



May 18, 2021

Eastham Conservation Commission
c/o Mr. Charles Katuska, Conservation Agent
2500 State Highway
Eastham, MA 02642

Re: Revised Plan – Rock Harbor Harbormaster Building and Site Revitalization Project
631 Dyer Prince Road, Eastham, Massachusetts
MassDEP File No. SE-019-1796; NHESP Tracking No. 3-32126

Dear Members of the Eastham Conservation Commission:

On behalf of the Applicant, the Town of Eastham, the Horsley Witten Group, Inc. (HW) is submitting the enclosed revised site plan resulting from an additional survey at the site. Specifically, this revised plan incorporates a finger-like projection of upper salt marsh that is located off-site to the north, as well as the adjusted buffer zones.

The potential additional area of salt marsh was brought to the attention of the Project Team by the Conservation Agent, Chuck Katuska, on May 5, 2021.

HW met on site with Mr. Katuska and Ms. Shana Brogan on May 11, 2021 to review existing conditions and discuss the resource areas. It was agreed that a small finger of upper salt marsh extends within the adjacent property in a configuration parallel to the northern boundary of the site. As there is also presence of filled tidelands in this vicinity, HW used a combination of factors to determine the extent of salt marsh in this location, including the definition of salt marsh, the presence of salt-tolerant species, the soil substrate, and the wrack line. HW placed eleven temporary flagging stations along the salt marsh boundary and survey-located these prior to removing all flagging. HW also confirmed the delineation with Mr. Katuska on site prior to finalizing our field survey.

The results of the field survey include this additional area of salt marsh along with additional salt marsh buffer zone that extends onto the project site. Subsequent design changes include relocating the septic system leaching field outside of the 100-foot buffer zone to this newly delineated salt marsh. The leaching field is now proposed to be located beneath the entrance of the existing paved parking lot. A minor adjustment to the location of the distribution box location has also been made. The Project Team has coordinated with the Town Staff, including the DPW Director, and the Town is supportive of placement of the leaching field in this location. A copy of this revised plan will be submitted to the Board of Health for reevaluation and permit approval.

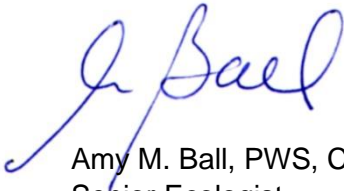
Enclosed please find three full-sized copies of the revised site plan along with seven copies for Commission members (10 total).

Copies of all submittal materials will be forwarded to the Massachusetts Department of Environmental Protection (MassDEP), Southeast Regional Office and to the Massachusetts Natural Heritage and Endangered Species Program (NHESP).

Thank you for your continued review of this project. Please do not hesitate to contact HW at (508) 833-6600 with any questions.

Sincerely,

Horsley Witten Group, Inc.



Amy M. Ball, PWS, CWS
Senior Ecologist

Enclosures

cc: MassDEP, Southeast Regional Office
Emily Holt, MA NHESP
Shana Brogan, Rock Harbor Capital Projects Committee
Scott Richards, Harbormaster
Rob Marcalow, AIA, NCARB, Kuth Ranieri Architects

GENERAL CONSTRUCTION NOTES:

- 1. ALL SITE WORK TO COMPLETE THIS PROJECT AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. IMMEDIATELY CONTACT AND COORDINATE WITH THE ENGINEER AND OWNER IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED.
3. UTILIZE ALL PRECAUTIONS AND MEASURES TO ENSURE THE SAFETY OF THE PUBLIC, ALL PERSONNEL AND PROPERTY DURING CONSTRUCTION IN ACCORDANCE WITH OSHA STANDARDS...
4. MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES INCLUDING POLICE DETAILING AND POST ALL BONDS, IF NECESSARY...
5. ALL EXISTING CONDITIONS SHOWN ARE APPROXIMATE AND ARE BASED ON THE BEST INFORMATION AVAILABLE...
6. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS INDICATED ON THE DRAWINGS ARE BASED ON RECORDS OR VARIOUS UTILITY COMPANIES...
7. COORDINATE AND MAKE ALL CONNECTION ARRANGEMENTS WITH UTILITY COMPANIES, AS REQUIRED.
8. THE CONTRACTOR MUST MAINTAIN ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT...
9. COORDINATE ALL TRENCING WORK WITH ROADWAYS WITH THE PROPER LOCAL & STATE AGENCY...
10. SAWCUT ALL TRENCH WORK WITH EXISTING PAVEMENT AS INDICATED ON THE DRAWINGS...
11. IMPORT ONLY CLEAN MATERIAL. MATERIAL FROM AN EXISTING OR FORMER SITE AS DEFINED BY THE MASSACHUSETTS CONTINGENCY PLAN 310 CMR 40.000 WILL NOT BE ACCEPTED.
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH AND MAINTAIN ALL CONTROL POINTS AND BENCHMARKS DURING CONSTRUCTION INCLUDING BENCHMARK LOCATIONS AND ELEVATIONS AT CRITICAL AREAS...
13. SITE LAYOUT SURVEY REQUIRED FOR CONSTRUCTION MUST BE PROVIDED BY THE CONTRACTOR AND PERFORMED BY A MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR...
14. MAINTAIN ALL GRADE STAKES SET BY THE SURVEYOR... GRADE STAKES ARE TO REMAIN UNTIL A FINAL INSPECTION OF THE ITEM HAS BEEN COMPLETED BY THE ENGINEER...
15. UNLESS OTHERWISE INDICATED ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS, ALL SITE CONSTRUCTION MATERIALS AND METHODOLOGIES ARE TO CONFORM TO THE MOST RECENT VERSION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS...
16. PROVIDE ALL CONSTRUCTION SERVICE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS REGARDING NOISE, VIBRATION, DUST, SEDIMENTATION CONTAINMENT, AND TRENCH WORK.
17. COLLECT SOLID WASTES AND STORE IN A SECURED DUMPSTER...
18. RESTORE ALL SURFACES EQUAL TO THEIR ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETE PER SPECIFICATIONS...
19. CONSTRUCT ALL WHEELCHAIR RAMPS IN ACCORDANCE WITH MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS...
20. PROVIDE A UNIT PRICE COST IN CUBIC YARD MEASURE FOR LEDGE AND/OR BOLLARD REMOVAL...
21. REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE...
22. ALL TRUCKS LEAVING THE SITE MUST BE COVERED.
23. DO NOT WASH ANY CONCRETE TRUCKS ON SITE...
24. BURIAL OF ANY STUMPS, SOLID DEBRIS, AND/OR STONES/BOLLARDS ON SITE IS PROHIBITED...
25. AT THE END OF CONSTRUCTION, REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIALS FROM THE SITE...

GENERAL DEMOLITION NOTES:

- 1. UNLESS OTHERWISE NOTED, THE CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION, DEMOLITION, REMOVAL AND DISPOSAL, IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES...
2. REMOVE ALL DEBRIS FROM THE SITE AND DISPOSE OF THE DEBRIS IN A PROPER AND LEGAL MANNER.
3. OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
4. COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES...
5. REFER TO MECHANICAL AND SITE PLANS AND SPECIFICATIONS FOR ALL WORK WHICH REQUIRES UTILITIES TO BE REMOVED...
6. PROVIDE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES...
7. MAINTAIN CONTINUOUS ACCESS AND OPERATION FOR SURROUNDING FACILITIES...
8. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.

BASIC CONSTRUCTION SEQUENCE:

- 1. SURVEY AND STAKE THE PROPOSED LIMIT OF DISTURBANCE AND LIMIT OF SEDIMENTATION BARRIERS.
2. PLACE SEDIMENTATION BARRIERS AS INDICATED ON DRAWINGS AND STAKED OUT IN THE FIELD...
3. BEGIN CLEARING THE SITE AS REQUIRED.
4. SURVEY AND STAKE THE PROPOSED PARKING LOT, STORMWATER MANAGEMENT AREAS, AND DRAINAGE LINES.
5. EXCAVATE AND ROUGH GRADE THE PROPOSED STORMWATER MANAGEMENT AREAS...
6. BEGIN CLEARING AND GRUBBING THE AREAS OF PARKING LOT AND STORMWATER MANAGEMENT AREAS...
7. BEGIN ROUGH GRADING AREAS FOR ROADS, PARKING AND BUILDING...
8. BEGIN UTILITY CONSTRUCTION...
9. INSTALL DRAINAGE PIPES, DRAINAGE MANHOLES, CATCH BASINS...
10. PERMANENTLY SEED ALL DISTURBED AREAS OUTSIDE OF THE AREA TO BE PAVED.
11. UPON COMPLETION OF UNDERGROUND UTILITIES INSTALLATION...
12. BEGIN ROAD AND PARKING CONSTRUCTION PER SITE PLANS...
13. FINISH PERMANENT STABILIZATION...
14. COMPLETE ALL REMAINING PLANTING AND SEEDING.
15. SWEEP PAVED AREAS WITHIN AND IMMEDIATELY ADJACENT TO THE PROJECT...
16. ENGINEER TO APPROVE THE REMOVAL OF ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES...

GENERAL GRADING AND DRAINAGE NOTES:

- 1. ALL CUT AND FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
2. EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
3. PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
4. ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
5. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS...
6. REFER TO ARCHITECTURAL PLAN AND SPECIFICATIONS FOR EARTHWORK AND COMPACTION REQUIREMENTS...
7. PROPOSED ELEVATIONS ARE SHOWN TO FINISH PAVEMENT OR GRADE UNLESS NOTED OTHERWISE.
8. ALL EARTHWORK AND SITE PREPARATION MUST BE DONE IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS...
9. ALL DRAINAGE STRUCTURES AND PIPES MUST BE CONNECTED TO THE DRAINAGE SYSTEM PRIOR TO THE INSTALLATION...
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE...

DEWATERING NOTES:

- 1. SUPPLY THE DEWATERING SYSTEMS TO:
A. DEVELOP A SUBSTANTIALLY DRY AND STABLE SUBGRADE FOR THE PROPOSED WORK.
B. PREVENT DAMAGE TO ADJACENT PROPERTIES...
C. RETAIN ALL SEDIMENTS ON-SITE WITHIN THE WORK AREA.
D. PREVENT SEDIMENT DISCHARGE AND CONTAMINATION OF THE RESOURCE AREA.
E. PREVENT LOSS OF FINES, QUIET CONDITION, OR SOFTENING OF FOUNDATION SUBGRADE...
F. MAINTAIN STABILITY OF SIDES AND BOTTOMS OF EXCAVATIONS AND TRENCHES.
2. LOCATE DEWATERING FACILITIES WHERE THEY WILL NOT INTERFERE WITH CONSTRUCTION WORK OR ABUTTING RESOURCES.
3. MODIFY DEWATERING EQUIPMENT AND PROCEDURES WHEN OPERATIONS THREATEN TO CAUSE DAMAGE...
4. PRIOR TO INSTALLATION OF THE DEWATERING SYSTEM, PROVIDE THE ENGINEER WITH A SCHEDULE OF DEWATERING PROCEDURES...
5. THE PROPOSED TYPES OF DEWATERING SYSTEMS:
A. ARRANGEMENT, LOCATION AND DEPTHS OF SYSTEM COMPONENTS.
B. COMPLETE DESCRIPTION OF EQUIPMENT AND INSTRUMENTATION TO BE USED...
C. TYPES AND SIZES OF FILTERS (IF APPLICABLE).
D. DESIGN CALCULATIONS DEMONSTRATING ADEQUACY OF THE PROPOSED SYSTEM AND EQUIPMENT...
E. PROVISIONS AND METHODS OF SEDIMENT REMOVAL AND DISPOSAL OF WATER.
F. ALL PERMITS REQUIRED FOR THE WORK, IF NECESSARY.
6. INTERCEPT AND DIVERT SURFACE WATER RUNOFF AWAY FROM EXCAVATIONS...
7. PROVIDE AND MAINTAIN HOLDING AREAS/TEMPORARY SETTLING BASINS OF ADEQUATE SIZE...
8. ACCUMPLISH DEWATERING IN ACCORDANCE WITH THE MEANS AND METHODS SUBMITTED AND APPROVED BY THE ENGINEER...
9. MAINTAIN DEWATERING OPERATIONS IN A MANNER THAT PREVENTS BUILDUP OF EXCESSIVE HYDROSTATIC PRESSURE...
10. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS...
11. DO NOT DISCHARGE WATER TO PROTECTED ENVIRONMENTAL RESOURCES WITHOUT TREATMENT...
12. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES...

STORMWATER FACILITY OPERATION & MAINTENANCE:

