

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)

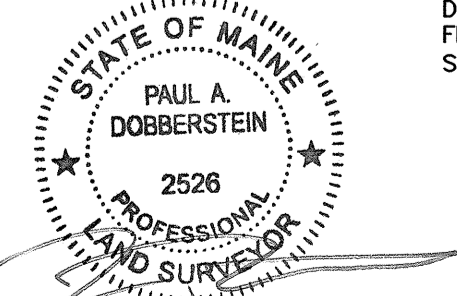
STRUCTURE	EXISTING (S.F.)
MAIN STRUCTURE	5,922
PAVEMENT	12,295
GRAVEL AREAS	2,277
RETAINING WALLS	48
CONCRETE PADS/STEPS	942
<b>TOTAL</b>	<b>21,484</b>
LOT SIZE	58,985
% LOT COVERAGE	36.4%

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:

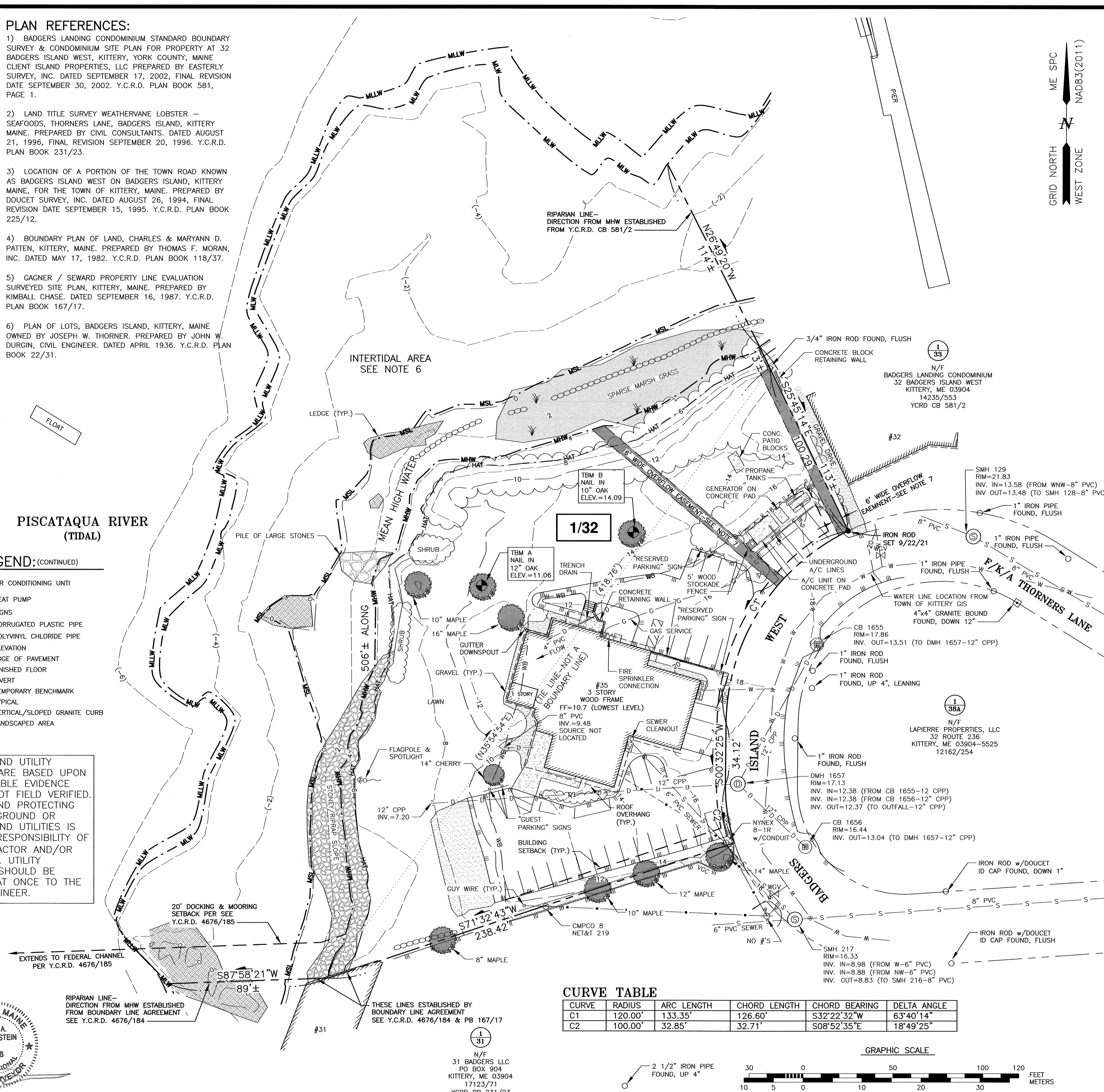
- NO SURVEY REPORT HAS BEEN PREPARED.
- NO LAND DESCRIPTION HAS BEEN PREPARED.
- MONUMENTS HAVE NOT BEEN SET.

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 CEPTIC (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)

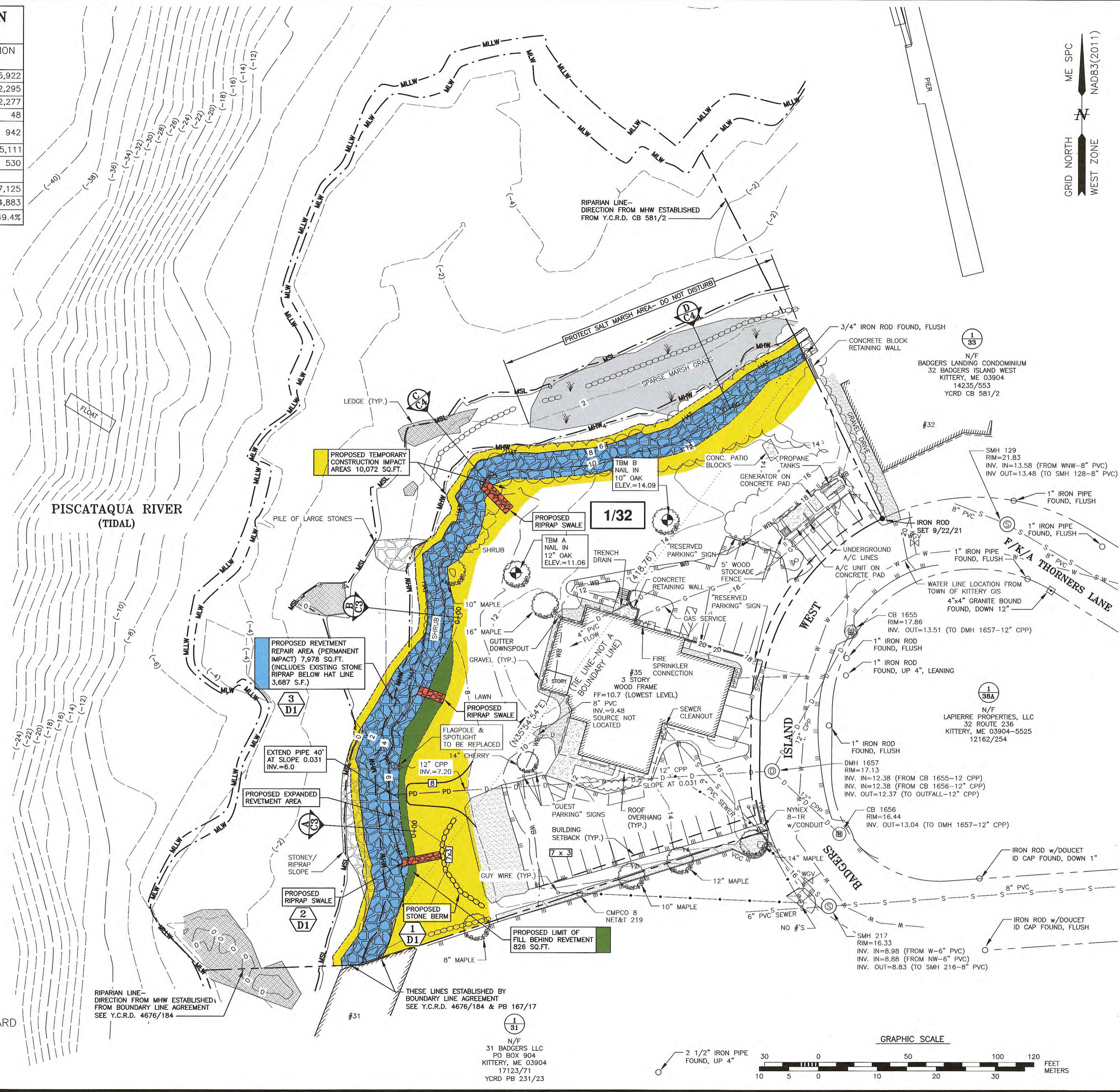
STRUCTURE	PRE-CONSTRUCTION (S.F.)	POST-CONSTRUCTION (S.F.)
MAIN STRUCTURE	5,922	5,922
PAVEMENT	12,295	12,295
GRAVEL AREAS	2,277	2,277
RETAINING WALLS	48	48
CONCRETE PADS/STEPS	942	942
REVTMENT	3,695	5,111
RIPRAP SWALES/BERM	0	530
TOTAL	25,179	27,125
LOT SIZE	54,883	54,883
% DEVEGETATED AREA	45.9%	49.4%

