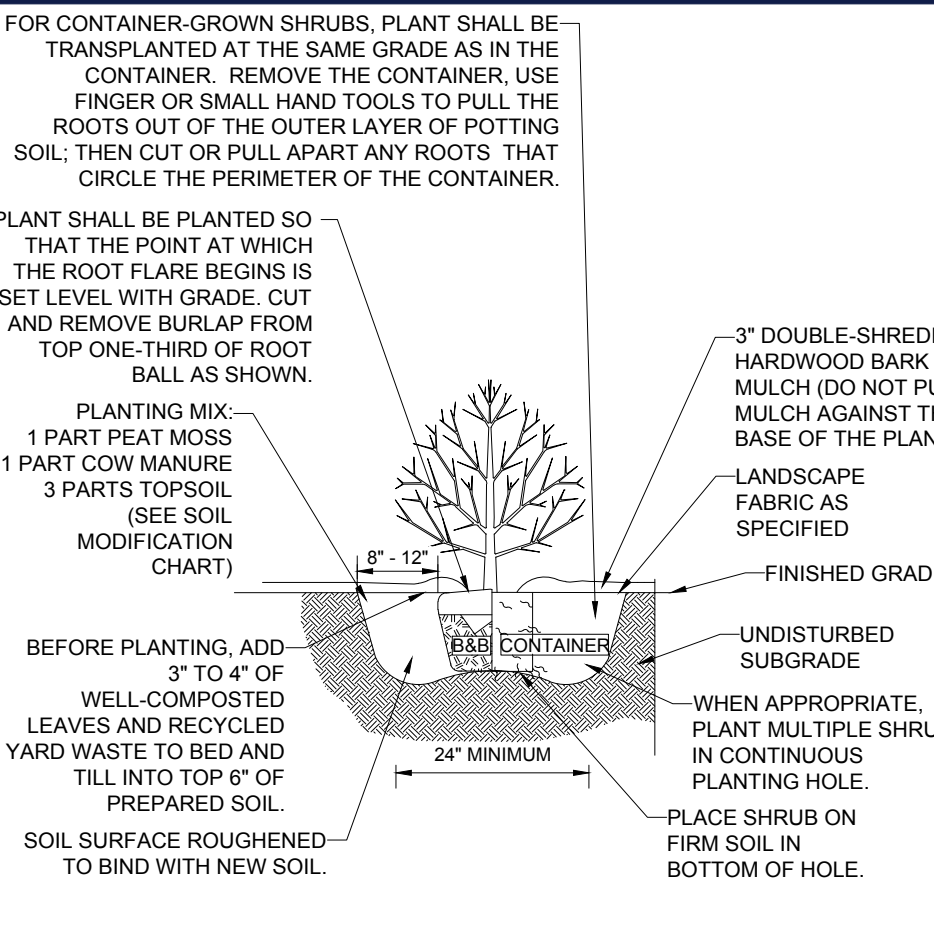
BIOBARRIER ROOT BARRIER



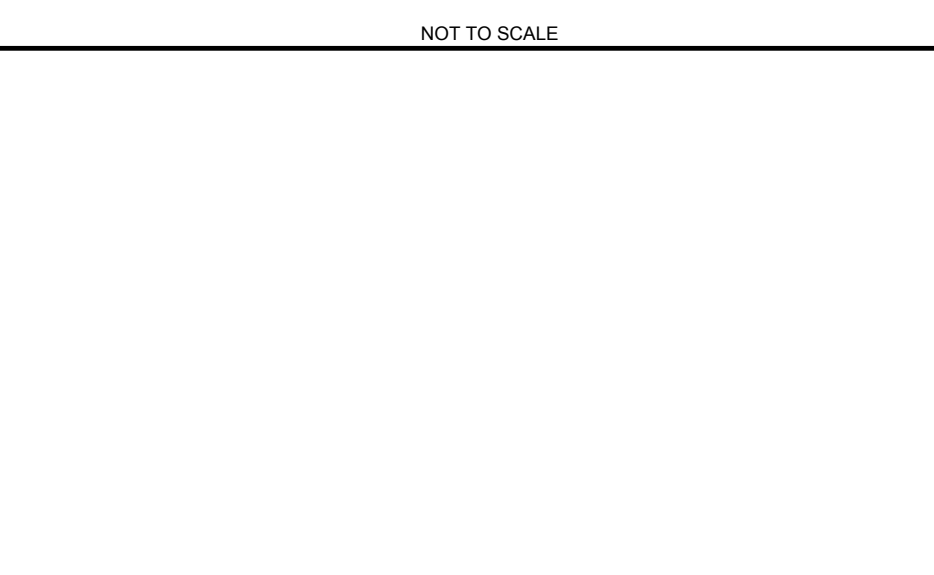
BLACK ALUMINUM EDGING

ARBORTIE STAKING

NOT TO SCALE



SHRUB PLANTING



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS				
REV	DATE	COMMENT	DESIGNED BY	CHECKED BY
1	07/15/2024	ADDED EPA MONITORING WELLS	JAK	JDG
2	08/01/2024	COMPREHENSIVE PERMIT	JAK	CSE
3	02/25/2025	TRAFFIC COMMENTS	JAK	JAK
4	03/12/2025	RESPONSE TO HANCOCK COMMENTS	JAK	EKR