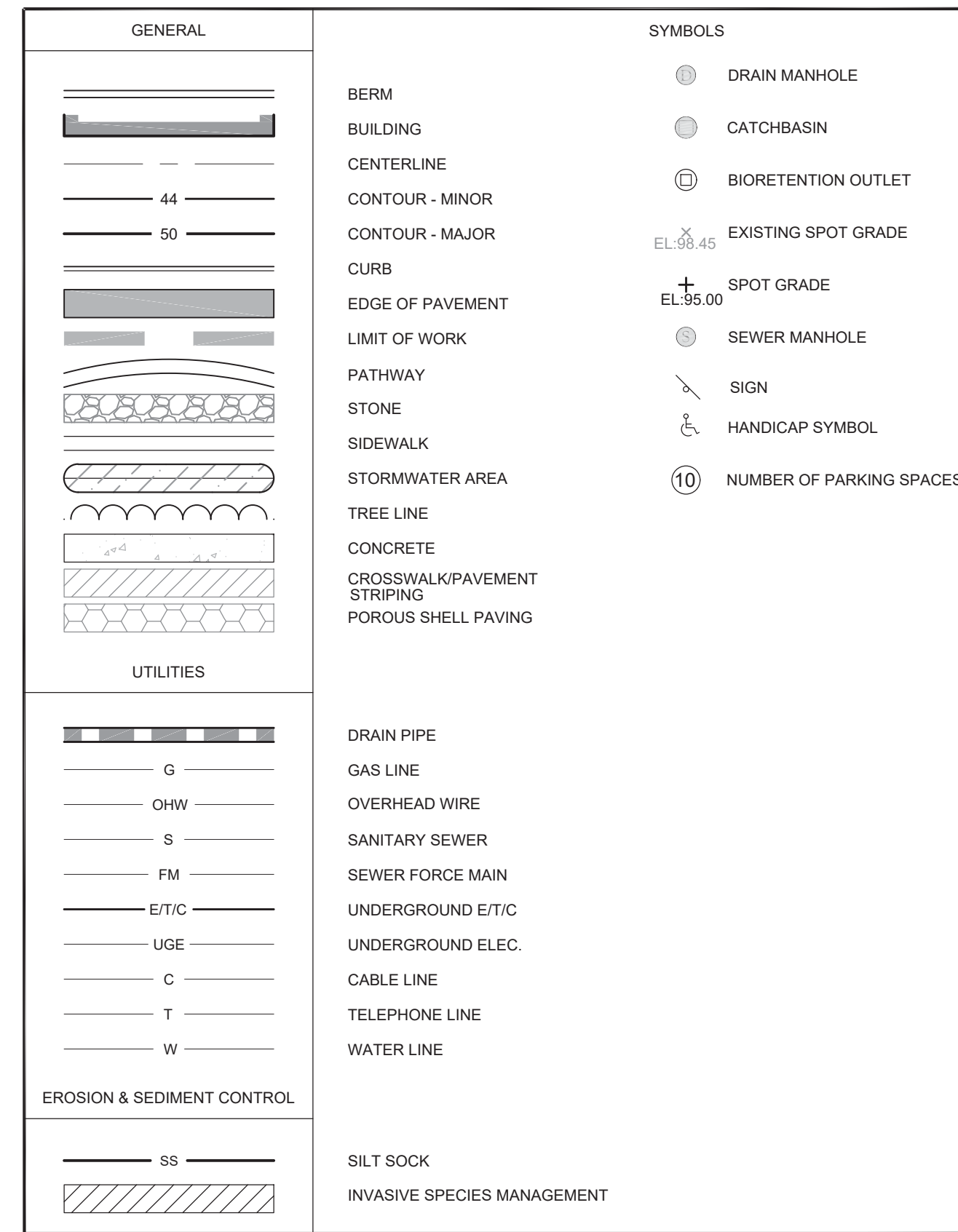
- 1. INSPECT AND RESTORE/CLEAN ALL FACILITIES (INLETS, MANHOLES, STORMWATER MANAGEMENT AREAS AS DESCRIBED BELOW...
2. REMOVE AND DISPOSE ALL SEDIMENT AND DEBRIS TO A PRE-APPROVED LOCATION.
3. REFER TO THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE...
4. AT A MINIMUM INSPECT MONTHLY AND AFTER STORM EVENTS GREATER THAN OR EQUAL TO 1" OF RAINFALL...
5. SPECIFIC MAINTENANCE REQUIRED DURING CONSTRUCTION:
A. DRAINAGE STRUCTURES (INLETS, MANHOLES, CATCHBASINS)...
B. SEDIMENT FOREBAY...
C. BIORETENTION SYSTEMS...
D. ROUTINE MAINTENANCE...
6. BACKFILL WITH APPROVED BIURETENTION SOIL...
7. PLACE SOIL IN 12 INCH LIFTS...
8. CHECK FOR SETTLEMENT...
9. DO NOT COMPACT BIURETENTION SOIL...
10. GRADE BIURETENTION MATERIALS WITH LIGHT EQUIPMENT...
11. STABILIZE ALL REMAINING DISTURBED AREAS...
12. ESTABLISH ELEVATIONS AND PIPE INVERTS FOR INLETS AND OUTLETS...
13. INSTALL THE OVERFLOW GUTLET STRUCTURE...
14. REMOVE REMAINING EROSION AND SEDIMENT CONTROLS...
15. CLEAN UP...
16. PLANTING...
17. CLEAN UP...
18. PLANT BIURETENTION AREA IN ACCORDANCE WITH PLANTING PLANS...
19. THE PRIMARY FUNCTION OF THE BIURETENTION STRUCTURE IS TO IMPROVE WATER QUALITY...
20. INSTALL BIURETENTION PLANTINGS...
21. DO NOT MIX OR STORE OTHER MATERIALS...
22. FILLER FABRIC...
23. PEEL GRAVEL...
24. UNDERDRAIN GRAVEL...
25. PIPE...
26. PLANTS...
27. SEED SIDE SLOPES ONLY...
28. OUTLET STRUCTURE...
29. SIZE AS INDICATED ON DRAWINGS...
30. FIBERGLASS REINFORCED PLASTIC MANHOLES...
31. SMALL SEDIMENTATION BASINS...
32. CONTAIN ALL SEDIMENT ON-SITE...
33. REMOVE ACCUMULATED SEDIMENT...
34. PROVIDE ON SITE OR MAKE READILY AVAILABLE THE NECESSARY EQUIPMENT...
35. PRIOR TO THE INSTALLATION OF FILTER FABRIC AND MEDIA...
36. CONTROL DUST BY WATERING OR OTHER APPROVED METHODS...
37. THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE...
38. BIURETENTION CONSTRUCTION SEQUENCE...
39. PRIOR TO THE INSTALLATION OF FILTER FABRIC AND MEDIA...
40. INSTALL THE FILTER FABRIC ALONG THE EXCAVATION SIDE WALLS...
41. RIPE THE BOTTOM SOILS TO A DEPTH OF SIX INCHES...
42. INSTALL UNDERDRAIN AS INDICATED ON DRAWINGS...
43. INSTALL PEEL GRAVEL LAYER...
44. DELIVER APPROVED BIURETENTION SOIL...
45. STABILIZE ALL REMAINING DISTURBED AREAS...
46. DRAWINGS, ENGINEER FIELD VISIT AND REPORT REQUIRED...
47. INSTALL BIURETENTION PLANTINGS...
48. INSTALL MULCH LAYER...
49. CONDUCT FINAL CONSTRUCTION INSPECTION...
50. REMOVE REMAINING EROSION AND SEDIMENT CONTROLS...
51. (1) SEE GENERAL NOTES/SPECIFICATIONS/CONSTRUCTION SEQUENCE...
52. (2) SEE GENERAL NOTES/SPECIFICATIONS/CONSTRUCTION DETAILS...
53. (3) MANDATORY NOTIFICATION PRIOR TO 12:00 NOON THE PRECEDING DAY...
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55. EXAMINATION...
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59. EMBANKMENT/BERM FILL...
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61. MATERIAL SPECIFICATIONS...
62. BIURETENTION SOIL...
63. UNIFORM SOIL MIX...
64. PROVIDE USDA UNIFIED SOIL CLASSIFICATION...
65. ORGANIC MATTER...
66. WELL AGED...
67. PROVIDE A SOIL TEST...
68. PH RANGE...
69. MAGNESIUM...
70. PHOSPHOROUS...
71. POTASSIUM...
72. SULFUR SALTS...
73. IF THE SOIL PH IS NOT WITHIN THE ACCEPTABLE RANGE...
74. ALL TESTING SHOULD BE PERFORMED BY THE SAME TESTING FACILITY...
75. DO NOT MIX OR STORE OTHER MATERIALS...
76. FILLER FABRIC...
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WATER & SEWER INSTALLATION NOTES:

- 1. INSTALL SEWER AND WATER MAINS ACCORDING TO THE FOLLOWING GUIDELINES TO PREVENT FREEZING OF THE MAIN OR SEWER:
UTILITY TYPE MIN COVER OVER TOP OF PIPE MN HORIZONTAL DISTANCE TO DRAIN STRUCTURE
SANITARY FORCEMAIN 5' 3'
GRAVITY FORCEMAIN 4' 2'
WATER MAIN 5' 2'
2. INSULATE SANITARY FORCE MAINS, WATER MAINS, HYDRANT PIPING AND DEAD END WATER LINES...
3. INSULATION 2" THICK POLYURETHANE INSULATION WITH PVC JACKET...
4. WATER AND SEWER SEPARATION IS TYPICALLY 10 FEET MINIMUM HORIZONTAL...
5. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING A PRESSURE TEST AND DISINFECTION TEST...
6. INSTALL AND REMOVE ALL NECESSARY BLOWOFFS...
7. COLLECT ALL BACTERIOLOGICAL SAMPLES AND PAY FOR ALL RELATED LABORATORY FEES...
8. MAINTAIN UP-TO-DATE AS-BUILT DRAWINGS...
9. EROSION & SEDIMENT CONTROL NOTES:
1. DESIGNATE THE SITE CONSTRUCTION FOREMAN AS THE ON-SITE PERSONNEL...
2. INSTALL ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES...
3. MAINTAIN A MINIMUM SURPLUS OF 100 FEET OF EROSION CONTROL BARRIER...
4. PROTECT THE ADJACENT RESOURCE AREA...
5. SINCE A FORMAL CONSTRUCTION ENTRANCE/EXIT IS NOT PROPOSED...
6. KEEP THE LIMIT OF CLEARING, GRADING AND DISTURBANCES...
7. MONITOR LOCAL WEATHER REPORTS...
8. INSPECT EROSION AND SEDIMENT CONTROL DEVICES...
9. SURROUND THE PERIMETER OF SOIL STOCKPILES...
10. DISTURBED AREAS AND SLOPES MUST NOT BE LEFT UNATTENDED...
11. SWEEP PAVED AREAS WITHIN AND IMMEDIATELY ADJACENT TO THE PROJECT...
12. CONTAIN ALL SEDIMENT ON-SITE...
13. REMOVE ACCUMULATED SEDIMENT...
14. PROVIDE ON SITE OR MAKE READILY AVAILABLE THE NECESSARY EQUIPMENT...
15. PRIOR TO THE INSTALLATION OF FILTER FABRIC AND MEDIA...
16. CONTROL DUST BY WATERING OR OTHER APPROVED METHODS...
17. THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE...
18. BIURETENTION CONSTRUCTION SEQUENCE...
19. PRIOR TO THE INSTALLATION OF FILTER FABRIC AND MEDIA...
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21. RIPE THE BOTTOM SOILS TO A DEPTH OF SIX INCHES...
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PROPOSED LEGEND:



KUTHranieri architects

725 GREENWICH ST STE 400
SAN FRANCISCO CA 94133
TEL : 415 . 544 . 9880
WWW.KUTHRANIERI.COM



Horsley Witten Group, Inc.
Sustainable Environmental Solutions
www.horsleywitten.com
90 Route 6A
Sandwich, MA 02563
508-833-6600 voice
508-833-3150 fax

Rock Harbor Harbormaster Building and Site Revitalization

631 Dyer Prince Road
Eastham, MA 02642

PROJECT INFORMATION table with columns: PROJECT INFORMATION, OWNER, DATE

OWNER table with columns: OWNER, DATE

DATE table with columns: DATE, DATE

NOT FOR CONSTRUCTION

100% DESIGN DEVELOPMENT
5/17/21

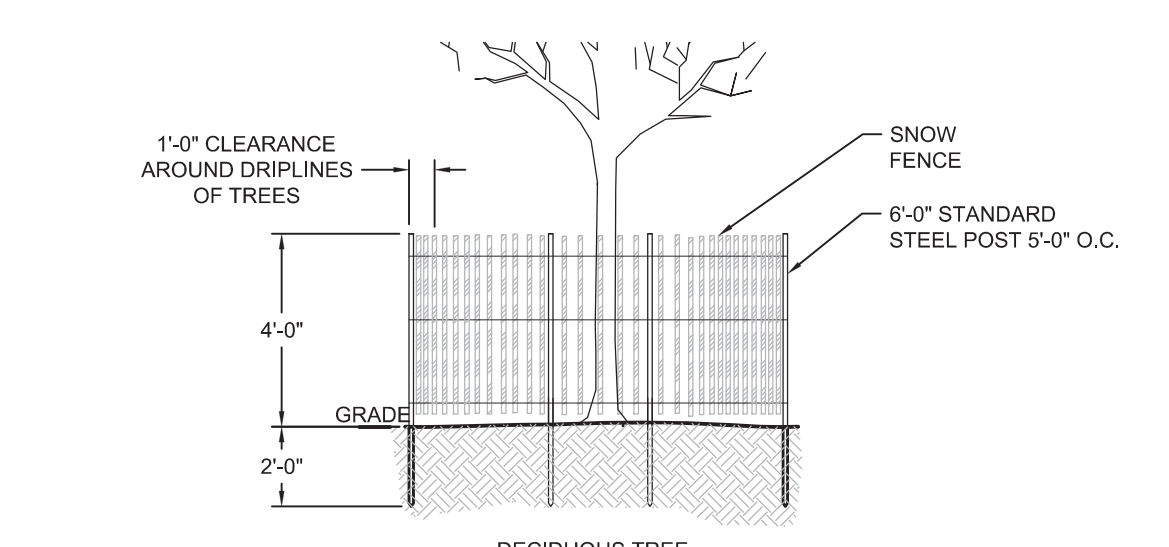
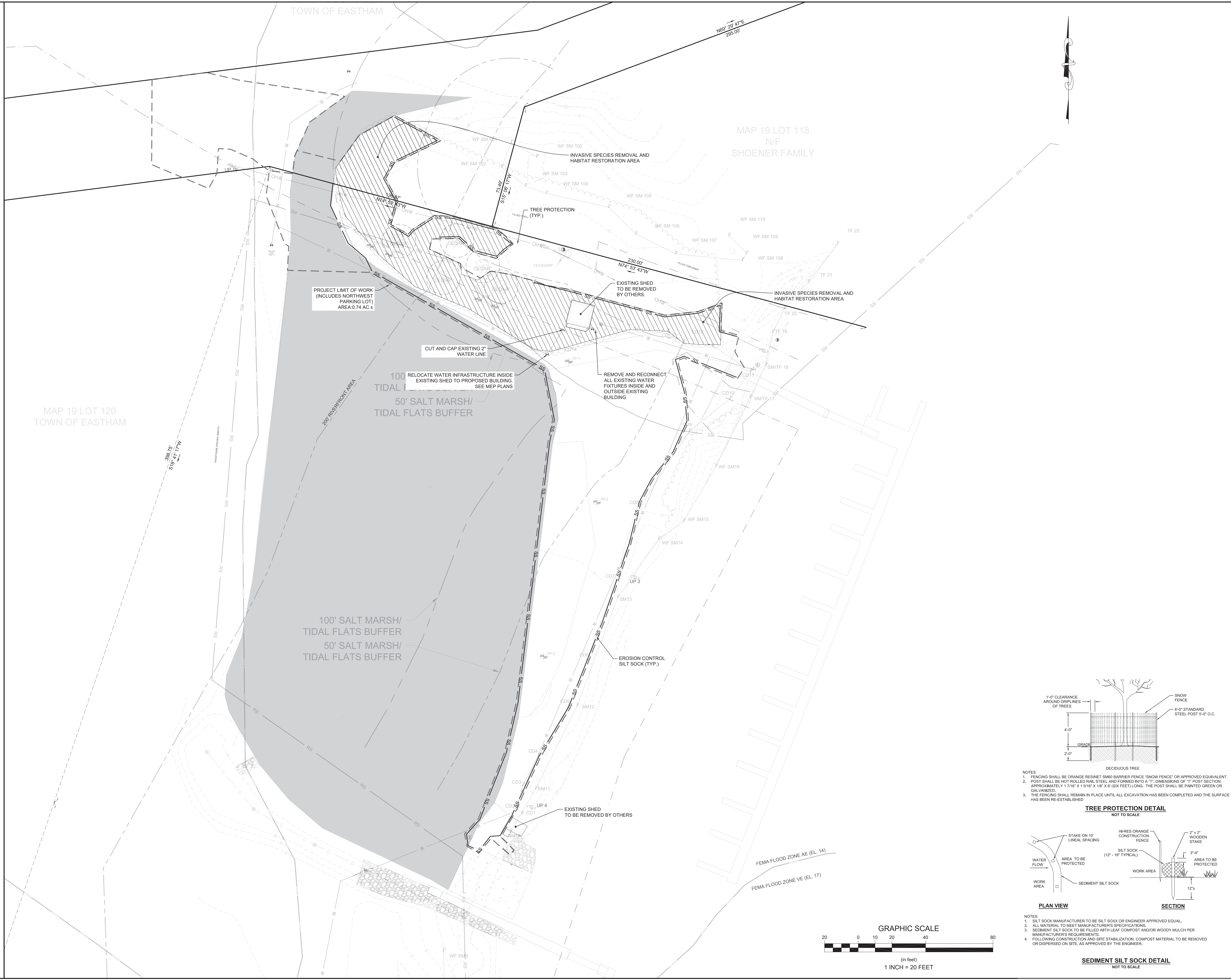


