

SITE DEVELOPMENT PLANS
FOR
B&M 35 HANOVER, LLC

29 WINTER STREET, PEMBROKE, MASSACHUSETTS

SHEET INDEX

EBI CONSULTING DRAWINGS	
SHEET NO.	SHEET TITLE
C-1	COVER SHEET
C-2	GENERAL NOTES & LEGEND SHEET
C-3	DEMOLITION PLAN
C-4	SITE PLAN
C-5	GRADING & DRAINAGE PLAN
C-6	UTILITY PLAN
C-7	SEPTIC SYSTEM PLAN & DETAILS
C-8	EROSION CONTROL PLAN
C-9	EROSION NOTES & DETAILS SHEET
C-10	DETAIL SHEET
C-11	DETAIL SHEET

REFERENCE DRAWINGS

SHEET NO.	SHEET TITLE
L100	Landscape Plan
SL1	Photometric Plan
	Existing Conditions Plan

APPROVAL BLOCK

SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE

LOCUS MAP



PREPARED BY:



PROPERTY INFORMATION

OWNER	APPLICANT
B&M 35 HANOVER, LLC 29 Winter Street Pembroke, MA 02359 Tel: (781) 826-0222 Fax: (781) 826-2941	B&M 35 HANOVER, LLC 29 Winter Street Pembroke, MA 02359 Tel: (781) 826-0222 Fax: (781) 826-2941

ASSESSOR'S INFORMATION
Map G14, Lot 54

PROJECT TEAM

CIVIL ENGINEER	LANDSCAPE ARCHITECT
EBI CONSULTING 21 B STREET BURLINGTON, MA 01803 Tel: (781)273-2500	J MILLER LANDSCAPE ARCHITECTURE 2095 VT ROUTE 18 WATERFORD, VT 05819 TEL: (802) 535 - 8586
SURVEYOR	GEOTECHNICAL ENGINEER
GRADY CONSULTING, LLC. 71 EVERGREEN STREET, SUITE 1 KINGSTON, MA 02364 Tel: (781)585-2300	CHARLES H. GROSS, PE, LLC 223 LIBERTY CIRCLE HANSON, MA 02341 TEL: (617) 909 - 5180

SUBMISSION INFO

ISSUED FOR: LOCAL APPROVALS
DATE ISSUED: JANUARY 18, 2023

WAIVER REQUESTS

- 5.1.2 A THREE (3) FOOT WIDE LANDSCAPING STRIP SHALL BE PROVIDED ALONG THE FOUNDATION WALLS TO SOFTEN THE APPEARANCE FOR ALL RESIDENTIAL BUILDING(S)
- 5.6.2 CURBING SHALL NOT BE BITUMINOUS CONCRETE.
- 5.9.9 A MINIMUM OF 50% OF THE BUILDING'S STREET SIDE FACADE SHALL CONTAIN WINDOWS. THE WINDOWS SHALL BE DIVIDED BY MUNTINS AND FRAMED WITH A CASING TRIM; AWNINGS SHOULD BE DESIGNED AS AN INTEGRAL PART OF THE BUILDING FACADE; METAL AWNINGS ARE NOT ALLOWED.

6.0 DEVELOPMENT IMPACT STATEMENT



PRELIMINARY

NO.	DESCRIPTION	DATE	INIT.



PROJECT TITLE SITE DEVELOPMENT PLANS SHEET TITLE COVER SHEET	PREPARED BY AKPT REVIEWED BY KS DATE 01/18/23 SCALE AS SHOWN PROJECT # 1622000082	SITE ADDRESS 29 WINTER STREET PEMBROKE, MA
---	--	--

C-1
SHEET NO.

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS.

- ## GENERAL DEMOLITION NOTES

1. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND SHALL BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.

- ## ADA INSTRUCTIONS TO CONTRACTOR:

- PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
- CURB RAMPS - SLOPE SHALL NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
- LANDINGS - SHALL BE PROVIDED AT EACH END OF RAMPS, SHALL PROVIDE POSITIVE DRAINAGE, AND SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
- PATH OF TRAVEL AND/OR ACCESSIBLE ROUTE - SHALL PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE SHALL BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 120 (5.0%), ADA RAMP SHALL BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, SHALL BE PROVIDED. THE RAMP SHALL HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.
- DOORWAYS - SHALL HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA SHALL BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICDIANS A117-1.2003 AND OTHER REFERENCED INCORPORATED BY CODE.)
- WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 402.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN SOME CIRCUMSTANCES. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY CHANGES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS. IN WRITING, BEFORE COMMENCEMENT OF WORK, CONSTRUCTION IMPROVEMENTS SHALL FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.

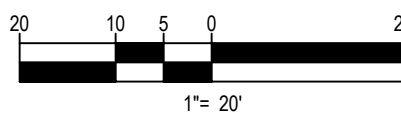
IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

EROSION CONTROL

--	--	--

[illegible]

DRAWN BY: AK/PT	REVIEWED BY: KS	ISSUE DATE 01/18/23	SCALE: AS SHOWN	PROJECT #: 1622000082
--------------------	--------------------	------------------------	--------------------	--------------------------



THIS PLAN TO BE UTILIZED FOR
DEMOLITION/ REMOVAL
PURPOSES ONLY



EBI Consulting



A. MURPHY INC.
ELECTRICAL DESIGN & CONTRACTING

PREPARED FOR:

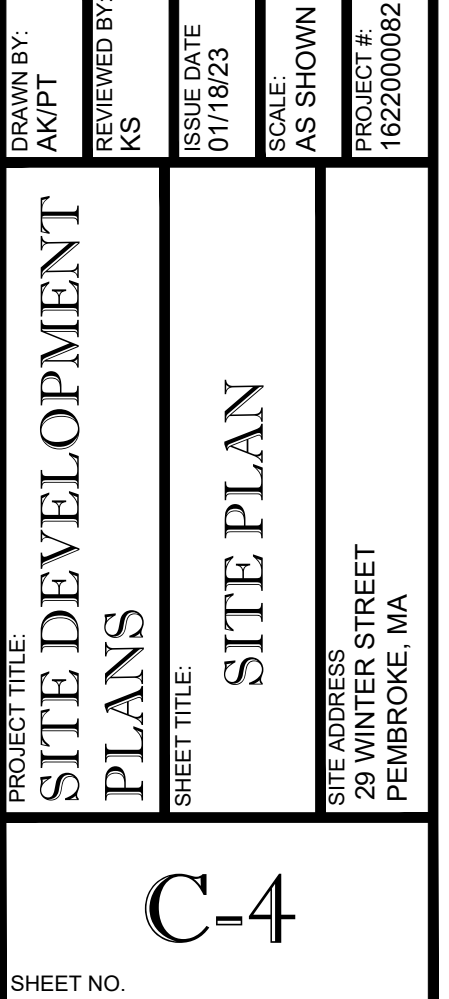
WHITE ADDRESS
29 WINTER STREET
PEMBROKE, MA

SHEET NO.

N/A - NOT APPLICABLE

(1) - EXISTING OFFICE BUILDING IS ALLOWED BY RIGHT UNDER THE INDUSTRIAL A ZONING DISTRICT. PROPOSED STORAGE STRUCTURE WILL PROVIDE AN ANCILLARY SERVICE TO THE EXISTING OFFICE USE

(2) - PARKING CRITERIA CALCULATION PROVIDED FOR THE PROPOSED STORAGE STRUCTURE ONLY. NO CHANGES ARE BEING PROPOSED FOR THE EXISTING BUILDING AND THE EXISTING PARKING AREA.



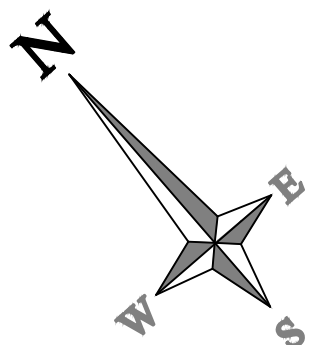
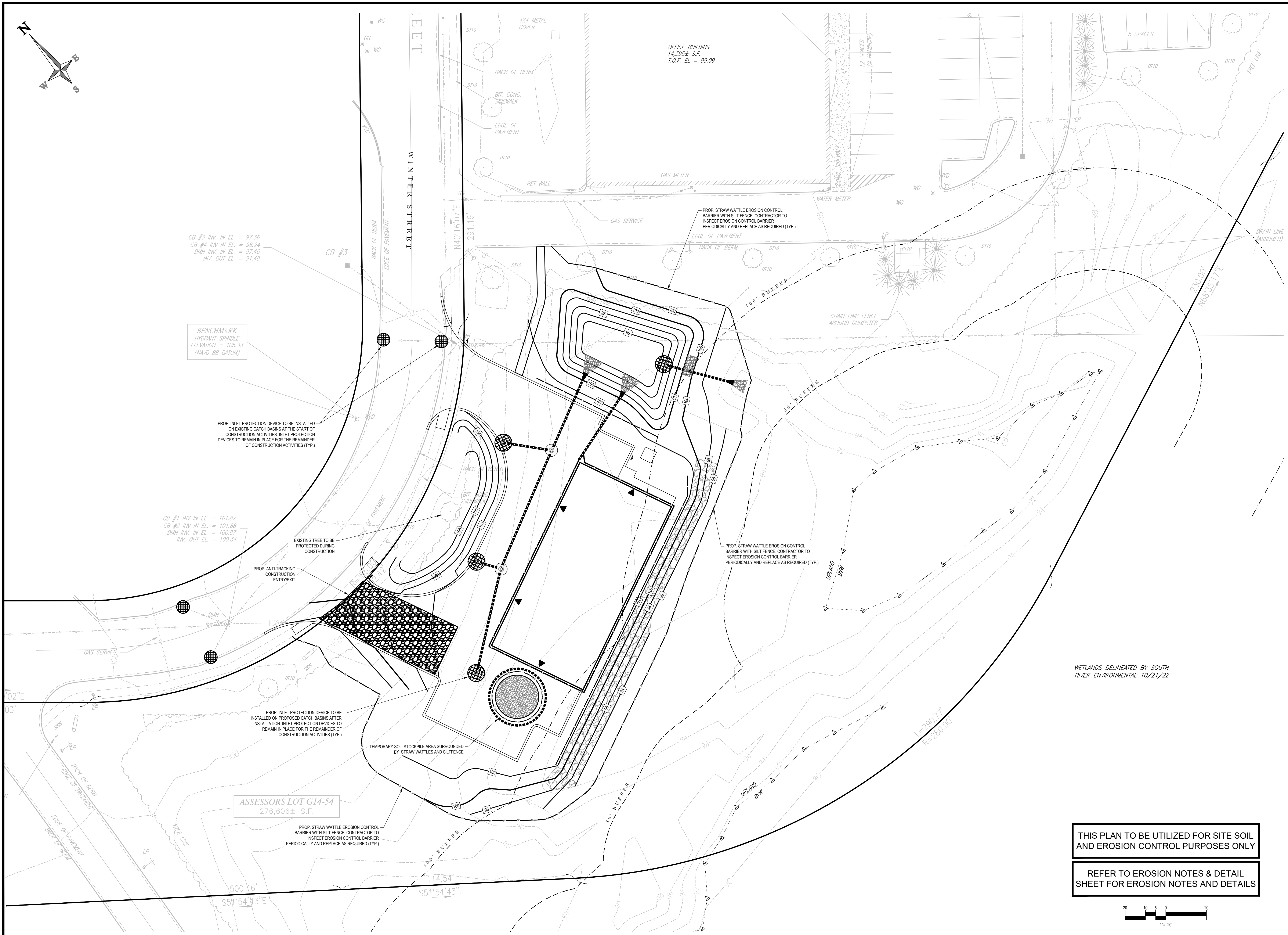
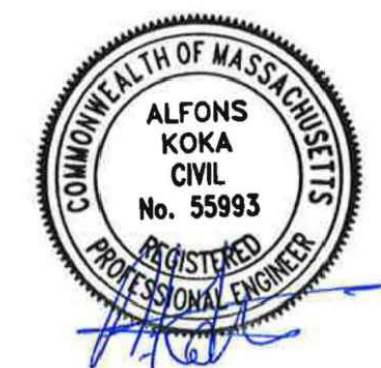
Drawing: S:\01_CIVIL CLIENTS\1622000082 A MURPHY ELEC 29 WINTER ST PEMBROKE\DRAWINGS\04-DWG\1622000082_SSI.DWG Layout Tab: 04-SITE, Date: 01/20/2023 Time: 10:54:20 AM Plotted by: AKDKA

1"=10'



SECTION THROUGH SEWAGE DISPOSAL SYSTEM

N.T.S.

 EBI Consulting[illegible]

Know what's below.
Call before you dig.

THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF EBI CONSULTING, INC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED.

DRAWING SCALES NOTED ARE FOR 24" x 36" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

PROJECT TITLE:
**SITE DEVELOPMENT
PLANS**

SHEET TITLE:
**EROSION
CONTROL PLAN**

SITE ADDRESS
28 WINTER STREET
PEMBROKE, MA

SHEET NO.

ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.

THOSE AREAS UNDERGOING ACTIVE CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL GRADING OF THE SITE. WITHIN 100 FEET OF DISTANCE FROM THE EROSION CONTROL MEASURES, A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).

SEDIMENT BARRIERS (SILT FENCE, STORM BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA OVER WHICH THEY MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 1% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.

INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.

ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT. IF WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPLSLOPE ARE STABILIZED BY TURF.

NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1).

IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.

DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.

REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:

1. SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.

2. WHERE LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST, IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR APPLY TIME IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 80 LB PER ACR OR 18.4 LB PER 1,000 SF USING 10-20-20 OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACR (138 LB PER 1,000 SF).

3. FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREMIUM TURF MIXTURE OF 4% KENTUCKY BLUE GRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN QUALITY SOO MAY BE SUBSTITUTED FOR SEED.

4. STRAW MULCH AT THE RATE OF 70-80 LBS PER 1,000 SF. IF A HYDRO-APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING, A SUITABLE BINDER SUCH AS CURSOL, OR RMP PLUS WILL BE USED ON STRAW MULCH FOR WIND CONTROL.

5. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.

6. WETLANDS WILL BE PROTECTED WITH BARRIERS AND/OR SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.

7. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.

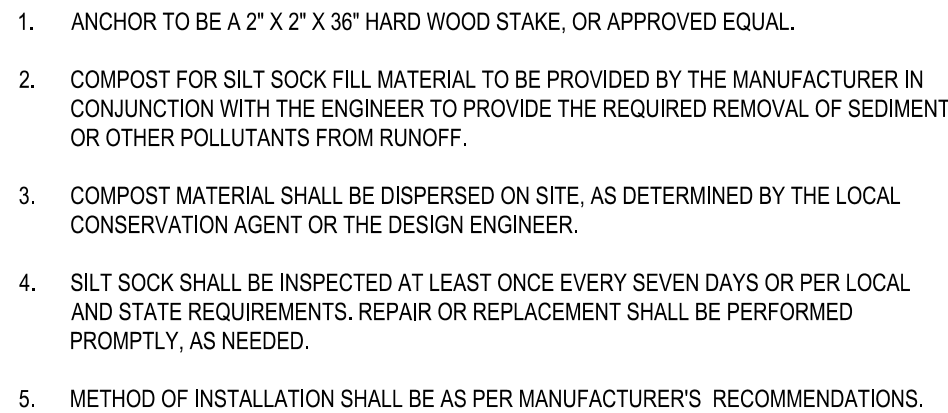
8. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO

LOCATION	MULCH	RATE (1000 SF)
PROTECT AREA	STRAW	100 POUNDS
WINDY AREA	SHREDDED OR CHOPPED CORNSTALKS STRAW (ANCHORED)*	185-275 POUNDS 100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED
GREATER THAN 3:1	(REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT)	

AND/OR MOISTURE TITERS AND TITRINE (1.5% TIDELOC), MOISTURE TITRINE (1.5% TIDELOC), WOOD CELLULOSE TITRINE (1.5% TIDELOC),
CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK. WETTING FOR SMALL AREAS AND ROAD
DITCHES MAY BE PERMITTED.

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
4. CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR straw AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED. WHEN SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINE GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 200 - 300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF straw OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
7. MULCHING REQUIREMENTS:
 - 7.1. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER.
 - 7.2. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGEWAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
 - 7.3. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
8. AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
9. DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
10. STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) SHALL REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF.
11. EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.