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COMPREHENSIVE PERMIT PLANS

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PROJECT No.: MAA230359-00-3D
DRAWN BY: CSE
CHECKED BY: JAK
DATE: 02/26/25
CAD ID: P-CIVL-L102

PRELIMINARY SITE DEVELOPMENT PLANS FOR

SLV ASHLAND, LLC

PROPOSED
40B DEVELOPMENT
"THE SANCTUARY AT ASHLAND MILLS"

MAP: 14 | LOT: 128
50 MAIN STREET
TOWN OF ASHLAND
MASSACHUSETTS

BOHLER
352 TURNPIKE ROAD, 3rd FLOOR
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

REGISTERED LANDSCAPE ARCHITECT
MASSACHUSETTS
No. 10000
Bohler, Jeffrey A.

LANDSCAPE NOTES & DETAILS

SHEET NUMBER:
L-102

I:\BOHLER\NETSHARED\BMA\PROJ\2023\2023\MAA230359-00-3D-102\LAYOUT_L-102.rvt



MASSACHUSETTS LIGHTING NOTES

(REV. 02/2023)

- THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
- THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80-08 TESTING. THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE.
- THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOT-CANDELS (FC).
- THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND RE-LAMPING IF NECESSARY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN. UPON COMPLETION AND OWNER'S ACCEPTANCE OF THE WORK, THE ABOVE RESPONSIBILITIES BECOMES SOLELY THE OWNER'S.
- WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC. ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
- THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
- CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT INTERFERE WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURAL REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND STATUTES.
- IT IS THE LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING ANY AND ALL POWER SOURCE(S), AND TRIMMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND/OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED.
- THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND STATUTES.
- THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
- WHEN A BANK AT/IN IS INCLUDED IN THE LIGHTING DESIGN REPRESENTS BOHLER'S UNDERSTANDING AND INTERPRETATION OF THE REGULATORY LIGHTING LEVELS INTENDED BY PUBLISHED STANDARDS.
- UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