REVISION table with columns: NO, DATE, REVISION, DESIGNED BY, CHECKED BY

CONSTRUCTION NOTES

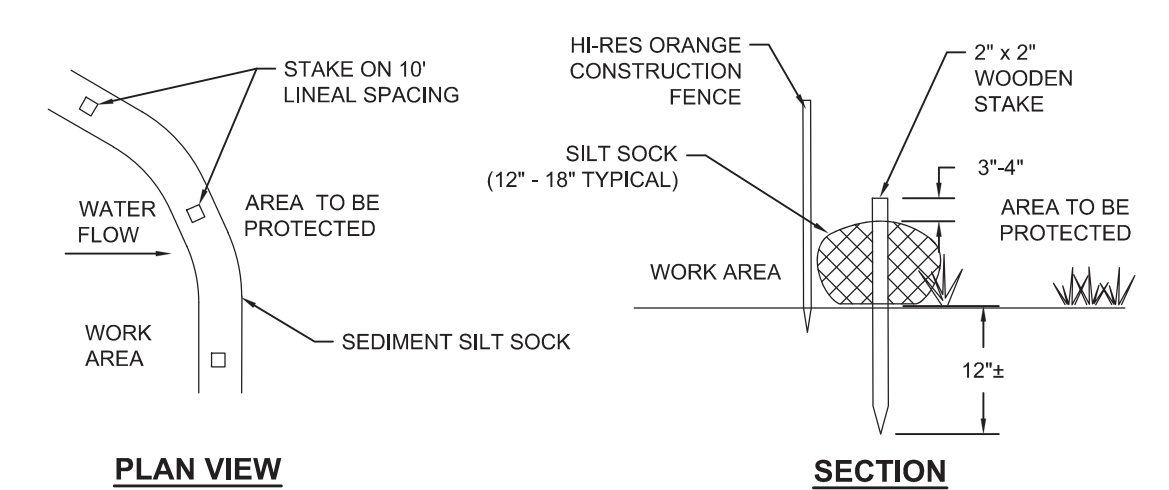
NOTE: If this drawing is not on 30in x 42 in, it has been revised from its original size. Scales as noted on drawings/details are no longer applicable. 5/17/2021, 2:29 PM

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5/17/2021 2:29 PM



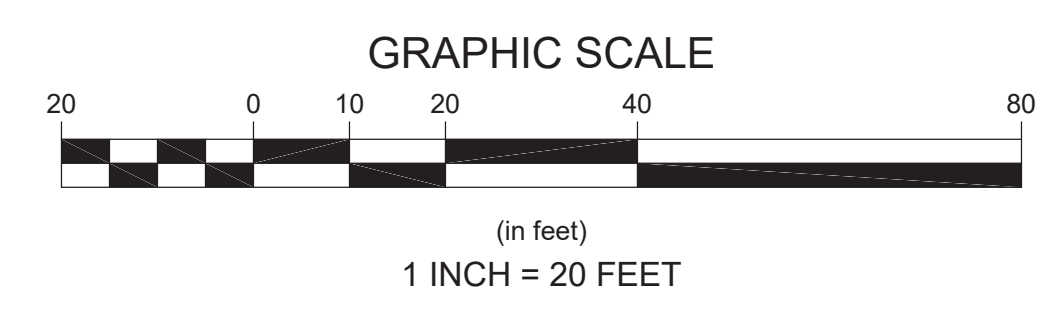
- NOTES:
- FENCING SHALL BE ORANGE RESINET SM80 BARRIER FENCE "SNOW FENCE" OR APPROVED EQUIVALENT.
 - POST SHALL BE HOT ROLLED RAIL STEEL AND FORMED INTO A "T" DIMENSIONS OF "T" POST SECTION, APPROXIMATELY 1 7/16" X 1 5/16" X 1/8" X 6" (SIX FEET) LONG. THE POST SHALL BE PAINTED GREEN OR GALVANIZED.
 - THE FENCING SHALL REMAIN IN PLACE UNTIL ALL EXCAVATION HAS BEEN COMPLETED AND THE SURFACE HAS BEEN RE-ESTABLISHED.

TREE PROTECTION DETAIL
NOT TO SCALE



- NOTES:
- SILT SOCK MANUFACTURER TO BE SILT SOCK OR ENGINEER APPROVED EQUIVALENT.
 - ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS.
 - SEDIMENT SILT SOCK TO BE FILLED WITH LEAF COMPOST AND/OR WOODY MULCH PER MANUFACTURER'S REQUIREMENTS.
 - FOLLOWING CONSTRUCTION AND SITE STABILIZATION, COMPOST MATERIAL TO BE REMOVED OR DISPERSED ON SITE, AS APPROVED BY THE ENGINEER.

SEDIMENT SILT SOCK DETAIL
NOT TO SCALE



KUThranieri
a r c h i t e c t s

725 GREENWICH ST STE 400
SAN FRANCISCO CA 94133

TEL : 415 . 544 . 9880
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Horsley Witten Group, Inc.
Sustainable Environmental Solutions
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90 Route 6A
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508-533-6600 voice
508-833-3150 fax

Rock Harbor Harbormaster Building and Site Revitalization

631 Dyer Prince Road
Eastham, MA 02642

Town of Eastham

OWNER

APRIL

NOT FOR CONSTRUCTION

100% DESIGN DEVELOPMENT

5/17/21

ISSUE DATE DESCRIPTION

DRAWN BY: ML CHECKED BY: RAC PROJECT #: 2003

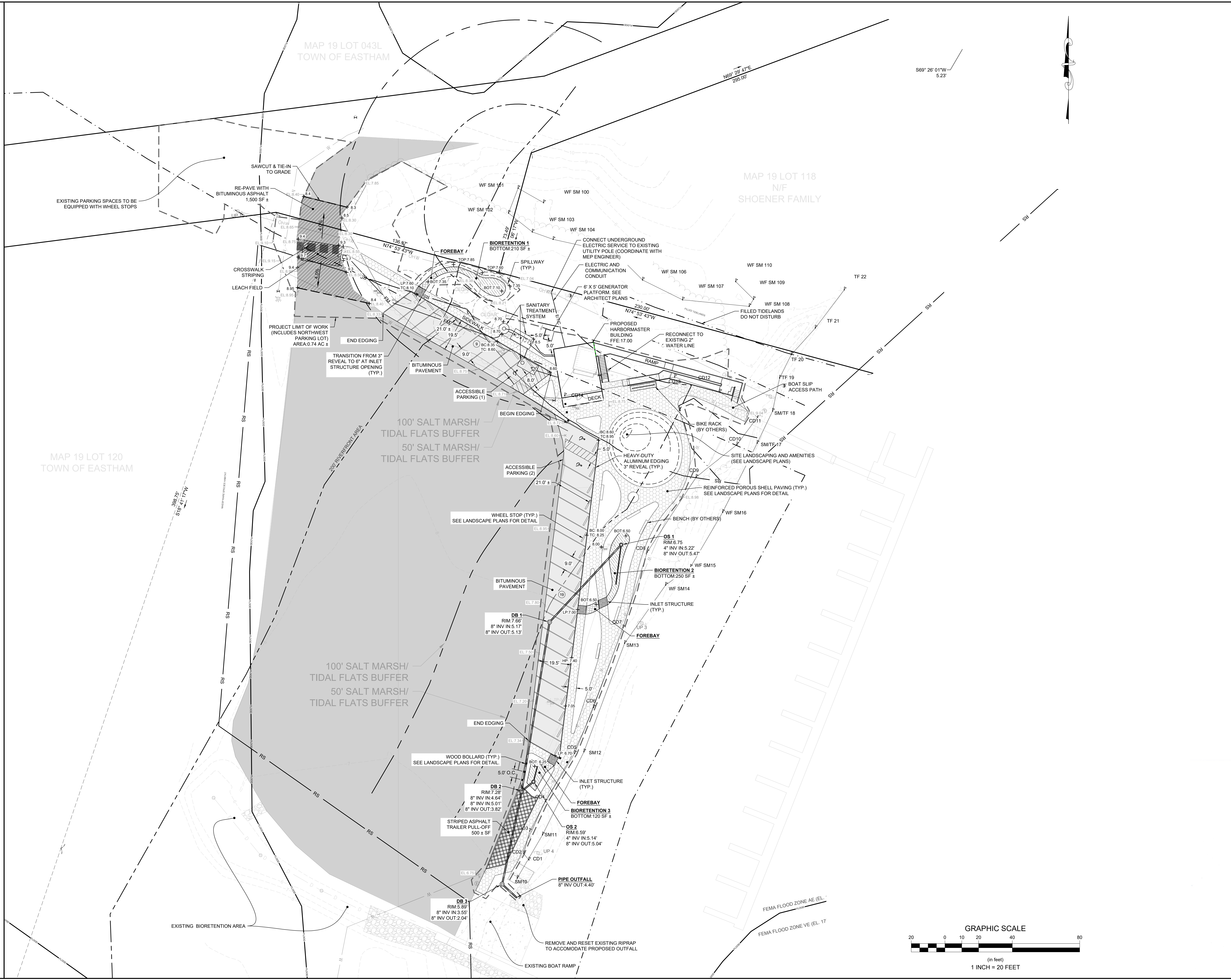
SITE PREP AND DEMOLITION PLAN

TITLE

C003

SHEET

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5/17/2021 11:18 AM



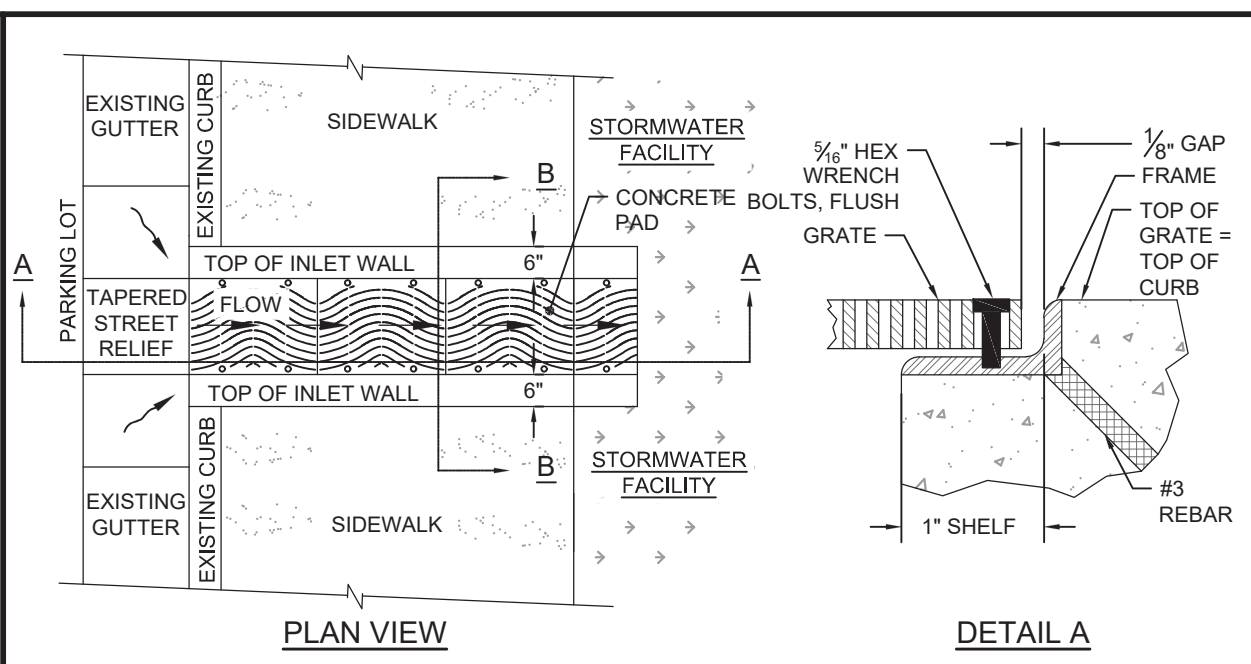
KUThranieri
architects
725 GREENWICH ST STE 400
SAN FRANCISCO CA 94133
TEL : 415 . 544 . 9880
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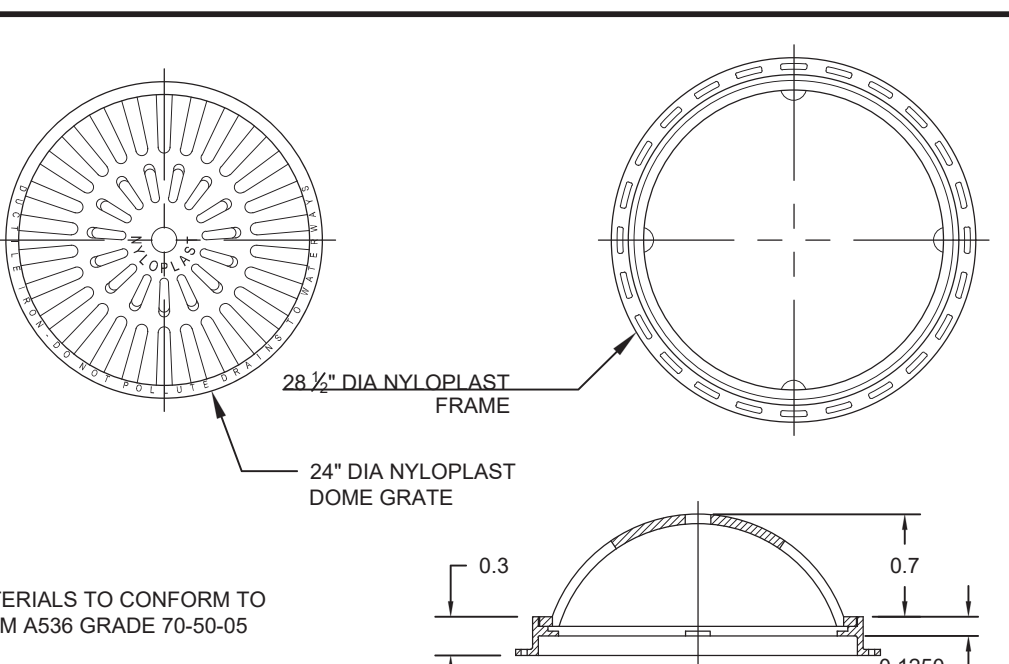
Rock Harbor Harbormaster Building and Site Revitalization
631 Dyer Prince Road
Eastham, MA 02642