**CONSTRUCTION IMPACT AREAS (TO HAT LINE)**

ITEM	COLOR KEY	AREA
TEMPORARY IMPACT AREA	<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	10,072 S.F.
PERMANENT IMPACT AREA	<span style="background-color: blue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	7,978 S.F.

YORK COUNTY REGISTRY OF DEEDS  
RECEIVED \_\_\_\_\_ 20\_\_\_\_  
AT \_\_\_\_\_ H \_\_\_\_\_ M., AND  
RECORDED IN BOOK \_\_\_\_\_ PAGE \_\_\_\_\_  
ATTEST:  
\_\_\_\_\_  
REGISTRAR

OWNER: \_\_\_\_\_  
SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
APPROVED BY THE TOWN OF KITTEERY PLANNING BOARD  
CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

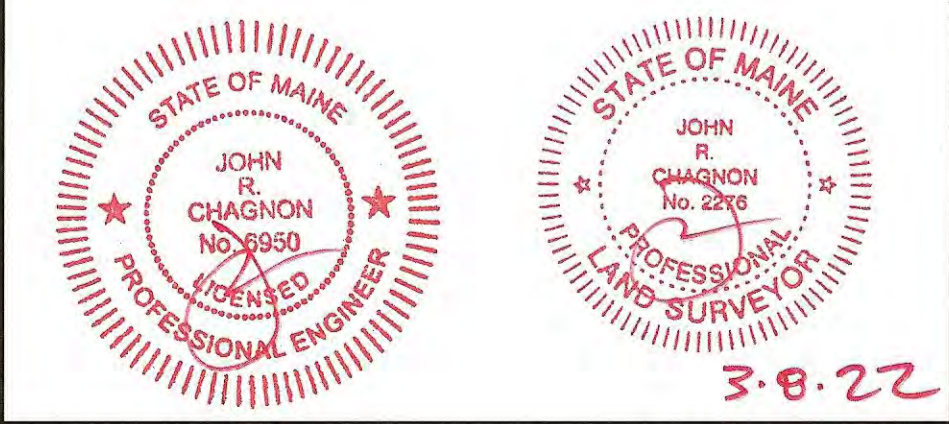


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Civil Engineers & Land Surveyors  
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Portsmouth, N.H. 03801-7114  
Tel (603) 430-9282  
Fax (603) 436-2315

- 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-BI) 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%  
MAXIMUM DEVEGETATED AREA: 60%
  - 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.

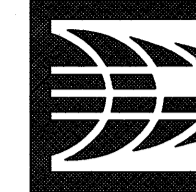
**REVTMENT REPAIR**  
**35 BADGERS ISLAND WEST**  
**KITTEERY, MAINE**