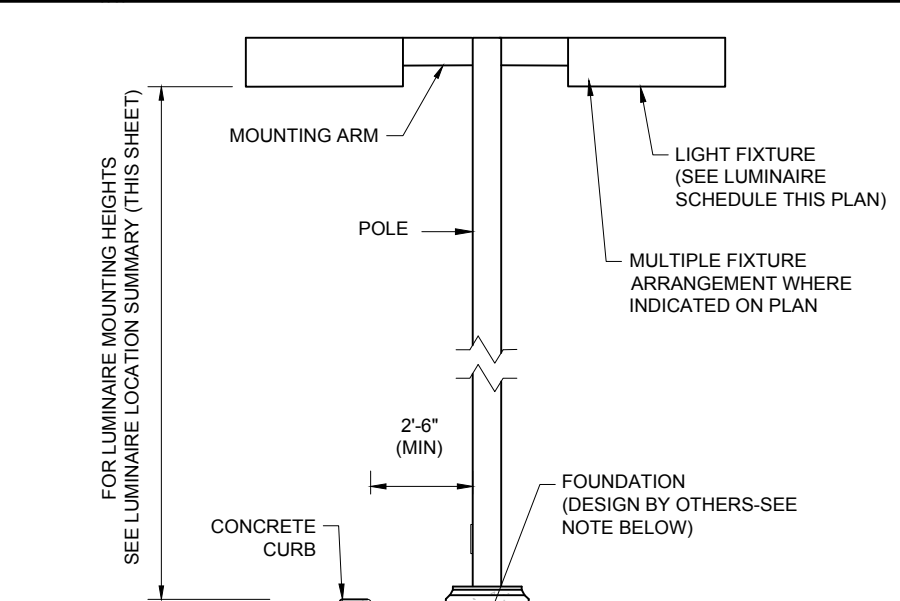
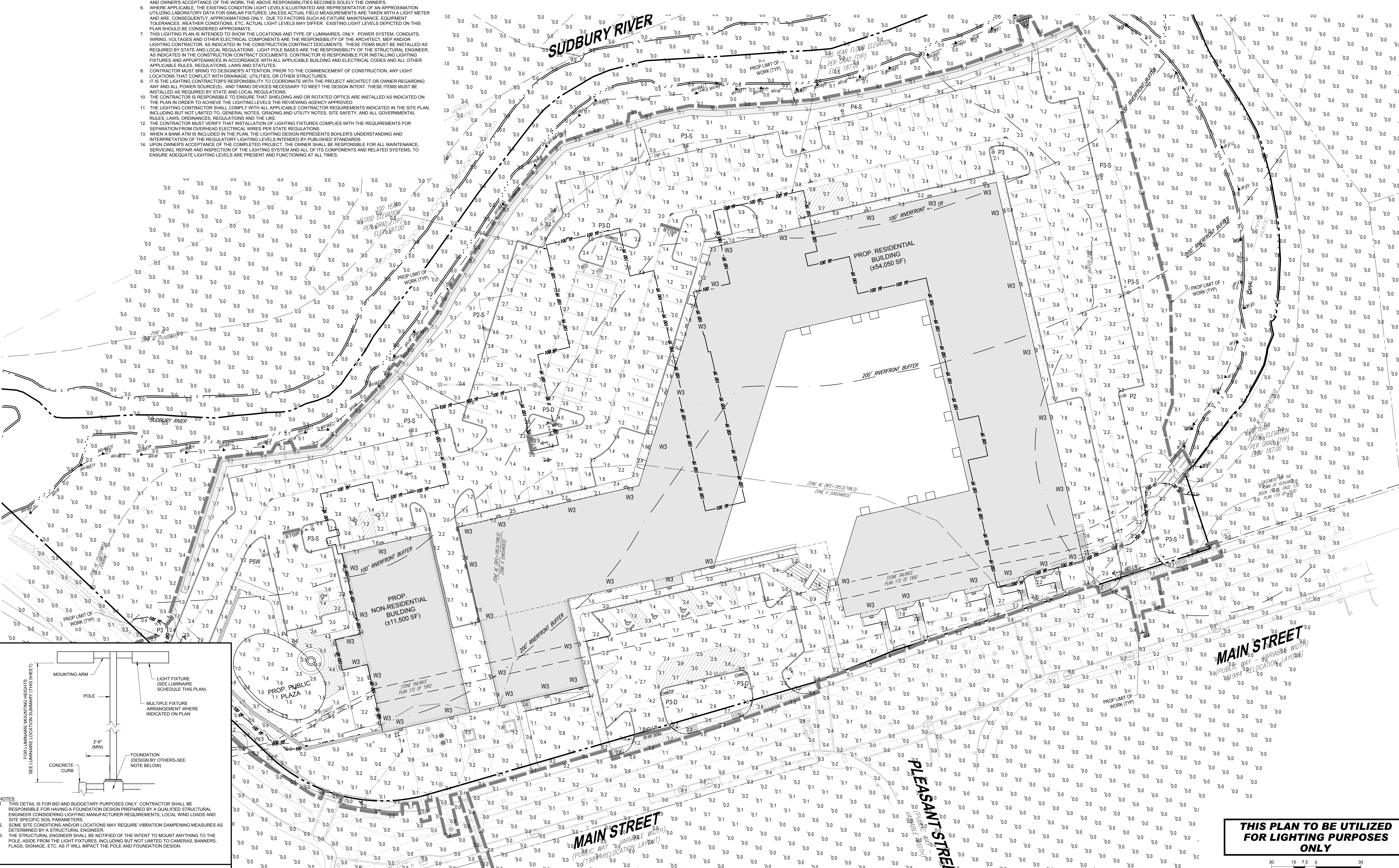
LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LLF	LUM. LUMENS	BUG RATING	DESCRIPTION
W3	44	10'-0" AFF	SINGLE	0.900	2282	B1-U0-G1	SIGNIFY GARDOO, WALL MOUNT PUREFORM LED WALL SCONCE, TYPE 3, ZERO UP-LIGHT (PWS-C-01-WW-G2-3-UV)
P2	1	20'-0" AFG	SINGLE	0.900	9294	B2-U0-G2	SIGNIFY GARDOO, ECOFORM SITE AND AREA LED LUMINAIRE, TYPE 2, ZERO UP-LIGHT (ECF-S-32L-700-WW-G2-2)
P2-S	1	20'-0" AFG	SINGLE	0.900	7073	B1-U0-G2	SIGNIFY GARDOO, ECOFORM SITE AND AREA LED LUMINAIRE, TYPE 2, WITH HOUSE-SIDE SHIELD, ZERO UP-LIGHT (ECF-S-32L-700-WW-G2-3-HS)
P3	2	20'-0" AFG	SINGLE	0.900	9034	B2-U0-G2	SIGNIFY GARDOO, ECOFORM SITE AND AREA LED LUMINAIRE, TYPE 3, ZERO UP-LIGHT (ECF-S-32L-700-WW-G2-3)
P3-S	6	20'-0" AFG	SINGLE	0.900	7197	B1-U0-G2	SIGNIFY GARDOO, ECOFORM SITE AND AREA LED LUMINAIRE, TYPE 3, WITH HOUSE-SIDE SHIELD, ZERO UP-LIGHT (ECF-S-32L-700-WW-G2-3-HS)
P3-D	4	20'-0" AFG	BACK-UP	0.900	9034	B2-U0-G2	SIGNIFY GARDOO, ECOFORM SITE AND AREA LED LUMINAIRE, TYPE 3, ZERO UP-LIGHT (ECF-S-32L-700-WW-G2-3)
P4	1	20'-0" AFG	SINGLE	0.900	9452	B2-U0-G2	SIGNIFY GARDOO, ECOFORM SITE AND AREA LED LUMINAIRE, TYPE 4, ZERO UP-LIGHT (ECF-S-32L-700-WW-G2-4)
P4-S	1	20'-0" AFG	SINGLE	0.900	7412	B1-U0-G2	SIGNIFY GARDOO, ECOFORM SITE AND AREA LED LUMINAIRE, TYPE 4, WITH HOUSE-SIDE SHIELD, ZERO UP-LIGHT (ECF-S-32L-700-WW-G2-4-HS)
PSW	1	20'-0" AFG	SINGLE	0.900	9395	B4-U0-G2	SIGNIFY GARDOO, ECOFORM SITE AND AREA LED LUMINAIRE, TYPE 5W, ZERO UP-LIGHT (ECF-S-32L-700-WW-G2-5W)

