



REPLY TO ATTENTION OF

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

MAINE GENERAL PERMITS (GPs)
AUTHORIZATION LETTER AND SCREENING SUMMARY

SHANE FORSLEY
B.I.W. GROUP, LLC
41 INDUSTRIAL DRIVE, UNIT 20
EXETER, NEW HAMPSHIRE 03833

CORPS PERMIT # NAE-2022-00647
CORPS GP# 7
STATE ID# NRPA

DESCRIPTION OF WORK:

Place approximately 3,687 SF of stone revetment below the high tide line of the Piscataqua River off 35 Badgers Island West at Kittery, Maine in order to stabilize approximately 190 linear feet of eroded shoreline. All intertidal will be conducting during low tide conditions when the site is in-the-dry. This work is shown on the attached plans entitled "My Map" in one sheet dated "2/11/22" and "B.I.W. GOUP LLC" in four sheets dated "10/6/21" and "1/28/22".

See GENERAL CONDITIONS attached.

LAT/LONG COORDINATES: 43.082350° N -70.755745° W USGS QUAD: PORTSMOUTH, NH

I. CORPS DETERMINATION:

Based on our review of the information you provided, we have determined that your project will have only minimal individual and cumulative impacts on waters and wetlands of the United States. Your work is therefore authorized by the U.S. Army Corps of Engineers under the Federal Permit, the Maine General Permits (GPs) which can be found at: https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit/ Accordingly, we do not plan to take any further action on this project.

You must perform the activity authorized herein in compliance with all the terms and conditions of the GP [including any attached Special Conditions and any conditions placed on the State 401 Water Quality Certification including any required mitigation]. Please review the GPs, including the GPs conditions beginning on page 5, to familiarize yourself with its contents. You are responsible for complying with all of the GPs requirements; therefore you should be certain that whoever does the work fully understands all of the conditions. You may wish to discuss the conditions of this authorization with your contractor to ensure the contractor can accomplish the work in a manner that conforms to all requirements.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

Condition 45 of the GPs (page 19) provides one year for completion of work that has commenced or is under contract to commence prior to the expiration of the GPs on October 14, 2025. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 14, 2026.

This authorization presumes the work shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to the undersigned.

No work may be started unless and until all other required local, State and Federal licenses and permits have been obtained. This includes but is not limited to a Flood Hazard Development Permit issued by the town if necessary.

II. STATE ACTIONS: PENDING [X], ISSUED [], DENIED [] DATE _____

APPLICATION TYPE: PBR: ____, TIER 1: ____, TIER 2: ____, TIER 3: X ____, LURC: ____ DMR LEASE: ____ NA: ____

III. FEDERAL ACTIONS:

JOINT PROCESSING MEETING: non-screen LEVEL OF REVIEW: SELF-VERIFICATION: X PRE-CONSTRUCTION NOTIFICATION: ____

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10 ____, 404 X ____, 10/404 ____, 103 ____

EXCLUSIONS: The exclusionary criteria identified in the general permit do not apply to this project.

FEDERAL RESOURCE AGENCY OBJECTIONS: EPA n/a ____, USF&WS n/a ____, NMFS n/a ____

If you have any questions on this matter, please contact my staff at 978-318-8676 at our Augusta, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at: http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Signature of Colin M. Greenan
COLIN M. GREENAN
PROJECT MANAGER
MAINE PROJECT OFFICE

FOR: FRANK J. DEL GIUDICE
CHIEF, PERMITS & ENFORCEMENT BRANCH
REGULATORY DIVISION



**US Army Corps
of Engineers®**
New England District

**PLEASE NOTE THE FOLLOWING GENERAL CONDITIONS FOR
DEPARTMENT OF THE ARMY
MAINE GENERAL PERMIT 8
PERMIT NO. NAE-2022-00647**

GENERAL CONDITIONS

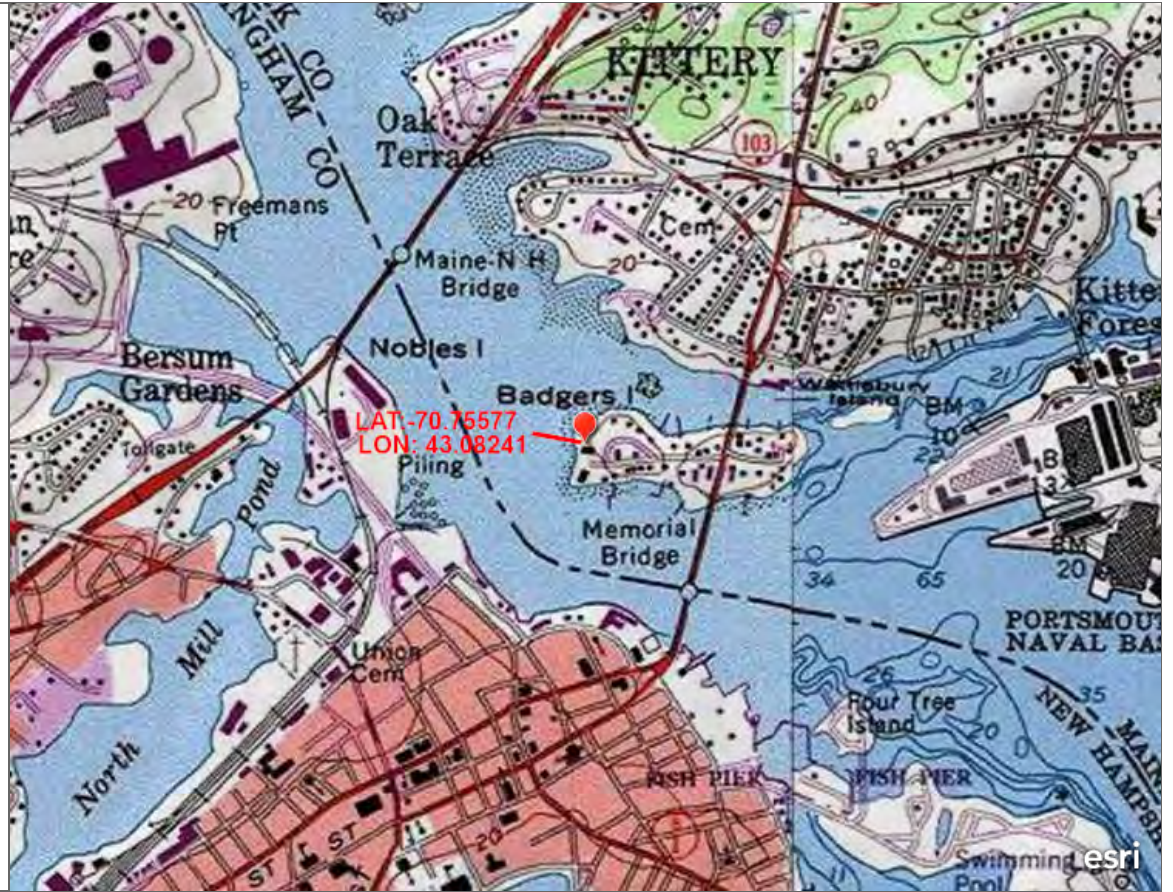
23. Soil Erosion, Sediment, and Turbidity Controls. a. Adequate sedimentation and erosion control management measures, practices and devices, such as phased construction, installation of sediment control barriers (i.e. silt fence, vegetated filter strips, geotextile silt fences, erosion control mixes, hay bales or other devices) downhill of all exposed areas, retention of existing vegetated buffers, application of temporary mulching during construction, and permanent seeding and stabilization shall be installed and properly maintained to reduce erosion and retain sediment on-site during and after construction. They shall be capable of preventing erosion; of collecting sediment, suspended and floating materials; and of filtering fine sediment. b. Temporary sediment control barriers shall be removed upon completion of work, but not until all disturbed areas are permanently stabilized. The sediment collected by these sediment barriers shall be removed and placed at an upland location and stabilized to prevent its later erosion into a waterway or wetland. All exposed soil and other fills shall be permanently stabilized at the earliest practicable date.

33. Permit(s)/Authorization Letter On-Site. The permittee shall ensure that a copy of the terms and conditions of these GPs and any accompanying authorization letter with attached plans are at the site of the work authorized by these GPs whenever work is being performed and that all construction personnel performing work which may affect waters of the U.S. are fully aware of the accompanying terms and conditions. The entire permit authorization shall be made a part of any and all contracts and subcontracts for work that affects areas of Corps jurisdiction at the site of the work authorized by these GPs. This shall be achieved by including the entire permit authorization in the specifications for work. The term "entire permit authorization" means all terms and conditions of the GPs, the GPs, and the authorization letter (including its drawings, plans, appendices and other attachments) and subsequent permit modifications as applicable. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or subcontract. Although the permittee may assign various aspects of the work to different contractors or subcontractors, all contractors and subcontractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire GP authorization,