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	3/8/22
REVISIONS		



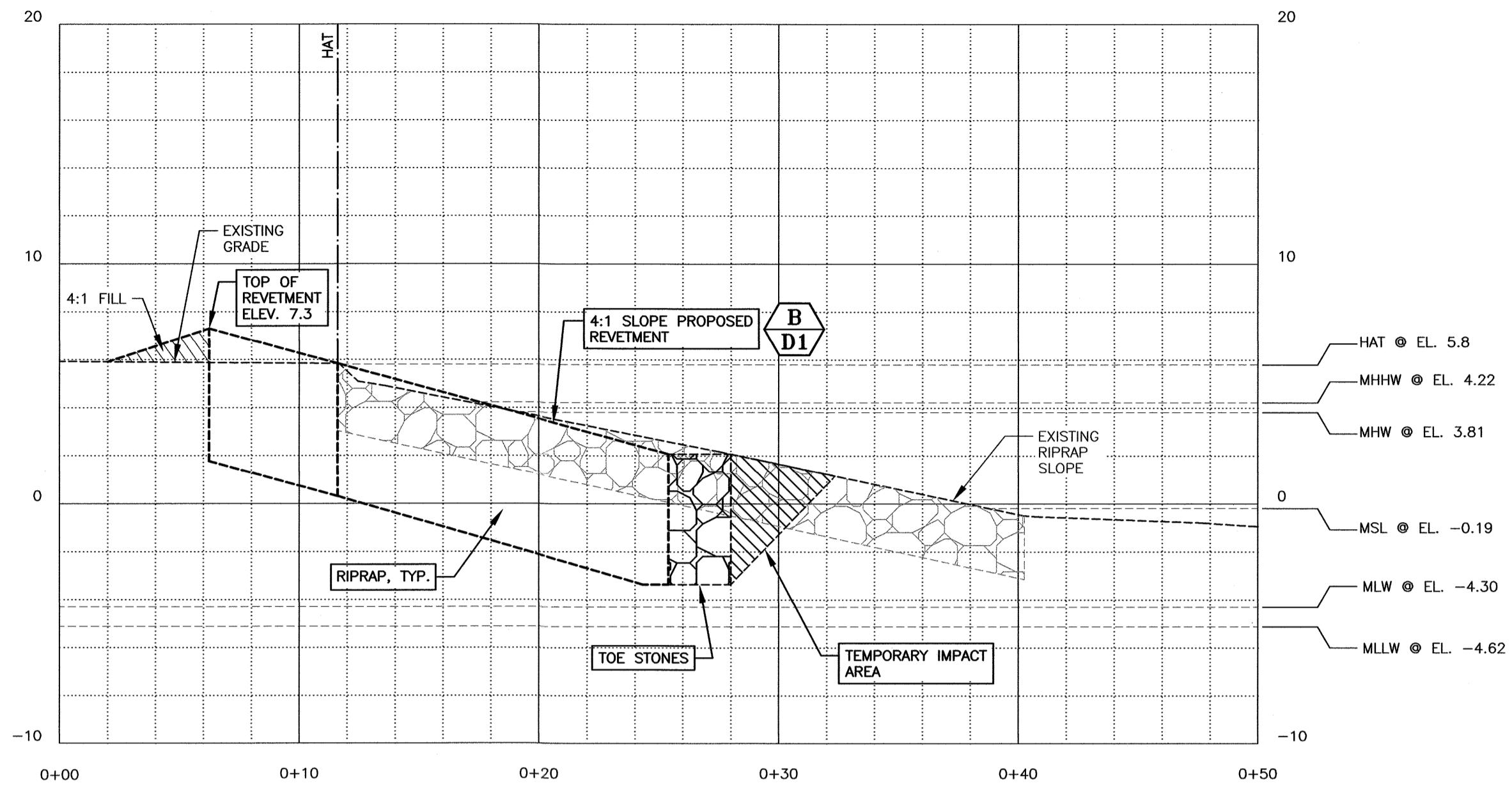
SCALE 1"=30' MARCH 2022

SHORELAND DEVELOPMENT APPLICATION PLAN **C2**

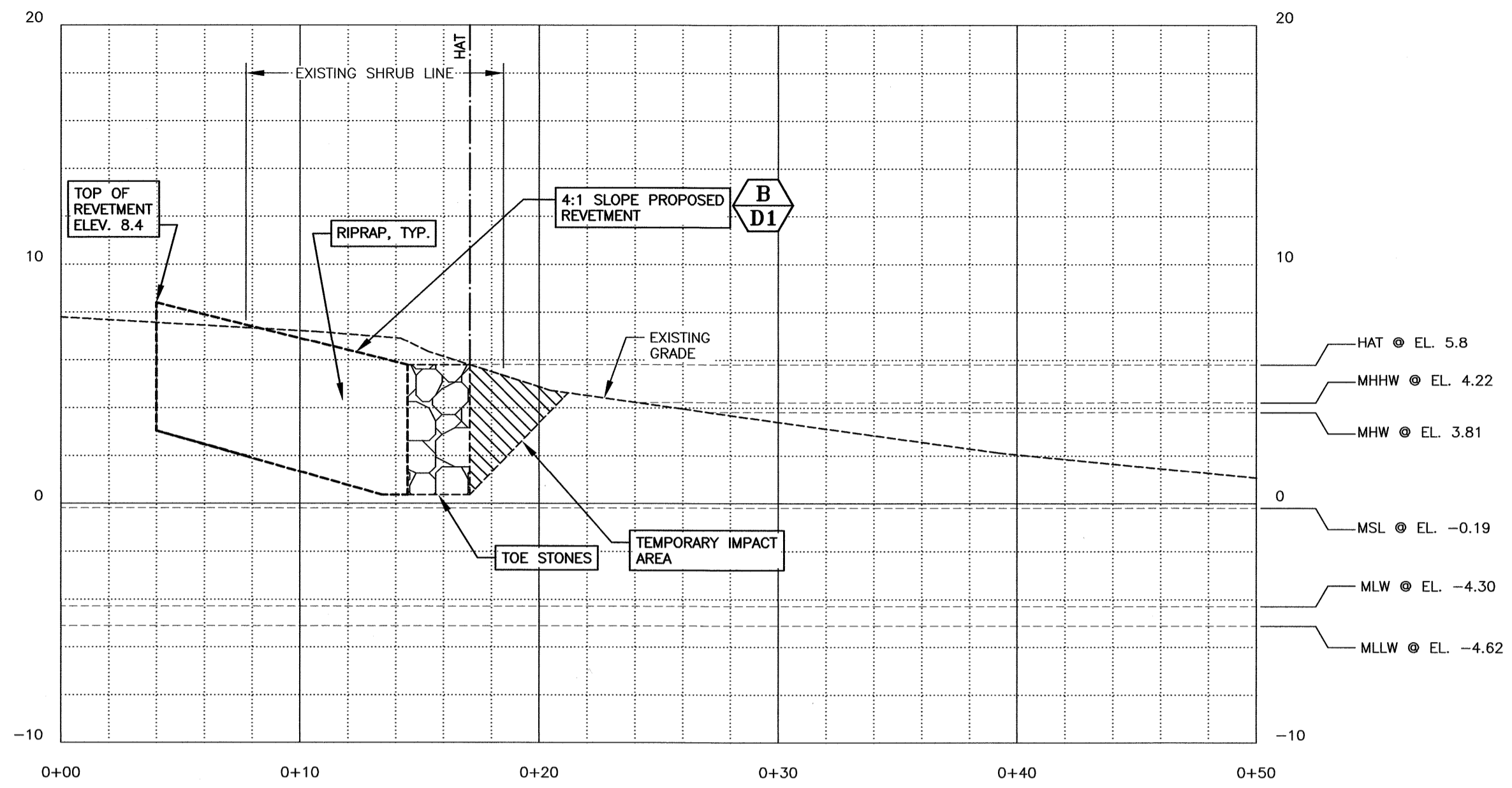


**NOTES:**

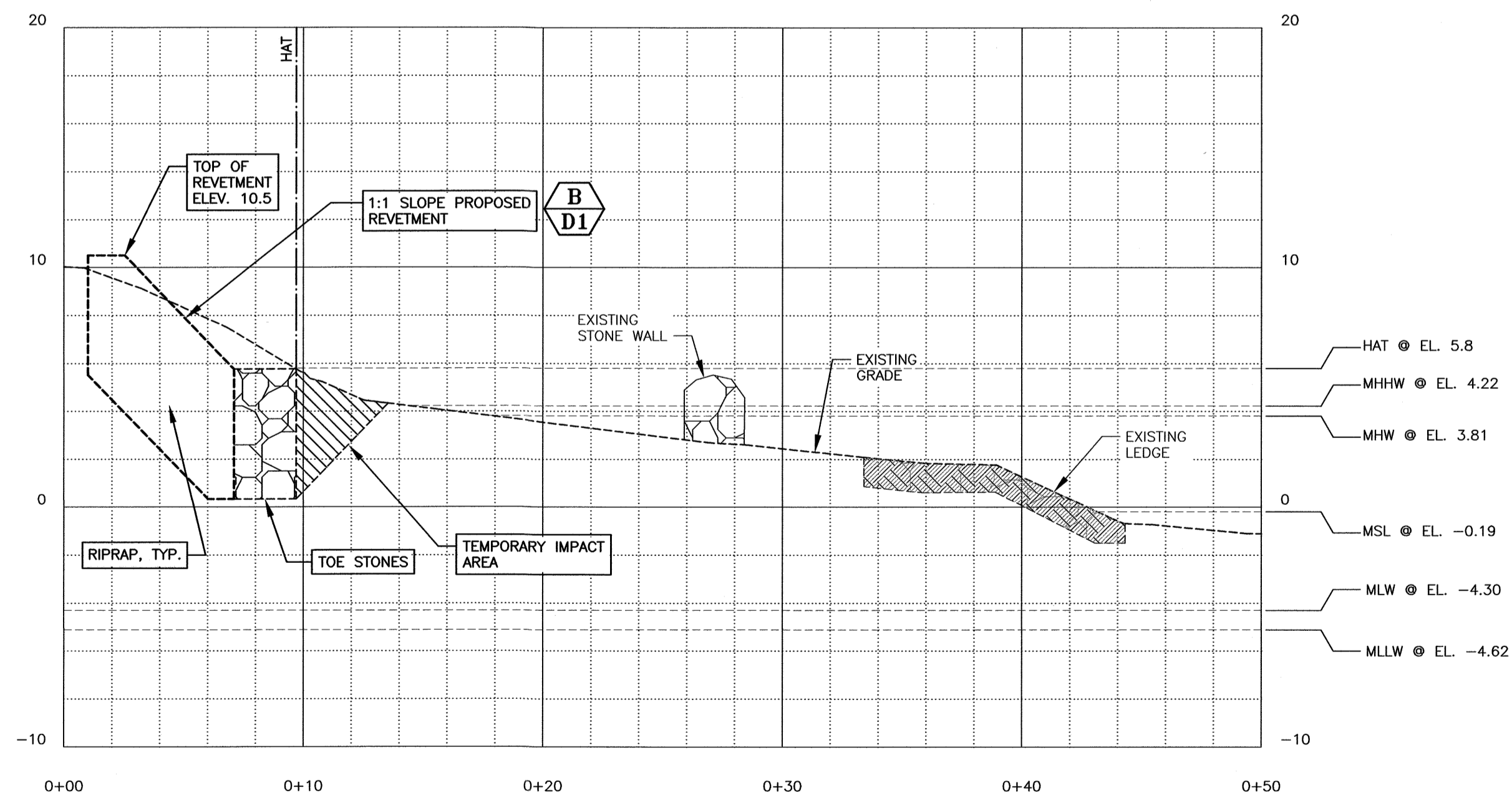
- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7253) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND 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