REFER TO ARCHITECTURAL DRAWINGS FOR FINAL MOUNTING HEIGHTS AND LOCATIONS

CALCULATION SUMMARY

Label	CALCTYPE	UNITS	AVG	MAX	MIN	AVGMIN	MAXMIN
ALL POINTS	ILLUMINANCE	FC	0.35	5.3	0.0	N/A	N/A
NORTH PARKING COURT AND DRIVE	ILLUMINANCE	FC	1.65	5.2	0.6	2.75	8.67
SOUTHWEST PARKING COURT	ILLUMINANCE	FC	2.01	0.7	2.87	7.14	
NORTHWEST PARKING COURT	ILLUMINANCE	FC	1.53	2.8	0.9	1.70	3.11

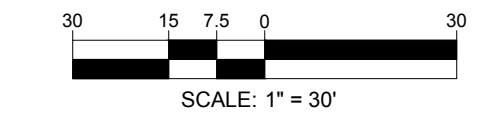


NOTES:

- THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.
- SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER.
- THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

AREA LIGHT

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	07/15/2024	ADDED EPA MONITORING WELLS	JDG
2	08/01/2024	COMPREHENSIVE PERMIT	CSE
3	02/25/2025	TRAFFIC COMMENTS	JAK
4	03/12/2025	RESPONSE TO HANCOCK COMMENTS	EKR

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PROJECT No.: MAA230359-00-3D
DRAWN BY: CSE
CHECKED BY: JAK
DATE: 02/26/2025
CAD LID: P-CIVL-L1GT

PROJECT:
PRELIMINARY SITE DEVELOPMENT PLANS
FOR
SLV ASHLAND, LLC

PROPOSED 40B DEVELOPMENT "THE SANCTUARY AT ASHLAND MILLS"
MAP: 14 | LOT: 128
50 MAIN STREET
TOWN OF ASHLAND, MASSACHUSETTS

BOHLER
352 TURNPIKE ROAD, 3rd FLOOR
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



SHEET TITLE:
LIGHTING PLAN

SHEET NUMBER:
L-201

REVISION 4 - 03/12/2025



Wall Mount

PureForm

PWS wall sconce with comfort optics



Gardco PureForm LED wall sconce comfort PWS offers a sleek, low profile design that will complement a range of architectural styles. Comfort optics are designed to enhance visual comfort by reducing glare. PureForm wall sconce provides up to 10,700 lumens to accommodate multiple mounting heights up to 20', and is available with Type 2, 3, 4, optical distributions. A full range of control options is available for additional energy savings. Optional emergency battery backup option is available for path-of-egress and is integral to the luminaire.

Project:
Location:
Cat.No:
Type:
Lamps: Qty:
Notes:

Ordering guide

Example: PWS-196L-650-NW-G2-2-UNV-DGY

Table with columns: Prefix, Number of LEDs, Drive Current, LED Color - Generation, Distribution, Emergency, Voltage. Includes rows for PWS PureForm wall sconce with various configurations.

Table with columns: Dimming controls, Motion-sensing, Photo-sensing, Options, Finish. Lists various control and sensing options for the sconce.

- 1. 196L, 1676, and 2100mA not available with emergency battery backup (EBP).
2. 2100mA not available with emergency battery backup cold weather (EBPC).
3. Extended lead times apply. Contact factory for details.
4. Not available with other dimming control options.
5. Not available with motion sensor.
6. Not available with photocell control.
7. Not available in 347 or 480V.
8. MMRB not available with emergency battery backup cold weather (EBPC).
9. Must specify mount voltage. UNV and HW not valid options.
10. Not available with DynaDimmer (CS/CM).
11. Not available with DynaDimmer (CS/CM).

PWS PureForm wall sconce comfort 05/24 page 1 of 6



SIGNIFY GARDCO PUREFORM LED PWS WALL SCNCE

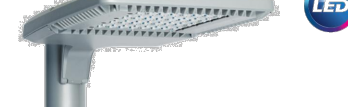
NOT TO SCALE



Site and Area

EcoForm

ECF-S small area light



Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project:
Location:
Cat.No:
Type:
Lamps: Qty:
Notes:

Ordering guide

Example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Table with columns: Prefix, Number of LEDs, Drive Current, LED Color - Generation, Mounting, Distribution, Voltage. Includes rows for ECF-S EcoForm site and area small light with various configurations.