PROJECT INFORMATION
Town of Eastham
OWNER
APRIL
STAMP
NOT FOR CONSTRUCTION
100% DESIGN DEVELOPMENT
5/17/21
ISSUANCE
RICHARD A. CLAYTON
CIVIL
NO. 48116
REGISTERED PROFESSIONAL ENGINEER
5-17-2021
DRAWN BY: ML CHECKED BY: RAC PROJECT #: 2003
CIVIL SITE PLAN
TITLE
C004

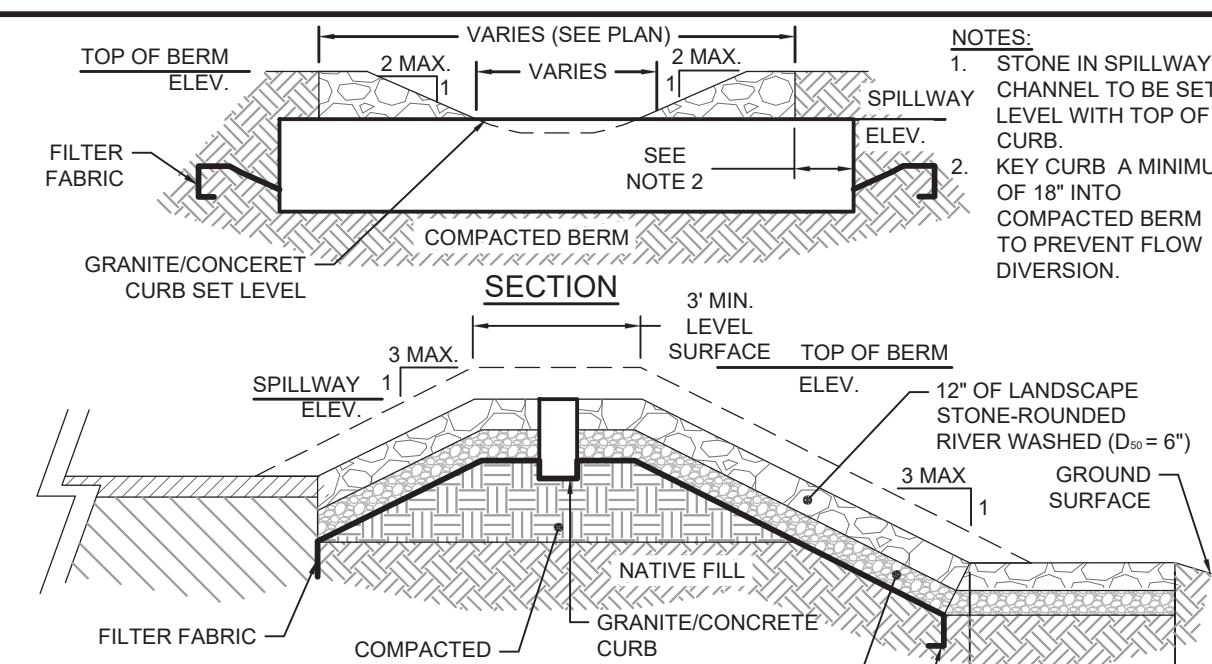
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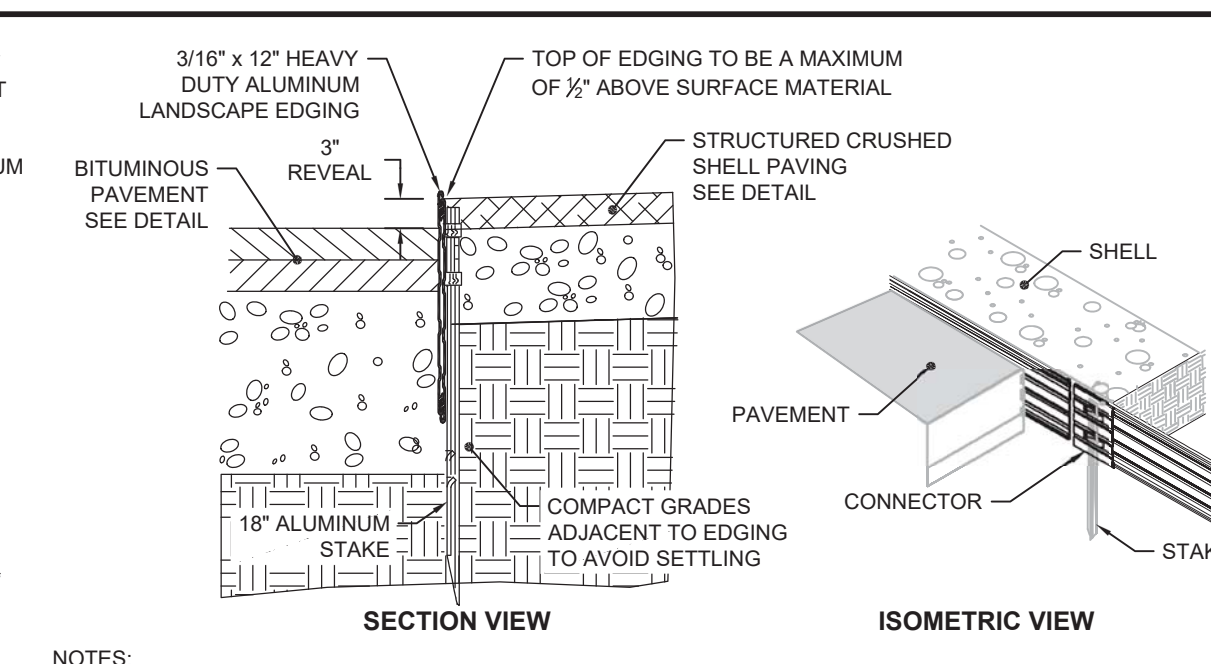
- NOTES:**
 1. MATERIALS TO CONFORM TO ASTM A536 GRADE 70-50-05
 2. CASTINGS ARE FURNISHED WITH A BLACK PAINT



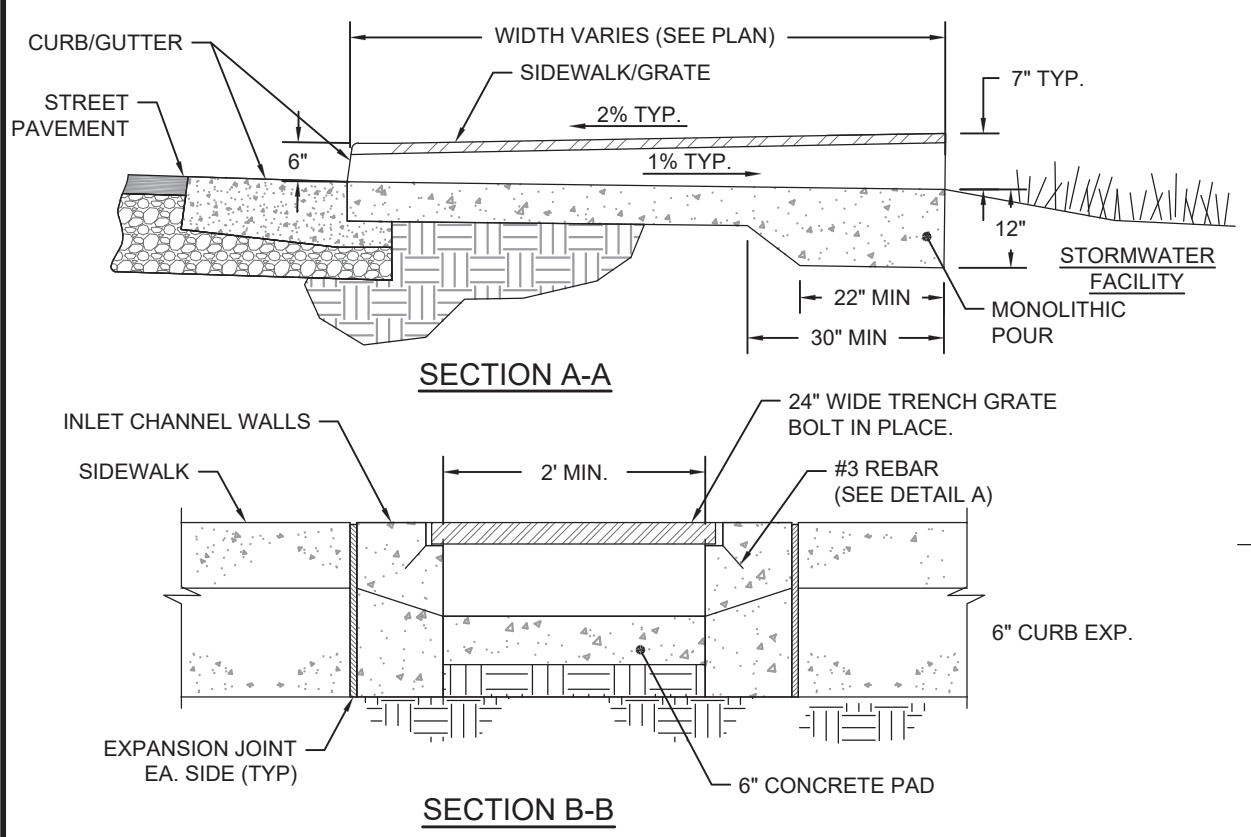
OVERFLOW SPILLWAY
 NOT TO SCALE



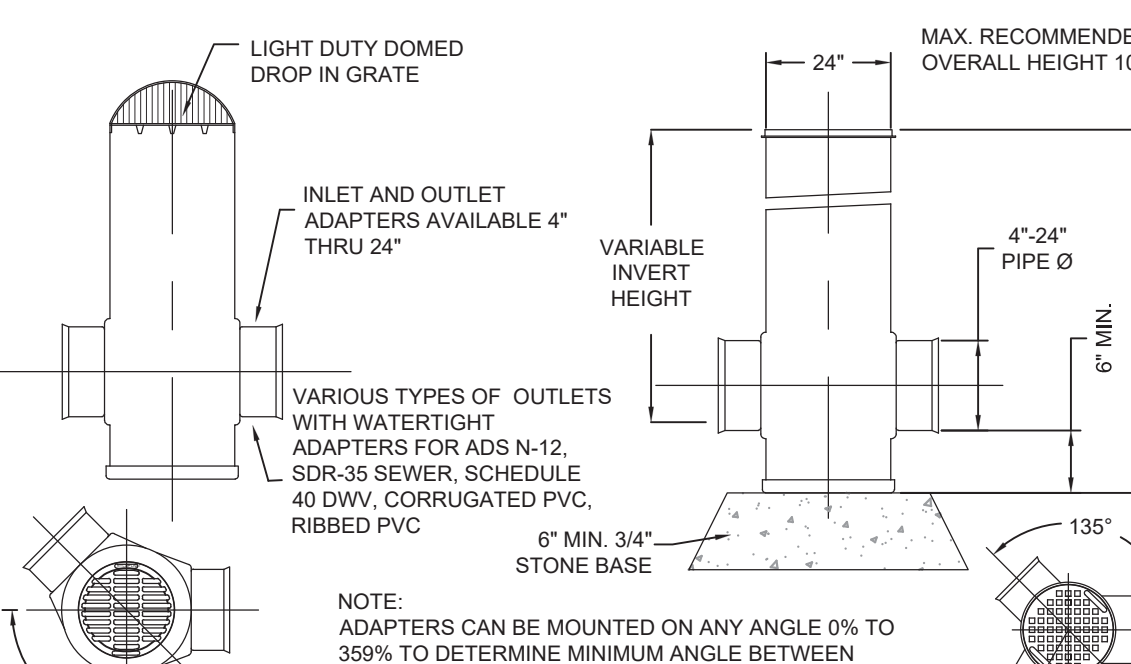
- NOTES:**
 1. STONE IN SPILLWAY CHANNELS TO BE SET LEVEL WITH TOP OF CURB.
 2. KEY CURB A MINIMUM OF 18" INTO COMPACTED BERM TO PREVENT FLOW DIVERSION.



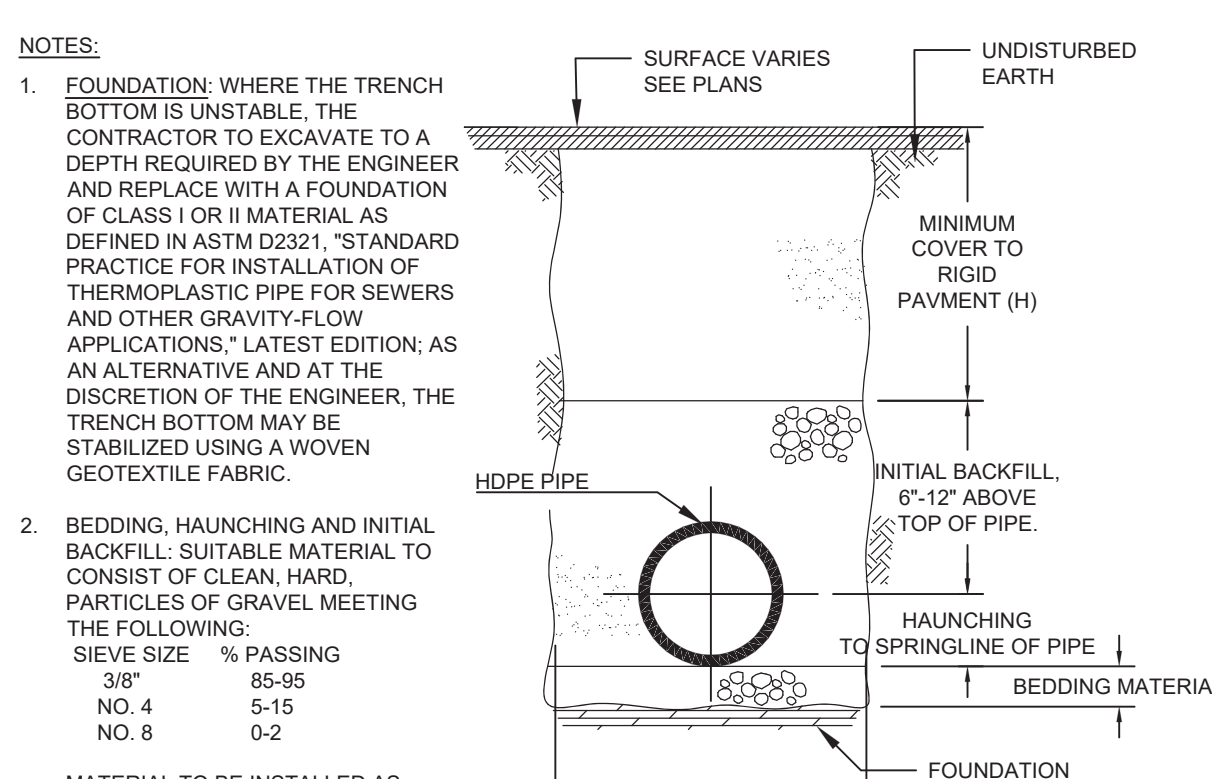
- NOTES:**
 1. INSTALL PER MANUFACTURER'S INSTALLATION GUIDELINES.
 2. 8" SECTION TO INCLUDE (1) 1/2" ALUMINUM STAKES AND (3) CONNECTION ADAPTORS.
 3. 16" SECTION TO INCLUDE (5) 1/2" ALUMINUM STAKES AND (3) CONNECTION ADAPTORS.
 4. EDGING TO BE PERMALOC CLEANLINE XL BLACK DURAFLEX AS MANUFACTURED BY PERMALOC CORPORATION OR ENGINEER APPROVED EQUIVALENT.