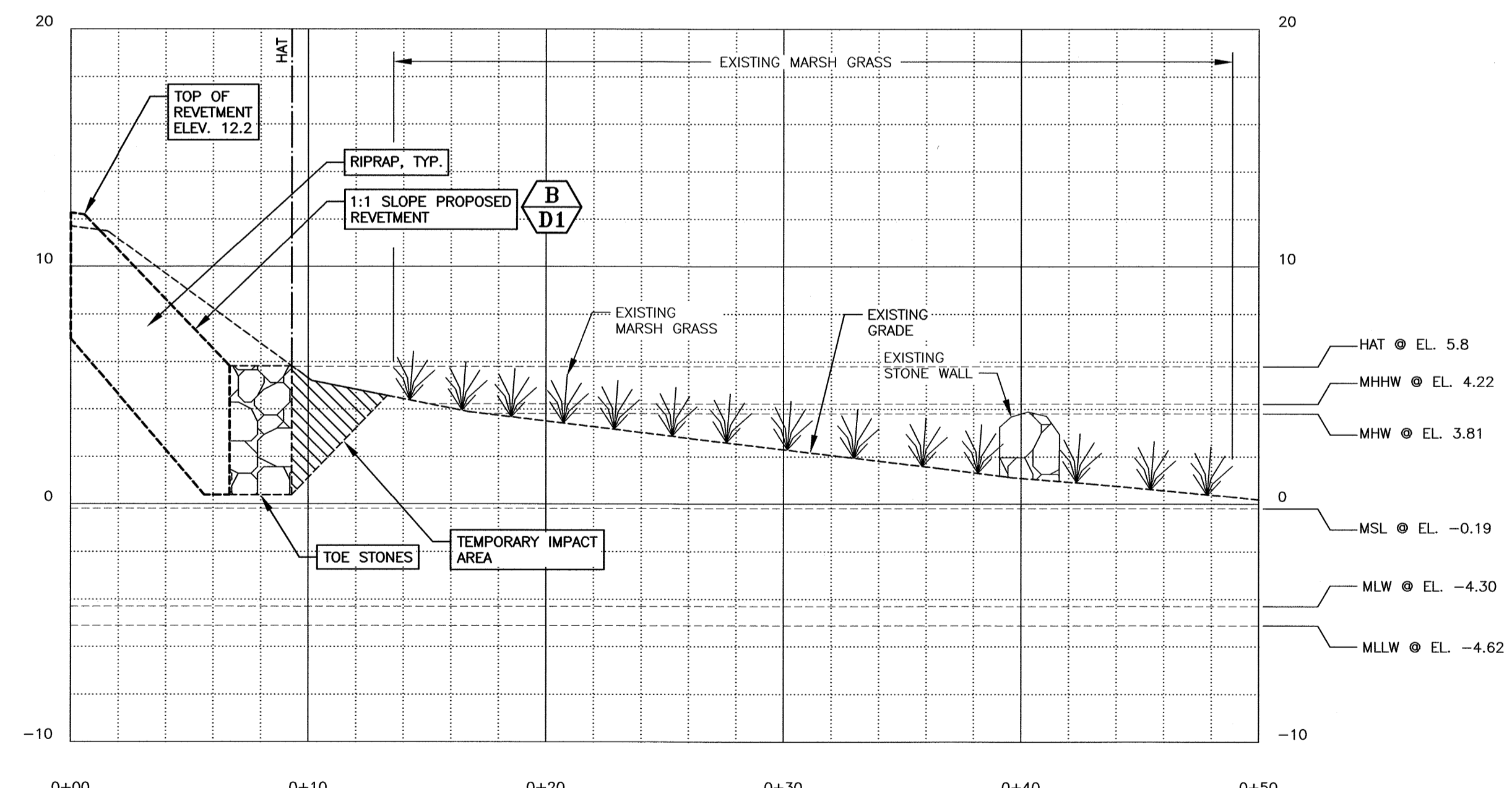
**SECTION A**  
SCALE: 1" = 5'



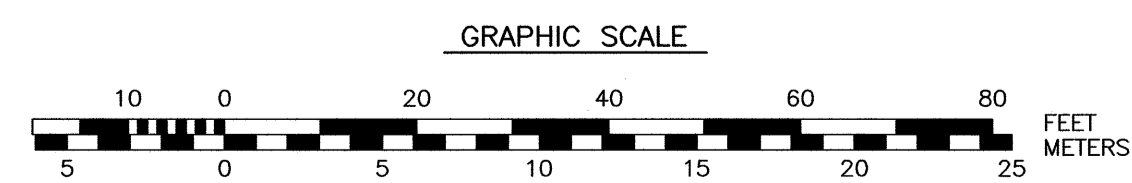
**SECTION B**  
SCALE: 1" = 5'



**SECTION C**  
SCALE: 1" = 5'



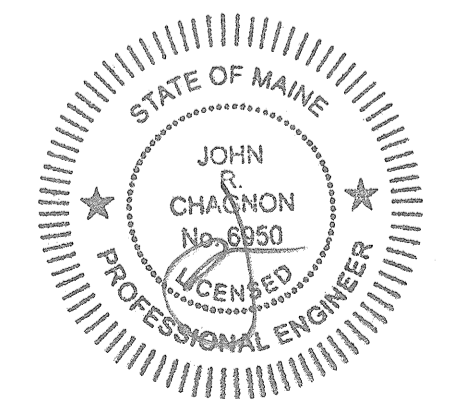
**SECTION D**  
SCALE: 1" = 5'