Table with columns: Dimming controls, Motion sensing lens, Photo-sensing, Options, Luminaire, Finish. Lists various control and sensing options for the light.

- 1. BL-MBR37 equipped with out-board sensor housing when voltage is 196L (241-480V).
2. Mounts to a 4" round pole with adapter included for square poles.
3. Limited to a maximum of 48 degree aiming above horizontal.
4. Not available with other dimming control options.
5. Not available with motion sensor.
6. Not available with photocell control.
7. Not available in 347 or 480V.
8. MMRB not available with emergency battery backup cold weather (EBPC).
9. Must specify mount voltage. UNV and HW not valid options.
10. 196L, 1676, and 2100mA not available with emergency battery backup cold weather (EBPC).
11. Not available in 480V. Or other photocell separately with TL-RSDP1.
12. Not available with DCC.
13. Not available with SR and SR. SRs provided with black finish standard.
14. Not available with Type 1 or 2. See D.C. 80-00-80-00-00, 02, or 03, unless noted.
15. Not available with DCC, FAWB, SRDL, or WAP dimming control options.
16. WAP must be combined with Motion sensing lens SR or SR or SR.
17. When ordering SRDL controller (by other) to be used on socket must be SRDL compatible. See specifications for more details. Consult factory for lead time. All 3 pin NEMA receptacles are connected to SR.
18. Not dimming driver allowed.
19. LCL and RCL not available with 48L-12A or 64L-1A.
20. Extended lead times apply. Contact factory for details.
21. Return to properly select the "BAC" suffix could result in non-compliant product that is not BAA compliant product with no recourse for an INMA or refund. The BAC designation is for an INMA or refund. The BAC designation however does not address (i) the applicability of, or availability of, a water under the Trade Agreements Act, or (ii) the "Buy American" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.

ECF-S_EcoForm_area_small 04/24 page 1 of 9



SIGNIFY GARDCO ECOFORM LED SMALL AREA LIGHT

NOT TO SCALE

BOHLER ENGINEERING, INC. PROJECT: 2023-02-23: MAA230359-00-3D - LAYOUT: L-202.LI02E



Table with columns: REV, DATE, COMMENT, CHECKED BY. Lists revisions to the drawing.

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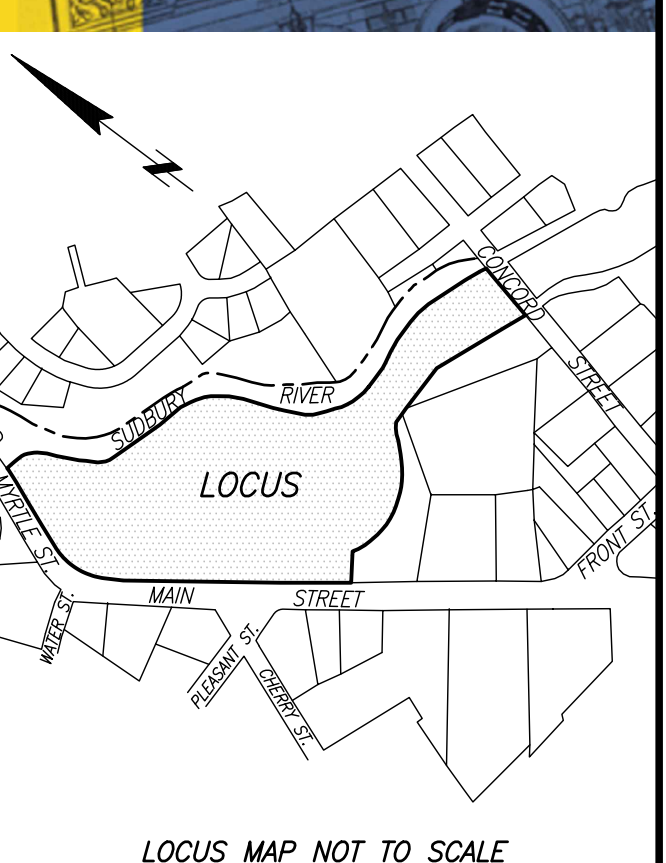
COMPREHENSIVE PERMIT PLANS. THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PRELIMINARY SITE DEVELOPMENT PLANS FOR SLV ASHLAND, LLC. PROPOSED 40B DEVELOPMENT "THE SANCTUARY AT ASHLAND MILLS". MAP: 14 | LOT: 128, 50 MAIN STREET, TOWN OF ASHLAND, MASSACHUSETTS.