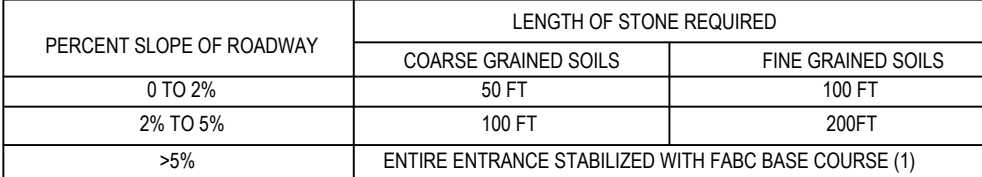
- THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:
- INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE/EXIT (AS SHOWN)
- INSTALLATION OF EROSION CONTROL BARRIER (STRAW BALES AND SILT FENCE) (AS SHOWN)
- INSTALLATION OF INLET PROTECTION IN STREET (AS SHOWN)
- DEMOLITION OF EXISTING SITE PAVEMENT AND AMENITIES (SEE DEMOLITION PLAN)
- CLEARING AND GRUBBING (SEE DEMOLITION PLAN)
- INSTALLATION OF TEMPORARY SWALES AND SEDIMENT BASINS
- EARTHWORK AND EXCAVATION/FILLING AS NECESSARY
- CONSTRUCTION OF UTILITIES (EXCLUDING SANITARY
- STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING
- INSTALLATION OF INLET PROTECTION OF ON-SITE UTILITIES (AS SHOWN)
- CONSTRUCTION OF BUILDINGS
- CONSTRUCTION OF SEPTIC SYSTEM
- CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS
- SPREAD TOPSOIL ON SLOPED AREAS AND SEED AND MULCH
- FINAL GRADING OF ALL SLOPED AREAS
- PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE INSTALLED AS REQUIRED.
- REMOVAL OF THE TEMPORARY SEDIMENT BASINS
- PAVE PARKING LOT AND BERM
- LANDSCAPING PER LANDSCAPING PLAN
- REMOVE EROSION CONTROLS AS DISTURBED AREAS BECOME STABILIZED TO 70% STABILIZATION OR GREATER



N.T.S.



1. EXCAVATE A 6" X 6" TRENCH ALONG THE LINE OF EROSION CONTROL OF THE SITE.
2. UNROLL SILTATION FENCE AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM FLOW DIRECTION).
3. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS LAYING ACROSS THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF THE FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING FABRIC FLAP ON UNDISTURBED GROUND AND PILING & TAMPING FILL AT THE BASE.



MAINTENANCE NOTES:

1. INSPECT STABILIZED CONSTRUCTION ENTRANCE / ANTI-TRACKING PAD AND SEDIMENT DISPOSAL AREA WEEKLY OR AFTER EVERY MAJOR RAIN STORM EVENT
2. WASH WATER (IF USED) SHALL BE DIRECTED TOWARD A SEDIMENT TRAP, SUFFICIENTLY SIZED FOR SPECIFIC SITE CONDITIONS.
3. EXCESSIVELY MUD-CLOGGED STONE SHALL BE REMOVED AND REPLACED, AS NEEDED.

N.T.S.



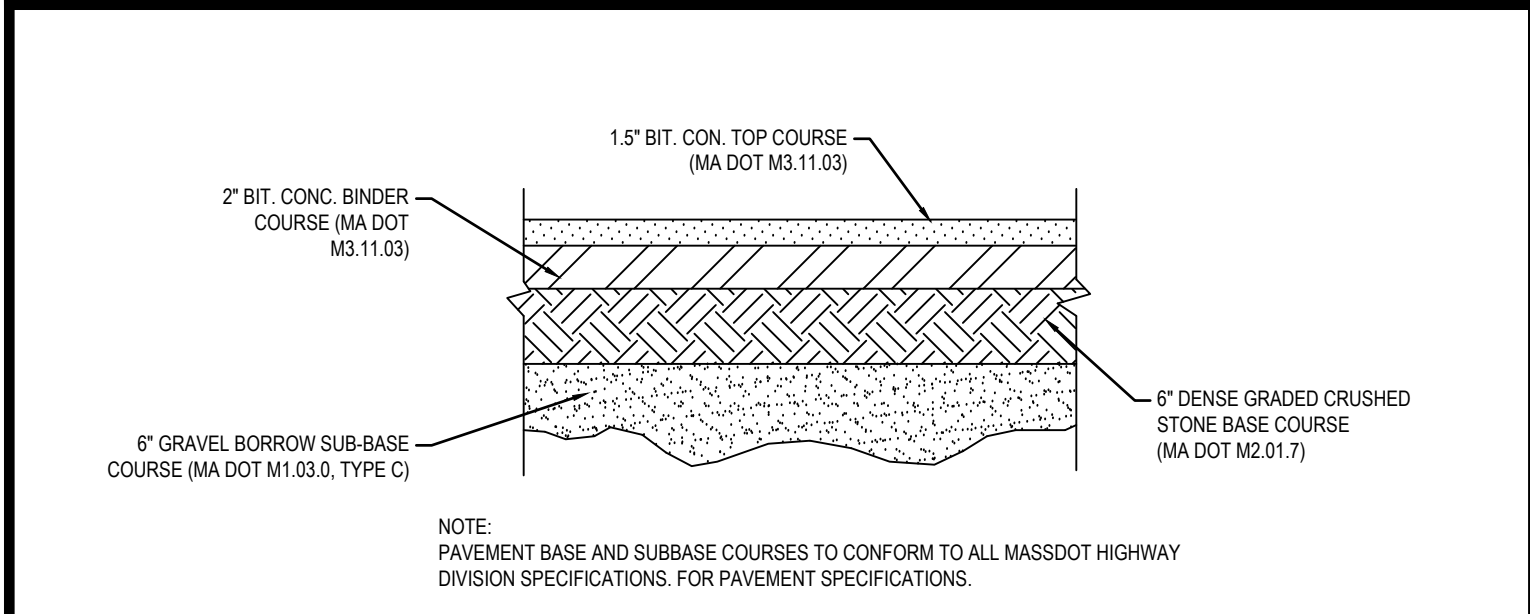
MODERATE TO HIGH FLOW GEOTEXTILE FIBER SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20% LBS
PUNCTURE	ASTM D-4633	135 LBS
TEAR BURST	ASTM D-3786	425 PSI
TRAPZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4356	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC - 1

1. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. PLACE AN OIL ADSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY REQUIREMENTS.
5. THE WIDTH, "W," OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE INLET BOX.
6. THE DEPTH, "D," OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES
7. THE LENGTH, "L," OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRAINED INLET BOX.

DO NOT USE IN PAVED AREAS WHERE PONDING
MAY CAUSE TRAFFIC HAZARDS.

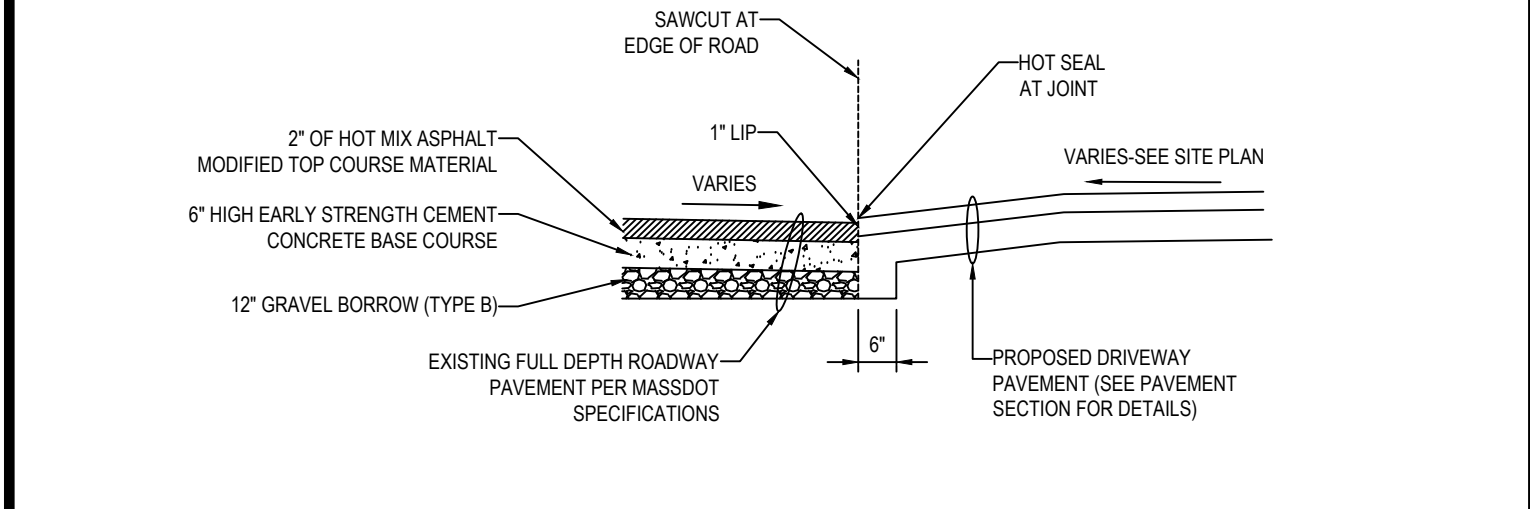
TO BE USED IN EXISTING RIGHT OF WAY

Drawing: S:\11_Civil CLIENTS\162200082-A MURPHY ELEC. 29 WINTER ST. PEMBROKE, MA\162200082-SS.DWG Layout: Twp ID-DETAILS Date: 01/20/2023 Twp ID: 005146 Ad: Printed by: AODA



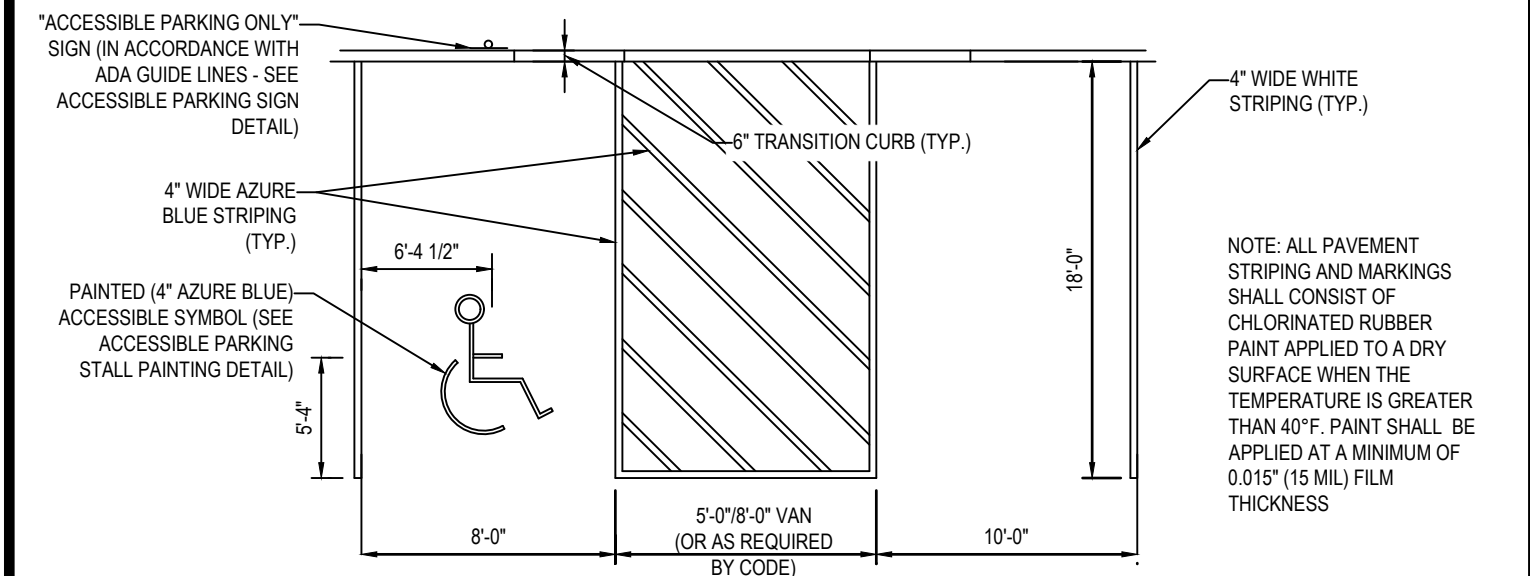
TYPICAL PAVEMENT SECTION

N.T.S.



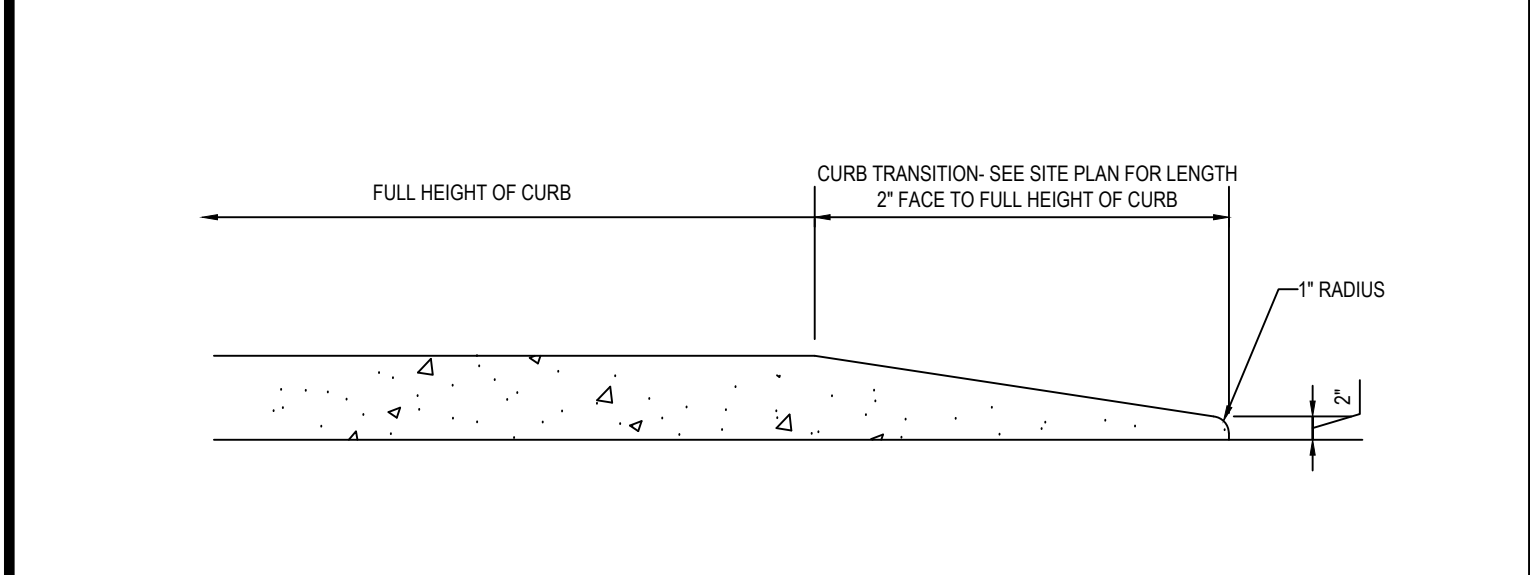
DRIVEWAY CONSTRUCTION DETAIL

N.T.S.



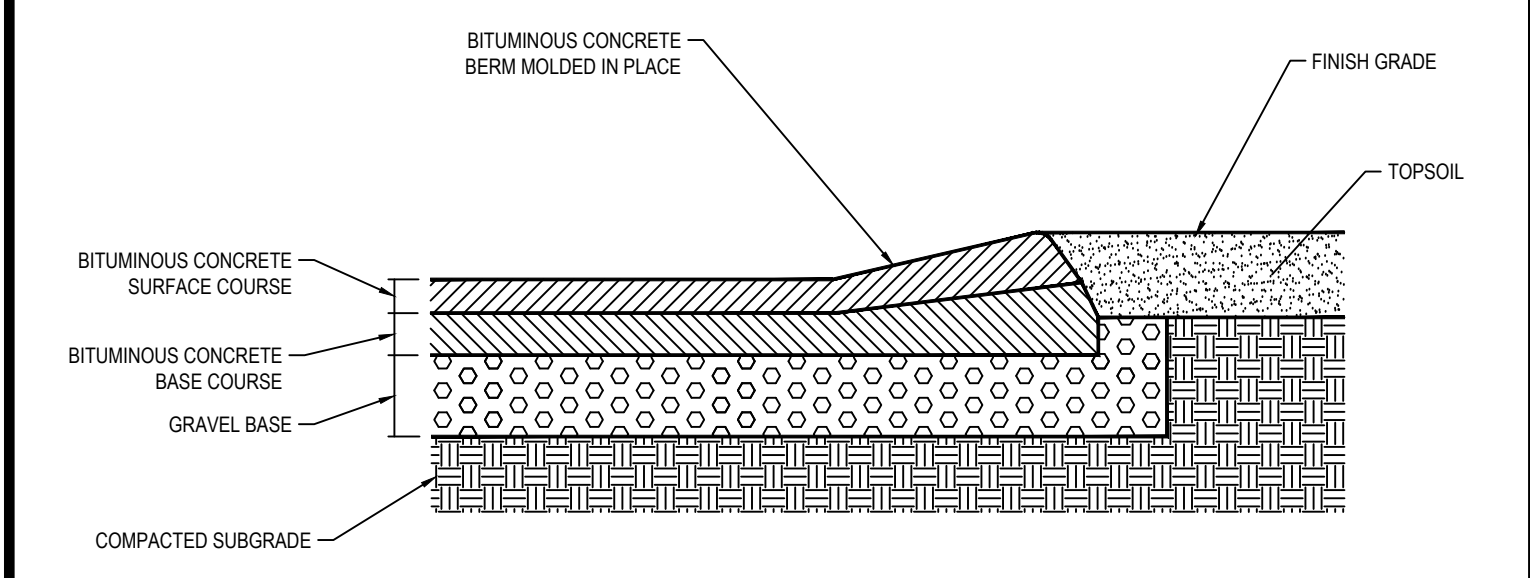
ACCESSIBLE STALL MARKINGS & PARKING LOT STRIPING DETAIL

N.T.S.