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

NO.	DESCRIPTION	DATE
1	RAISED REVETMENT ELEVATIONS	1/28/22
0	ISSUED FOR COMMENT	10/19/21

**REVISIONS**



1-28-22

SCALE: AS NOTED SEPTEMBER 2021

**SLOPE REPAIR  
SECTIONS**

**C3**

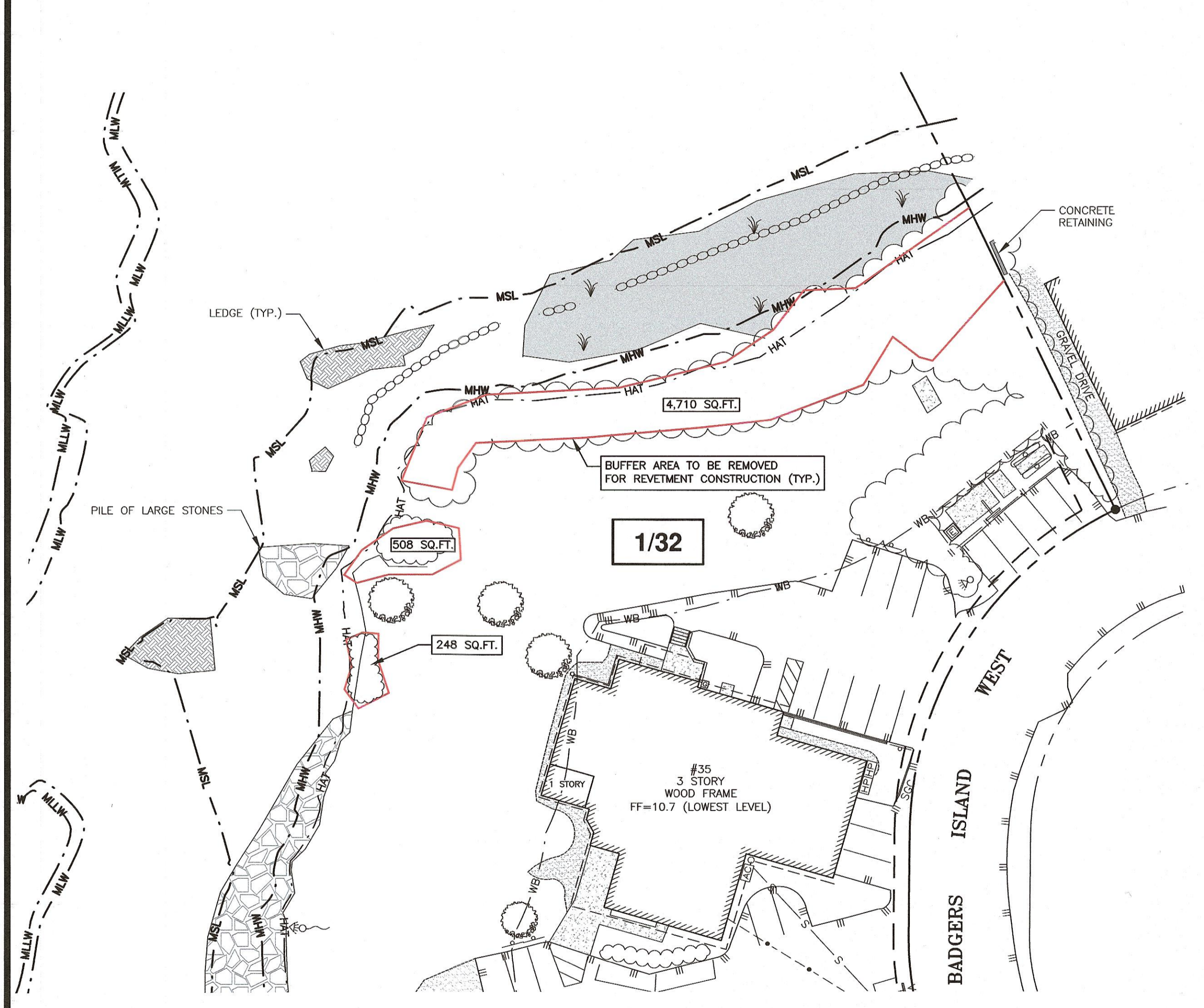
ME SPC  
 NAD83(2011)  
 GRID NORTH  
 WEST ZONE

BUFFER PLANTING SCHEDULE			
SYMBOL	ITEM	SIZE	QTY
●	CLETHRA ALNIFOLIA	2 GALLON	13
	SWEET PEPPERBUSH		
⊙	MYRICA PENNSYLVANICA	2 GALLON	8
	NORTHERN BAYBERRY		
⊕	SPIRAEA LATIFOLIA	1/2 GALLON	8
	MEADOW SWEET		
▲	ASTER NOVAE-ANGLIAE	1/2 GALLON	8
	NEW ENGLAND ASTER		
■	ACER RUBRUM	2" CALIPER	5
	RED MAPLE		

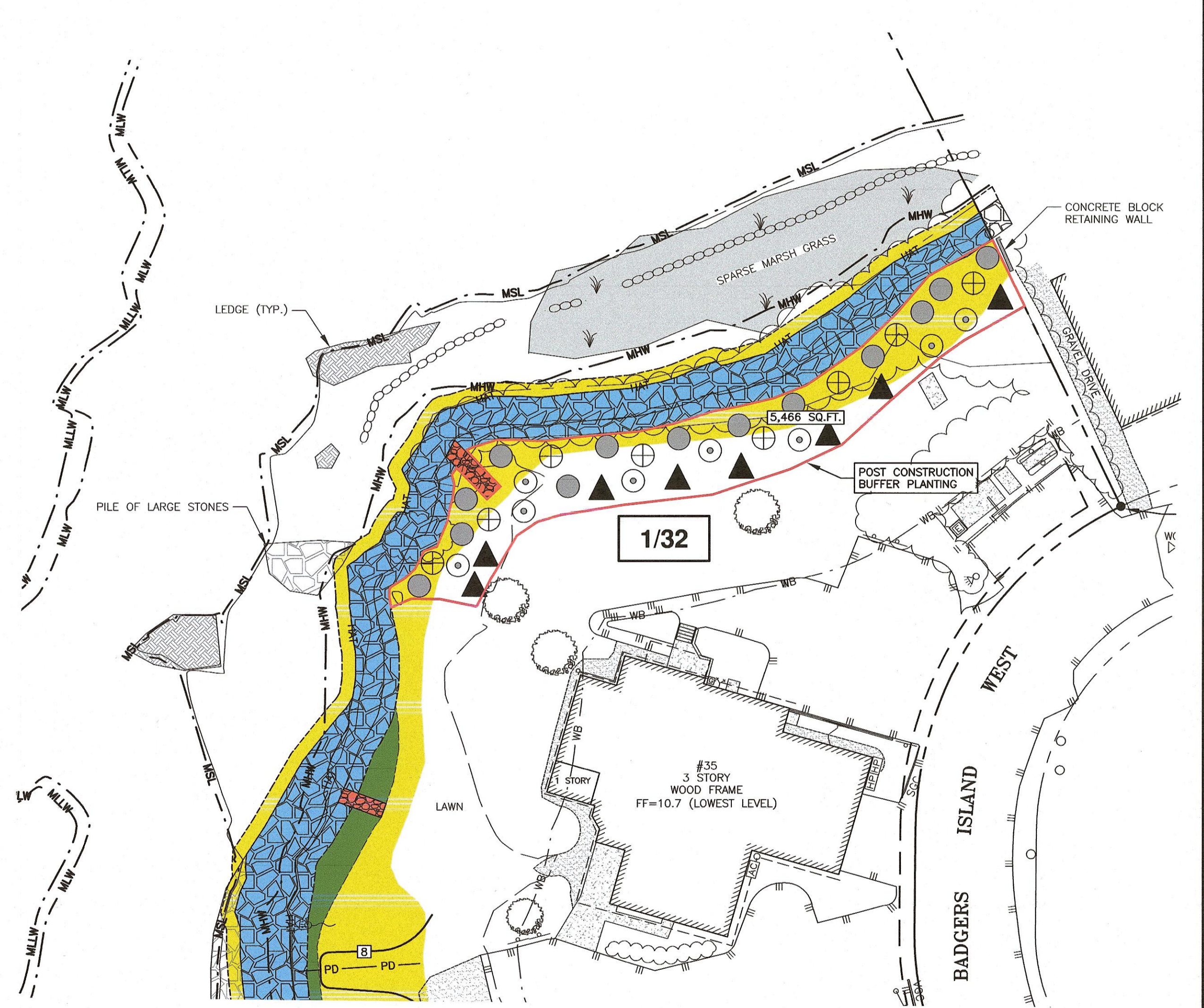
\* PLANT SPECIES CAN SUBSTITUTED WITH APPROVAL FROM AMBIT ENGINEERING, INC.