BOHLER logo and address: 352 TURNPIKE ROAD, 3rd FLOOR, SOUTHBOROUGH, MA 01772. Phone: (508) 480-9900. www.BohlerEngineering.com



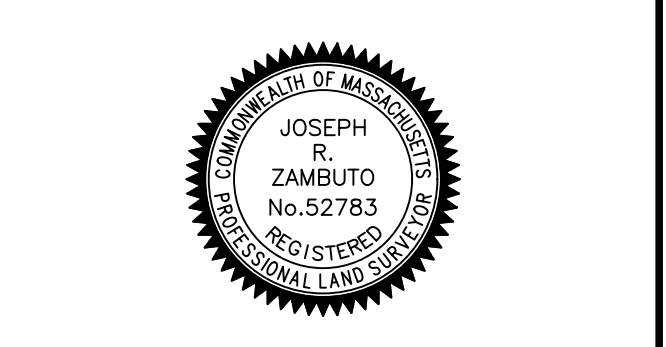
SHEET TITLE: LIGHTING NOTES & DETAILS. SHEET NUMBER: L-202. REVISION 4 - 03/12/2025.



LOCUS MAP NOT TO SCALE

TO: FIRST AMERICAN TITLE INSURANCE COMPANY
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 7(A), 7(C), 7(D), 8, 9, 10, 11(A), 13, 14, 16, 17, 18 AND 19 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON MAY 30, 2024.

FELDMAN GEOSPATIAL
JOSEPH E. ZAMBUTO, PLS (MAP 52783)
JZAMBUTO@FELDMANGEO.COM
DATE: 8/23/2024



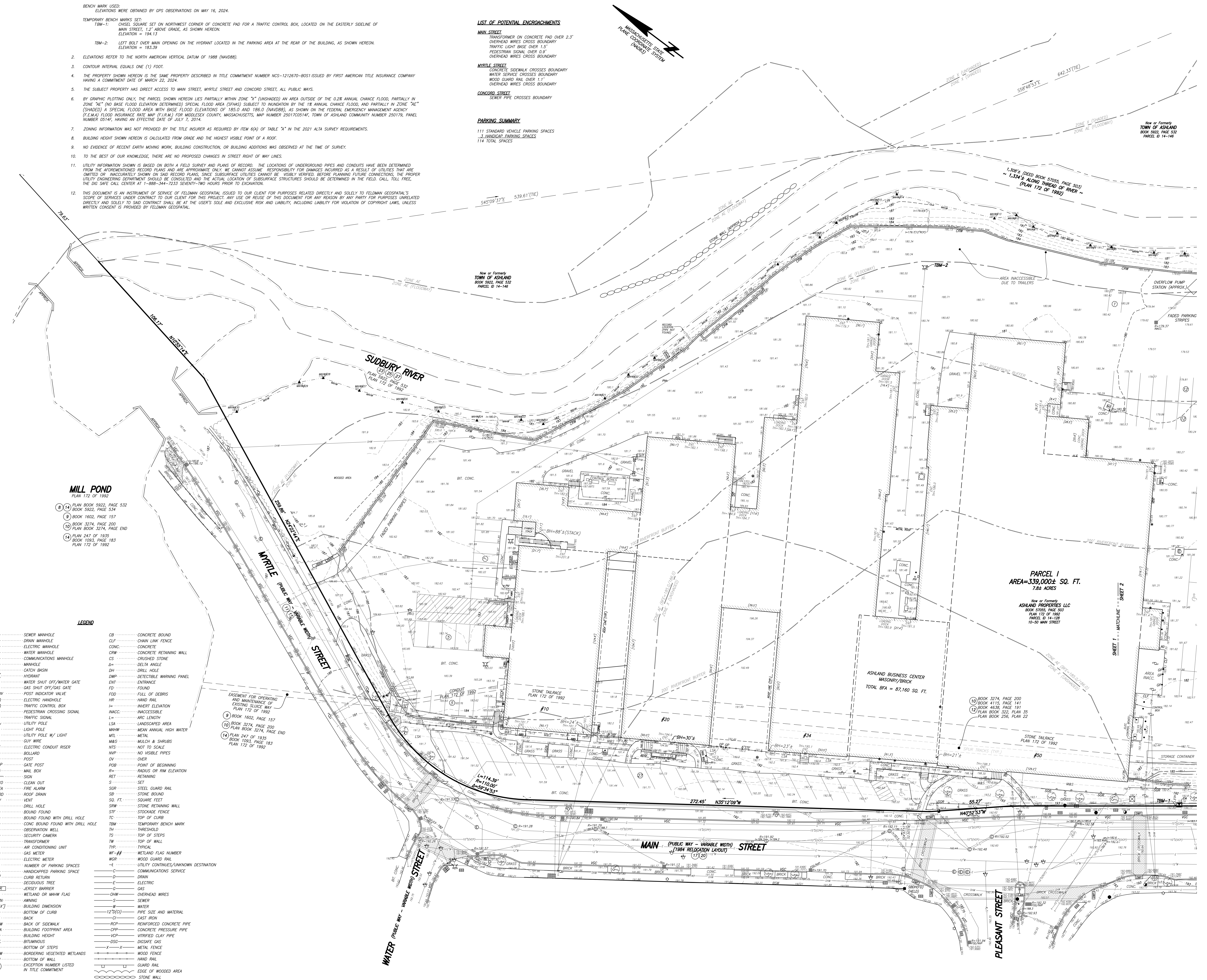
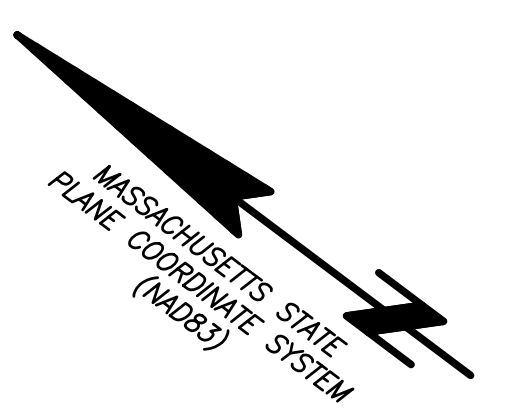
DRAWING NAME:
**ALTA/NSPS
LAND TITLE SURVEY**
50 MAIN STREET
ASHLAND, MASS.