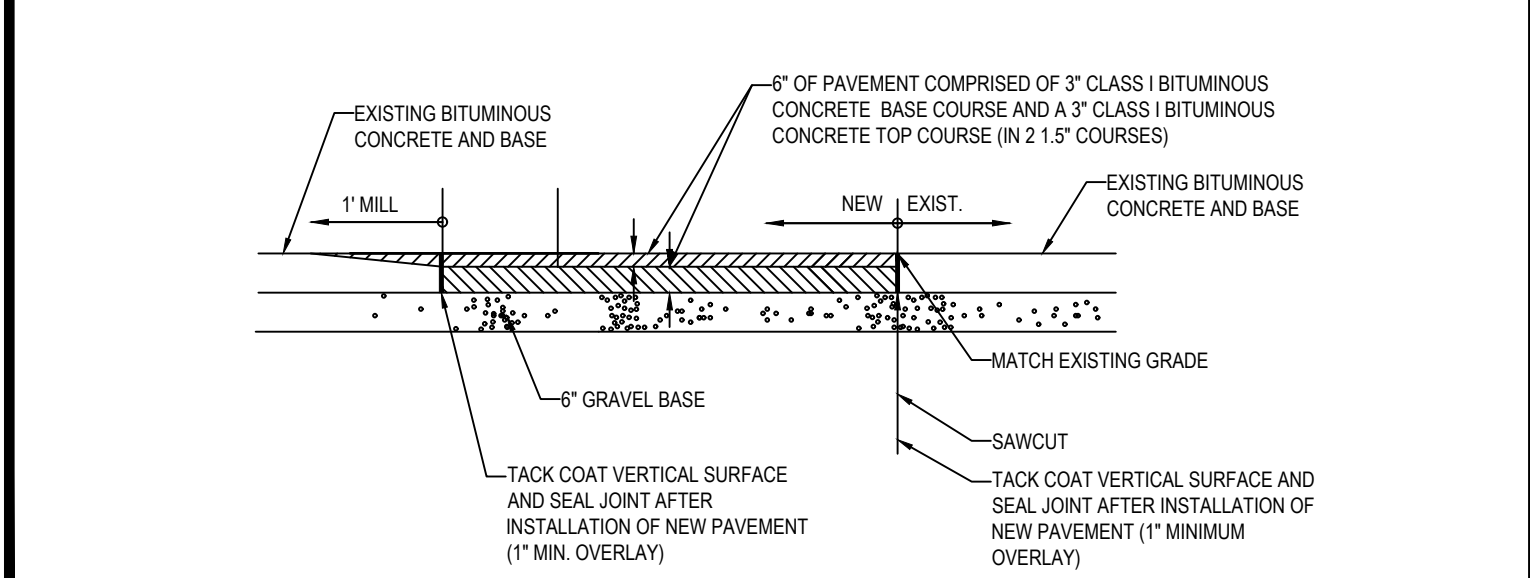
TRANSITION CURB DETAIL

N.T.S.



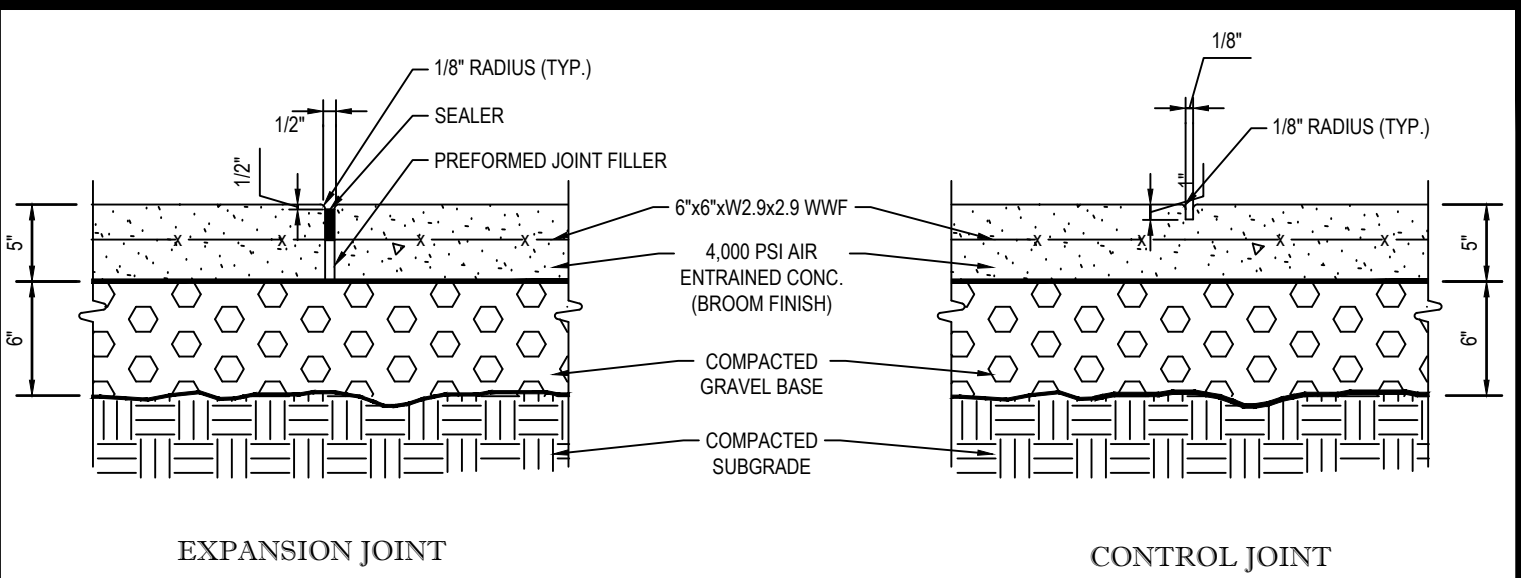
CAPE COD BERM

N.T.S.



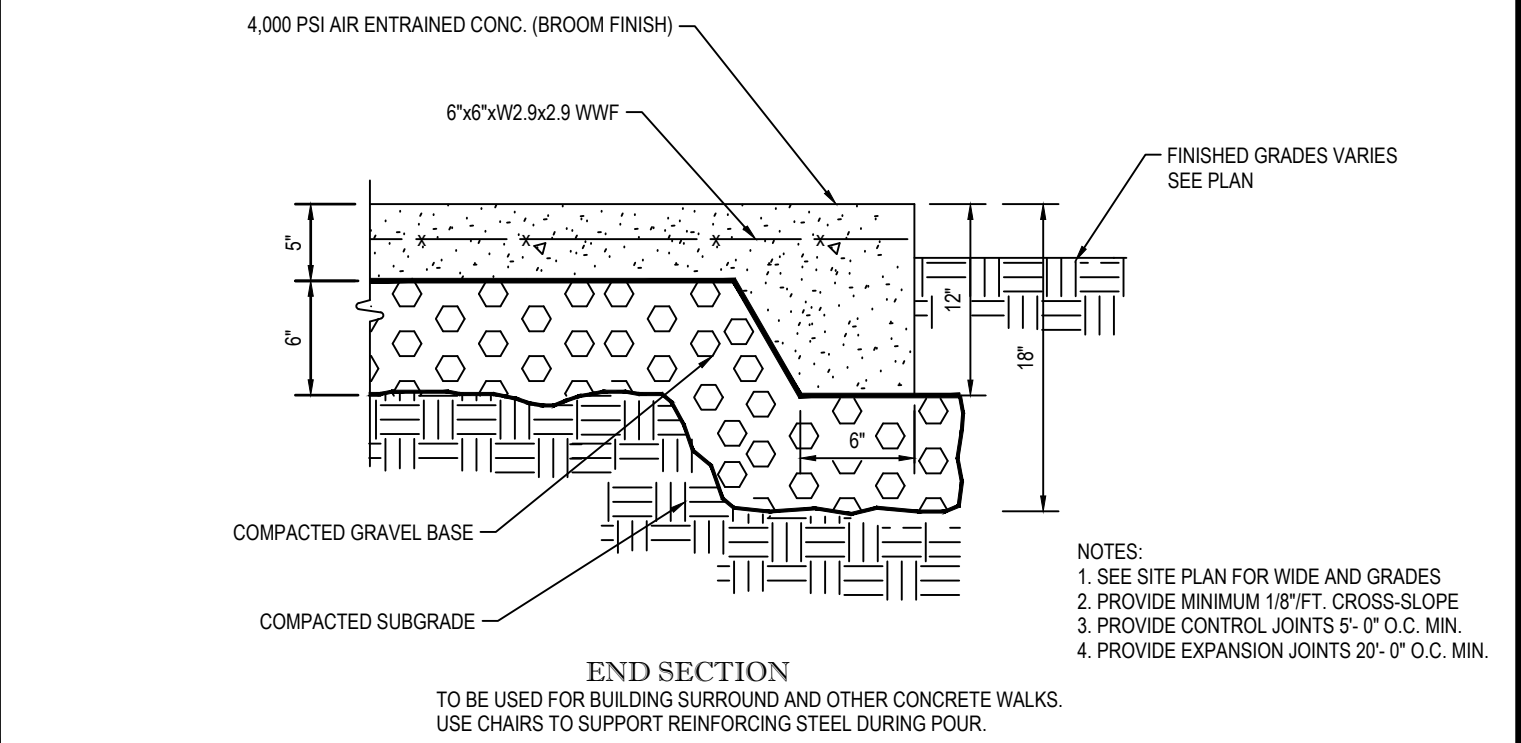
ROADWAY PATCHING DETAIL

N.T.S.



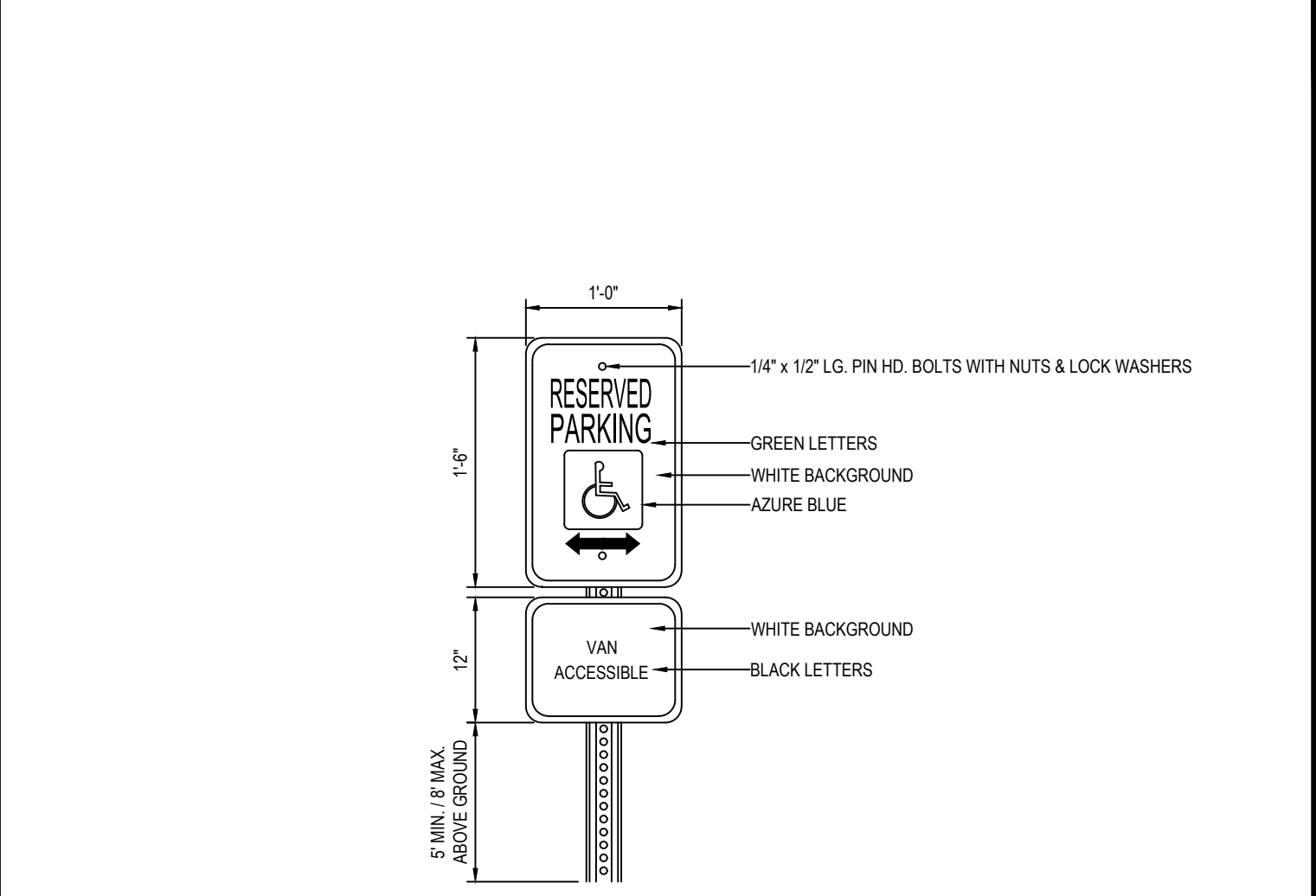
EXPANSION JOINT

CONTROL JOINT



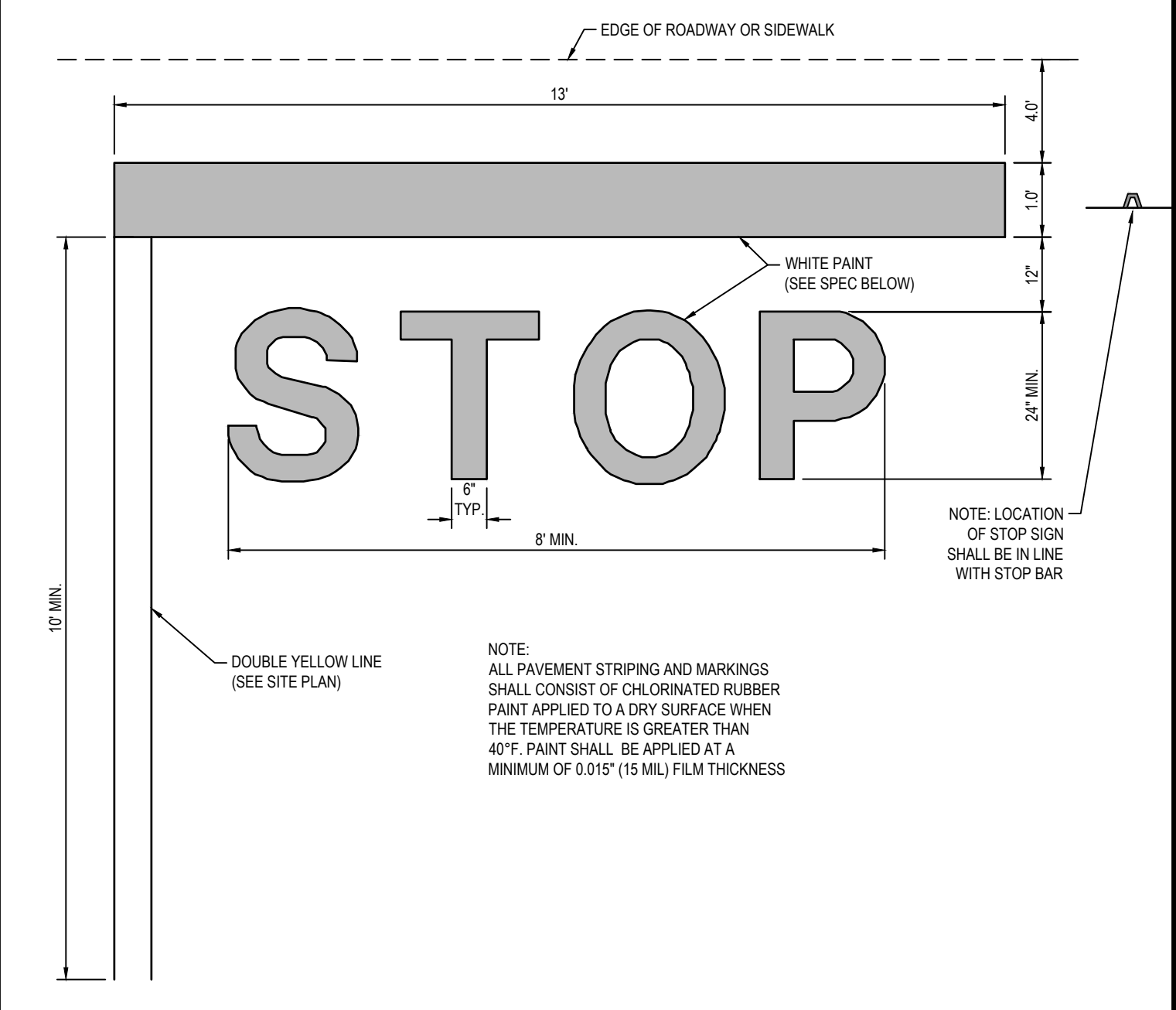
MONOLITHIC CONC. SIDEWALK DETAILS

N.T.S.