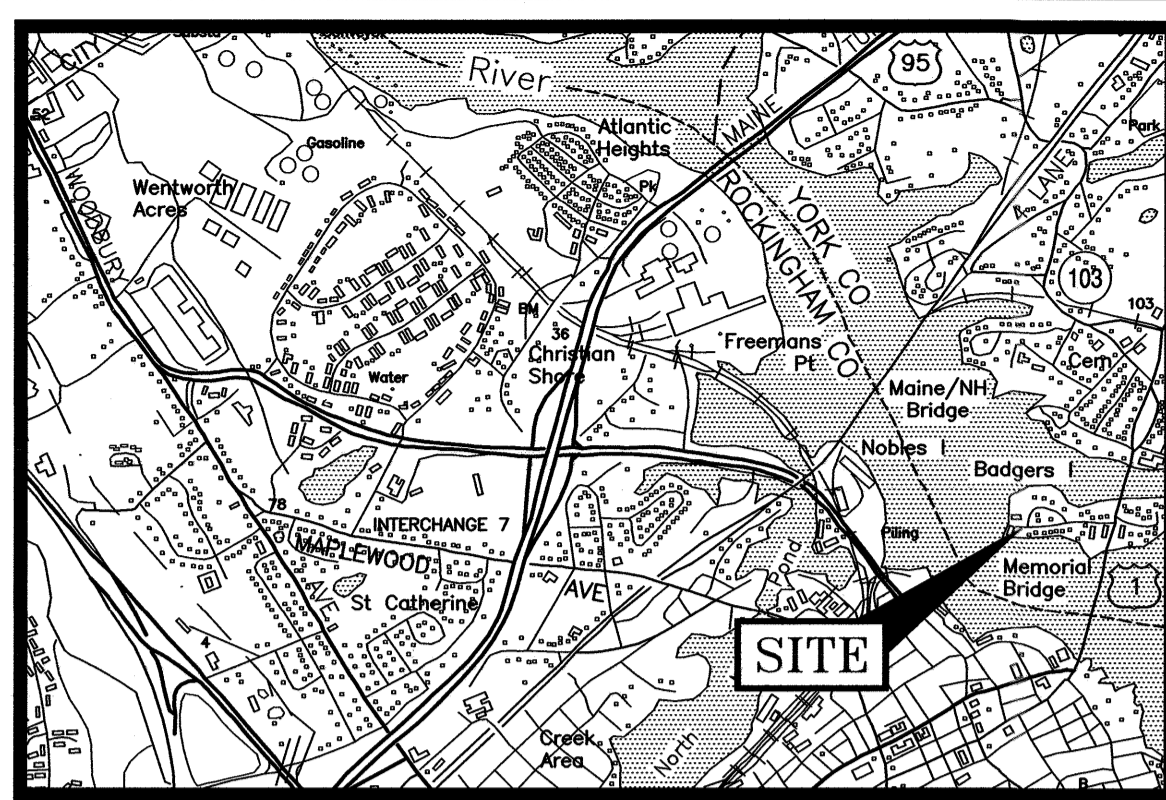
34. Inspections. The permittee shall allow the Corps to make periodic inspections at any time deemed necessary in order to ensure that the work is eligible for authorization under these GPs, is being, or has been performed in accordance with the terms and conditions of these GPs.

My Map

No legend



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LOCATION MAP SCALE 1"=2,000'

LEGEND:

- N/F NOW OR FORMERLY
- RP RECORD OF PROBATE
- YCRD YORK COUNTY REGISTRY OF DEEDS
- MAP 11 / LOT 21
- RAILROAD SPIKE FOUND
- IRON ROD/IRON PIPE FOUND
- IRON PIPE FOUND
- STONE/CONCRETE BOUND FOUND
- RAILROAD SPIKE SET
- IRON ROD SET
- DRILL HOLE SET
- GRANITE BOUND SET
- BOUNDARY
- BUILDING SETBACK
- MEAN HIGH WATER LINE
- MSL MEAN SEA LEVEL
- MLW MEAN LOW WATER
- MLLW MEAN LOWER LOW WATER
- HAT MAINE DEP HIGHEST ANNUAL TIDE LINE
- WB WETLAND BUFFER LINE
- UNDERGROUND ELECTRIC
- OVERHEAD ELECTRIC/WIRES
- CONTOUR
- SPOT ELEVATION
- EDGE OF PAVEMENT (EP)
- WOODS / TREE LINE
- UTILITY POLE (w/ GUY)
- GAS SHUT OFF
- WATER SHUT OFF/CURB STOP
- GATE VALVE
- HYDRANT
- METER (GAS, WATER, ELECTRIC)
- CATCH BASIN
- SEWER MANHOLE
- DRAIN MANHOLE

- PLAN REFERENCES:**
- BADGERS LANDING CONDOMINIUM STANDARD BOUNDARY SURVEY & CONDOMINIUM SITE PLAN FOR PROPERTY AT 32 BADGERS ISLAND WEST, KITTERY, YORK COUNTY, MAINE. CLIENT ISLAND PROPERTIES, LLC PREPARED BY EASTERLY SURVEY, INC. DATED SEPTEMBER 17, 2002, FINAL REVISION DATE SEPTEMBER 30, 2002. Y.C.R.D. PLAN BOOK 581, PAGE 1.
 - LAND TITLE SURVEY WEATHERVANE LOBSTER - SEAFOODS, THORNERS LANE, BADGERS ISLAND, KITTERY MAINE. PREPARED BY CIVIL CONSULTANTS. DATED AUGUST 21, 1996, FINAL REVISION SEPTEMBER 20, 1996. Y.C.R.D. PLAN BOOK 231/23.
 - LOCATION OF A PORTION OF THE TOWN ROAD KNOWN AS BADGERS ISLAND WEST ON BADGERS ISLAND, KITTERY MAINE, FOR THE TOWN OF KITTERY, MAINE. PREPARED BY DOUCET SURVEY, INC. DATED AUGUST 26, 1994, FINAL REVISION DATE SEPTEMBER 15, 1995. Y.C.R.D. PLAN BOOK 225/12.
 - BOUNDARY PLAN OF LAND, CHARLES & MARYANN D. PATTEN, KITTERY, MAINE. PREPARED BY THOMAS F. MORAN, INC. DATED MAY 17, 1982. Y.C.R.D. PLAN BOOK 118/37.
 - GAGNER / SEWARD PROPERTY LINE EVALUATION SURVEYED SITE PLAN, KITTERY, MAINE. PREPARED BY KIMBALL CHASE. DATED SEPTEMBER 16, 1987. Y.C.R.D. PLAN BOOK 167/17.
 - PLAN OF LOTS, BADGERS ISLAND, KITTERY, MAINE OWNED BY JOSEPH W. THORNER. PREPARED BY JOHN W. DURGIN, CIVIL ENGINEER. DATED APRIL 1936. Y.C.R.D. PLAN BOOK 22/31.

LEGEND: (CONTINUED)

- AC AIR CONDITIONING UNIT
- HP HEAT PUMP
- SIGNS
- CPP CORRUGATED PLASTIC PIPE
- PVC POLYVINYL CHLORIDE PIPE
- EL. ELEVATION
- EP EDGE OF PAVEMENT
- FF FINISHED FLOOR
- INV. INVERT
- TBM TEMPORARY BENCHMARK
- TYP. TYPICAL
- VGC/SGC VERTICAL/SLOPED GRANITE CURB
- LSA LANDSCAPED AREA

DEVEGETATED COVERAGE CALCULATION (TO PROPERTY LINE & MEAN HIGH WATER)

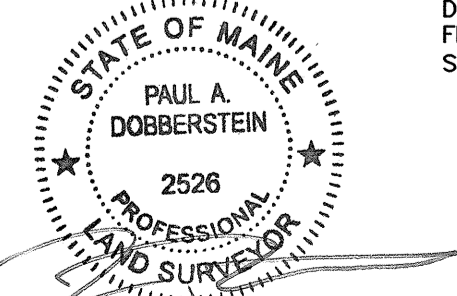
STRUCTURE	EXISTING (S.F.)
MAIN STRUCTURE	5,922
PAVEMENT	12,295
GRAVEL AREAS	2,277
RETAINING WALLS	48
CONCRETE PADS/STEPS	942
TOTAL	21,484
LOT SIZE	58,985
% LOT COVERAGE	36.4%

UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

PURSUANT TO CHAPTER 90 PARTS 1 AND 2 OF THE SURVEY STANDARDS OF PRACTICE AS ADOPTED BY THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS, THE FOLLOWING EXCEPTIONS TO PART 2 ARE NOTED:

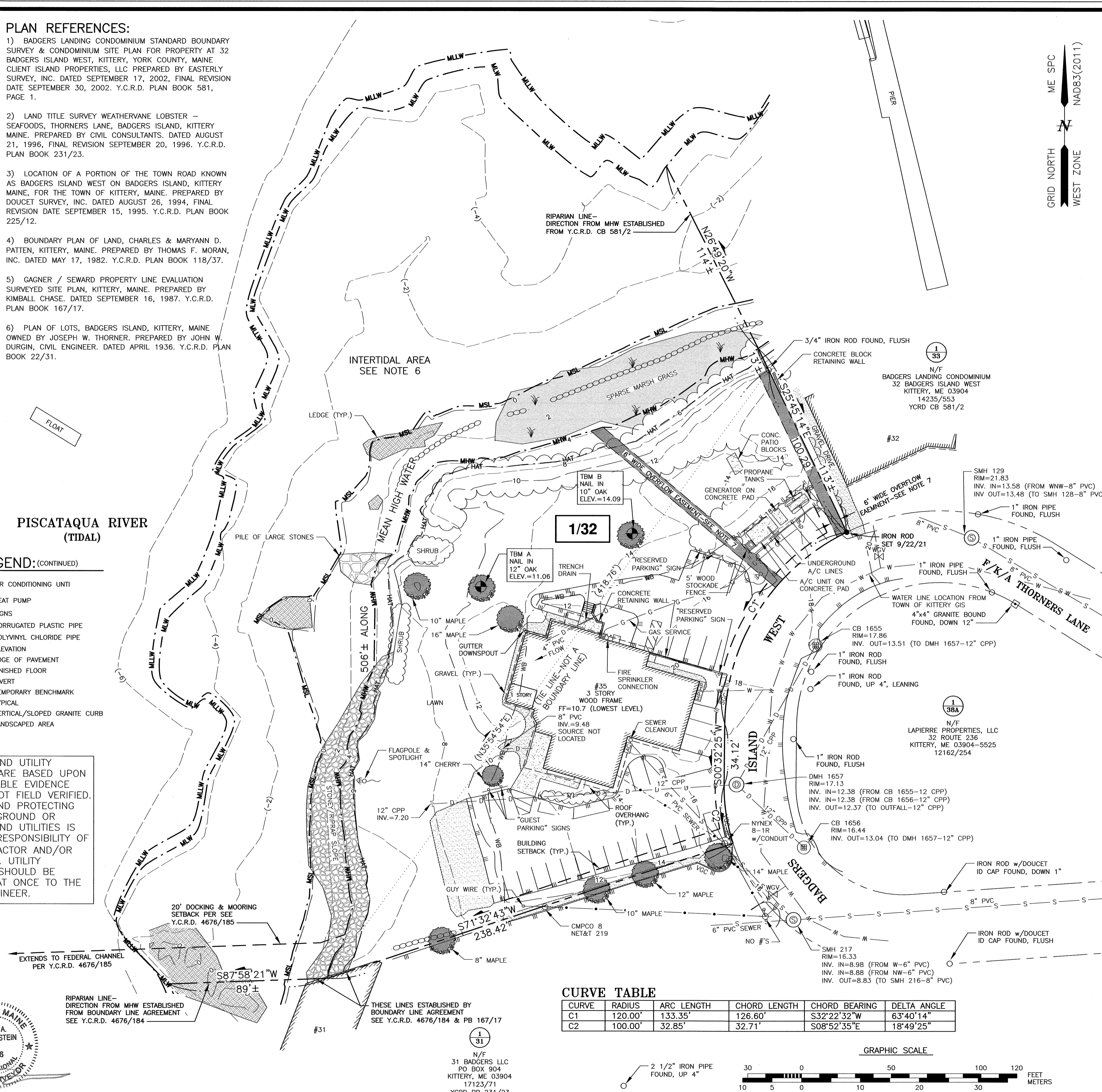
- NO SURVEY REPORT HAS BEEN PREPARED.
- NO LAND DESCRIPTION HAS BEEN PREPARED.
- MONUMENTS HAVE NOT BEEN SET.

THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CHAPTER 90 STANDARDS OF PRACTICE, EFFECTIVE DATE APRIL 1, 2001 EXCEPT AS NOTED ON THIS PLAN.



PAUL A. DOBBERSTEIN, PLS #2526

DATE 10/6/21



CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	120.00'	133.35'	126.60'	S32°22'32"W	63°40'14"
C2	100.00'	32.85'	32.71'	S08°52'35"E	18°49'25"

GRAPHIC SCALE



AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

- NOTES:**
- PARCEL IS SHOWN ON THE TOWN OF KITTERY ASSESSOR'S MAP 1 AS LOT 32.
 - OWNER OF RECORD:
B.I.W. GROUP, LLC
41 INDUSTRIAL DRIVE, UNIT 20
EXETER, NH 03833
18503/331 (FIRST PARCEL)
PLAN BOOK 22/31 (LOTS 14, 15, 16, & 17)
 - A PORTION OF THE PARCEL IS IN A SPECIAL FLOOD HAZARD AREA, ZONE A2 (ELEV. 9-NGVD29), AS SHOWN ON FIRM PANEL 2301710008D. EFFECTIVE DATE JULY 3, 1986.
 - EXISTING LOT AREA:
58,985± S.F. (TO MEAN HIGH WATER)
1.3541± ACRES (TO MEAN HIGH WATER)
 - PARCEL IS LOCATED IN THE MIXED USE - BADGERS ISLAND (MU-BI) ZONING DISTRICT AND IS SUBJECT TO THE RESOURCE PROTECTION (OZ-RP) AND SHORELAND-WATER BODY / WETLAND PROTECTION AREA (OZ-SL-250') OVERLAY DISTRICTS.
 - DIMENSIONAL REQUIREMENTS:
MIN. LOT AREA: 6,000 SF
FRONTAGE: 50 FEET
SETBACKS: FRONT 5 FEET, SIDE 10 FEET, REAR 10 FEET
MAXIMUM BUILDING HEIGHT: 40 FEET
MINIMUM OPEN SPACE: 40%
 - THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON ASSESSOR'S MAP 1 LOT 32 IN THE TOWN OF KITTERY.
 - VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS. MHW, MSL, MLW, AND MLLW BASED ON NOAA STATION 8419870-SEAVEY ISLAND, PORTSMOUTH HARBOR, ME.
 - AREA BETWEEN MEAN HIGH WATER AND MEAN LOW WATER ARE SUBJECT TO THE RIGHTS OF THE PUBLIC.
 - PARCEL IS SUBJECT TO A 6' WIDE EASEMENT FOR "LAYING AND MAINTAINING AN OVERFLOW PIPE FROM A SEPTIC (sic) TANK ON THE CONVEYED LOT UNDER THE ROADWAY". BENEFITING LOTS 1, 2, 3, 4, AND 5 ON PLAN REFERENCE 6 (NOW ASSESSOR'S MAP 1 LOTS 38 & 38A). SAID EASEMENT WAS GRANTED AS BEING ON LOT 14 BUT ALONG THE COMMON LOT LINE OF 14 & 15 OR COMMON LINE OF 13 & 14. SEE Y.C.R.D. 1301/275. IT IS NOT CLEAR IN WHICH LOCATION THE PIPE WAS CONSTRUCTED.
 - HIGHEST ANNUAL TIDE LINE SHOWN AT ELEVATION 10.4 PER LOCATION SEAVEY ISLAND IN MAINE DEP HIGHEST ANNUAL TIDE (HAT) LEVELS FOR YEAR 2018.

B.I.W. GROUP, LLC
35 BADGERS ISLAND WEST
KITTERY, MAINE

NO.	DESCRIPTION	DATE
1	REVISE PER COMMENT	10/6/21
0	ISSUED FOR COMMENT	9/10/21

SCALE 1"=30' AUGUST 2021

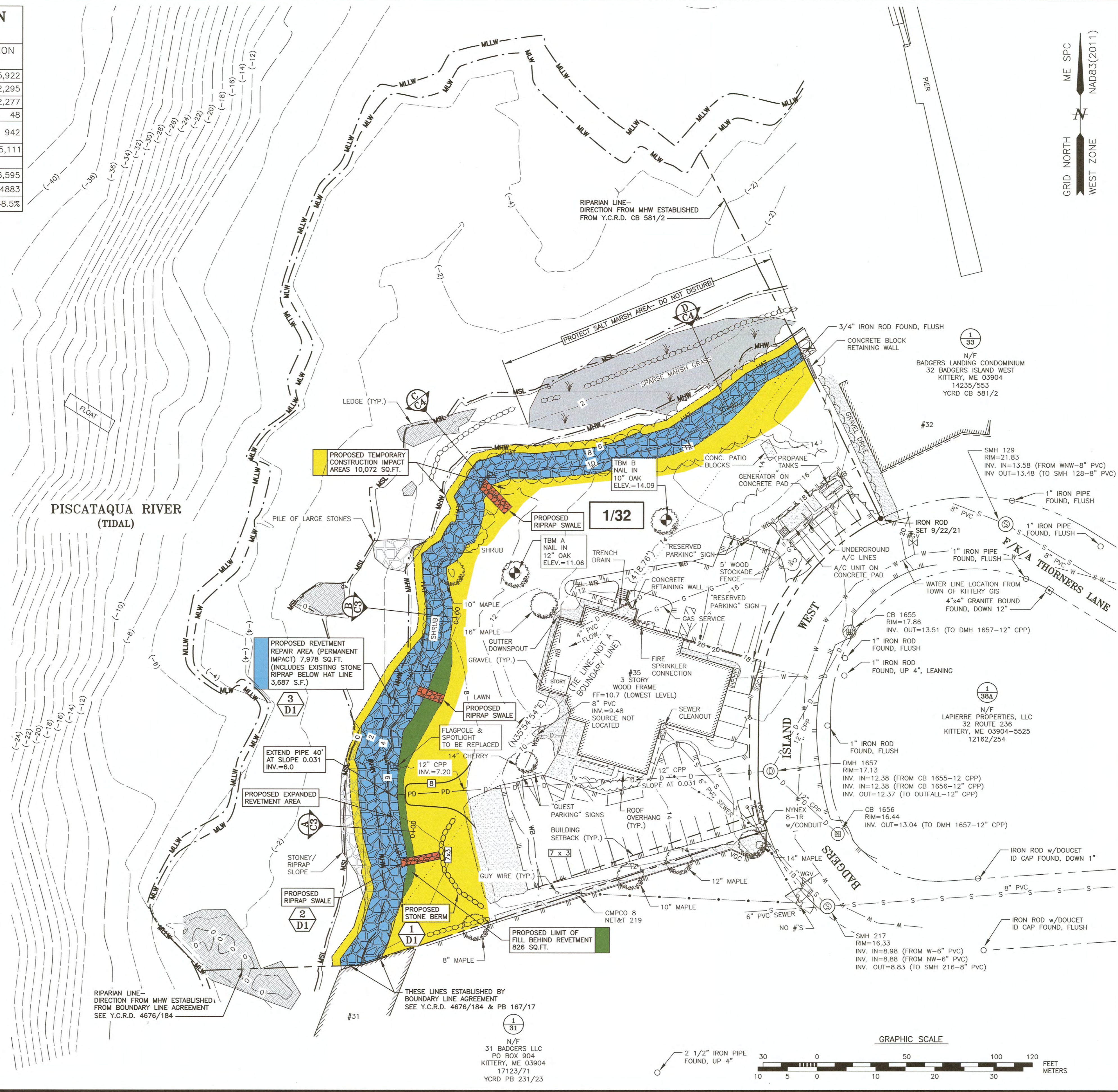
EXISTING CONDITIONS PLAN **C1**

DEVEGETATED COVERAGE CALCULATION
(TO HAT LINE)

STRUCTURE	PRE-CONSTRUCTION (S.F.)	POST-CONSTRUCTION (S.F.)
MAIN STRUCTURE	5,922	5,922
PAVEMENT	12,295	12,295
GRAVEL AREAS	2,277	2,277
RETAINING WALLS	48	48
CONCRETE PADS/STEPS	942	942
REVTMENT	3,695	5,111
TOTAL	25,179	26,595
LOT SIZE	54,883	54,883
% LOT COVERAGE	45.9%	48.5%

CONSTRUCTION IMPACT AREAS (TO HAT LINE)

ITEM	COLOR KEY	AREA
TEMPORARY IMPACT AREA		10,072 S.F.
PERMANENT IMPACT AREA		7,978 S.F.



AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

- NOTES:**
- 1) PARCEL IS SHOWN ON THE TOWN OF KITTEERY ASSESSOR'S MAP 1 AS LOT 32.
 - 2) OWNER OF RECORD:
B.I.W. GROUP, LLC
41 INDUSTRIAL DRIVE, UNIT 20
EXETER, NH 03833
18503/331
 - 3) A PORTION OF THE PARCEL IS IN A SPECIAL FLOOD HAZARD AREA, ZONE A2 (ELEV. 9-NGVD29), AS SHOWN ON FIRM PANEL 2301710008D. EFFECTIVE DATE JULY 3, 1986.
 - 4) EXISTING LOT AREA:
58,985± S.F. (TO MEAN HIGH WATER)
1.3541± ACRES (TO MEAN HIGH WATER)
 - 5) PARCEL IS LOCATED IN THE MIXED USE - BADGERS ISLAND (MU-B) ZONING DISTRICT AND IS SUBJECT TO THE RESOURCE PROTECTION (OZ-RP) AND SHORELAND-WATER BODY / WETLAND PROTECTION AREA (OZ-SL-250') OVERLAY DISTRICTS.
 - 6) DIMENSIONAL REQUIREMENTS:
MIN. LOT AREA: 6,000 SF
FRONTAGE: 50 FEET
SETBACKS: FRONT 5 FEET
SIDE 10 FEET
REAR 10 FEET
MAXIMUM STRUCTURE HEIGHT: 40 FEET
MINIMUM OPEN SPACE: 40%
 - 4) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED AREA OF SLOPE REPAIR ON PORTION OF TAX MAP 1 LOT 32 IN THE TOWN OF KITTEERY.
 - 5) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS. MHW, MSL, MLW, AND MLLW BASED ON NOAA STATION 8419870-SEAVEY ISLAND, PORTSMOUTH HARBOR, ME.
 - 6) THIS IS NOT A BOUNDARY SURVEY. RIGHTS WITHIN THE INTERTIDAL AREA HAVE NOT BEEN DETERMINED.
 - 7) HIGHEST ANNUAL TIDE LINE SHOWN AT ELEVATION 10.4 PER LOCATION SEAVEY ISLAND IN MAINE DEP HIGHEST ANNUAL TIDE (HAT) LEVELS FOR YEAR 2018.

REVTMENT REPAIR
35 BADGERS ISLAND WEST
KITTEERY, MAINE

NO.	DESCRIPTION	DATE
1	REVISED LOCATION	1/28/22
0	ISSUED FOR COMMENT	10/19/21

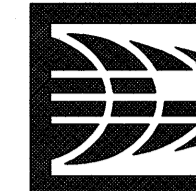
STATE OF MAINE
JOHN R. CHAGNON
No. 8399
LICENSED PROFESSIONAL ENGINEER

STATE OF MAINE
JOHN R. CHAGNON
No. 2878
LICENSED PROFESSIONAL LAND SURVEYOR

1-28-22

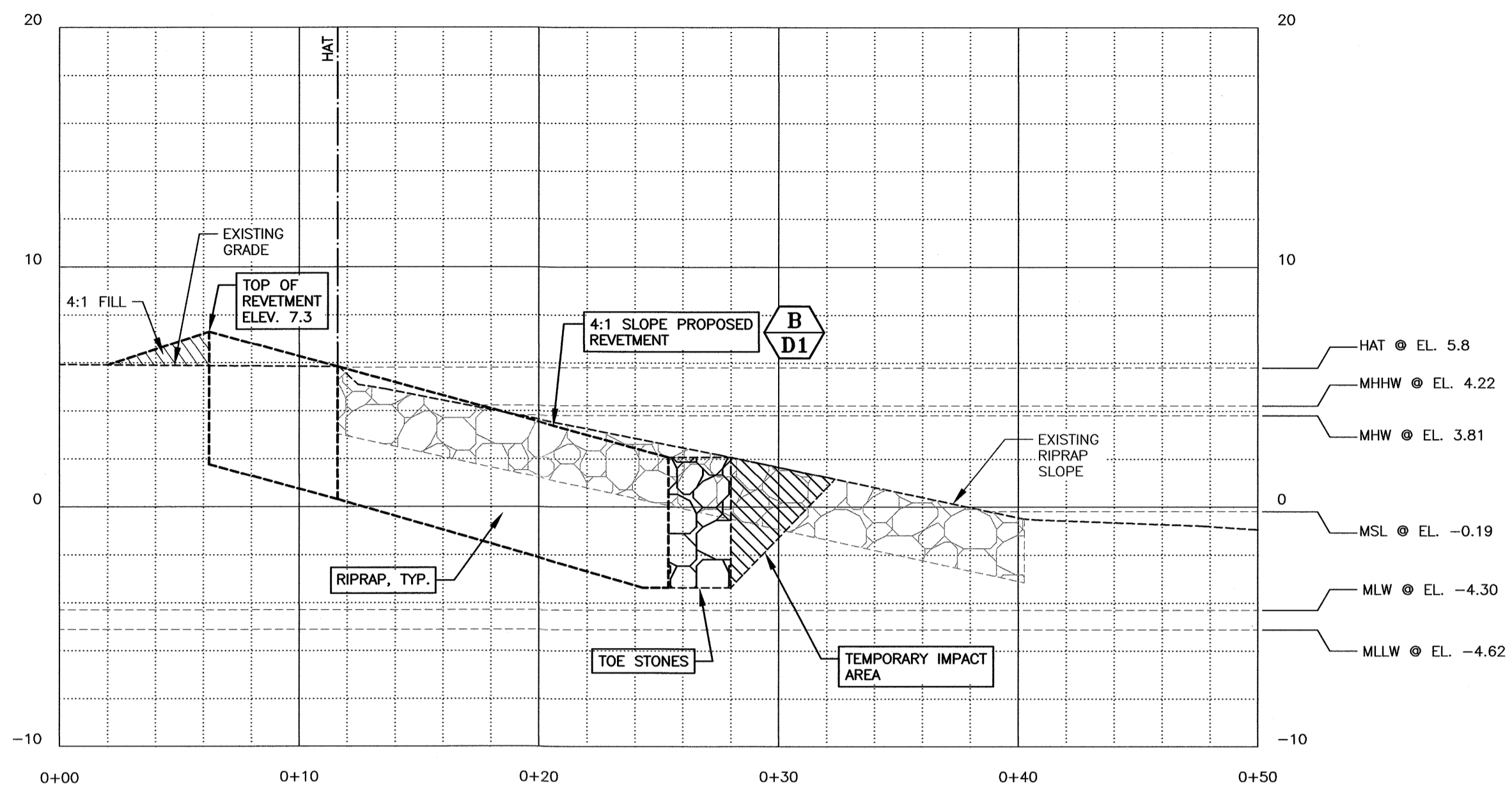
SCALE 1"=30' SEPTEMBER 2021

ME DEP PERMIT PLAN **C2**

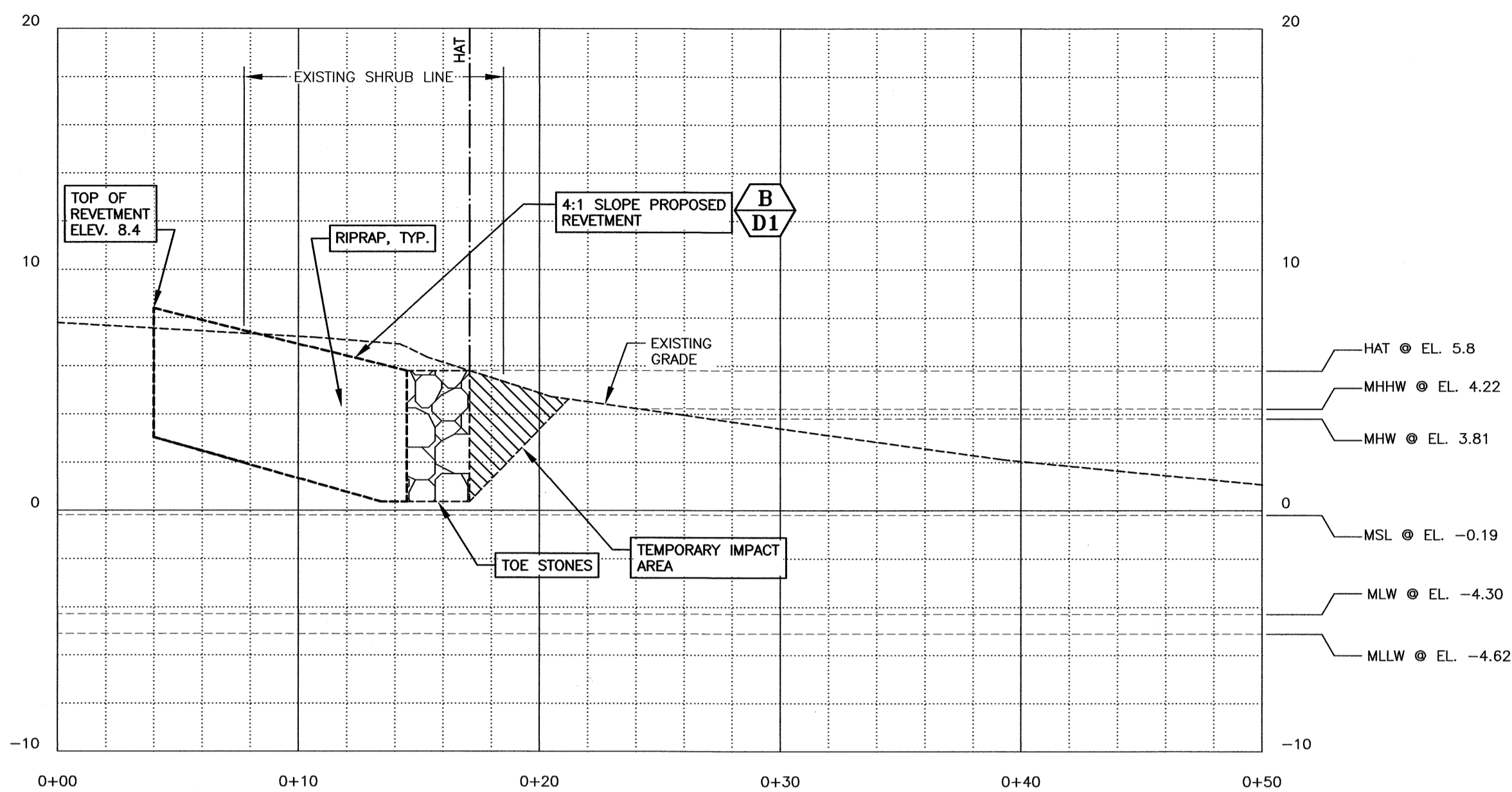


NOTES:

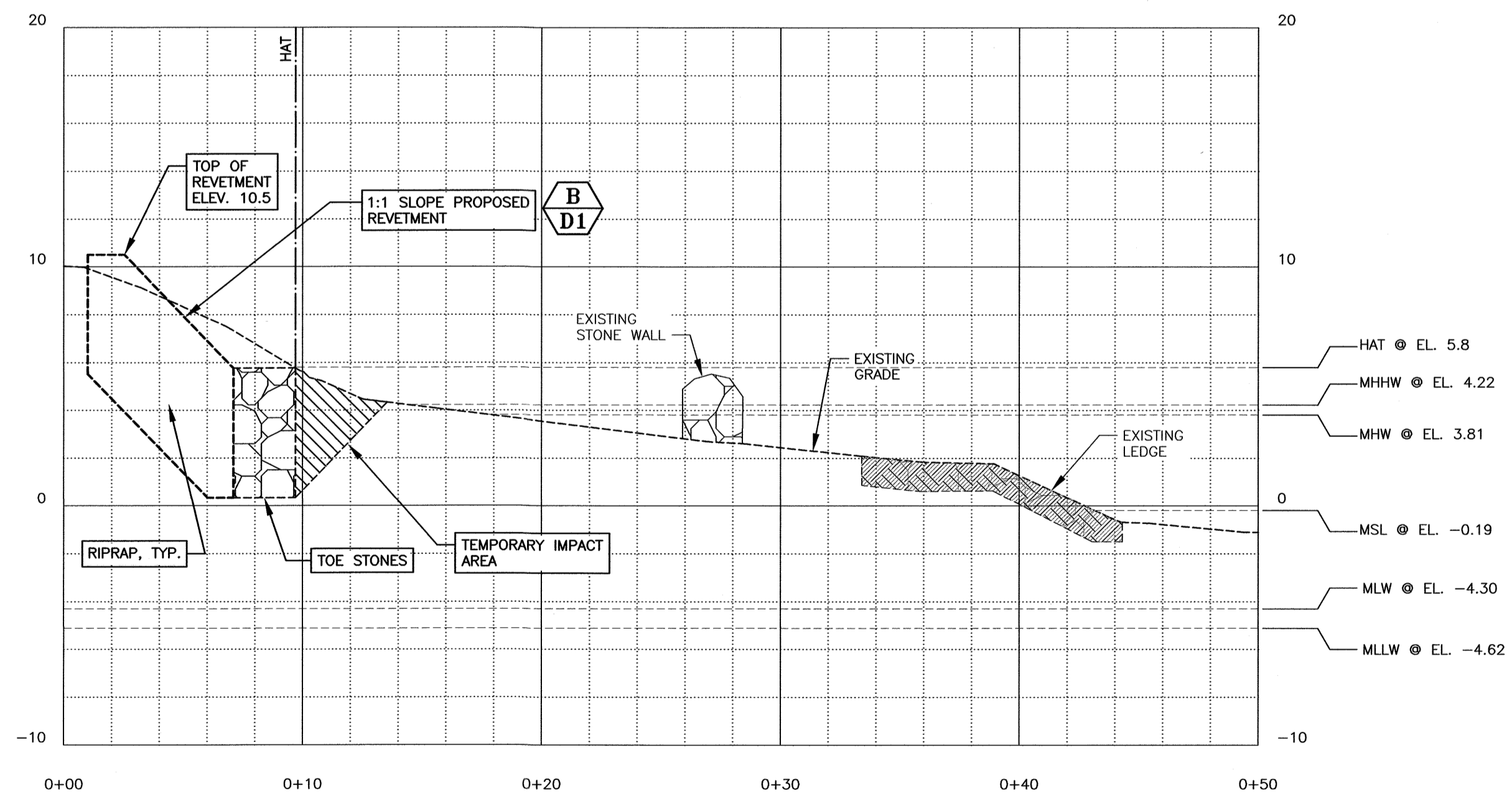
- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7253) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 3) EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS, MARCH 2015.
- 4) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS. MHW, MSL, MLW, AND MLLW BASED ON NOAA STATION 8419870-SEAVEY ISLAND, PORTSMOUTH HARBOR, ME.
- 5) THE PURPOSE OF THIS PLAN IS TO SHOW THE REVETMENT REPAIR ON ASSESSOR'S MAP 1 LOT 32 IN THE TOWN OF KITTERY



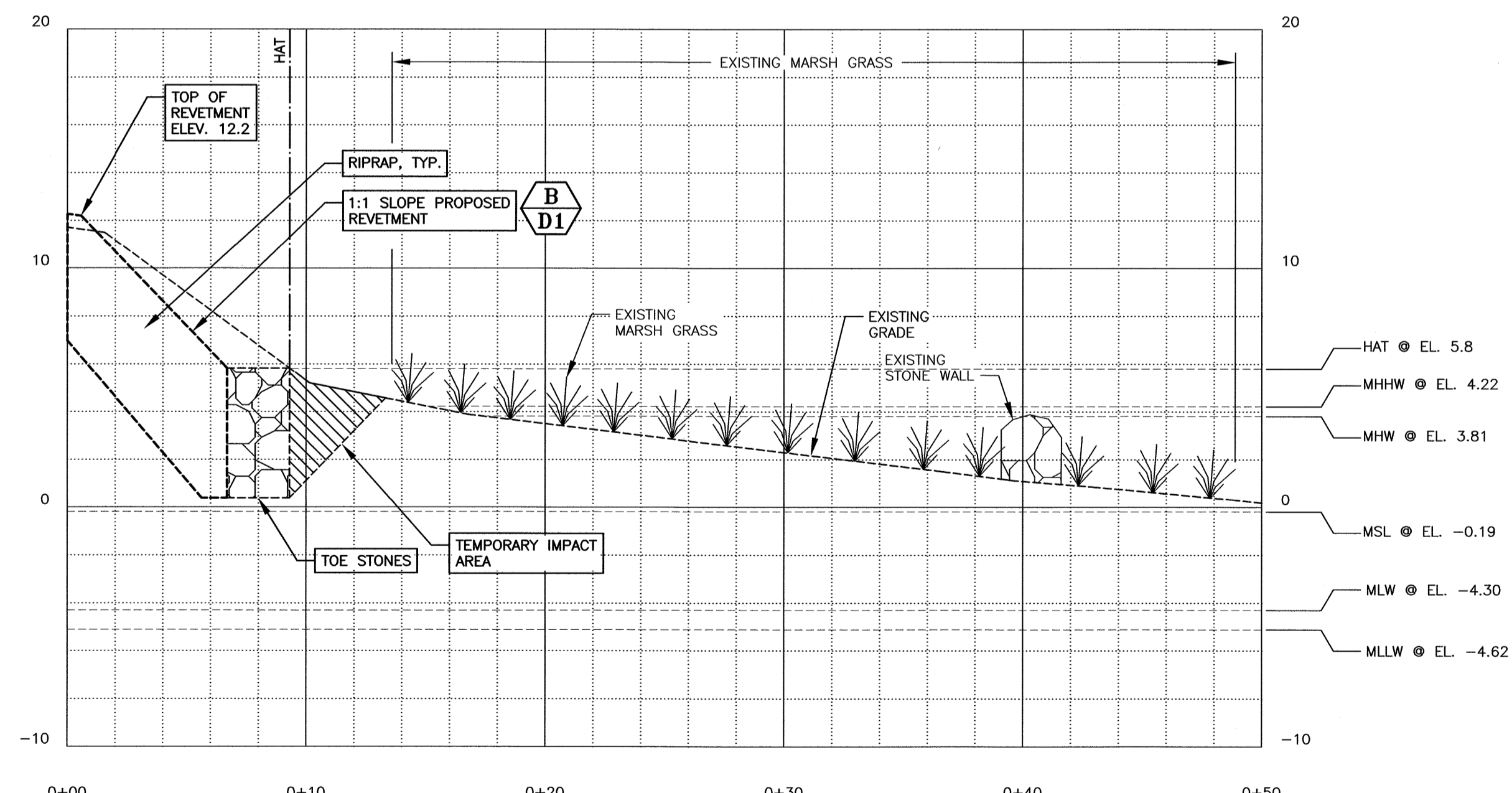
SECTION A
SCALE: 1" = 5'



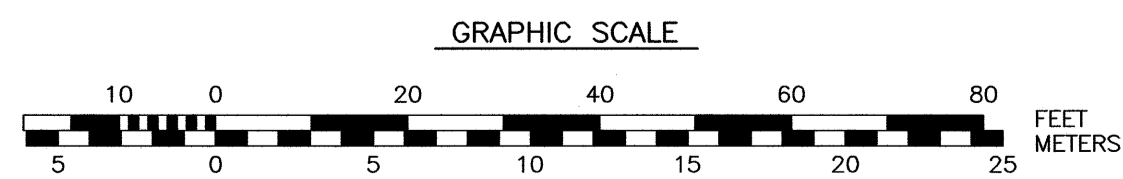
SECTION B
SCALE: 1" = 5'



SECTION C
SCALE: 1" = 5'



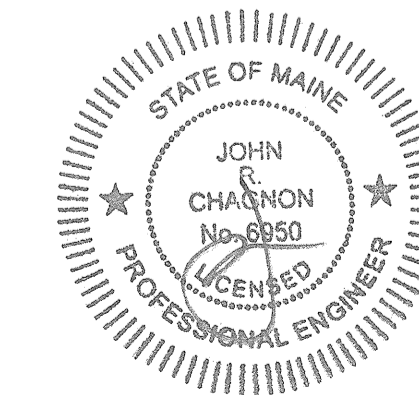
SECTION D
SCALE: 1" = 5'



**REVETMENT REPAIR
35 BADGERS
ISLAND WEST
KITTERY, MAINE**

1	RAISED REVETMENT ELEVATIONS	1/28/22
0	ISSUED FOR COMMENT	10/19/21

NO.	DESCRIPTION	DATE
REVISIONS		



1-28-22

SCALE: AS NOTED SEPTEMBER 2021

**SLOPE REPAIR
SECTIONS**

C3

SEQUENCE OF CONSTRUCTION

- 1) MOBILIZATION OF A PUSH BOAT, WORK SKIFF AND MATERIALS TO THE SITE VIA THE PISCATAQUA RIVER.
- 2) MOBILIZATION OF EQUIPMENT TRUCKS TO THE SITE.
- 3) THE BARGE WILL BE POSITIONED ALONGSIDE THE PROPOSED LOCATION OF THE RIPRAP AND WATERWARD OF ANY EMERGENT VEGETATION TO MINIMIZE IMPACTS
- 4) INSTALLATION OF THE RIPRAP WILL BE PERFORMED FROM A CRANE BARGE OR SKIFF TO REDUCE THE AMOUNT OF FOOT TRAFFIC IN THE INTERTIDAL AREA.
- 5) ALL WORK WILL BE PERFORMED AT LOW TIDE TO MINIMIZE SEDIMENTATION.