**NOTES:**

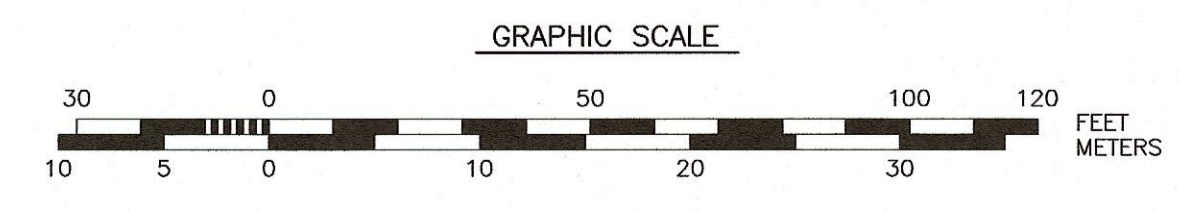
- 1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.
- 2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND 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) PLANTS AND SEED MIX CAN BE OBTAINED FROM PIERSON NURSERIES, INC., 24 BUZZELL ROAD, BIDDEFORD, ME. 04005. 207-499-2994. WWW.PIERSONNURSERIES.COM.



**PRE-CONSTRUCTION:**  
 5,466 SQ.FT. OF BUFFER AREA TO BE REMOVED FOR REVETMENT CONSTRUCTION

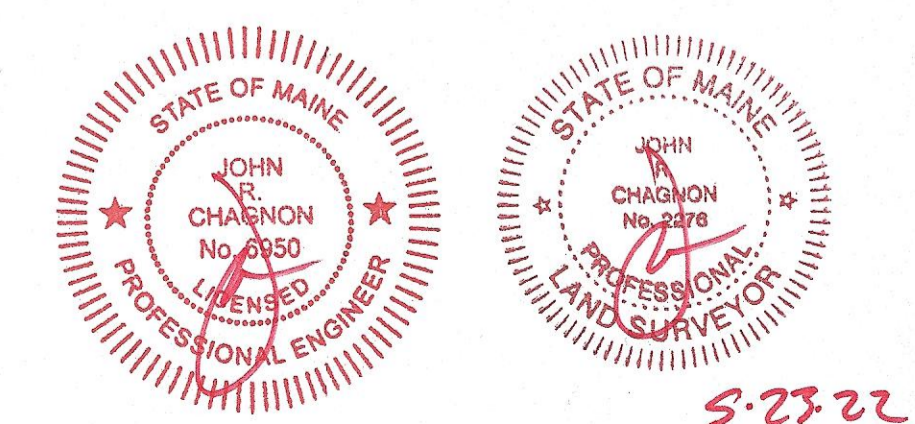


**POST-CONSTRUCTION BUFFER PLANTING:**  
 5,466 SQ.FT. SEE BUFFER PLANTING SCHEDULE



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