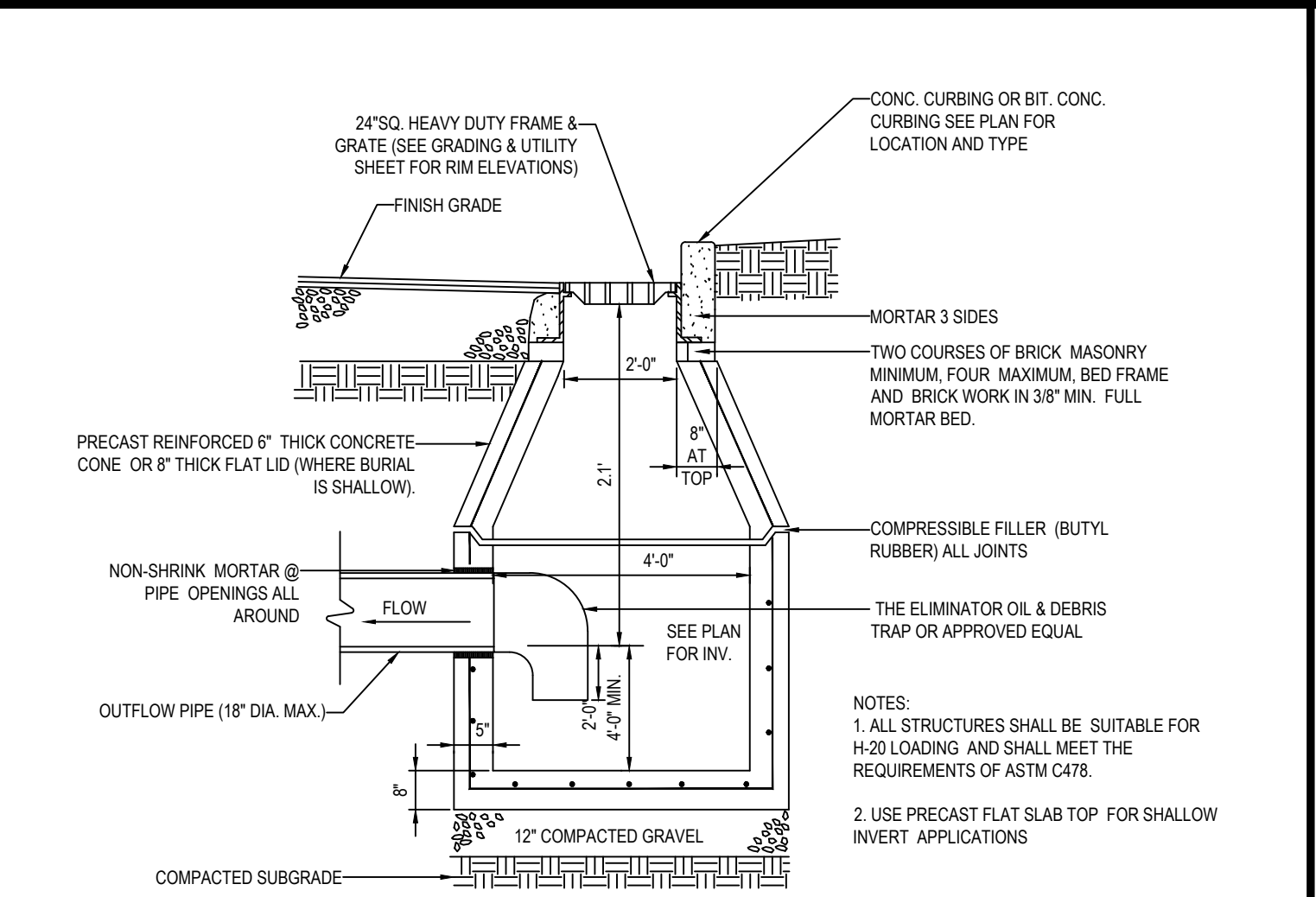
ACCESSIBLE PARKING SIGN DETAIL

N.T.S.



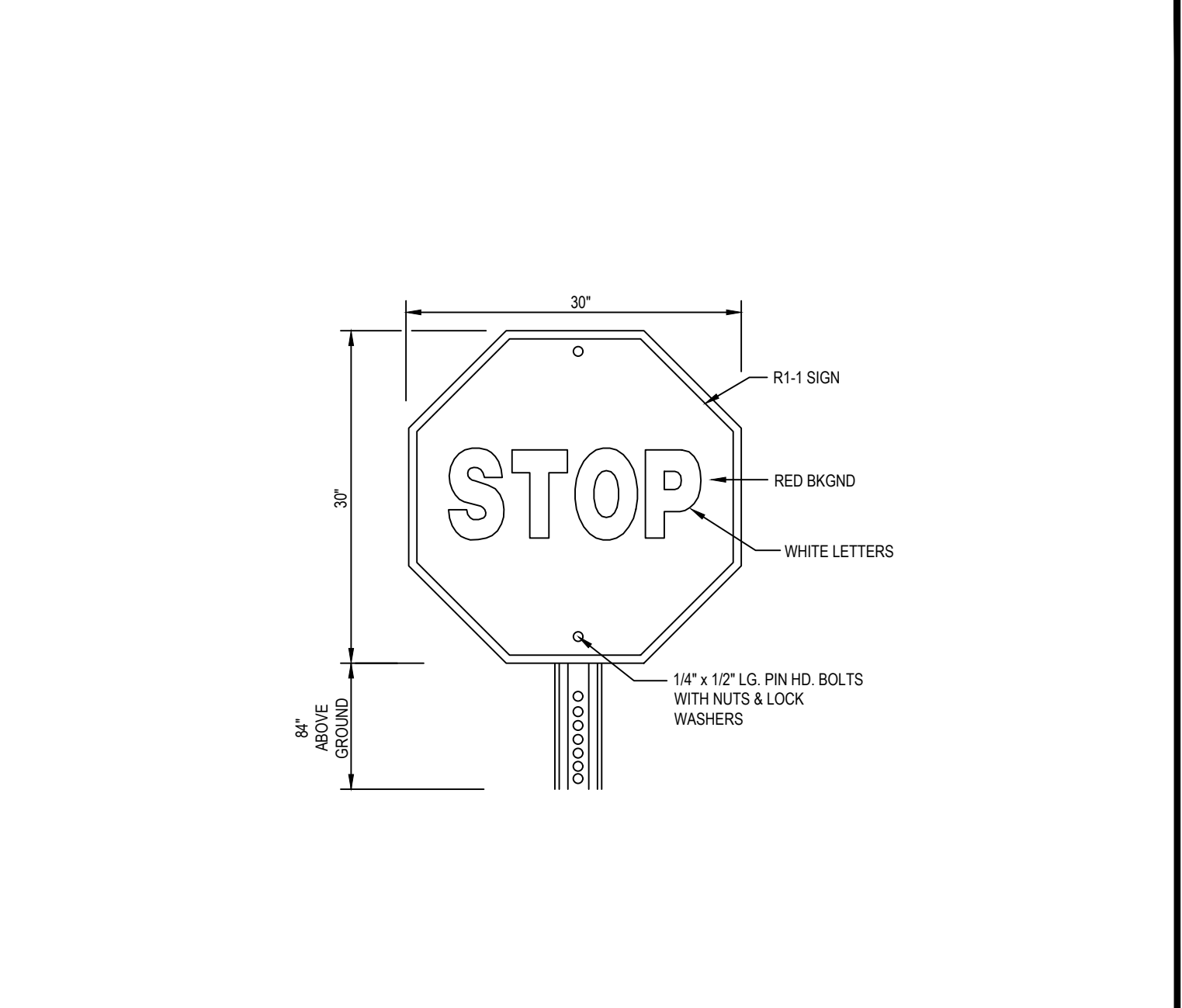
'STOP' BAR DETAIL

N.T.S.



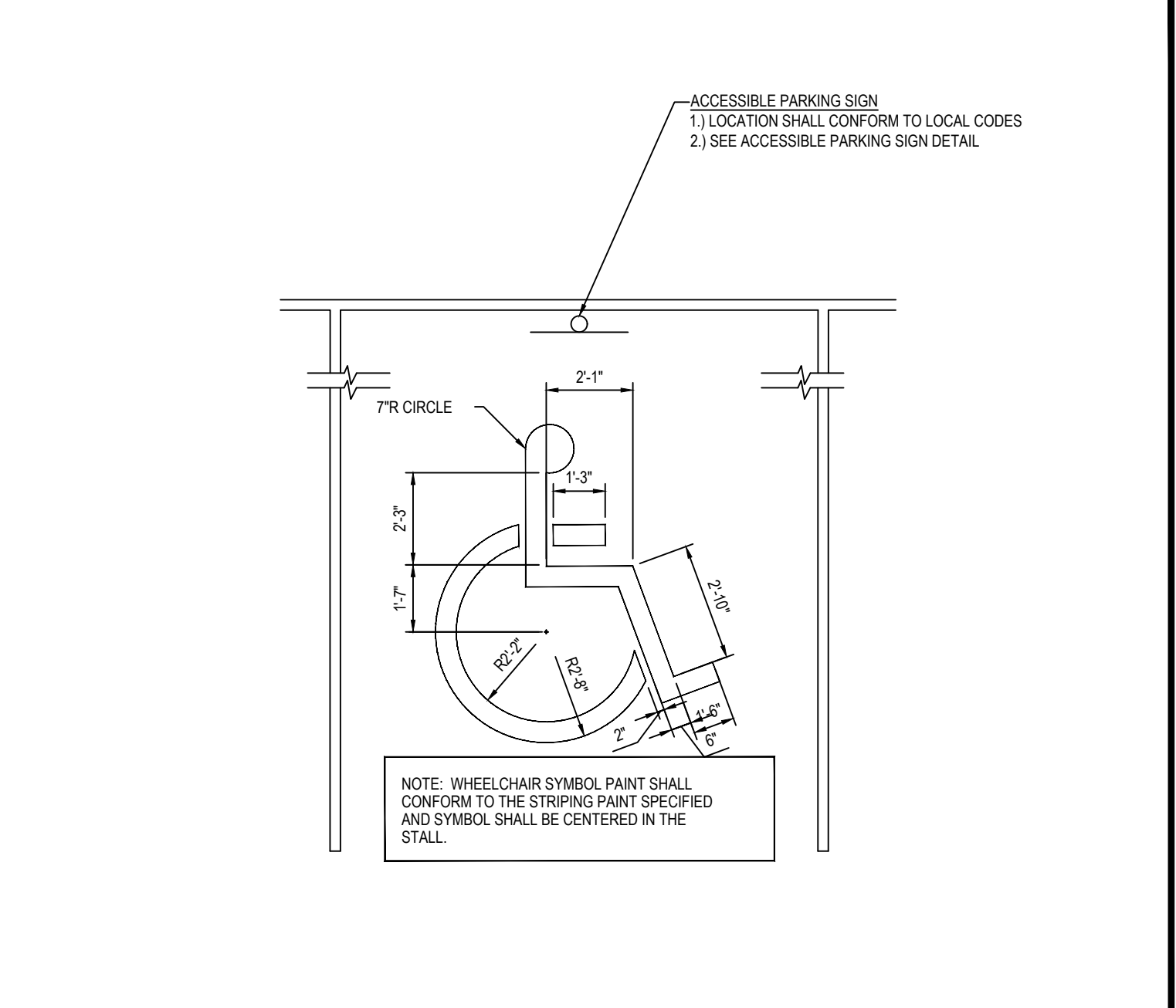
PRECAST CONCRETE DEEP SUMP CATCH BASIN DETAIL

N.T.S.



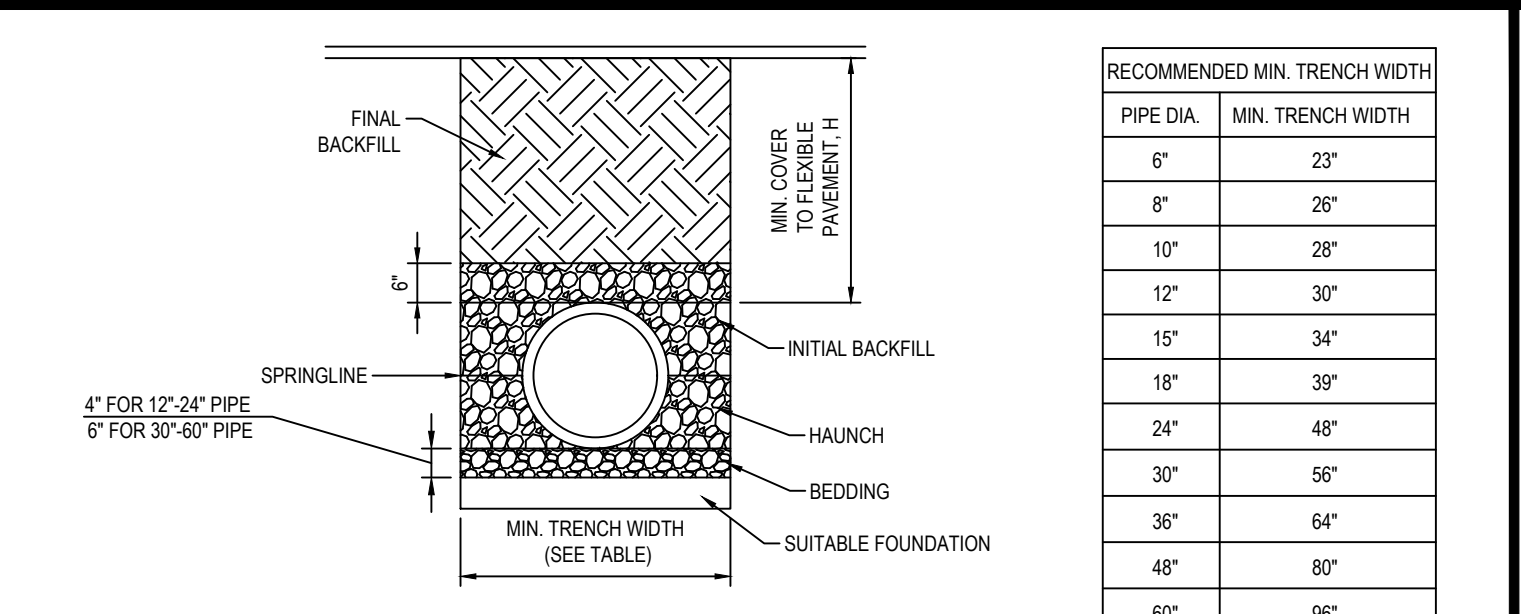
'STOP' SIGN

N.T.S.