HEAVY EQUIPMENT IN WETLANDS OR MUDFLATS

OPERATING HEAVY EQUIPMENT OTHER THAN FIXED EQUIPMENT (DRILL RIGS, FIXED CRANES, ETC.) WITHIN WETLANDS SHALL BE MINIMIZED, AND SUCH EQUIPMENT SHALL NOT BE STORED, MAINTAINED OR REPAIRED IN WETLANDS, TO THE MAXIMUM EXTENT PRACTICABLE. WHERE CONSTRUCTION REQUIRES HEAVY EQUIPMENT OPERATION IN WETLANDS, THE EQUIPMENT SHALL EITHER HAVE LOW GROUND PRESSURE (TYPICALLY <3 PSI), OR IT SHALL BE PLACED ON SWAMP/CONSTRUCTION/TIMBER MATS (HEREIN REFERRED TO AS "CONSTRUCTION MATS" AND DEFINED AT APPENDIX A, ENDNOTE 4) THAT ARE ADEQUATE TO SUPPORT THE EQUIPMENT IN SUCH A WAY AS TO MINIMIZE DISTURBANCE OF WETLAND SOIL AND VEGETATION. CONSTRUCTION MATS ARE TO BE PLACED IN THE WETLAND FROM THE UPLAND OR FROM EQUIPMENT POSITIONED ON SWAMP MATS IF WORKING WITHIN A WETLAND, IF THE USE OF CONSTRUCTION MATS IN WETLANDS IS REQUIRED FOR CONSTRUCTION. PLACEMENT OF CONSTRUCTION MATS WITHIN SALT MARSH AREAS IS PROHIBITED, DRAGGING CONSTRUCTION MATS INTO POSITION IS PROHIBITED. OTHER SUPPORT STRUCTURES THAT ARE CAPABLE OF SAFELY SUPPORTING EQUIPMENT MAY BE USED WITH WRITTEN CORPS AUTHORIZATION (CATEGORY 2 AUTHORIZATION OR INDIVIDUAL PERMIT). SIMILARLY, THE PERMITTEE MAY REQUEST WRITTEN AUTHORIZATION FROM THE CORPS TO WAIVE USE OF MATS DURING FROZEN, DRY OR OTHER CONDITIONS. AN ADEQUATE SUPPLY OF SPILL CONTAINMENT EQUIPMENT SHALL BE MAINTAINED ON SITE. CONSTRUCTION MATS SHOULD BE MANAGED IN ACCORDANCE WITH THE CONSTRUCTION MAT BMPs AT WWW.NAE.USACE.ARMY.MIL/MISSIONS/REGULATORY

SOIL EROSION, SEDIMENT AND TURBIDITY CONTROLS

- A. ADEQUATE SEDIMENTATION AND EROSION CONTROL MANAGEMENT MEASURES, PRACTICES AND DEVICES, SUCH AS PHASED CONSTRUCTION, INSTALLATION OF SEDIMENT CONTROL BARRIERS (I.E. SILT FENCE, VEGETATED FILTER STRIPS, GEOTEXTILE SILT FENCES, EROSION CONTROL MIXES, HAY BALES OR OTHER DEVICES) DOWNHILL OF ALL EXPOSED AREAS, RETENTION OF EXISTING VEGETATED BUFFERS, APPLICATION OF TEMPORARY MULCHING DURING CONSTRUCTION, AND PERMANENT SEEDING AND STABILIZATION SHALL BE INSTALLED AND PROPERLY MAINTAINED TO REDUCE EROSION AND RETAIN SEDIMENT ON-SITE DURING AND AFTER CONSTRUCTION. THEY SHALL BE CAPABLE OF PREVENTING EROSION; OF COLLECTING SEDIMENT, SUSPENDED AND FLOATING MATERIALS; AND OF FILTERING FINE SEDIMENT.
- B. TEMPORARY SEDIMENT CONTROL BARRIERS SHALL BE REMOVED UPON COMPLETION OF WORK, BUT NOT UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED. THE SEDIMENT COLLECTED BY THESE SEDIMENT BARRIERS SHALL BE REMOVED AND PLACED AT AN UPLAND LOCATION AND STABILIZED TO PREVENT ITS LATER EROSION INTO A WATERWAY OR WETLAND.
- C. ALL EXPOSED SOIL AND OTHER FILLS SHALL BE PERMANENTLY STABILIZED AT THE EARLIEST PRACTICABLE DATE.

TIME OF YEAR WORK WINDOWS/RESTRICTIONS

FOR ACTIVITIES WHERE WORK IS AUTHORIZED IN STREAMS AND TIDAL WATERS THAT CAUSES TURBIDITY OR SEDIMENT RE-SUSPENSION OR OTHER CONSTRUCTION RELATED DISTURBANCES, WORK MUST BE CONDUCTED DURING THE FOLLOWING T.O.Y. WORK WINDOWS (NOT DURING THE T.O.Y. RESTRICTIONS) UNLESS OTHERWISE AUTHORIZED BY THE CORPS UNDER CATEGORY 2 REVIEW:

	T.O.Y. RESTRICTION (NO WORK)	T.O.Y. WORK WINDOW (WORK ALLOWED)
NON-TIDAL WATERS	OCT. 01 THROUGH JUL. 14	JUL. 15 THROUGH SEP. 30
TIDAL WATERS	APR. 10 THROUGH NOV. 07	NOV. 08 THROUGH APR. 09

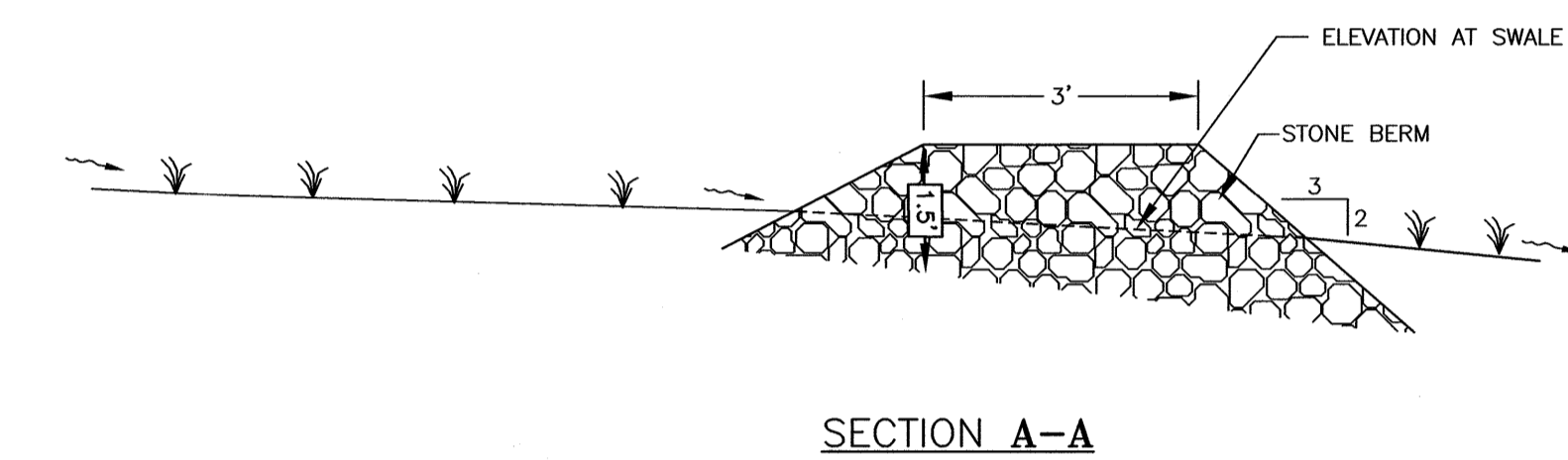
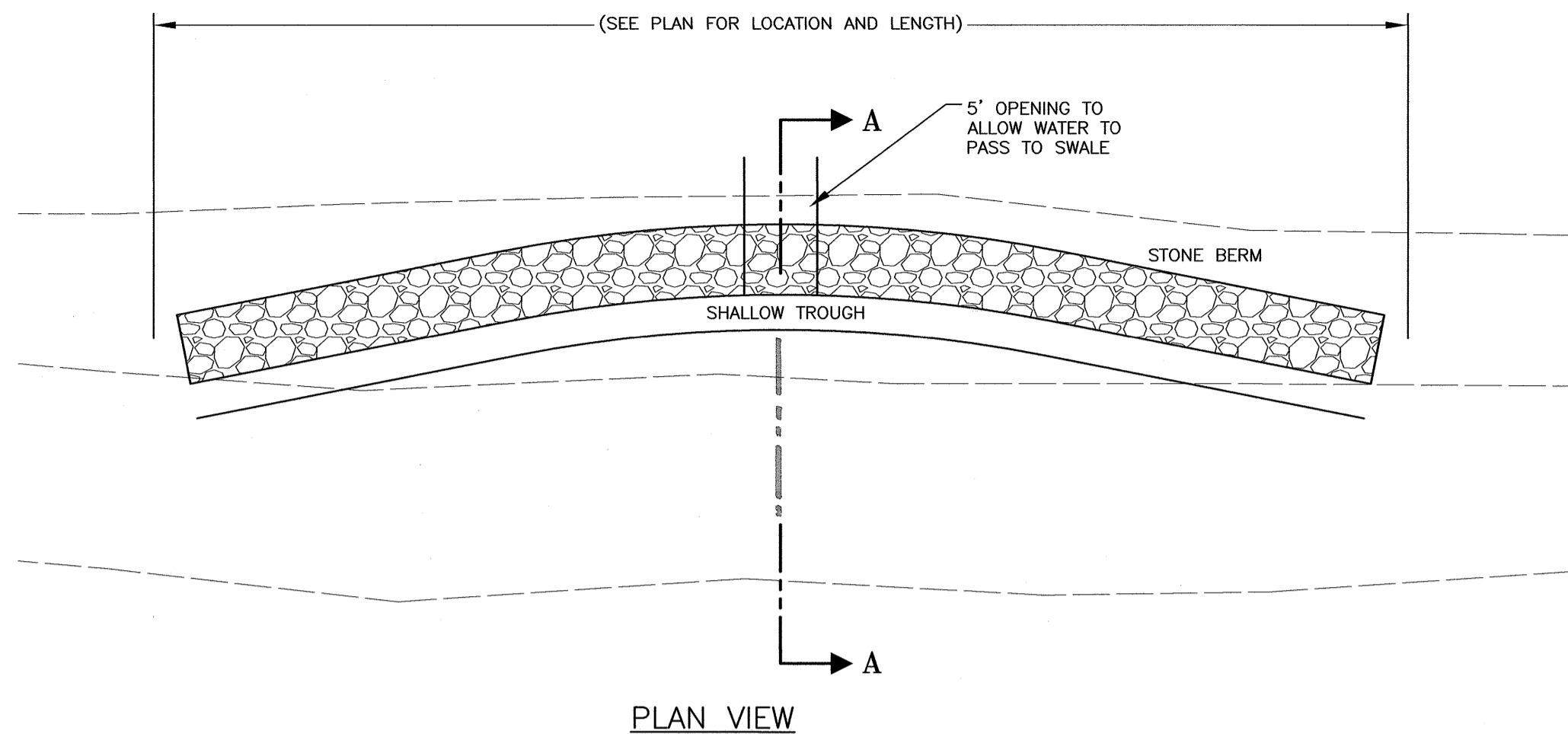
ALTERNATE WINDOWS AUTHORIZED UNDER CATEGORY 2 MAY INCLUDE SPECIES SPECIFIC WINDOWS RECOMMENDED BY THE MAINE DEPT. OF MARINE RESOURCES AND/OR MAINE DEPT. OF INLAND FISHERIES & WILDLIFE.