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	5/23/22



SCALE 1"=30' MAY 2022

**BUFFER PLANTING** **C4**

**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](http://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

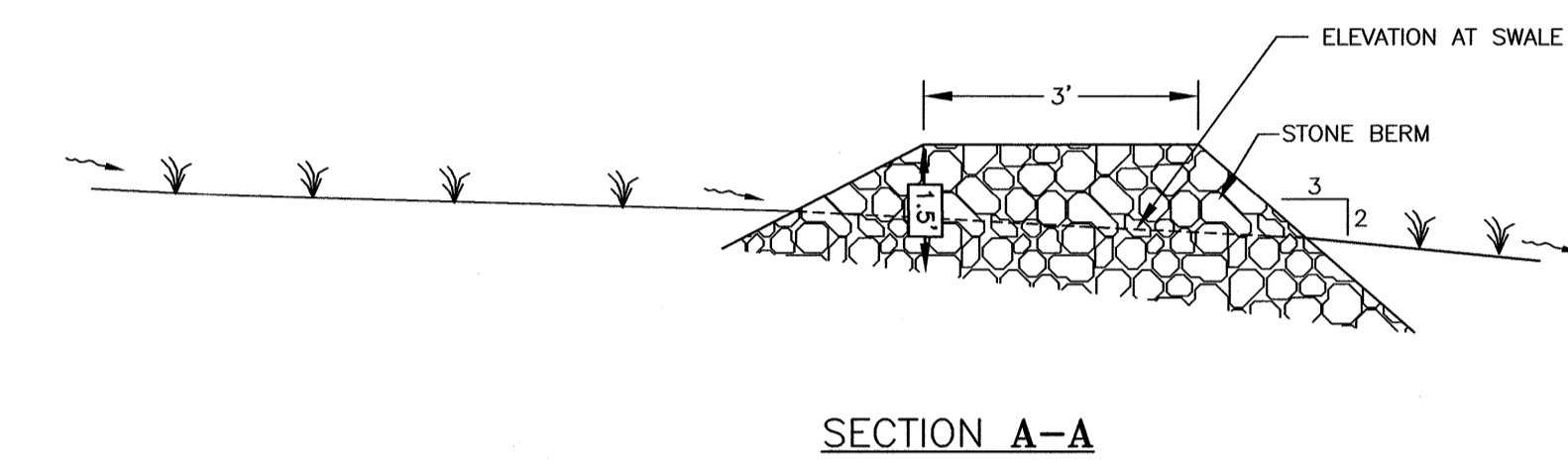
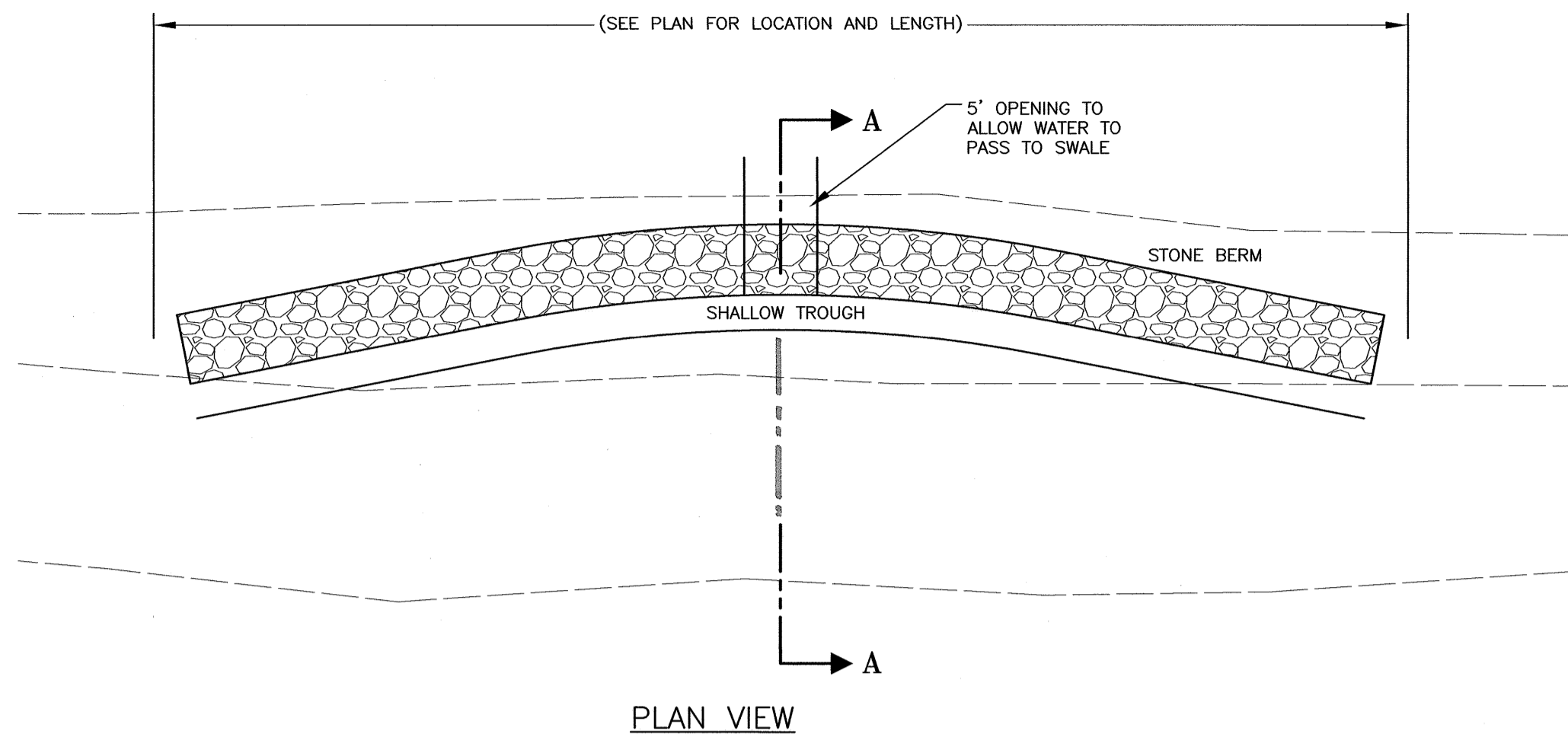
ALTERNATE WINDOWS AUTHORIZED UNDER CATEGORY 2 MAY INCLUDE SPECIES SPECIFIC WINDOWS RECOMMENDED BY THE MAINE DEPT. OF MARINE RESOURCES AND/OR MAINE DEPT. OF INLAND FISHERIES & WILDLIFE.

**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/)

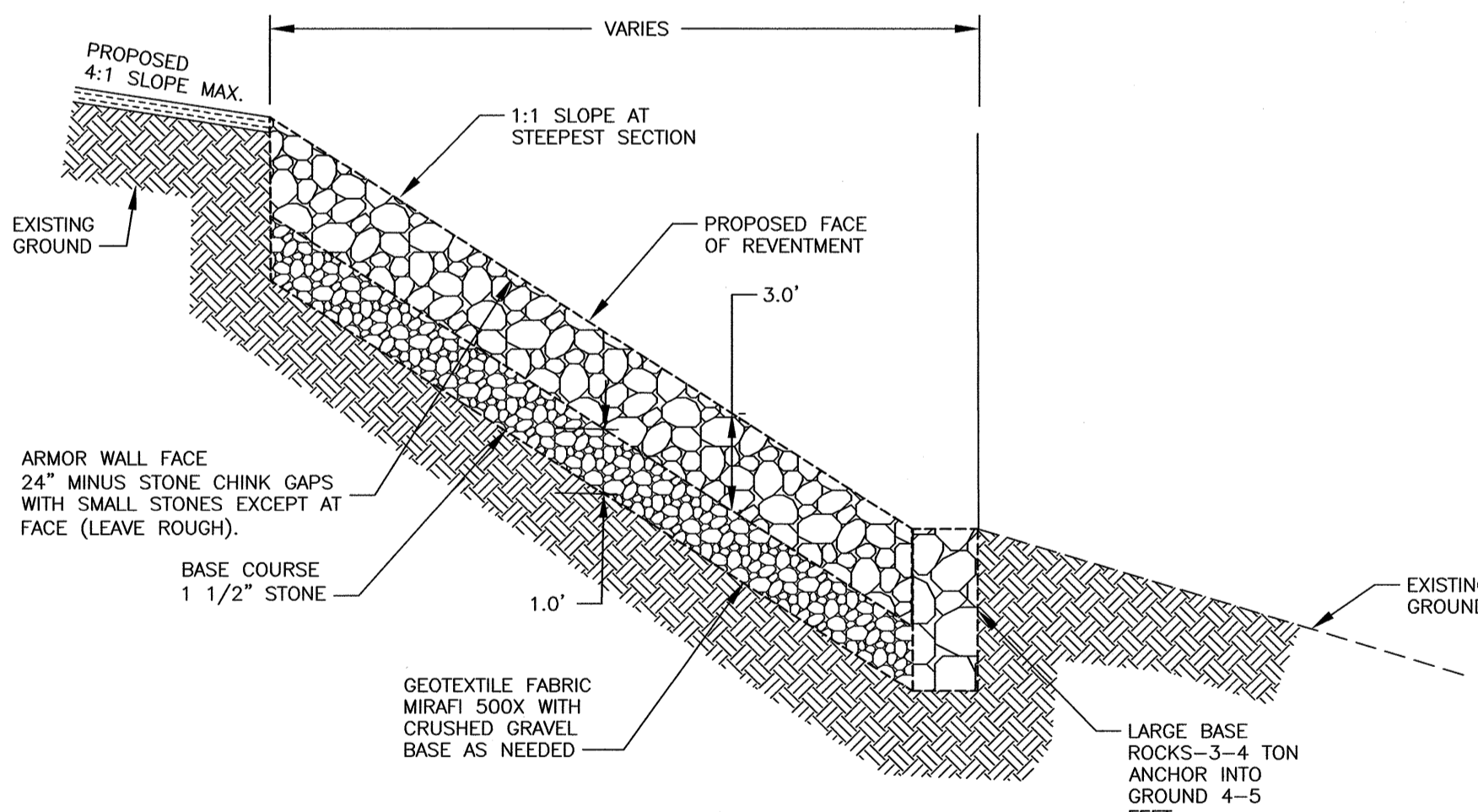
**SPAWNING, BREEDING, AND MIGRATORY AREAS.**

- 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.