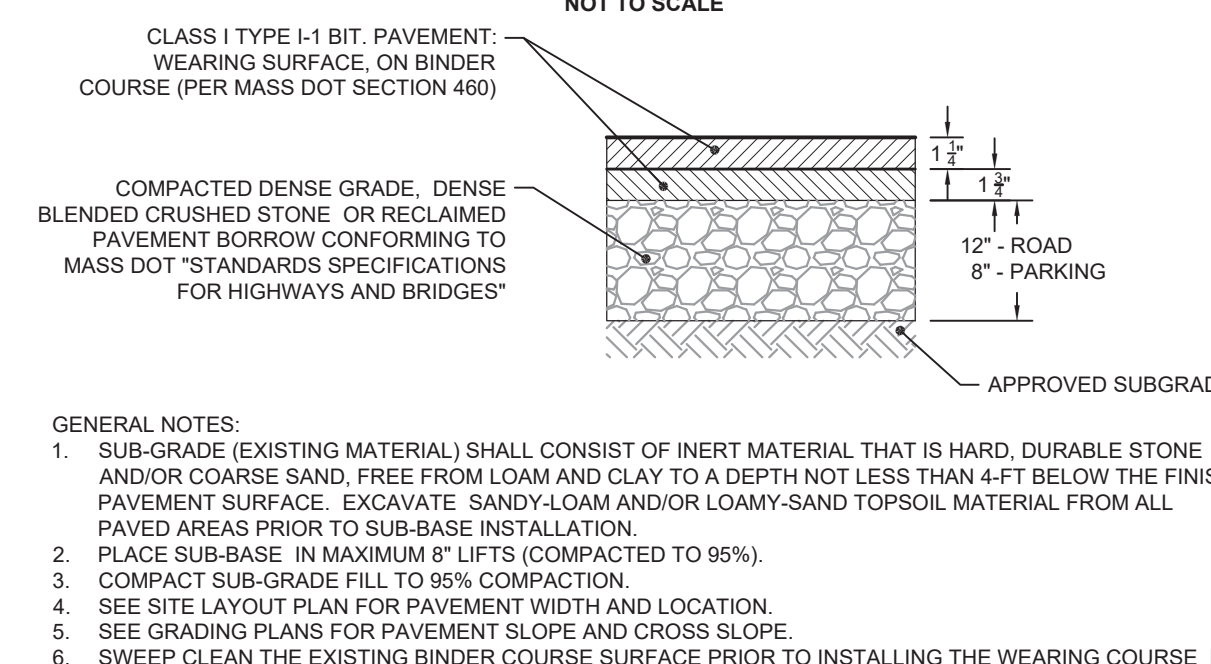
- NOTES:**
 1. TRENCH GRATE TO BE TITL WAVE MODEL BY URBAN ACCESSORIES OR EQUAL.