FLOODPLAINS AND FLOODWAYS

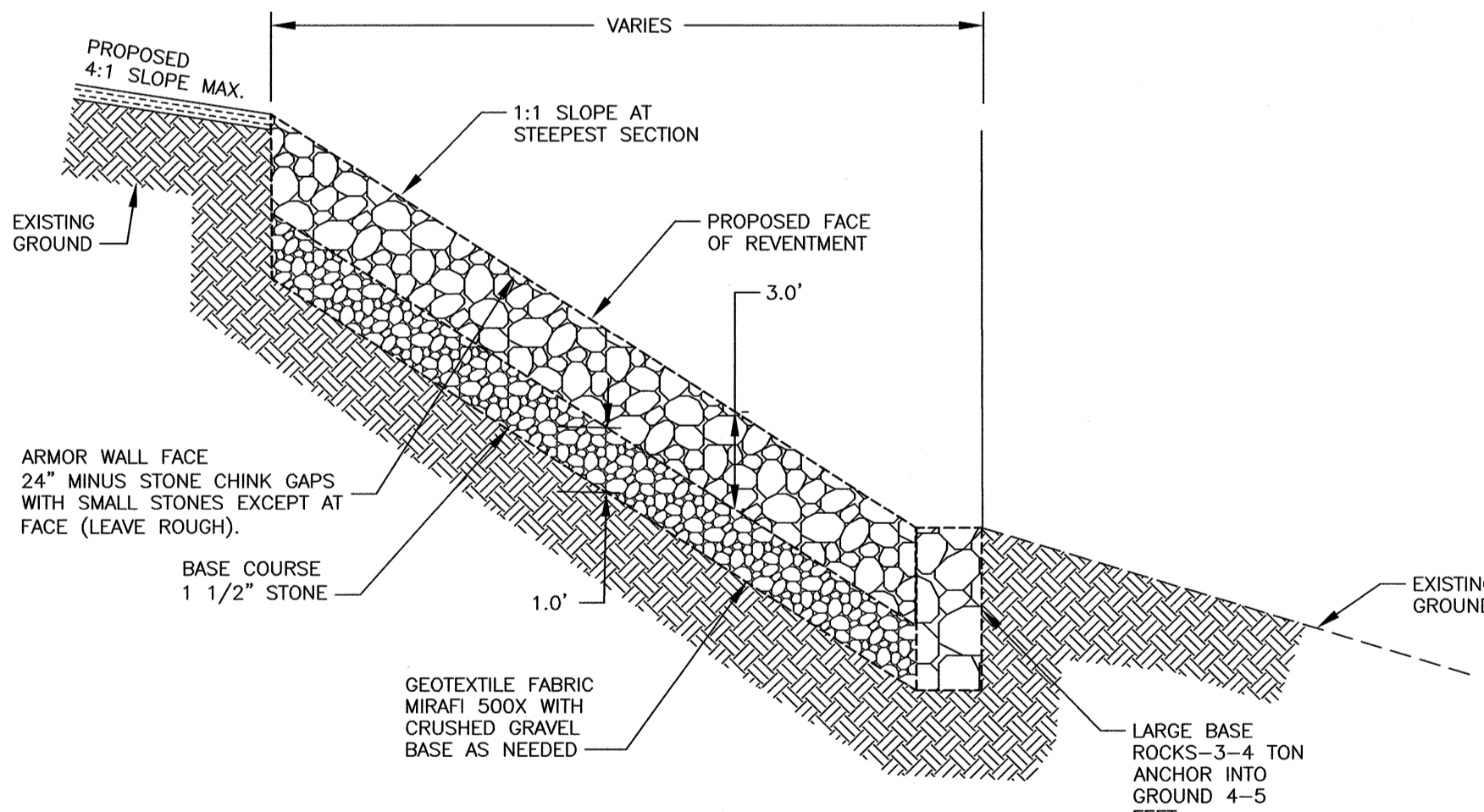
- A. APPROPRIATE MEASURES MUST BE TAKEN TO MINIMIZE FLOODING TO THE MAXIMUM EXTENT PRACTICABLE.
- B. ACTIVITIES WITHIN 100-YEAR FLOODPLAINS MUST COMPLY WITH APPLICABLE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)-APPROVED STATE AND/OR LOCAL FLOODPLAIN MANAGEMENT PERMITTING REQUIREMENTS. PROPONENTS MAY NEED TO COORDINATE WITH FEMA AND APPLY FOR A FORMAL CHANGE TO THE FLOOD INSURANCE STUDY PRODUCTS OR FORWARD A SET OF PROJECT PLANS AND RELEVANT TECHNICAL DOCUMENTATION IN A DIGITAL FORMAT TO THE RISK ANALYSIS BRANCH CHIEF, MITIGATION DIVISION, FEMA, REGION 1, 99 HIGH STREET, BOSTON, MASSACHUSETTS 02110. APPLICANTS SHOULD PROVIDE A COPY OF ANY DOCUMENTATION TO THE CORPS ALONG WITH THE PCN.
- C. PROPONENTS MAY HAVE TO OBTAIN A FLOOD HAZARD DEVELOPMENT PERMIT ISSUED BY THE TOWN. INQUIRIES MAY BE DIRECTED TO THE MUNICIPALITY OR TO THE MAINE FLOODPLAIN MANAGEMENT COORDINATOR AT (207) 287-8063. SEE [HTTP://WWW.MAINE.GOV/DACF/FLOOD/](http://WWW.MAINE.GOV/DACF/FLOOD/)

SPAWNING, BREEDING, AND MIGRATORY AREAS.

- A. JURISDICTIONAL ACTIVITIES AND IMPACTS SUCH AS EXCAVATIONS, DISCHARGES OF DREDGED OR FILL MATERIAL, AND/OR SUSPENDED SEDIMENT PRODUCING ACTIVITIES IN JURISDICTIONAL WATERS THAT PROVIDE VALUE AS FISH MIGRATORY AREAS, FISH AND SHELLFISH SPAWNING OR NURSERY AREAS, OR AMPHIBIAN AND MIGRATORY BIRD BREEDING AREAS, DURING SPAWNING OR BREEDING SEASONS SHALL BE AVOIDED AND MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE.
- B. JURISDICTIONAL ACTIVITIES IN WATERS OF THE UNITED STATES THAT PROVIDE VALUE AS BREEDING AREAS FOR MIGRATORY BIRDS MUST BE AVOIDED TO THE MAXIMUM EXTENT PRACTICABLE. THE PERMITTEE IS RESPONSIBLE FOR OBTAINING ANY "TAKE" PERMITS REQUIRED UNDER THE USFWS'S REGULATIONS GOVERNING COMPLIANCE WITH THE MIGRATORY BIRD TREATY ACT OR THE BALD AND GOLDEN EAGLE PROTECTION ACT. THE PERMITTEE SHOULD CONTACT THE APPROPRIATE LOCAL OFFICE OF THE USFWS TO DETERMINE IF SUCH "TAKE" PERMITS ARE REQUIRED FOR A PARTICULAR ACTIVITY.