DATE: JUNE 21, 2024
REVISIONS:
FILENAME: 2400483-D1.dwg
RESEARCH: JF FIELD CHECK: KF
FIELD MGR: JRZ APPROVED: JF
CALC: JF DASH: MJM
FIELD CHK: JF CRD FILE: 2400483-D1
SCALE: 1"=20'
SHEET NO. 1 OF 3

NOTES:

- BENCH MARK INFORMATION:
BENCH MARK USED:
ELEVATIONS WERE OBTAINED BY GPS OBSERVATIONS ON MAY 16, 2024.
TEMPORARY BENCH MARKS SET:
TBM-1: CHISEL SQUARE SET ON NORTHWEST CORNER OF CONCRETE PAD FOR A TRAFFIC CONTROL BOX, LOCATED ON THE EASTERLY SIDELINE OF MAIN STREET, 1.2' ABOVE GRADE, AS SHOWN HEREON.
ELEVATION = 194.13
TBM-2: LEFT BOLT OVER MAIN OPENING ON THE HYDRANT LOCATED IN THE PARKING AREA AT THE REAR OF THE BUILDING, AS SHOWN HEREON.
ELEVATION = 183.39
- ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- CONTOUR INTERVAL EQUALS ONE (1) FOOT.
- THE PROPERTY SHOWN HEREON IS THE SAME PROPERTY DESCRIBED IN TITLE COMMITMENT NUMBER NCS-1212670-8051 ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY HAVING A COMMITMENT DATE OF MARCH 22, 2024.
- THE SUBJECT PROPERTY HAS DIRECT ACCESS TO MAIN STREET, MYRTLE STREET AND CONCORD STREET, ALL PUBLIC WAYS.
- BY GRAPHIC PLOTTING ONLY, THE PARCEL SHOWN HEREON LIES PARTIALLY WITHIN ZONE "X" (UNSHADED) AN AREA OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD, PARTIALLY IN ZONE "AC" (NO BASE FLOOD ELEVATION DETERMINED) SPECIAL FLOOD AREA (SFMA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, AND PARTIALLY IN ZONE "AE" (SHADED) A SPECIAL FLOOD AREA WITH BASE FLOOD ELEVATIONS OF 185.0 AND 186.0 (NAVD88), AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR MIDDLESEX COUNTY, MASSACHUSETTS, MAP NUMBER 2501700314F, TOWN OF ASHLAND COMMUNITY NUMBER 250179, PANEL NUMBER 0514F, HAVING AN EFFECTIVE DATE OF JULY 7, 2014.
- ZONING INFORMATION WAS NOT PROVIDED BY THE TITLE INSURER AS REQUIRED BY ITEM 6(A) OF TABLE "A" IN THE 2021 ALTA SURVEY REQUIREMENTS.
- BUILDING HEIGHT SHOWN HEREON IS CALCULATED FROM GRADE AND THE HIGHEST VISIBLE POINT OF A ROOF.
- NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WAS OBSERVED AT THE TIME OF SURVEY.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES.
- UTILITY INFORMATION SHOWN IS BASED ON BOTH A FIELD SURVEY AND PLANS OF RECORD. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE AFORESAID RECORDED PLANS AND ARE APPROXIMATE ONLY. WE CANNOT ASSUME RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES THAT ARE OMITTED OR INACCURATELY SHOWN ON SAID RECORD PLANS, SINCE SUBSURFACE UTILITIES CANNOT BE VISIBLY VERIFIED BEFORE PLANNING FUTURE CONNECTIONS. THE PROPER UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHOULD BE DETERMINED IN THE FIELD. CALL TOLL FREE, THE 800 SAFE CALL CENTER AT 1-888-344-7233 SEVENTY-TWO HOURS PRIOR TO EXCAVATION.
- THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF FELDMAN GEOSPATIAL ISSUED TO OUR CLIENT FOR PURPOSES RELATED DIRECTLY AND SOLELY TO FELDMAN GEOSPATIAL'S SCOPE OF SERVICES UNDER CONTRACT TO OUR CLIENT FOR THIS PROJECT. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN CONSENT IS PROVIDED BY FELDMAN GEOSPATIAL.