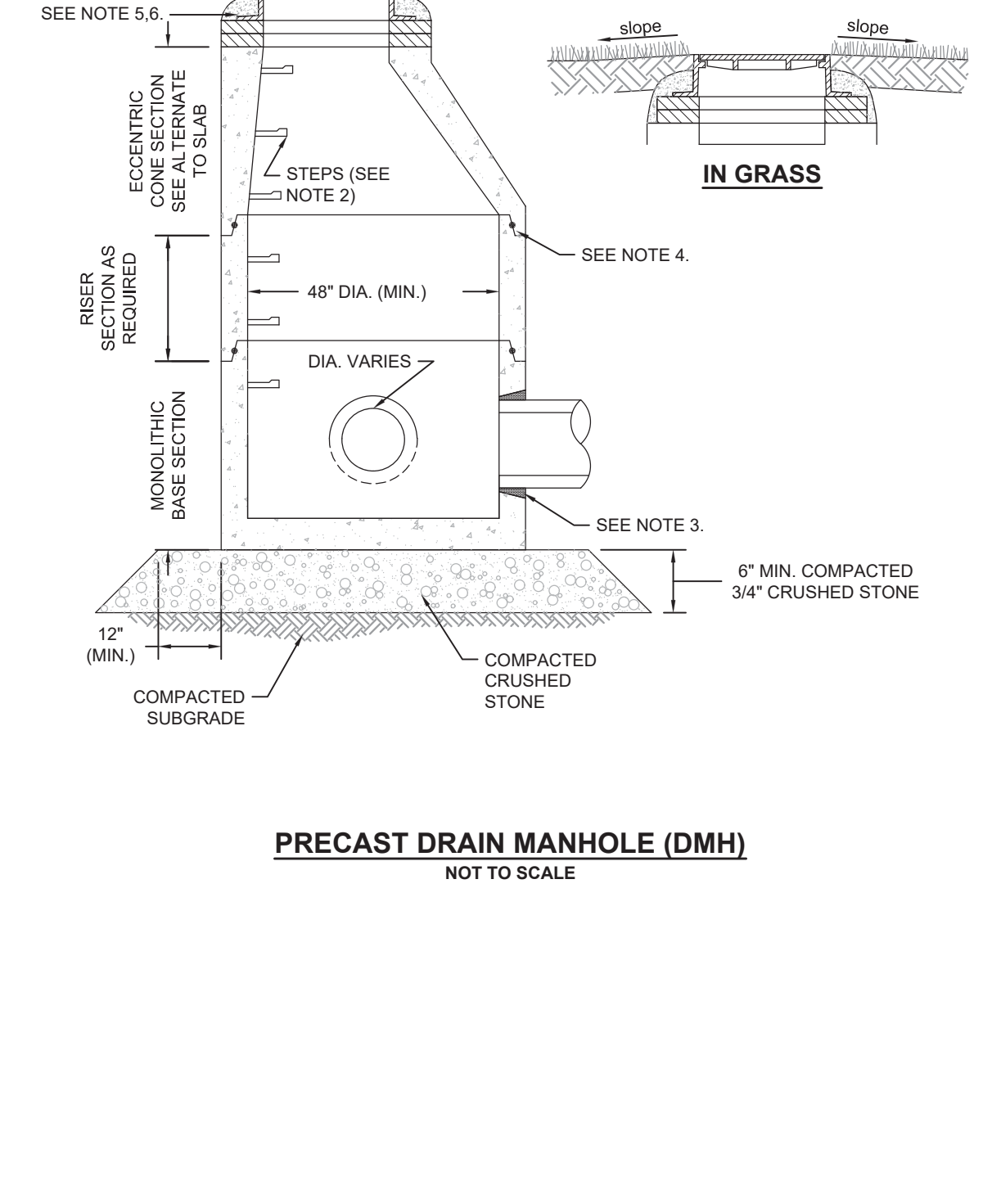
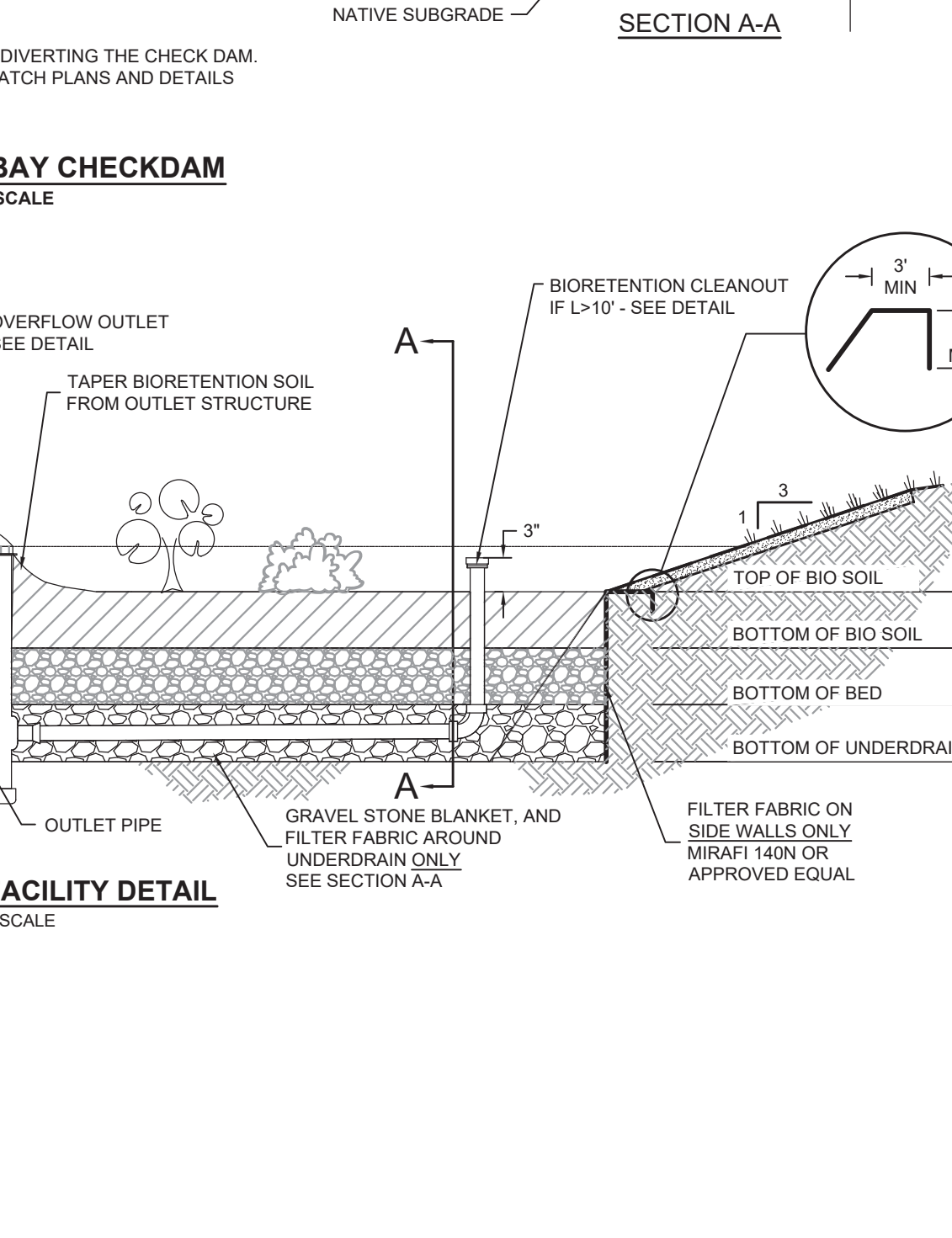
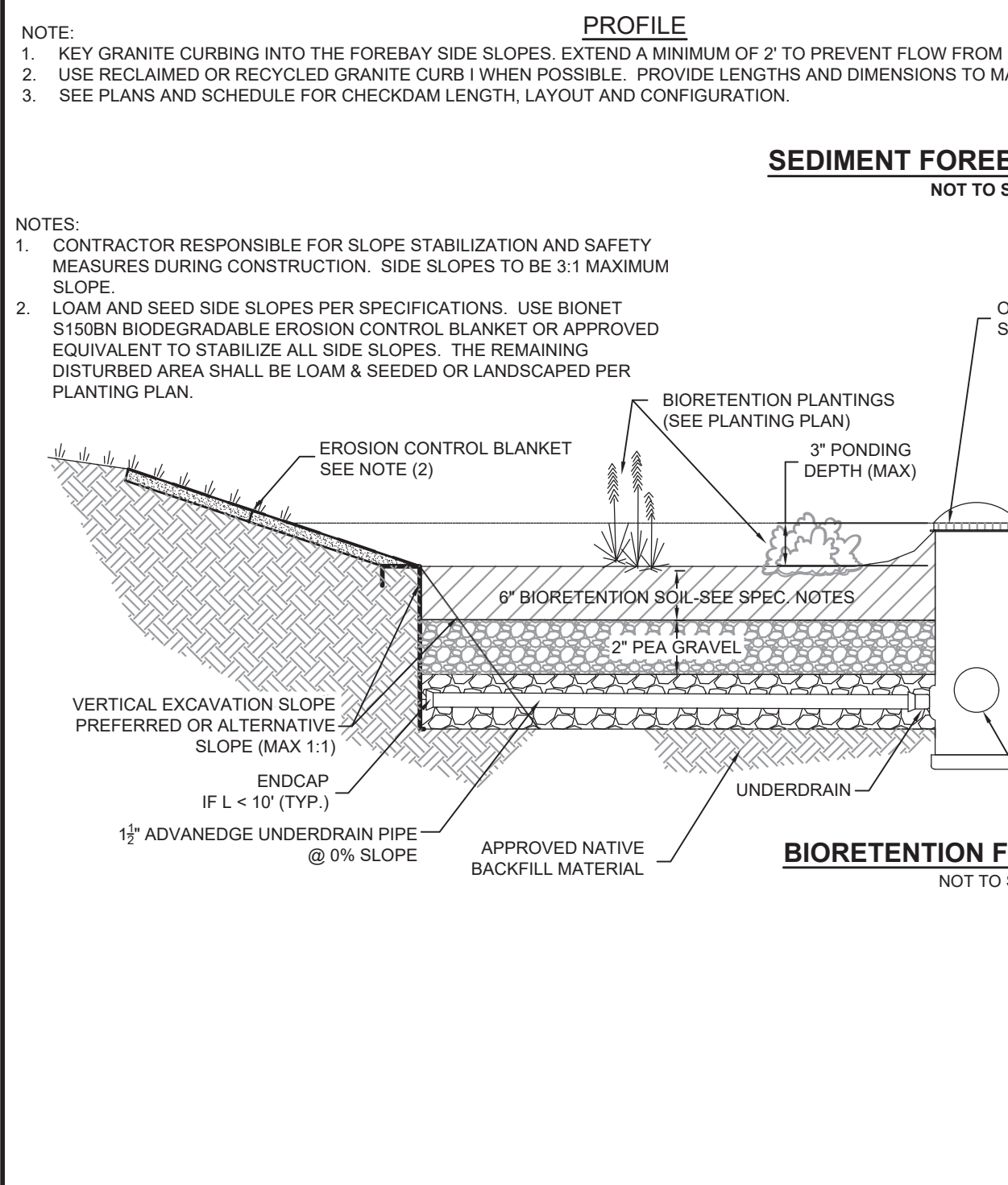
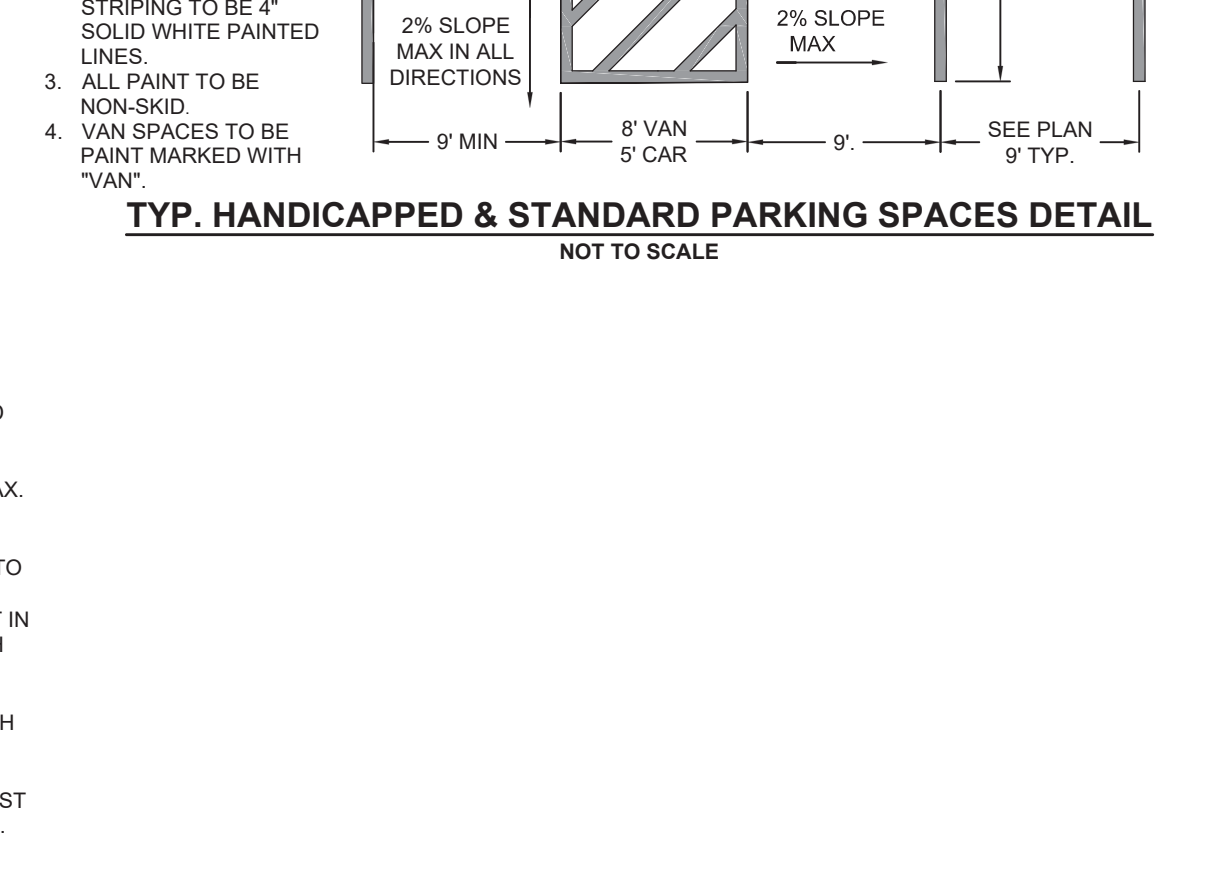
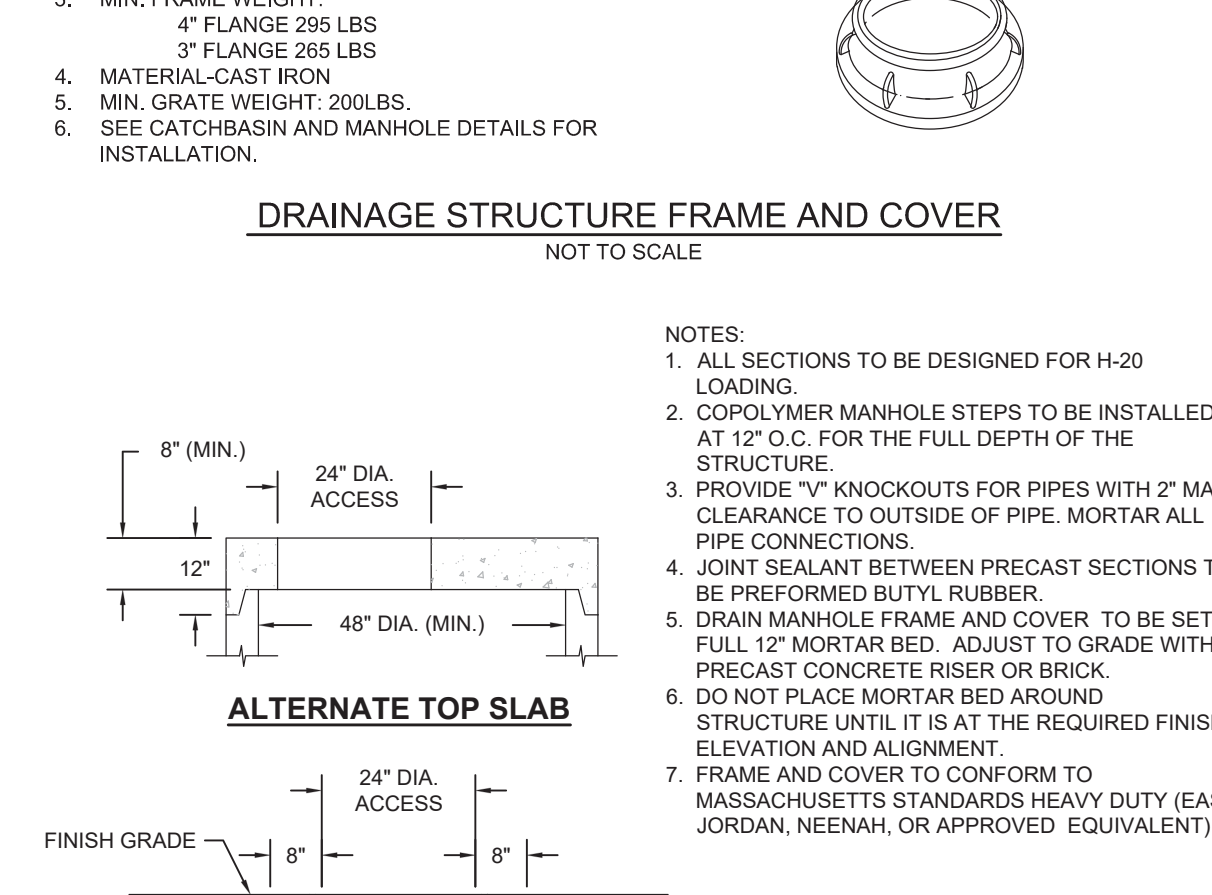
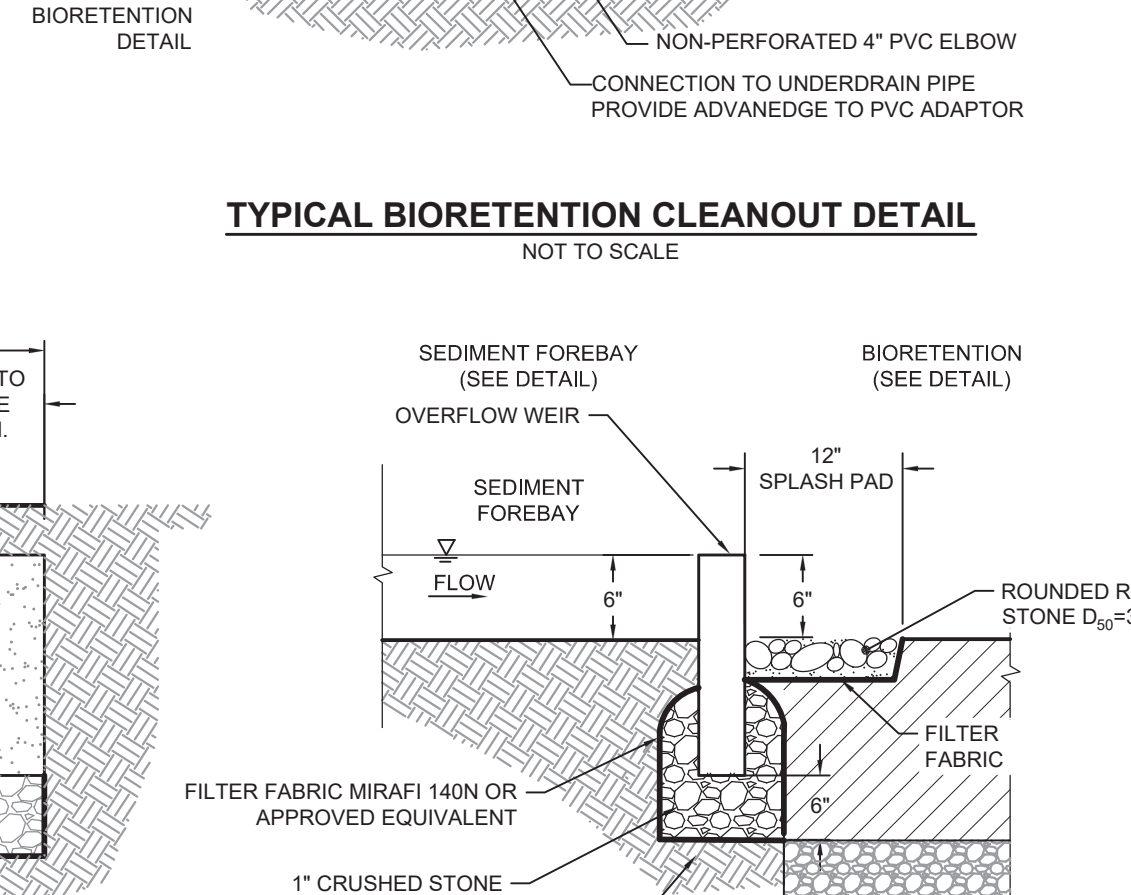
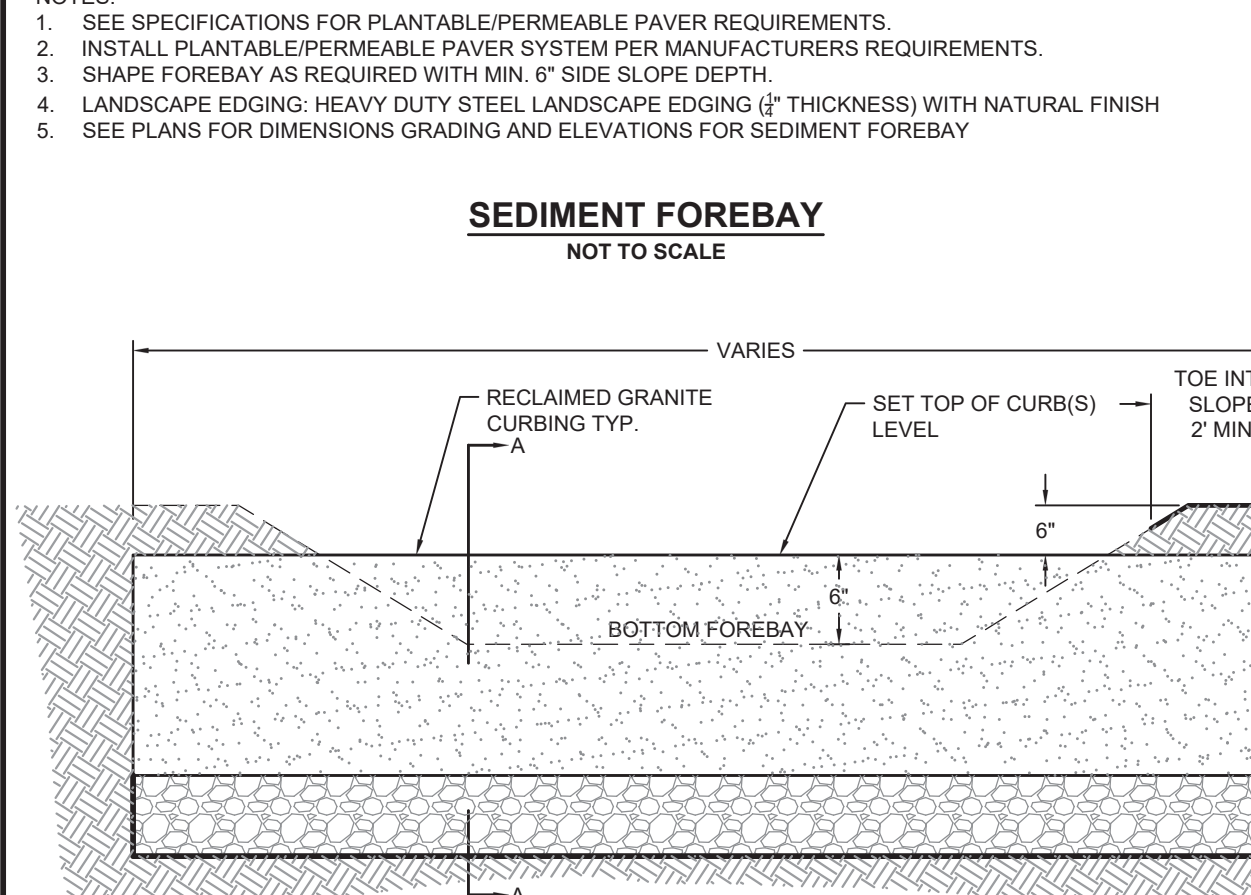
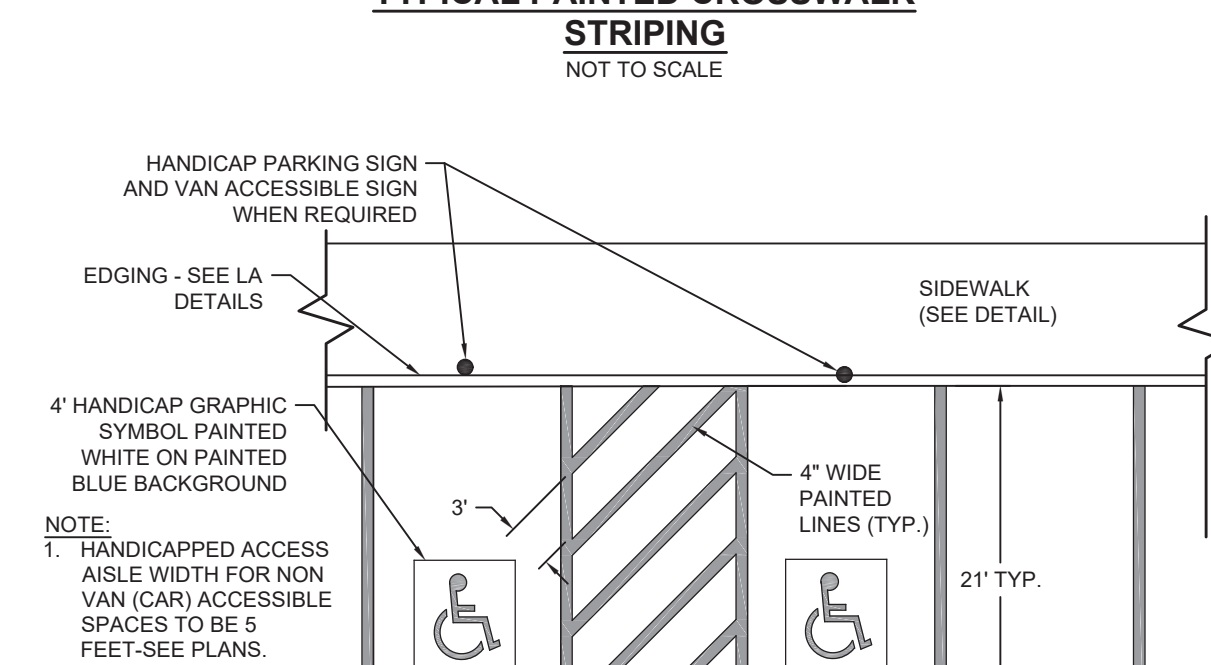