1 PARABOLIC STONE BERM NTS



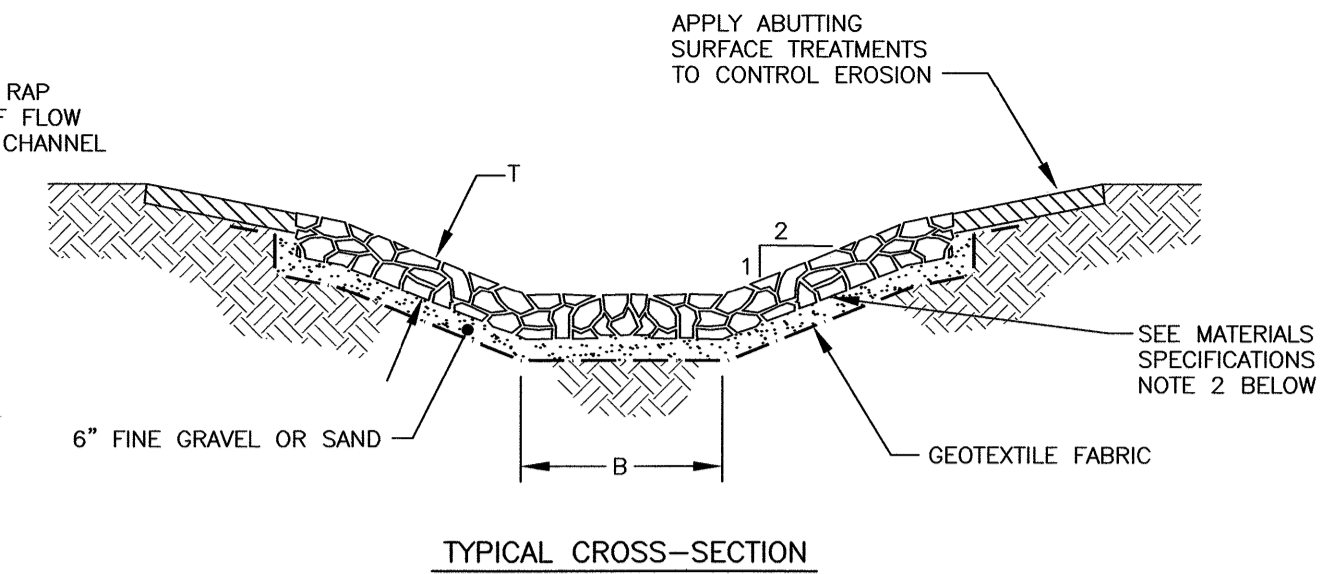
3 SLOPE REPAIR TYPICAL SECTION NTS

CONSTRUCTION SPECIFICATIONS:

1) PLACE STONES IMMEDIATELY FOLLOWING REMOVAL. LAY STONES INDIVIDUALLY UPWARD FROM THE TOE WITH LARGER STONES AT THE TOE. FILL VOIDS WITH SPALLS. FINISHED SURFACE TO BE REASONABLY UNIFORM IN APPEARANCE, AND APPROXIMATELY PARALLEL TO AND WITHIN 6" OF THE LINES AND GRADES SHOWN OR ORDERED.

STONE SHALL BE PLACED TO PREVENT DISPLACEMENT OF THE UNDERLYING MATERIALS. HAND PLACEMENT MAY BE REQUIRED TO PREVENT DAMAGE TO ANY ADJACENT AREAS. STONES SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT IS NOT LESS THAN ONE THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT. FLAT ROCKS SHALL NOT BE USED. VOIDS IN THE REVETMENT SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS, EXCEPT AT THE FACE OF WALL.

T = THICKNESS OF RIP RAP
d = MAXIMUM DEPTH OF FLOW
B = BOTTOM WIDTH OF CHANNEL



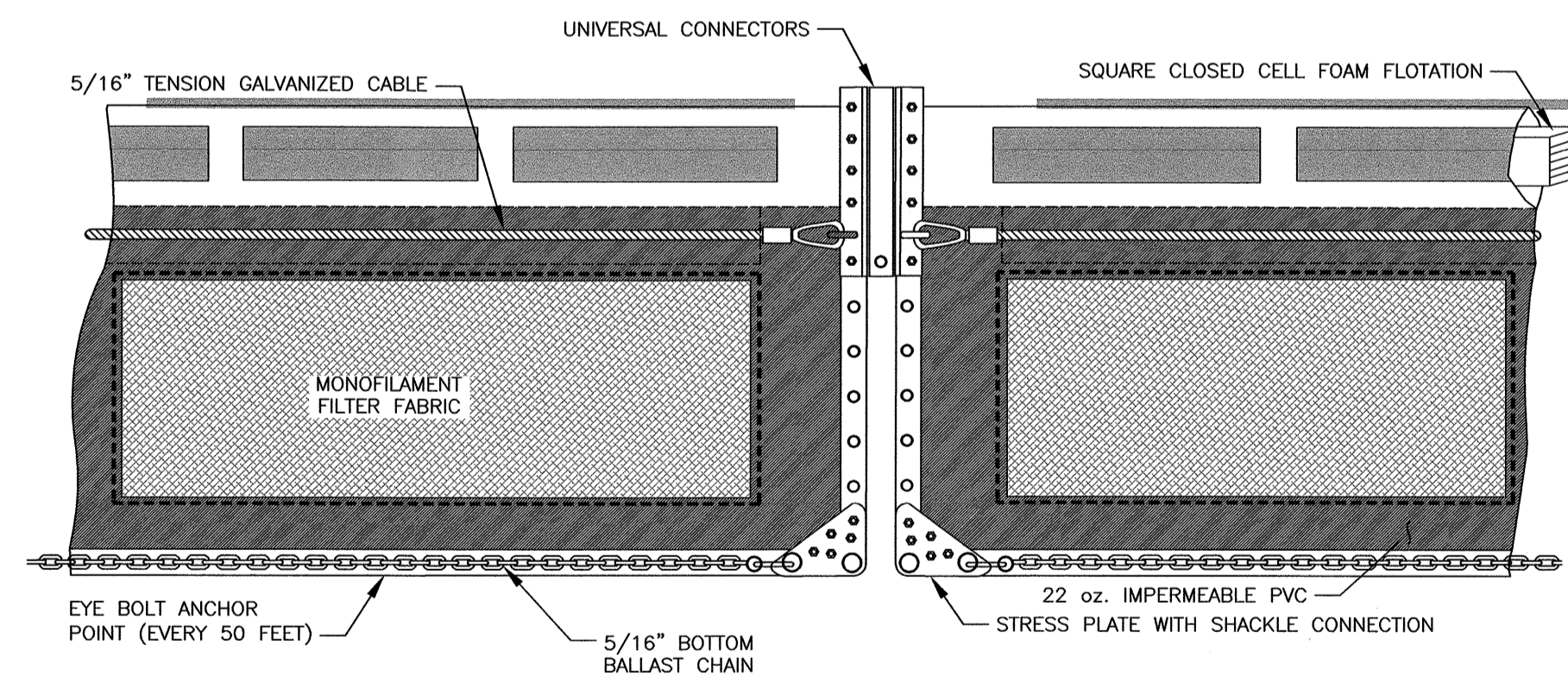
MATERIALS SPECIFICATIONS:

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF THE MAINE STORMWATER MANAGEMENT BMP MANUAL FOR ROCK RIP RAP.
2. ANCHOR PINS FOR FABRIC SHALL MEET THE REQUIREMENTS OF THE MANUFACTURER OF THE FABRIC.
3. RIP RAP SHALL BE A WELL GRADED MIX OF DURABLE ANGULAR OR SUBANGULAR STONES. FLAT ROCKS SHALL NOT BE USED FOR RIP RAP.

CONSTRUCTION SPECIFICATIONS:

1. THE SUBGRADE FOR THE RIP RAP SHALL BE CLEARED AND GRUBBED TO REMOVE ALL ROOTS, VEGETATION, AND DEBRIS AND PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE THICKNESS OF THE RIP RAP LAYER (T) SHALL BE 2.25 TIMES THE ROCK d50 AS DETERMINED BY THE METHOD IN BEST MANAGEMENT PRACTICE FOR ROCK RIP RAP.
3. GEOTEXTILE FABRIC SHALL BE PROTECTED FROM PUNCTURES OR TEARING DURING PLACEMENT OF THE ROCK RIP RAP BY PLACING A CUSHION OF SAND OR FINE GRAVEL OVER THE FABRIC. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC, SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT DISPLACEMENT OF THE UNDERLYING MATERIALS. HAND PLACEMENT MAY BE REQUIRED TO PREVENT DAMAGE TO ANY PERMANENT STRUCTURES.
5. VOIDS IN RIP RAP SHOULD BE FILLED WITH SMALLS AND SMALLER ROCKS.
6. THE RIP RAP SWALE SHALL BE CONSTRUCTED SO WATER WILL FLOW ON TO THE REVETMENT.

2 RIP RAP SWALE NTS



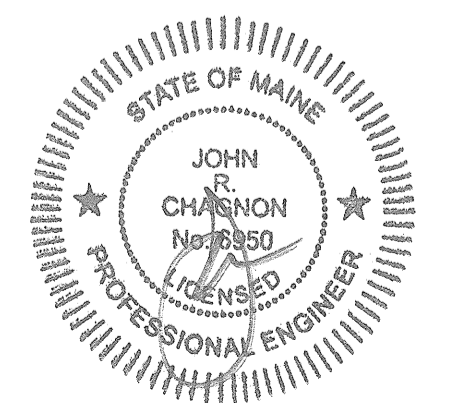
4 TURBIDITY CURTAIN DETAIL NTS

NOTES:

- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
- 3) EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS, MARCH 2015.
- 4) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS. MHW, MSL, MLW, AND MLLW BASED ON NOAA STATION 8419870-SEAVEY ISLAND, PORTSMOUTH HARBOR, ME.

**REVETMENT REPAIR
35 BADGERS
ISLAND WEST
KITTERY, MAINE**

NO.	DESCRIPTION	DATE
1	ADD DETAILS	1/20/22
0	ISSUED FOR COMMENT	10/19/21
REVISIONS		



SCALE: NTS OCTOBER 2021

REVETMENT DETAILS **D1**