BERM STONE SIZE	
SIEVE DESIGNATION	% BY WEIGHT PASSING
12 inch	100
6 inch	84-100
3 inch	68-83
1 inch	42-55
No. 4	8-12

**1** PARABOLIC STONE BERM NTS



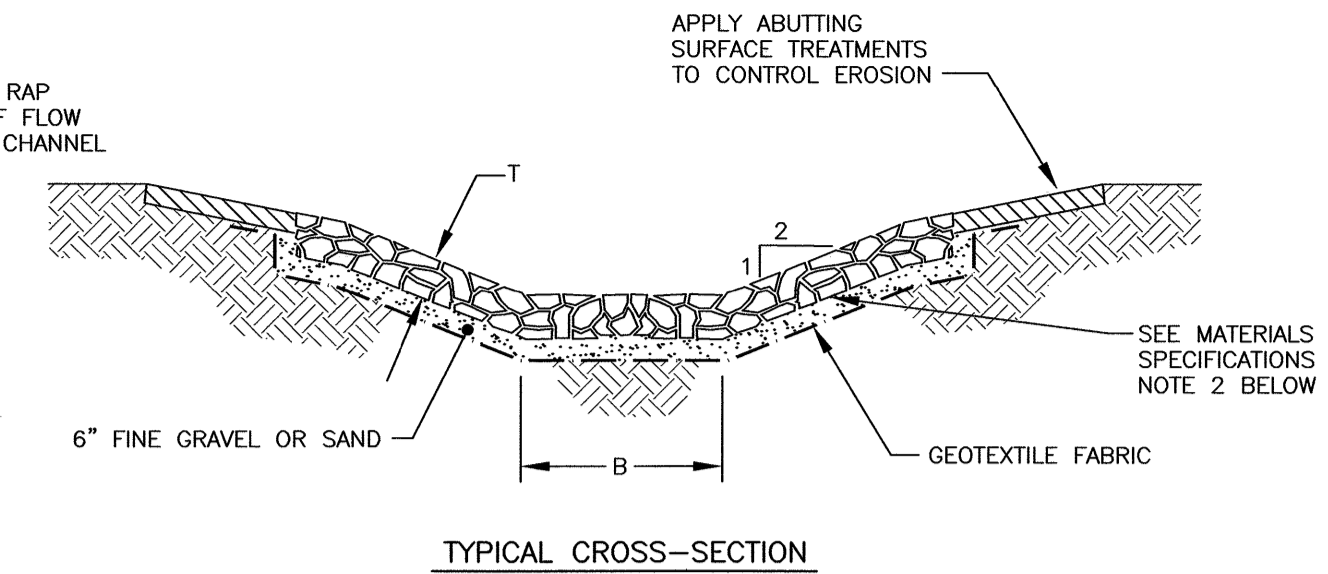
**3** SLOPE REPAIR TYPICAL SECTION NTS

**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



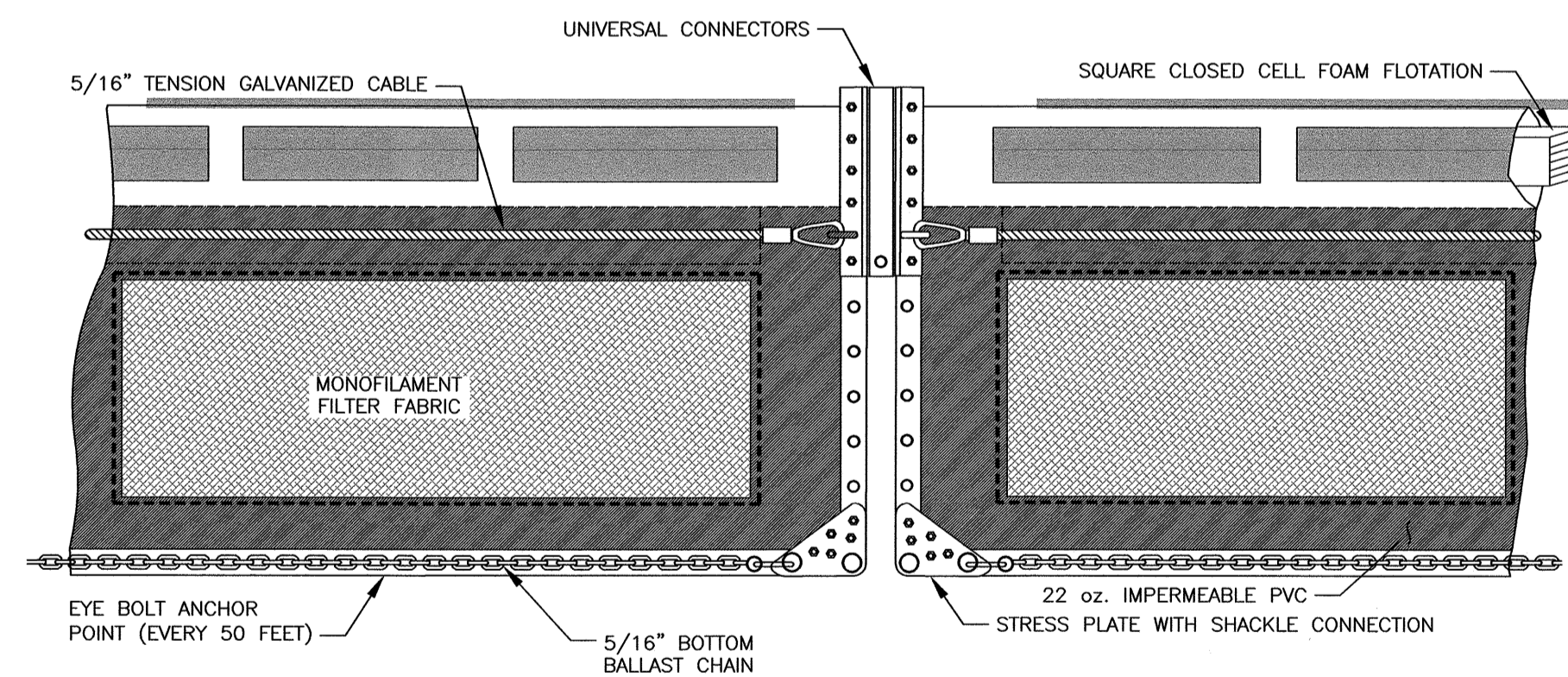
**MATERIALS SPECIFICATIONS:**

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



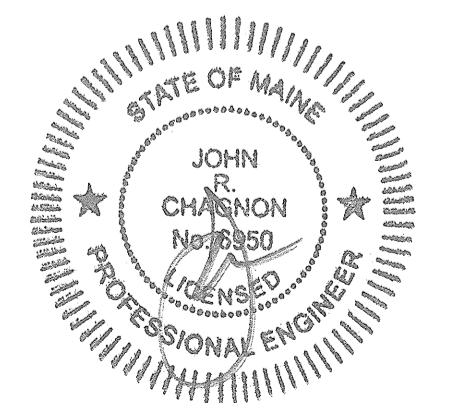
**4** TURBIDITY CURTAIN DETAIL NTS

**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**