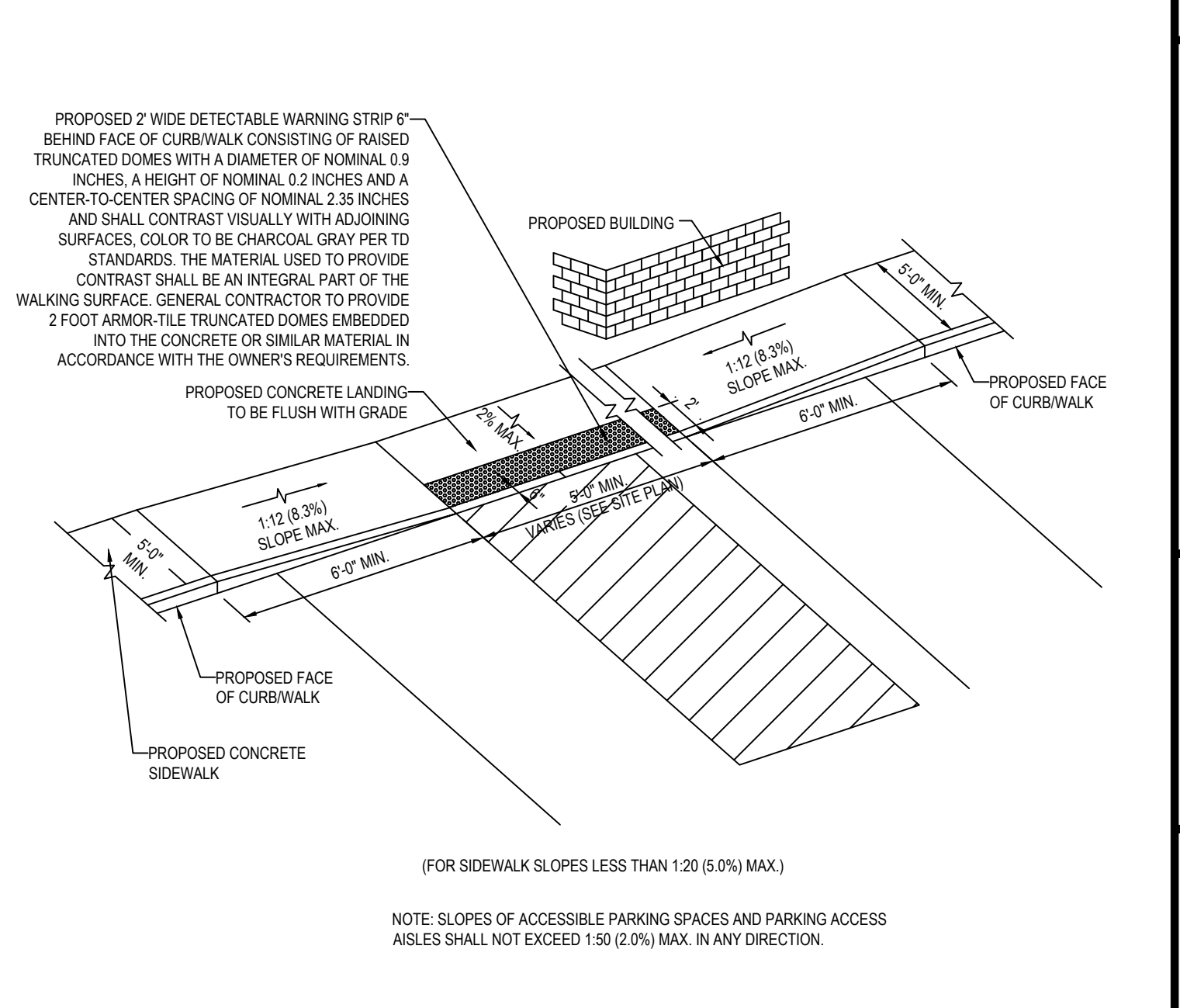
ACCESSIBLE PARKING STALL PAINTING DETAIL

N.T.S.



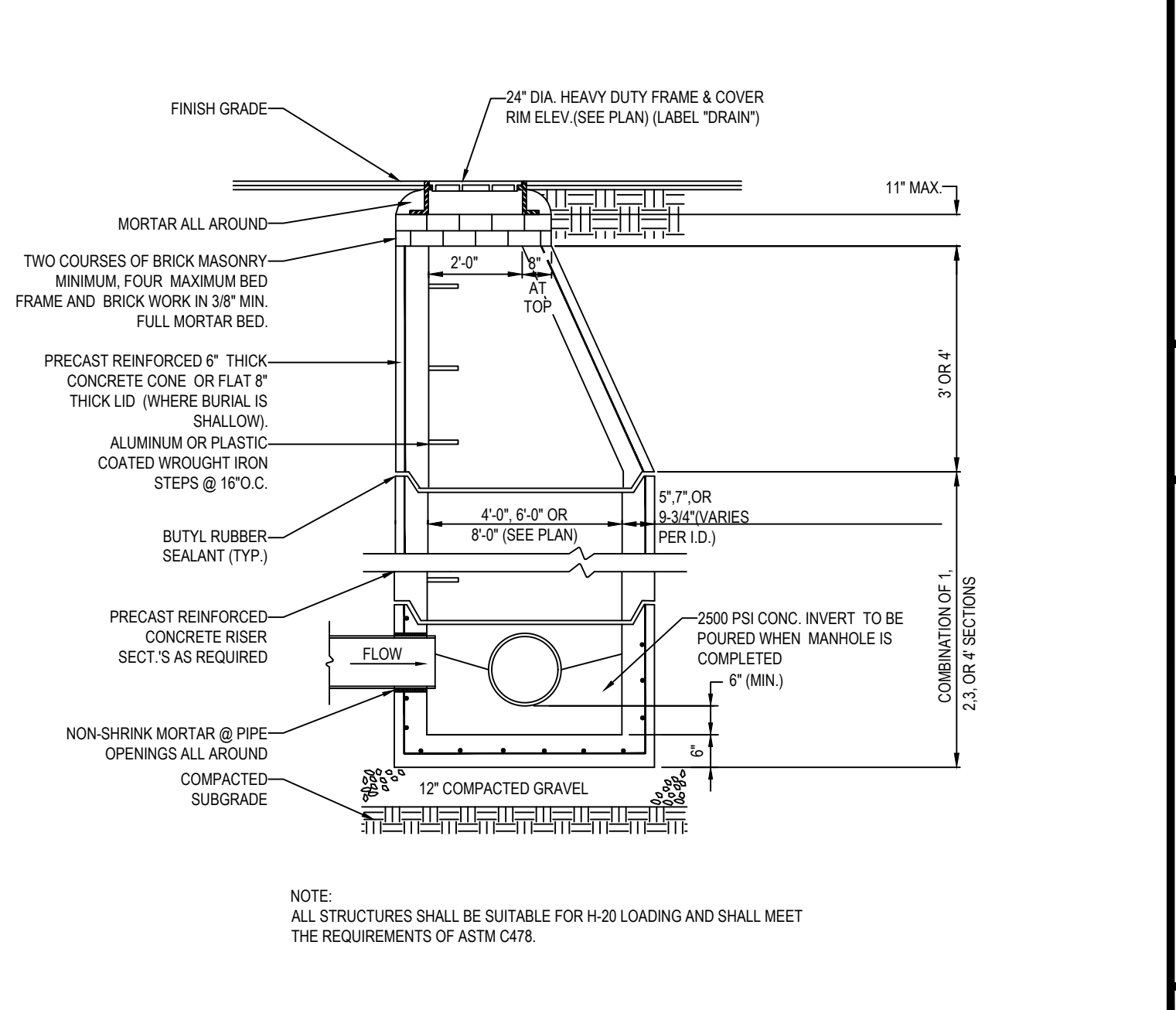
HDPE STORM DRAINAGE TRENCH

N.T.S.



SLOPED WALK DETAIL

N.T.S.



TYP. PRECAST CONCRETE MANHOLE STORM DRAIN

N.T.S.

EBI Consulting
21 B Street | Burlington, MA 01803
Tel: 781.273.2500 | Fax: 781.273.3311
www.ebiconsulting.com



PRELIMINARY

NO.	REVISIONS	DESCRIPTION	DATE	INIT

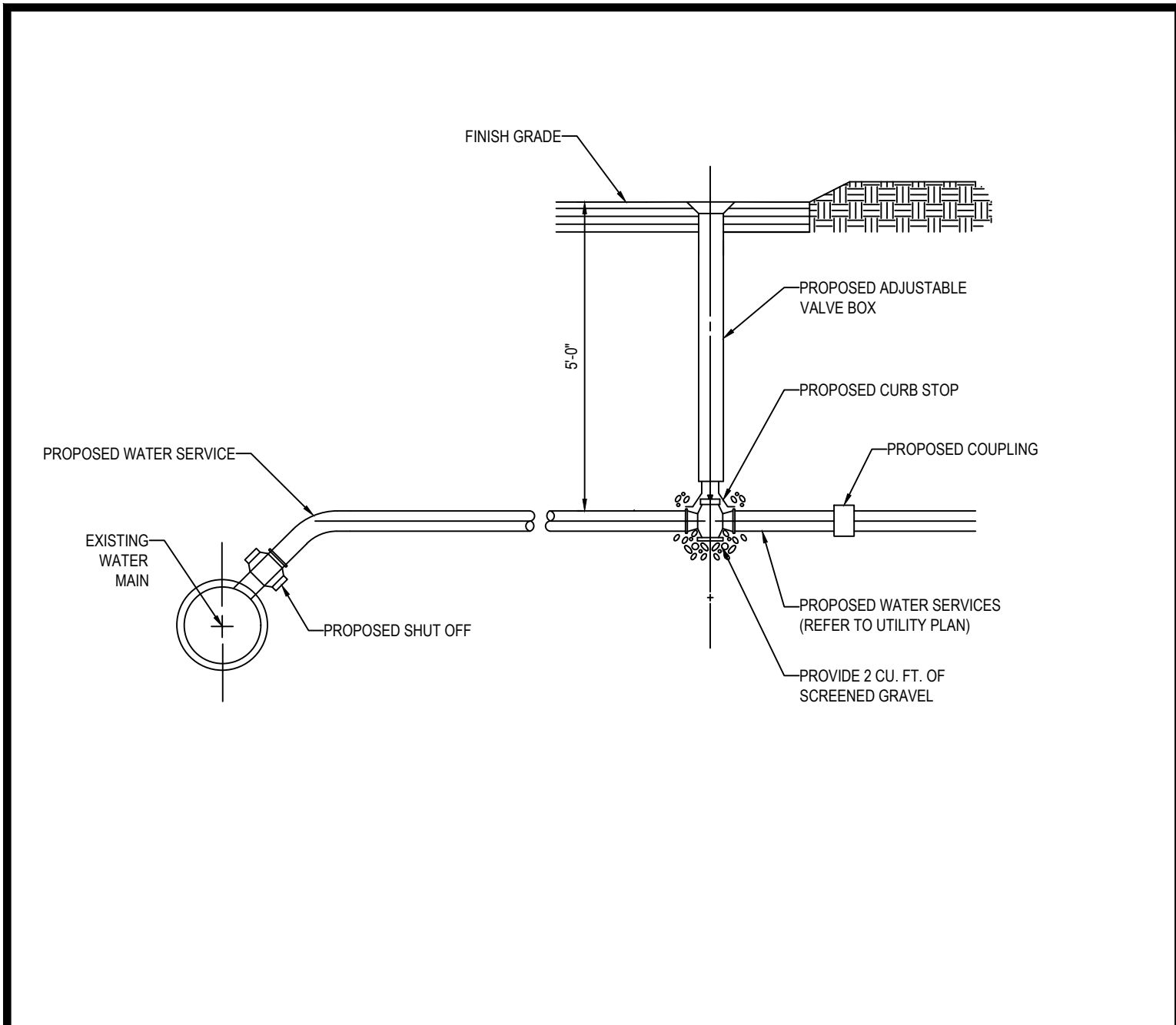
811
Know what's below.
Call before you dig.

A. MURPHY INC.
ELECTRICAL DESIGN & CONTRACTING
THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF EBI CONSULTING. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN CONSENT OF THE CREATOR. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED.
DRAWING SCALES NOTED ARE FOR 34" x 46" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

FOR: SITE DEVELOPMENT PLANS
SHEET TITLE: DETAIL SHEET
PROJECT # 162200082
SITE ADDRESS: 29 WINTER STREET, PEMBROKE, MA

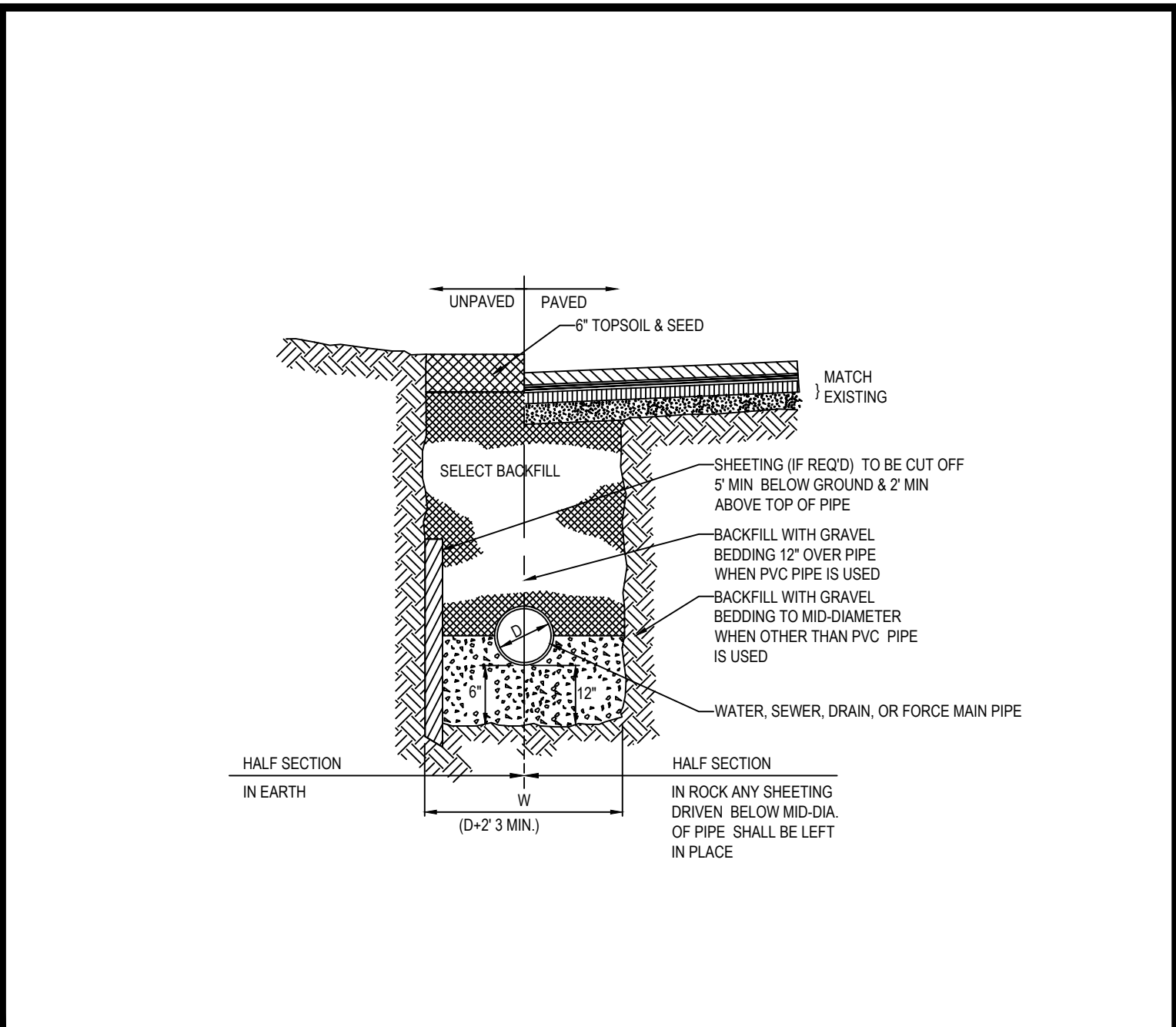
C-10
SHEET NO.

Drawing: S:\01_Civil Clients\162200082 A. MURPHY ELEC. 29 WINTER ST. PEMBROKE, MA\WORKING\162200082_SLDWG Layout_Tad 11-DETAILS Date: 01/20/2023 Time: 10:55:42 AM Plotted by: ADNA



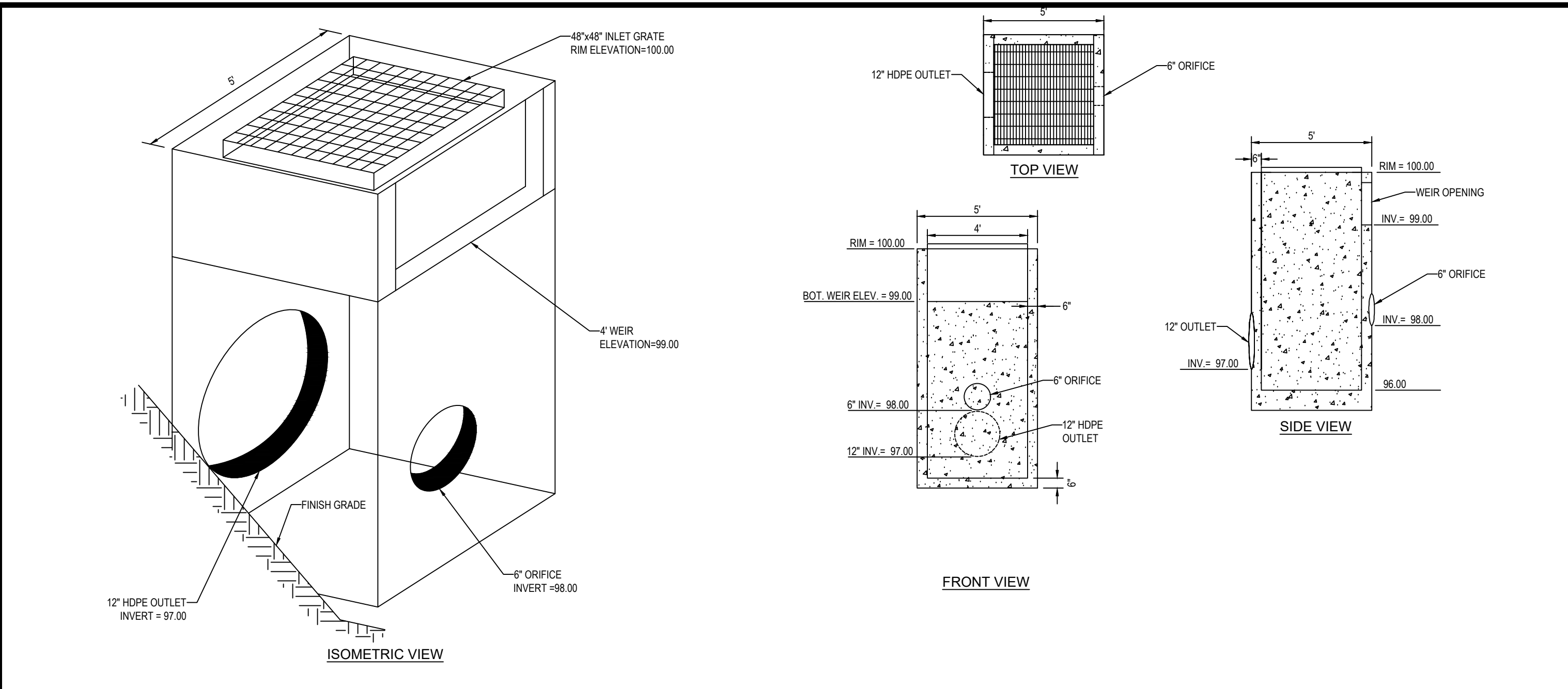
WATER SERVICE CONNECTION DETAIL

N.T.S.