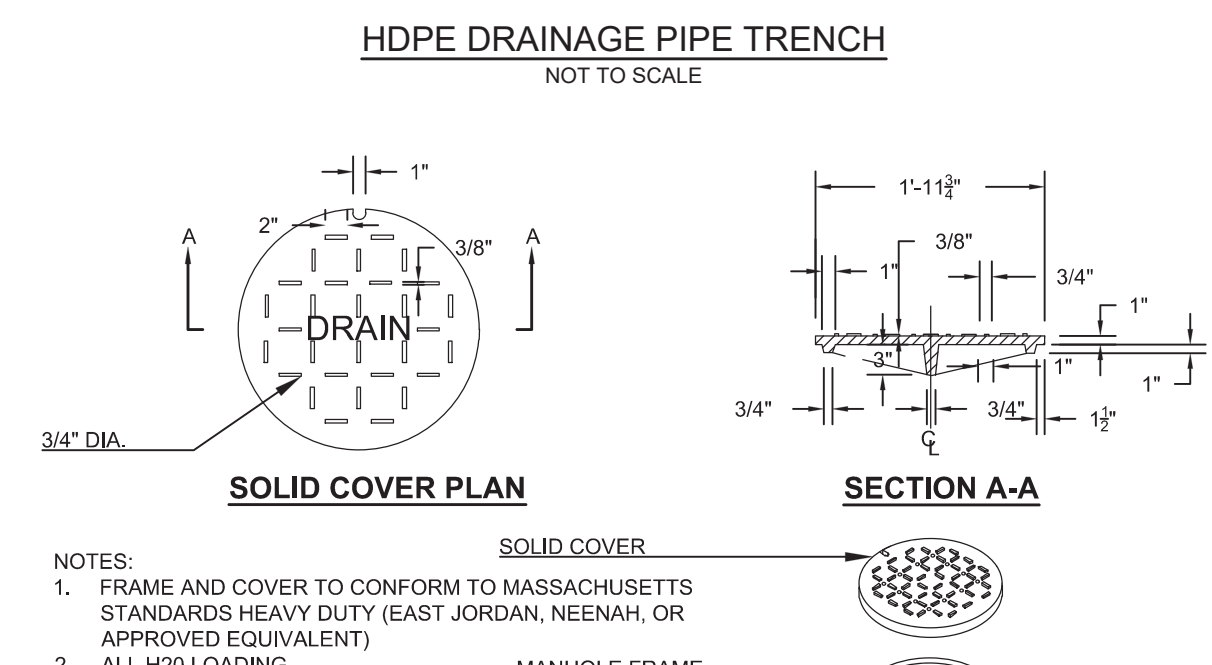
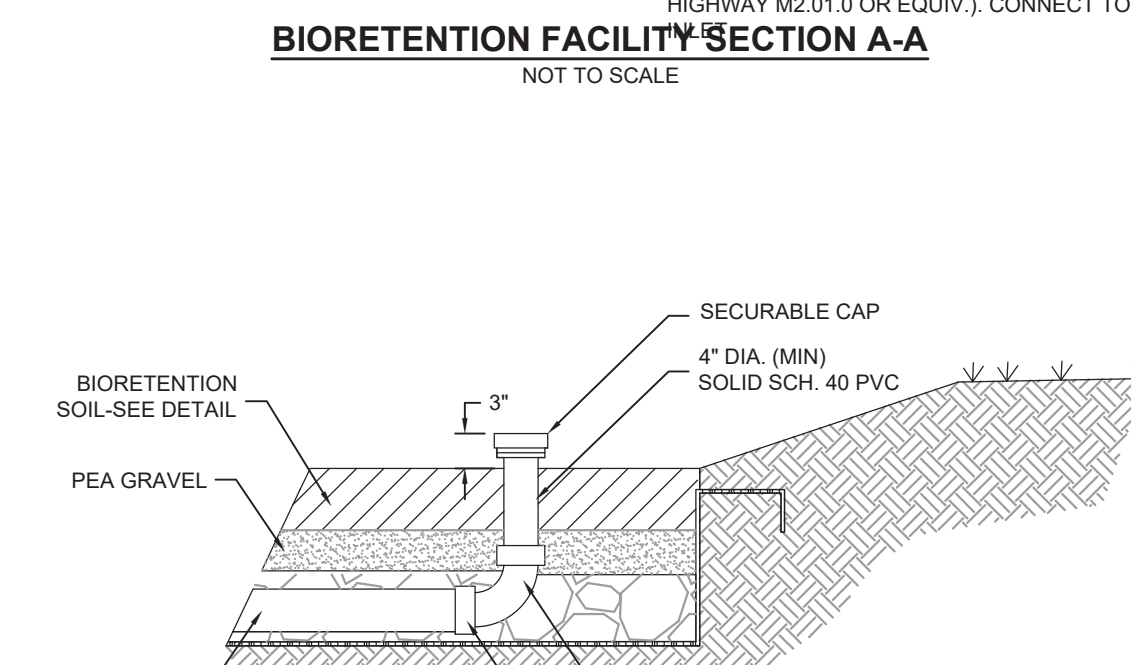
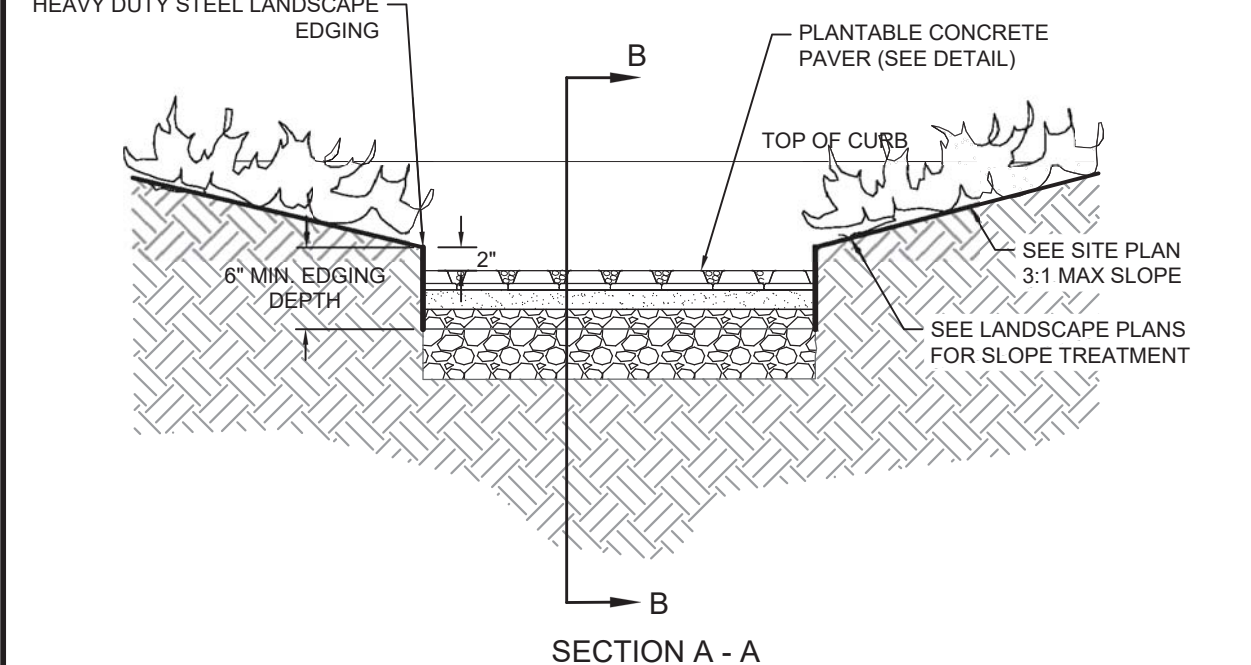
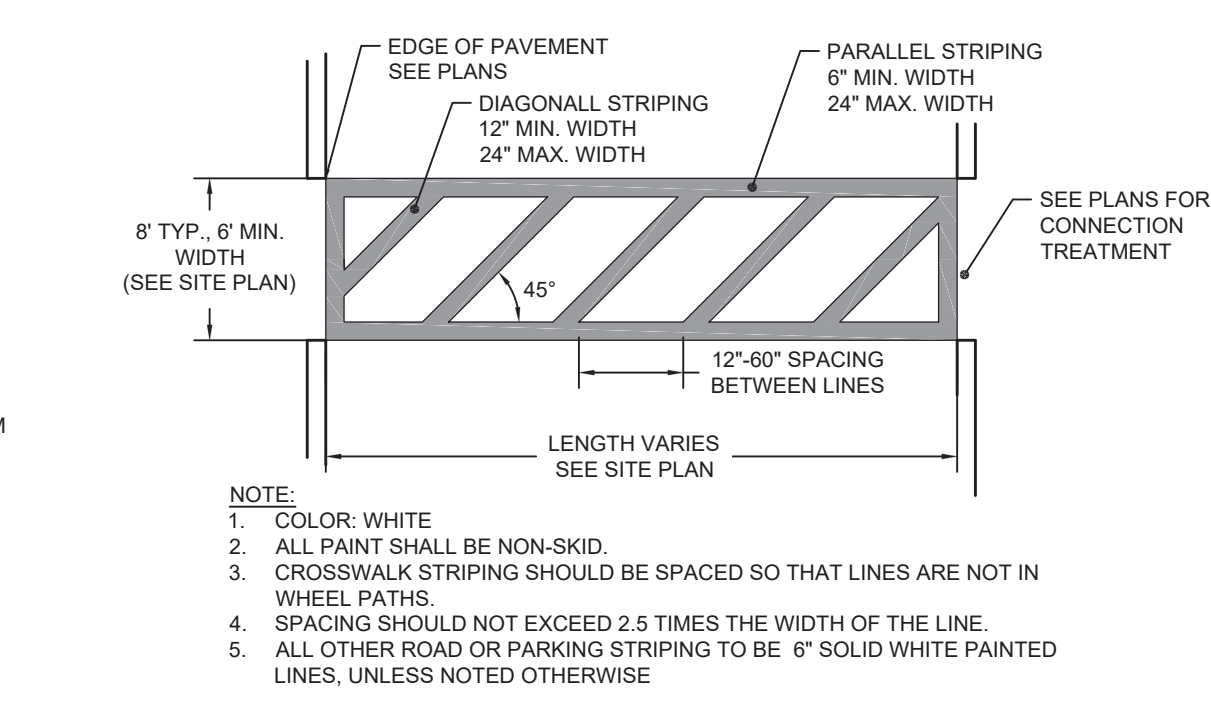
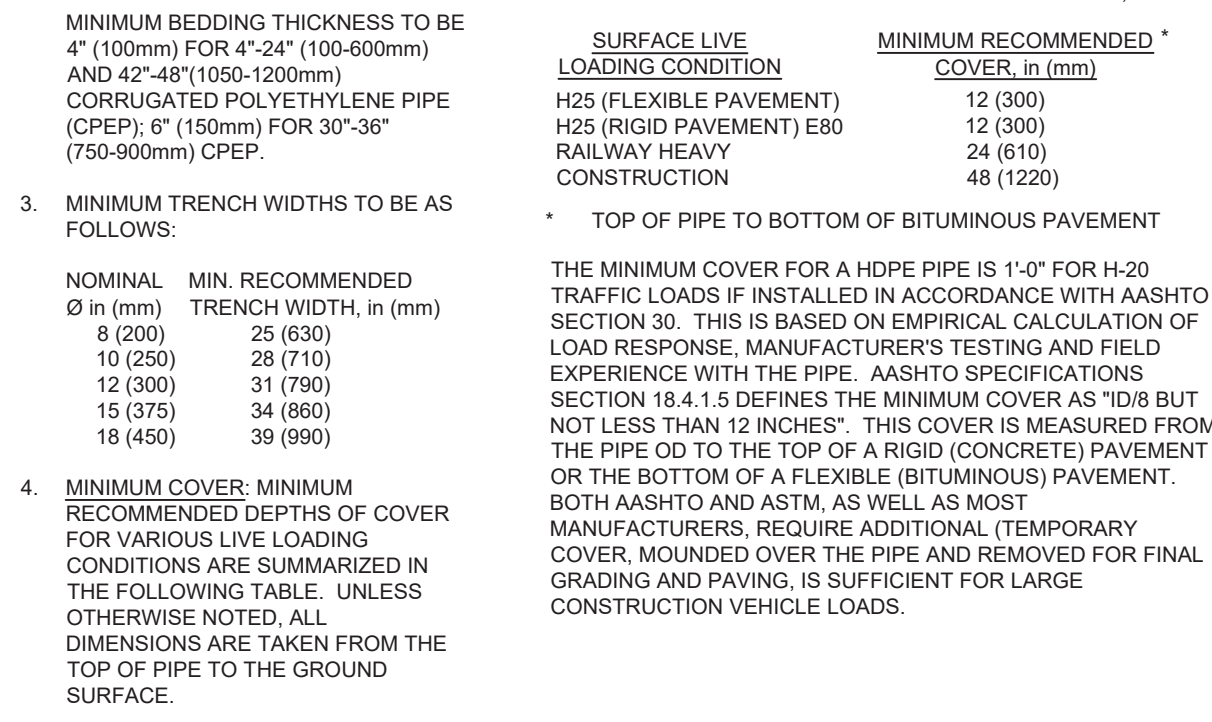
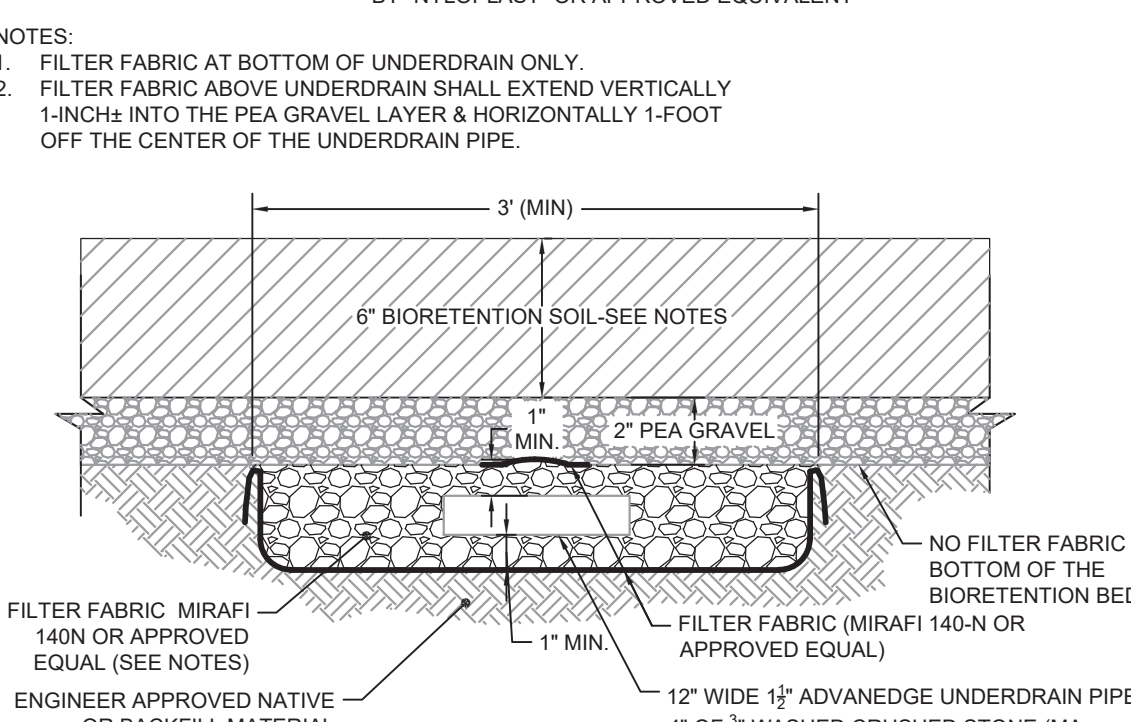
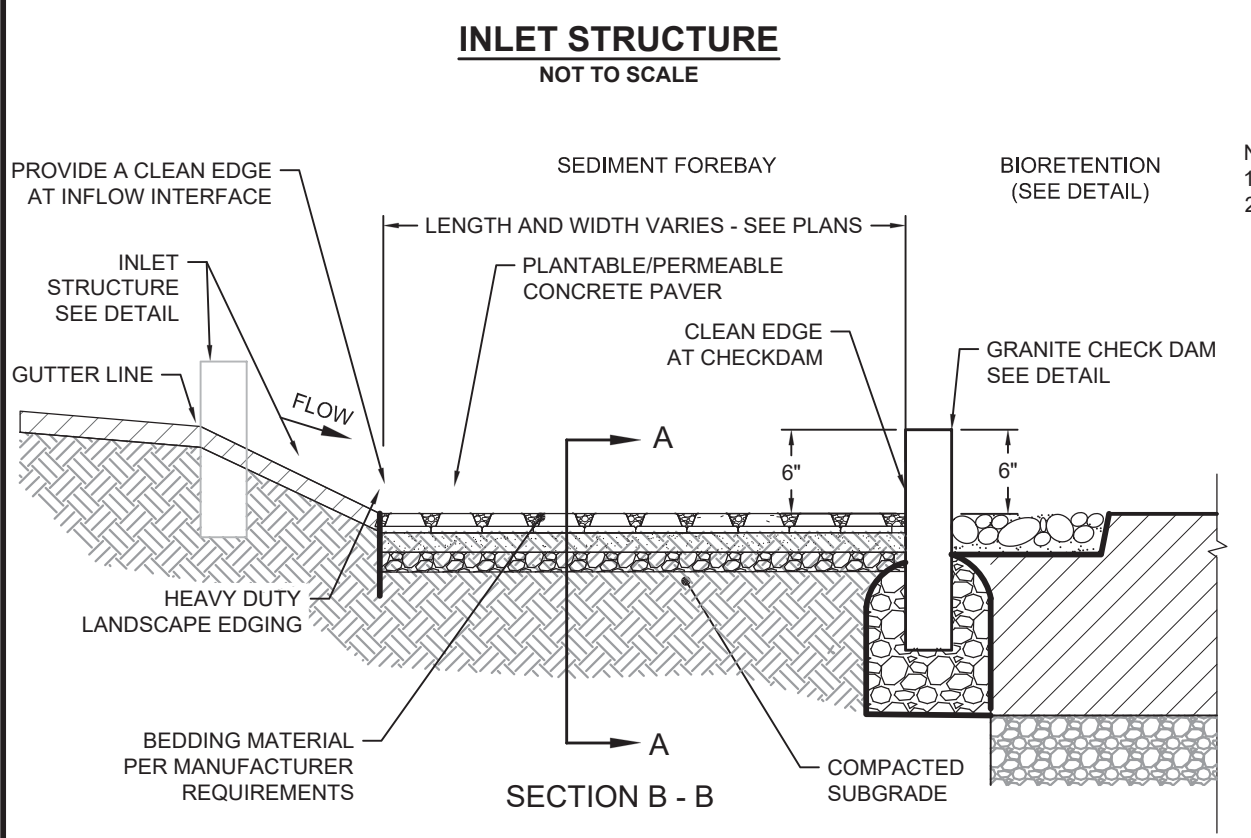
BIORETENTION FACILITY SECTION A-A
 NOT TO SCALE