- LIST OF POTENTIAL ENCROACHMENTS**
- MAIN STREET**
TRANSFORMER ON CONCRETE PAD OVER 2.3'
OVERHEAD WIRES CROSS BOUNDARY
TRAFFIC LIGHT BASE OVER 1.5'
PEDESTRIAN SIGNAL OVER 0.9'
OVERHEAD WIRES CROSS BOUNDARY
- MYRTLE STREET**
CONCRETE SIDEWALK CROSSES BOUNDARY
WATER SERVICE CROSSES BOUNDARY
WOOD GUARD RAIL OVER 1.1'
OVERHEAD WIRES CROSS BOUNDARY
- CONCORD STREET**
SEWER PIPE CROSSES BOUNDARY
- PARKING SUMMARY**
111 STANDARD VEHICLE PARKING SPACES
2 HANDICAPPED PARKING SPACES
114 TOTAL SPACES



- MILL POND**
PLAN 172 OF 1992
- 8 PLAN BOOK 5922, PAGE 532
 - 9 BOOK 5922, PAGE 534
 - 9 BOOK 1602, PAGE 157
 - 10 BOOK 3274, PAGE 200
 - 10 PLAN BOOK 3274, PAGE END
 - 14 PLAN 247 OF 1935
 - 14 BOOK 1093, PAGE 183
 - 14 PLAN 172 OF 1992

LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> SM SEWER MANHOLE DM DRAIN MANHOLE EM ELECTRIC MANHOLE WM WATER MANHOLE CM COMMUNICATIONS MANHOLE M MANHOLE CB CATCH BASIN HYDRANT WATER SHUT OFF/WATER GATE WATER SHUT OFF/GAS GATE PIV POST INDICATOR VALVE EV ELECTRIC VALVE TC TRAFFIC CONTROL BOX PS PEDESTRIAN CROSSING SIGNAL TS TRAFFIC SIGNAL UP UTILITY POLE UL UTILITY POLE W/ LIGHT GW GUY WIRE EC ELECTRIC CONDUIT RISER B BOLLARD OV POST GP GATE POST MB MAIL BOX SI SIGN CO CLEAN OUT FA FIRE ALARM RD ROOF DRAIN V VENT SRW DRILL HOLE BF BOUND FOUND BFH BOUND FOUND WITH DRILL HOLE CBF CONCRETE BOUND FOUND WITH DRILL HOLE OW OBSERVATION WELL SC SECURITY CAMERA TR TRANSFORMER ACU AIR CONDITIONING UNIT GM GAS METER EMR ELECTRIC METER NP NUMBER OF PARKING SPACES HCP HANDICAPPED PARKING SPACE CR CURB RETURN DT DECIDUOUS TREE JB JERSEY BARRIER AWW WETLAND OR MAHW FLAG AWN AWNING BD BUILDING DIMENSION BC BOTTOM OF CURB CI CAST IRON BSW BACK OF SIDEWALK BF4 BUILDING FOOTPRINT AREA BH BUILDING HEIGHT BT BITUMINOUS BS BOTTOM OF STEPS BW BORROWING DEPLETED WETLANDS BM BOTTOM OF WALL EX EXCEPTION NUMBER LISTED IN TITLE COMMITMENT | <ul style="list-style-type: none"> CR CONCRETE BOUND CLF CHAIN LINK FENCE CONC CONCRETE CRCW CONCRETE RETAINING WALL CS CRUSHED STONE Δ Δ DELTA ANGLE DH DRILL HOLE DWP DETECTIBLE WARNING PANEL ENT ENTRANCE FD FOUND FOD FULL OF DEBRIS HR HAND RAIL IN INVERT ELEVATION INACC INACCESSIBLE L ARC LENGTH LSA LANDSCAPED AREA MAHW MEAN ANNUAL HIGH WATER MTL METAL MBS MULCH & SHRUBS N/S NOT TO SCALE NVP NO VISIBLE PIPES OV OVER POB POINT OF BEGINNING R RADIUS OR R/W ELEVATION RET RETAINING S SET SGR STEEL GUARD RAIL SB STONE BOUND SO FT. SQUARE FEET SRW STONE RETAINING WALL STF STOCKADE FENCE TC TOP OF CURB TBM TEMPORARY BENCH MARK TH THRESHOLD TS TOP OF STEPS TW TOP OF WALL TYP TYPICAL WF-# WETLAND FLAG NUMBER WRW WOOD GUARD RAIL U UTILITY CONTIGUOUS/UNKNOWN DESTINATION C COMMUNICATIONS SERVICE D DRAIN E ELECTRIC G GAS DHW OVERHEAD WIRES S SEWER W WATER 12"(C) PIPE SIZE AND MATERIAL CI CAST IRON RCP REINFORCED CONCRETE PIPE CPW CONCRETE PRESSURE PIPE VCP VITRIFIED CLAY PIPE DSC DISSAFE GAS X METAL FENCE W WOOD FENCE H HAND RAIL G GUARD RAIL EDGE OF WOODED AREA STONE WALL |
|--|---|