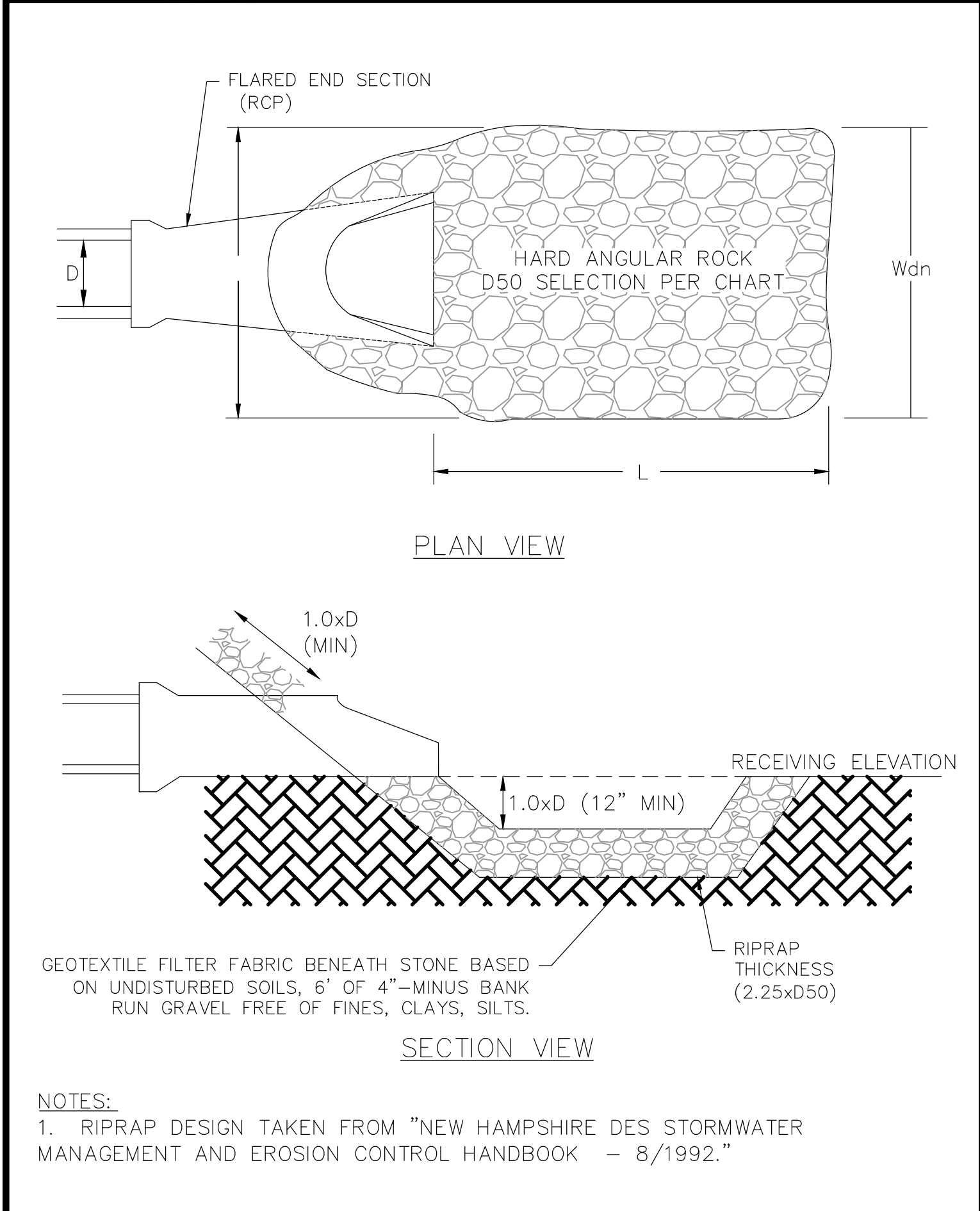
TYPICAL UTILITY TRENCH

N.T.S.



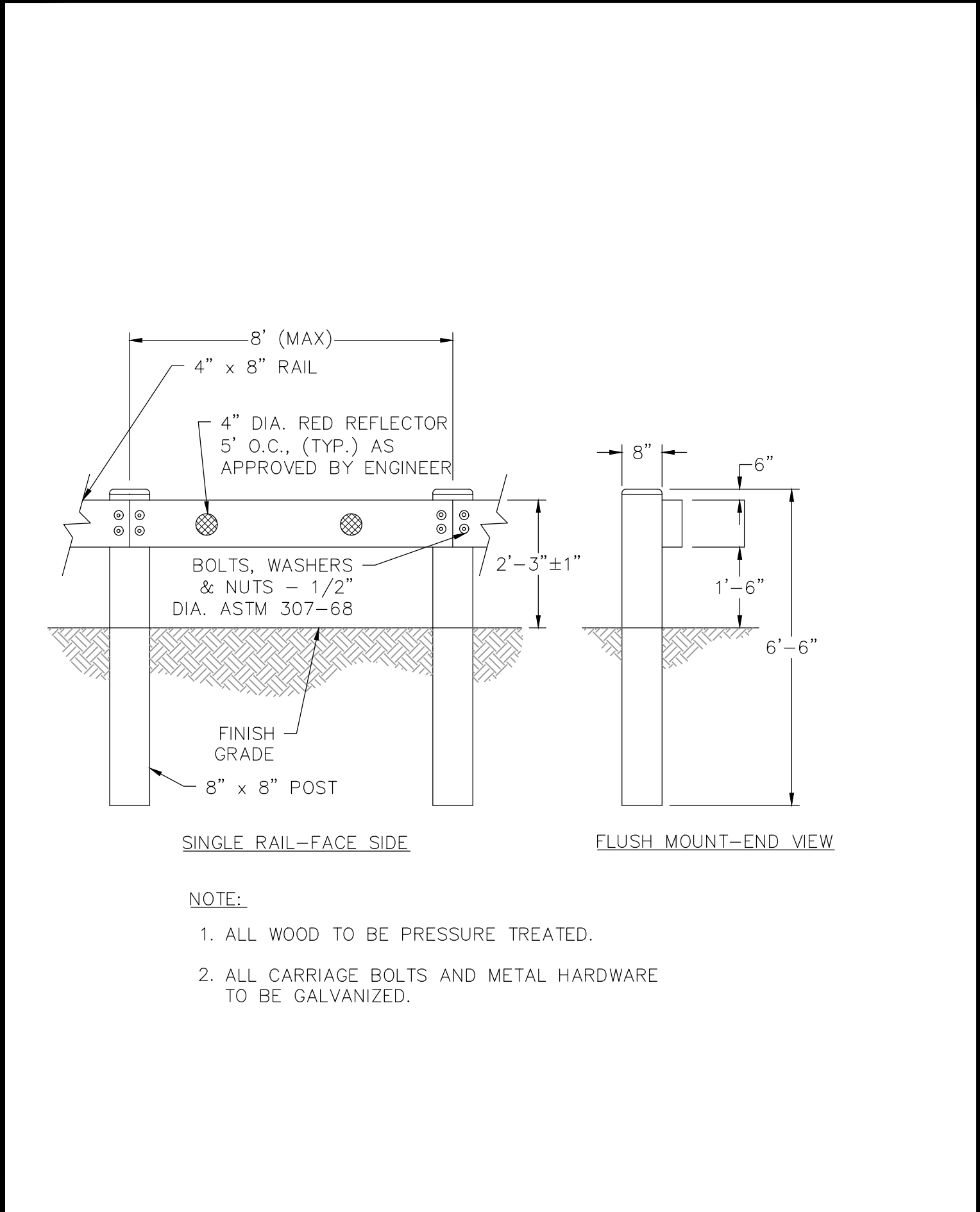
OUTLET CONTROL STRUCTURE

N.T.S.



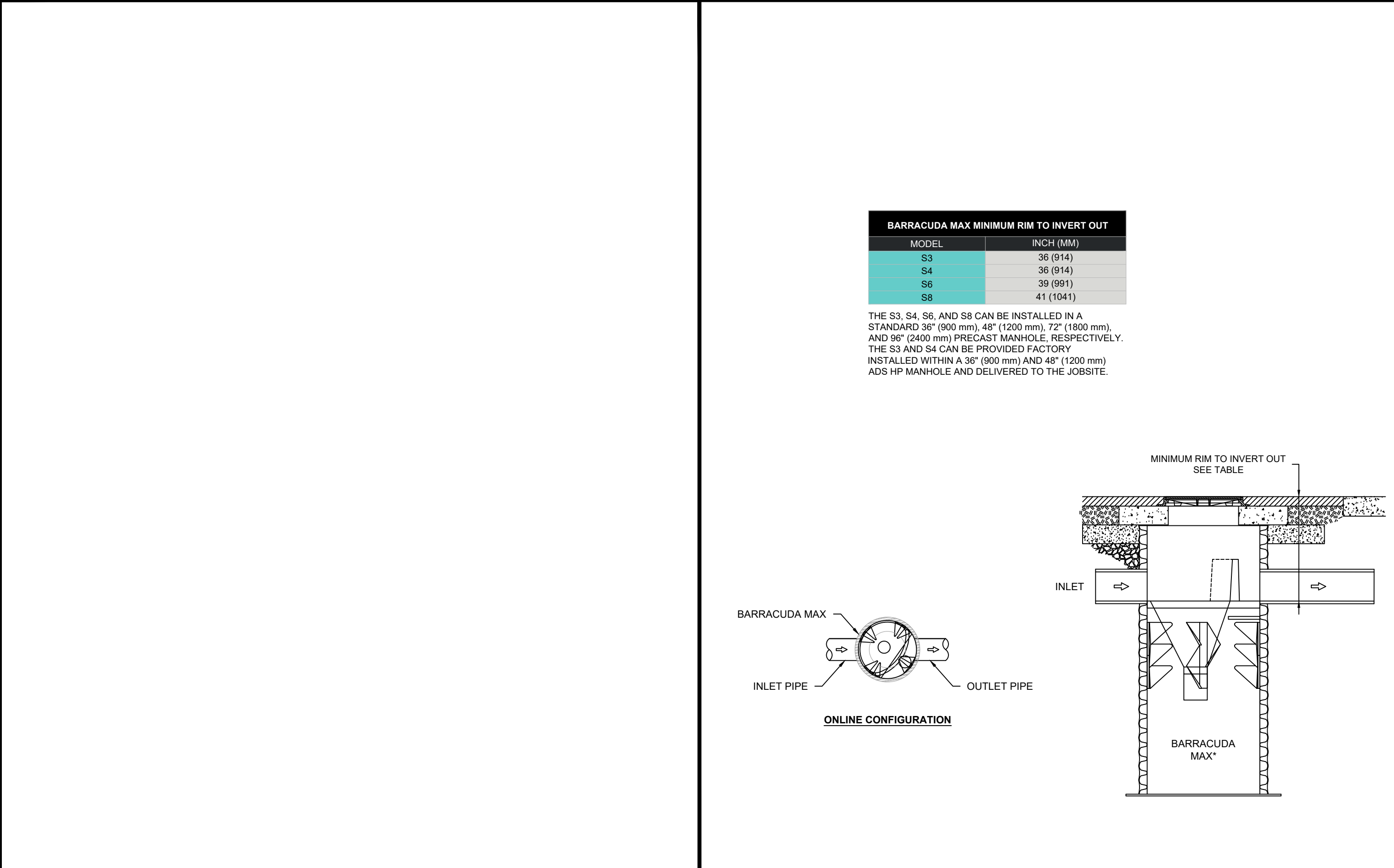
FLARED END SECTION WITH RIP RAP

N.T.S.



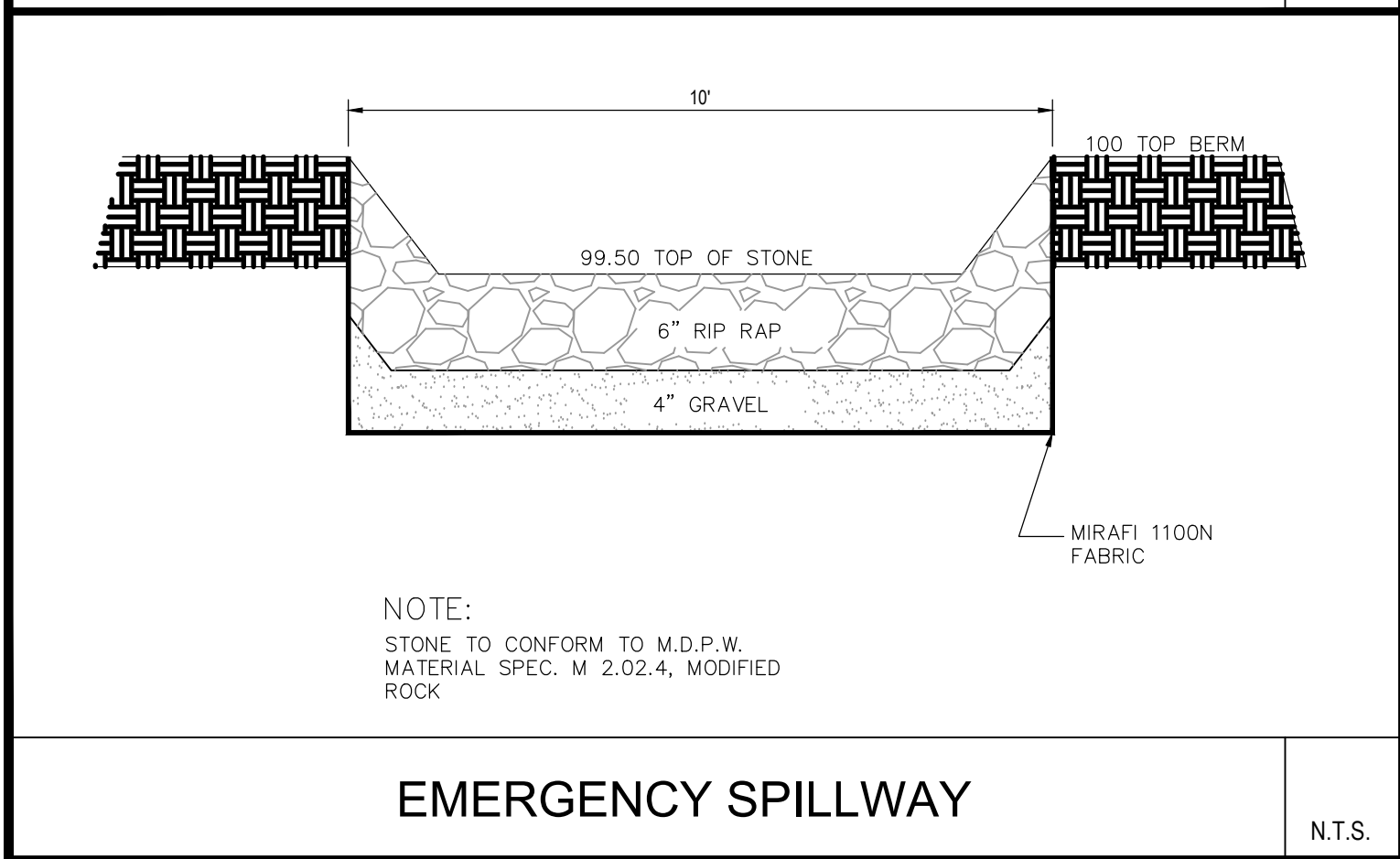
WOOD GUARDRAIL

N.T.S.



ADS BARRACUDA S4

N.T.S.



EMERGENCY SPILLWAY

N.T.S.