- NOTES:**
 1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR TO EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH FOUNDATION OF CLASS OR II MATERIAL AS DEFINED IN ASTM D2321. STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS. LATEST EDITION, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.



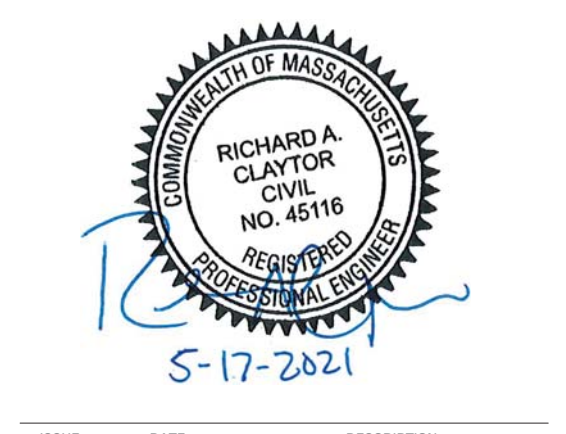
- GENERAL NOTES:**
 1. SUB-GRADE (EXISTING MATERIAL) SHALL CONSIST OF INERT MATERIAL THAT IS HARD, DURABLE STONE AND/OR COARSE SAND, FREE FROM LOAM AND CLAY TO A DEPTH NOT LESS THAN 4-FT BELOW THE FINISH PAVEMENT SURFACE. EXCAVATE SANDY LOAM AND/OR LOAMY SAND TOPSOIL MATERIAL FROM ALL PAVED AREAS PRIOR TO SUB-BASE INSTALLATION.
 2. PLACE SUB-BASE IN MAXIMUM 8" LIFTS (COMPACTED TO 95%).
 3. COMPACT SUB-GRADE FILL TO 95% COMPACTION.
 4. SEE SITE LAYOUT PLAN FOR PAVEMENT WIDTH AND LOCATION.
 5. SEE GRADING PLANS FOR PAVEMENT SLOPE AND CROSS SLOPE.
 6. SWEEP CLEAN THE EXISTING BINDER COURSE SURFACE PRIOR TO INSTALLING THE WEARING COURSE BY A STREET SWEEPING MACHINE.
 7. APPLY A TACK COAT PER SPECIFICATIONS.



PROJECT INFORMATION	
Town of Eastham	OWNER
	ARCHITECT

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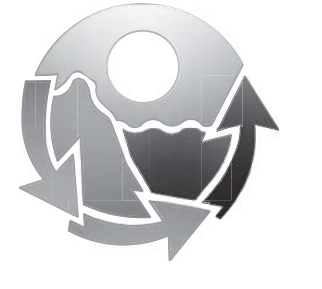
100% DESIGN DEVELOPMENT
 5/17/21



DATE	REVISION	DESCRIPTION
DRAWN BY: ML	CHECKED BY: RAC	PROJECT # 2003

DETAILS

C005



**Rock Harbor Harbormaster Building and Site
Revitalization**

631 Dyer Prince Road
Eastham, MA 02642

Town of Eastham

OWNER

APRIL

**NOT FOR
CONSTRUCTION**

100% DESIGN
DEVELOPMENT
5/17/21

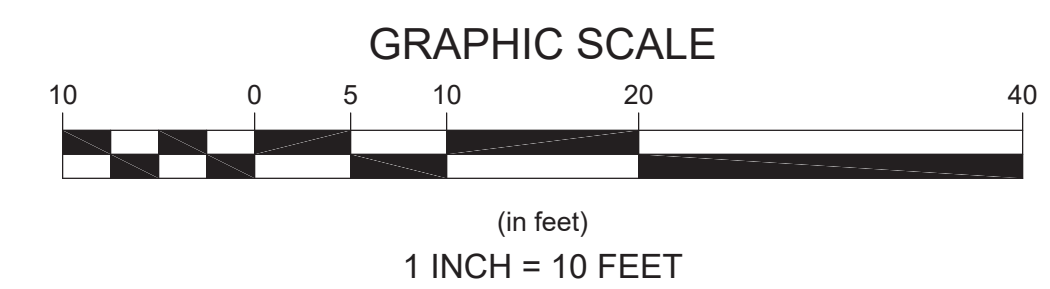
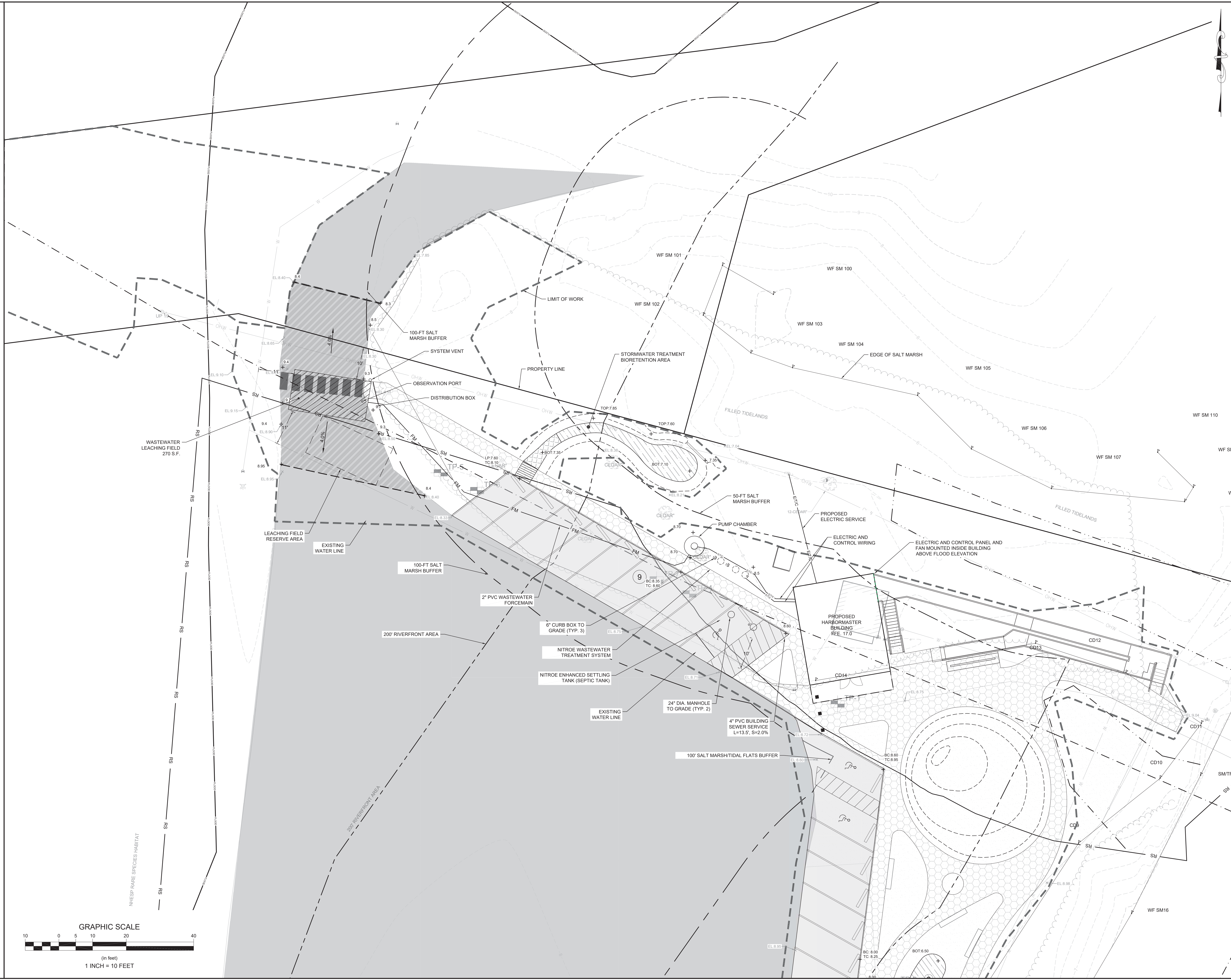


ISSUE DATE DESCRIPTION
DRAWN BY: ML CHECKED BY: RAC PROJECT #: 2003

WASTEWATER PLAN

WW001

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5/17/2021 2:29 PM



NHESP RARE SPECIES HABITAT