EBI Consulting

21 B Street | Burlington, MA 01803
Tel: 781.273.2500 | Fax: 781.273.3311
www.ebiconsulting.com

PREPARED BY:

ALFONS KOKA
CIVIL
No. 55993
REGISTERED PROFESSIONAL ENGINEER

PROJECT TITLE

SITE DEVELOPMENT PLANS

SHEET TITLE

DETAIL SHEET

PROJECT ADDRESS

29 WINTER STREET
PEMBROKE, MA

C-11

SHEET NO.

REVISIONS

NO.	DESCRIPTION	DATE	INIT

811

Know what's below.
Call before you dig.

PREPARED FOR:

A. MURPHY INC.
ELECTRICAL DESIGN & CONTRACTING

THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF EBI CONSULTING. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF THE CREATOR. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED.

DRAWING SCALES NOTED ARE FOR 3/4", 3/8" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

DATE BY:

ACPT

REVIEWED BY:

KS

DATE

01/18/23

SCALE:

AS SHOWN

PROJECT #:

162200082

PLANTING PLAN NOTES

1. THE EXISTING CONDITIONS BACKGROUND HAS AN ELECTRONIC CAD FILE AS SUPPLIED BY EBI CONSULTING ON 01/04/2023.
2. ALL OF THE PROPOSED PLANT MATERIAL SHALL BE INSTALLED AS SHOWN ON THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
3. IT IS THE LANDSCAPE CONTRACTOR RESPONSIBILITY TO COORDINATE ALL ELEMENTS WITH THE GENERAL CONTRACTOR AND IF NECESSARY OTHER SUB CONTRACTORS AS REQUIRED TO SUCCESSFULLY PLANT ALL OF THE PROPOSED MATERIAL.
4. IT IS THE LANDSCAPE CONTRACTOR RESPONSIBILITY TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO STARTING WORK. ANY CONFLICTS THAT ARISE DURING THIS TIME SHALL BE BROUGHT TO THE DESIGN TEAMS ATTENTION IMMEDIATELY.
5. THE PLANT MATERIAL INSTALLATION SHALL HAPPEN BEFORE THE ROUGH GRADING HAS BEEN APPROVED BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE.
6. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN. ALL TREES AND SHRUBS OF THE SAME SPECIES AND SIZE SHALL HAVE MATCHING HEIGHT AND FORM UNLESS OTHERWISE NOTED ON THE PLANS AND BE APPROVED BY LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE.
7. THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN IN THE CONTRACT DOCUMENTS. DISCREPANCIES IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IMMEDIATELY SO I AM ABLE TO RESOLVE THE ISSUE IN A TIMELY MANNER.
8. ALL PROPOSED TREES, SHRUBS AND ORNAMENTAL GRASSES SHALL BE STAKED PRIOR TO EXCAVATING OF THE PLANTING AREAS. ADDITIONALLY, THE CONTRACTOR SHALL PAINT ON THE GROUND THE EXTENDS OF THE PROPOSED PLANT BEDS AND ALSO SHOW THE AREAS OF THE GROUND COVER AND PERENNIALS. THE FINAL LAYOUT TO BE APPROVED BY LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE.
9. THE CONTRACTOR SHALL FURNISH PLANT MATERIAL FREE OF PESTS OR PLANT DISEASES. PRESELECTED OR TAGGED ANY MATERIAL SHALL BE INSPECTED BY THE LANDSCAPE ARCHITECT AND CERTIFIED PEST AND DISEASE FREE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WARRANTY ALL PLANT MATERIAL FOR (1) ONE FULL YEAR FROM THE TIME OF FINAL ACCEPTANCE OF THE PLANTING.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING MATERIALS THAT WERE DAMAGED DURING PLANTING OPERATIONS.
11. ALL TREES, PLANT BEDS AND GROUND COVER SHALL BE COVERED WITH 3" OF ORGANIC BARK MUGH AS NOTED IN THE SPECIFICATIONS.

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
DECIDUOUS AND EVERGREEN SHRUBS					
CA	7	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSHEET	3 GALLON	
HPSS	20	HYDRANGEA PANICULATA 'STRAWBERRY SHAKE'	STRAWBERRY SHAKE HYDRANGEA	3 GALLON	
IGS	21	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	3 GALLON	
IVRS	7	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	3 GALLON	(1) MALE
ORNAMENTAL GRASSES, PERENNIALS AND GROUND COVER					
EPKXH	12	ECHINACEA PURPUREA KIM'S KNEE HIGH	KIM'S KNEE HIGH PURPLE CONEFLOWER	2 GALLON	
NFWL	15	NEPETA X FAASSENII 'WALKER'S LOW'	KIM'S KNEE HIGH PURPLE CONEFLOWER	2 GALLON	
PAH	47	PENNISETUM ALOPECUROIDES 'HAELN'	DWARF FOUNTAIN GRASS	2 GALLON	

LANDSCAPE ARCHITECT:

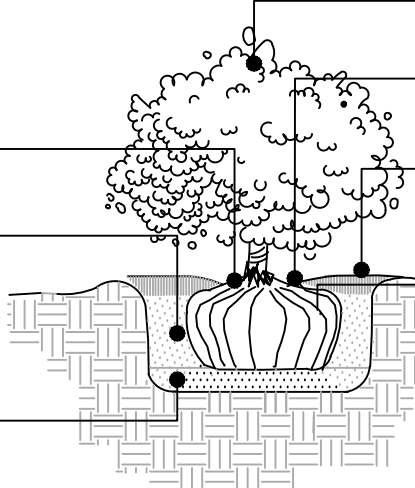


Jay Miller

LANDSCAPE
ARCHITECTURE

2045 VT. RT. 18
WATERFORD VT 05819
P: 802.555.8586
E: JAY@J.MILLERLANDSCAPE.COM

TOP OF ROOT BALL
SHALL BE LEVEL WITH
FINISH GRADE
BACKFILL MIXTURE TO BE 3
PARTS TOPSOIL AND 1 PART
ORGANIC HUMUS



PRUNE TO REMOVE DEAD
OR BROKEN BRANCHES

MULCH 2" MINIMUM AWAY
FROM THE TRUNK OF THE
PLANT

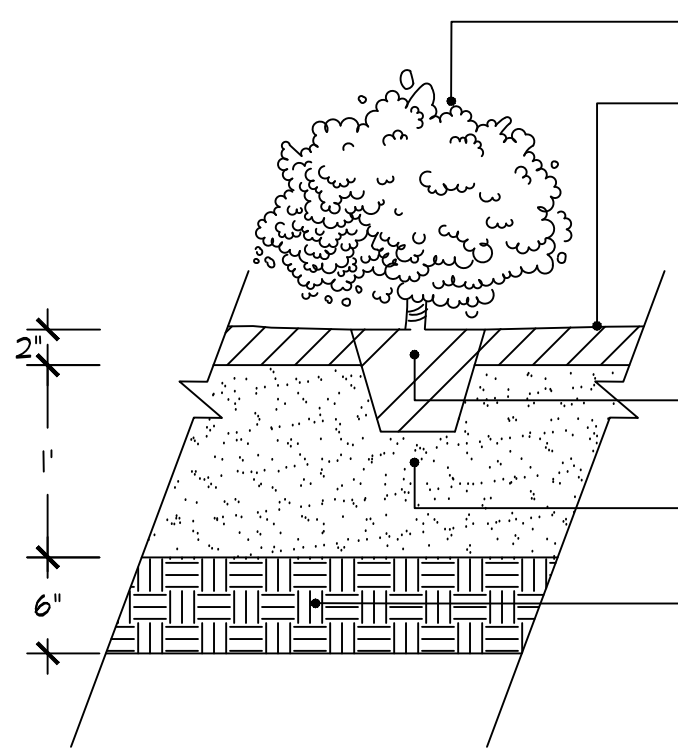
2-3" SHREDDED HARDWOOD BARK
MULCH. CREATE 3" CONTINUOUS
SAUCER AROUND EACH PLANT

CUT AND REMOVE BURLAP FROM
TOP 1/3 OF ROOTBALL.
NON-DEGRADABLE BURLAP SHALL
BE REMOVED OR ROLLED UNDER
BALL AFTER PLACEMENT OF PLANT.

BOTTOM LAYER OF BACKFILL
SHALL BE LIGHTLY TAMPED AND
SETTLED WITH WATER PRIOR TO
PLACEMENT OF PLANT

SHRUB PLANTING

SCALE = N.T.S.



PERENNIAL OR GROUND COVER
PLANTING

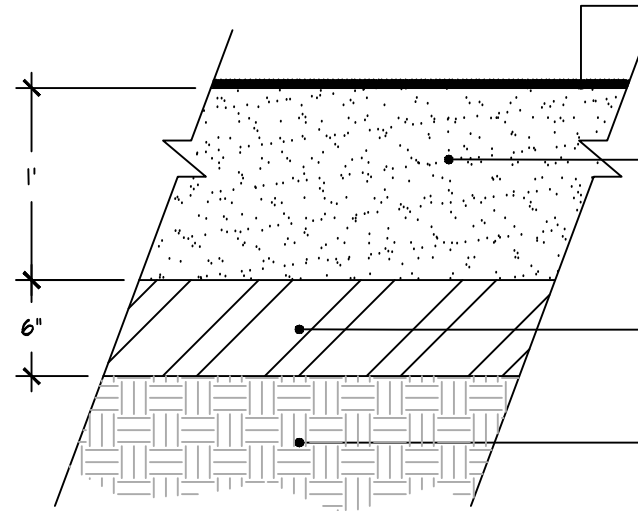
2" BARK MULCH WITH A BUILT UP
SAUCER AROUND THE DRIP LINE
OF THE PLANT.

PLANT ROOTBALL, ONCE THE
PLANT IS REMOVED FROM THE
CONTAINER SCRATCH AND
AMENDED PLANTING SOIL PER
THE SPECIFICATIONS

SCARIFY AND LOOSEN ANY
COMPACTED SOILS.

ORNAMENTAL GRASSES AND PERENNIALS PLANTING

SCALE = N.T.S.



LAWN, EITHER SEED OR SOD,
REFER TO PLANTING PLAN FOR
LOCATIONS

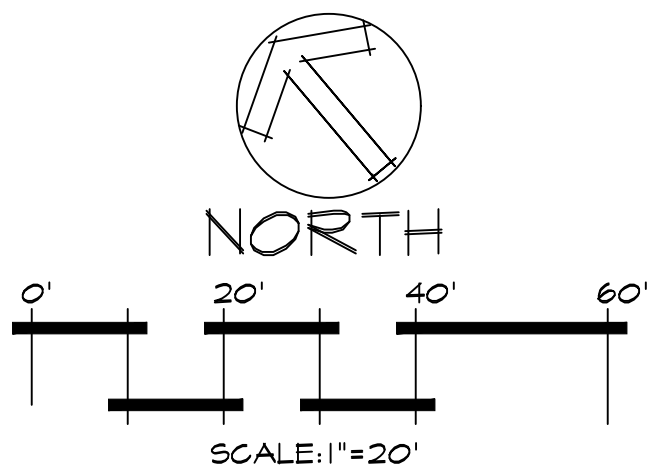
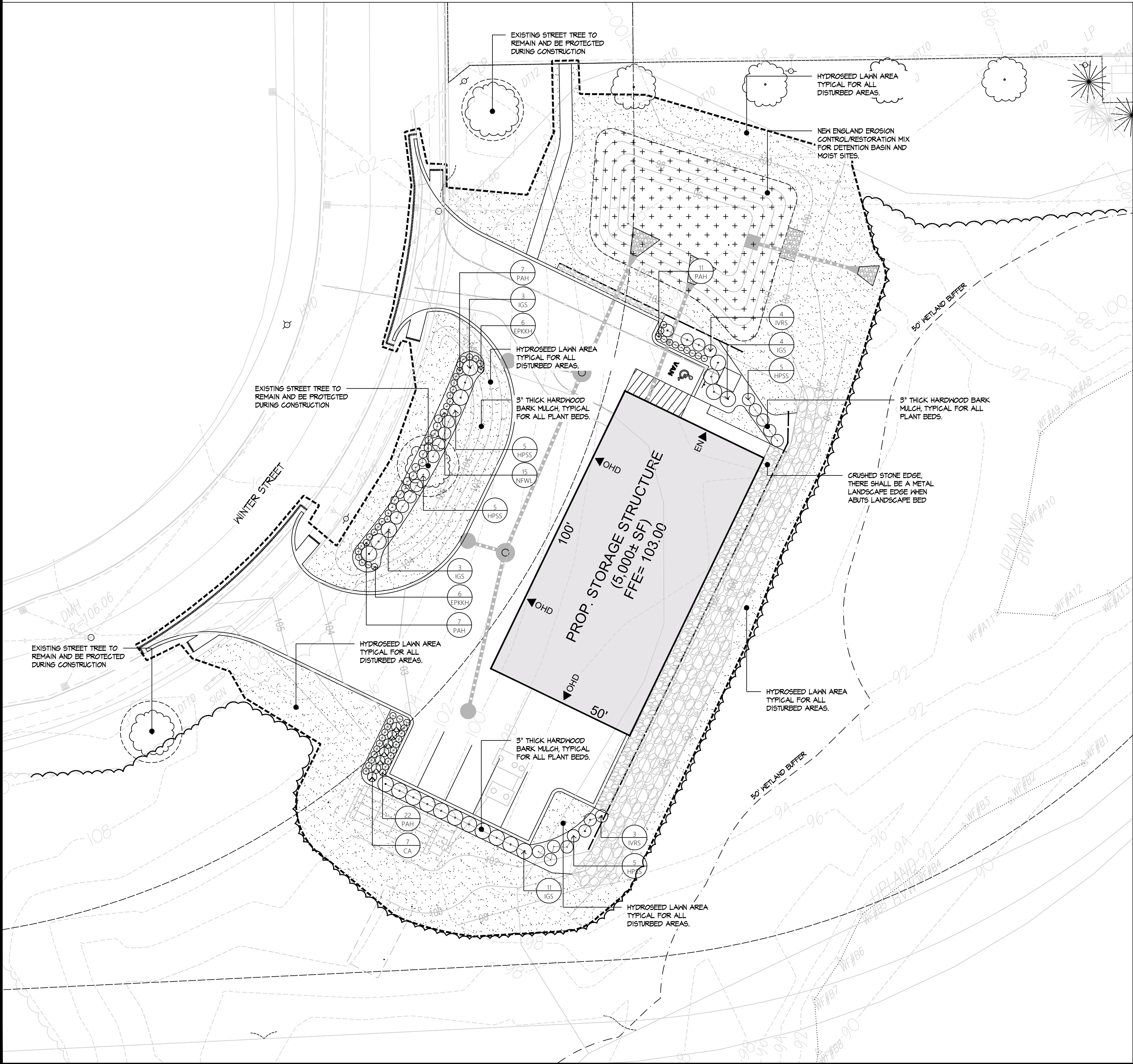
AMENDED TOPSOIL PER
SPECIFICATIONS

SCARIFY AND LOOSEN SUBGRADE
BEFORE PLACING THE AMENDED
TOPSOIL

UNDISTURBED OR COMPACTED
SUBGRADE

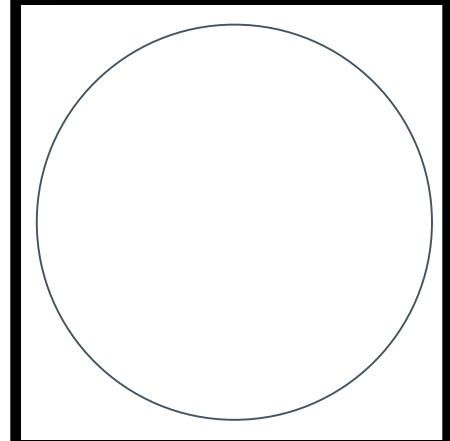
LOAM AND SEED

SCALE = N.T.S.



EBI Consulting

21 B Street | Burlington, MA 01803
Tel: 781.273.2500 | Fax: 781.273.3311
www.ebiconsulting.com



PRELIMINARY

REVISIONS		INIT
NO	DESCRIPTION	DATE

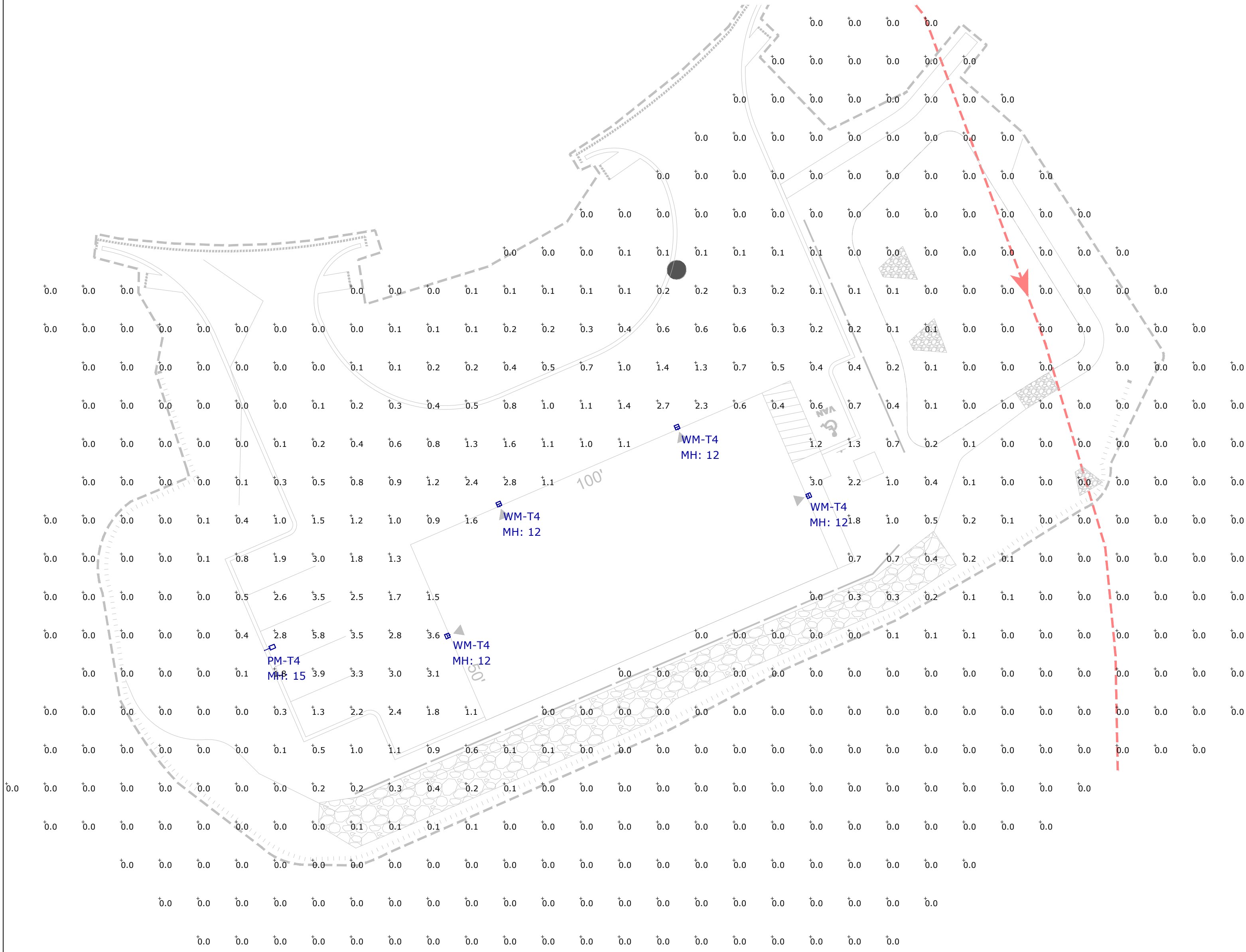
811
Know what's below.
Call before you dig.

A. MURPHY INC.
ELECTRICAL DESIGN & CONTRACTING
THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF EBI CONSULTING. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF EBI CONSULTING. THE CREATOR IS STRICTLY PROHIBITED.
DRAWING SCALES NOTED ARE FOR 24" x 36" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

PROJECT TITLE: SITE DEVELOPMENT PLANS
SHEET TITLE: LANDSCAPE PLAN
SITE ADDRESS: 29 WINTER STREET, PEMBROKE, MA
DRAWN BY: ACPT
REVIEWED BY: RS
DATE: 1/19/2023
SCALE: AS SHOWN
PROJECT #: 1622000082

L100

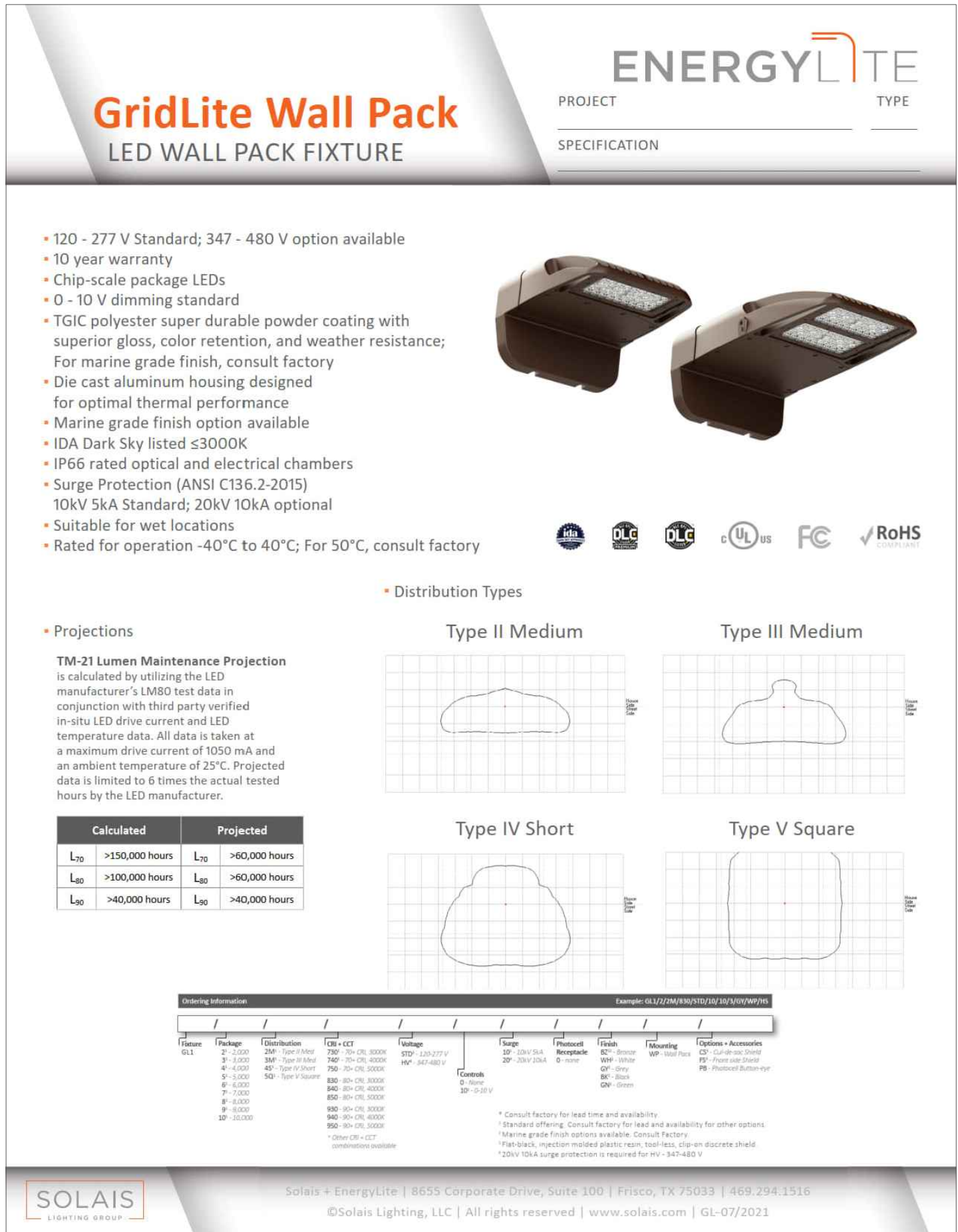
SHEET NO.



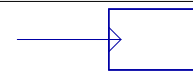
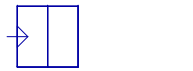
1 Site Lighting Plan & Photometrics
SCALE: 1"=20'-0"



2 Fixture Specification - Solais Gridlite GL3



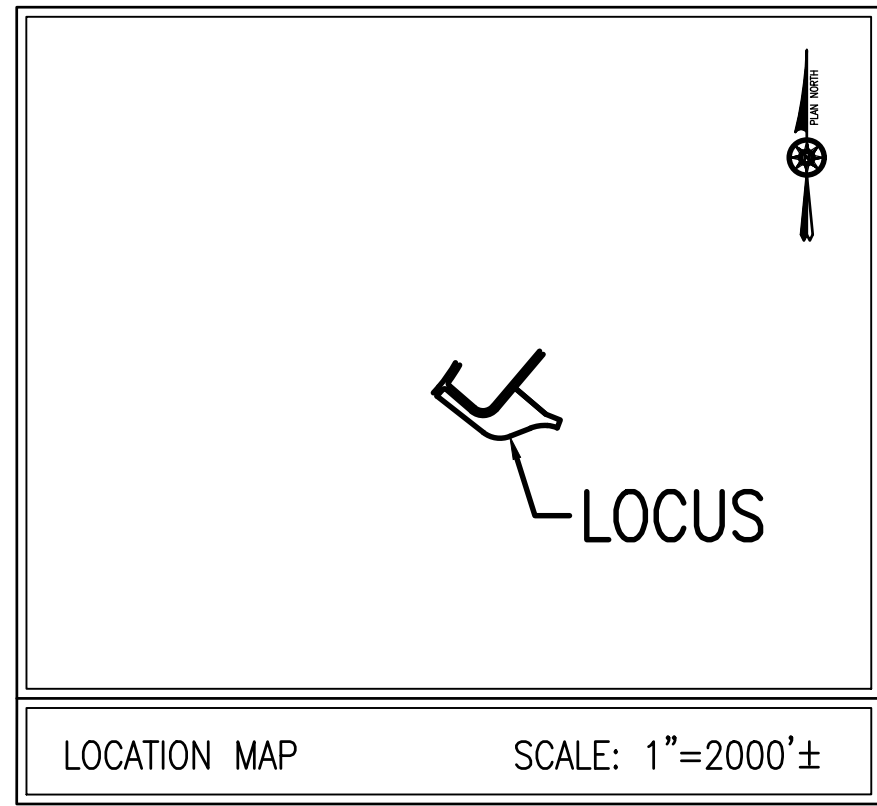
3 Fixture Specification - Solais Gridlite Wall Pack

Luminaire Schedule					LLF	Fixture Wattage	Fixture Lumens
Symbol	Label	Qty	Part Number				
	PM-T4	1	Solais # GL3-12L-4WS-740-STD-10-1PS-00-SBZ-ES-SS		0.900	82.28	6736
	WM-T4	4	Solais # GL1-3-4S-740-STD-0-10-0-BZ-WP		0.900	26	2912

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Site Points	Illuminance	Fc	0.24	5.8	0.0	N.A.	N.A.

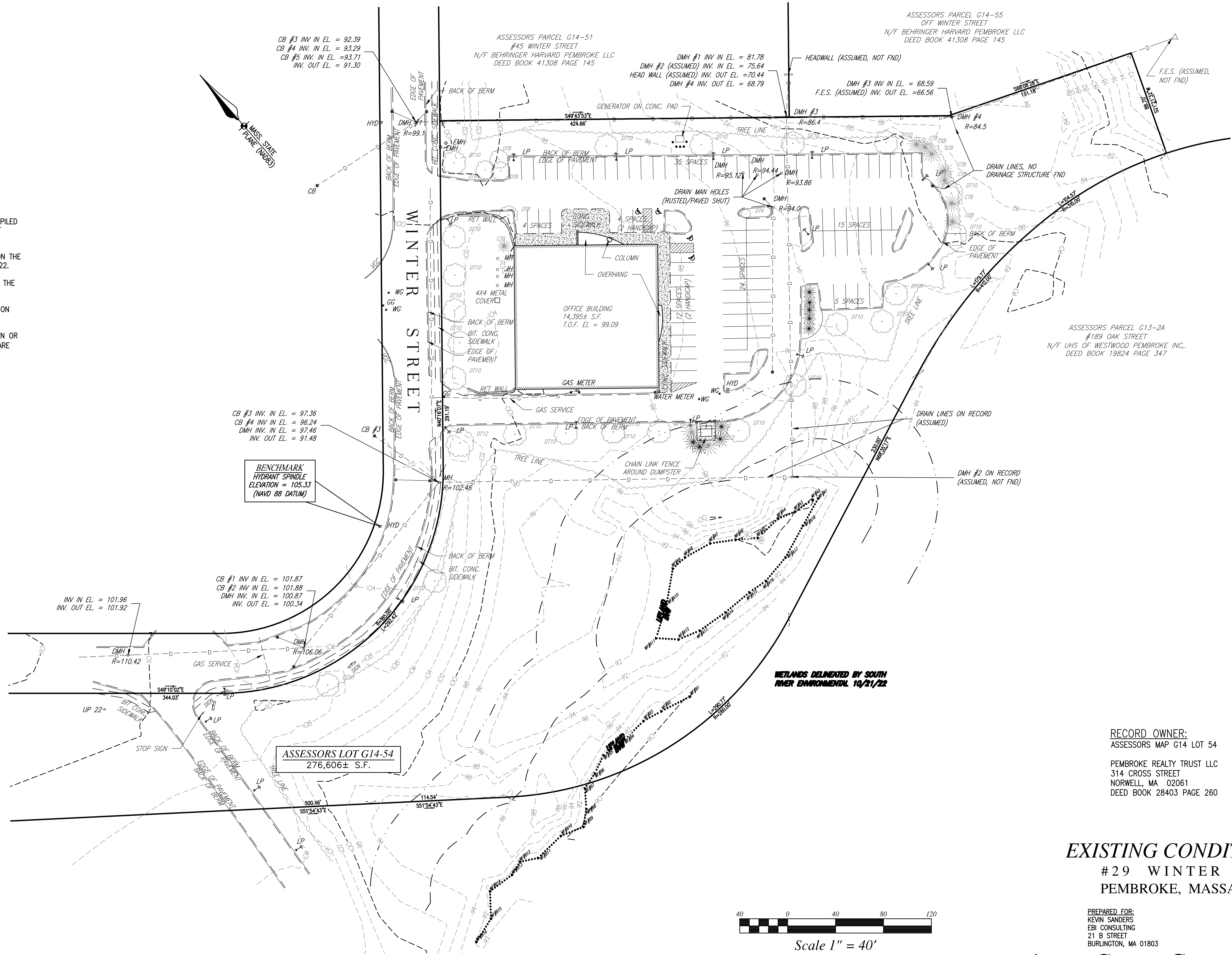
- NOTES:
- A LIGHT LOSS FACTOR OF 0.900 HAS BEEN APPLIED TO FIXTURES UNLESS OTHERWISE NOTED. REFER TO LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR AND LUMEN INFORMATION.
 - SEE "MH" ON LIGHTING FIXTURE TAG LOCATED ON PLAN FOR MOUNTING HEIGHT INFORMATION.
 - CALCULATION POINTS ARE TAKEN AT GRADE.
 - CALCULATION RESULTS ARE BASED ON IES STANDARDS UNLESS OTHERWISE REQUESTED.

DATE:	REVISIONS	DESCRIPTION	DATE
January 16, 2023	1		
PROJECT NUMBER:	2		
DRAWN BY: AD	3		
CHECKED BY: TJ	4		
APPROVED BY: HD	5		
SCALE: AS NOTED	6		
	7		



- NOTES:**
1. PROPERTY LINE, STREET LINE AND OWNER INFORMATION WAS COMPILED FROM RECORDS ON FILE AT THE PLYMOUTH COUNTY REGISTRY OF DEEDS.
 2. TOPOGRAPHY INFORMATION SHOWN ON THIS PLAN IS BASED AN ON THE GROUND SURVEY BY GRADY CONSULTING LLC IN OCTOBER OF 2022.
 3. SUBJECT SITE IS IN THE INDUSTRIAL A DISTRICT AS DEPICTED ON THE TOWN OF PEMBROKE ZONING MAP.
 4. EXISTING UTILITIES, WHERE SHOWN, HAVE BEEN COMPILED BASED ON OBSERVED ABOVE GROUND EVIDENCE ONLY AND ARE TO BE CONSIDERED APPROXIMATE. GRADY CONSULTING, L.L.C. DOES NOT GUARANTEE THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN OR THAT ALL EXISTING UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN.

FLOOD NOTE:
BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE X AREA OF MINIMAL FOOD HAZARD AS DEPICTED ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL No. 25023C 0207K, WHICH BEARS AN EFFECTIVE DATE OF JULY 6, 2021.



RECORD OWNER:
ASSESSORS MAP G14 LOT 54

PEMBROKE REALTY TRUST LLC
314 CROSS STREET
NORWELL, MA 02061
DEED BOOK 28403 PAGE 260

EXISTING CONDITIONS PLAN
#29 WINTER STREET
PEMBROKE, MASSACHUSETTS

PREPARED FOR:
KEVIN SANDERS
EBI CONSULTING
21 B STREET
BURLINGTON, MA 01803

NOVEMBER 1, 2022
SCALE: 1"=40'
JOB No. 22-519

GRADY CONSULTING, L.L.C.
Civil Engineers, Land Surveyors & Landscape Architects
71 Evergreen Street, Suite 1, Kingston, MA 02364
Phone (781) 585-2300