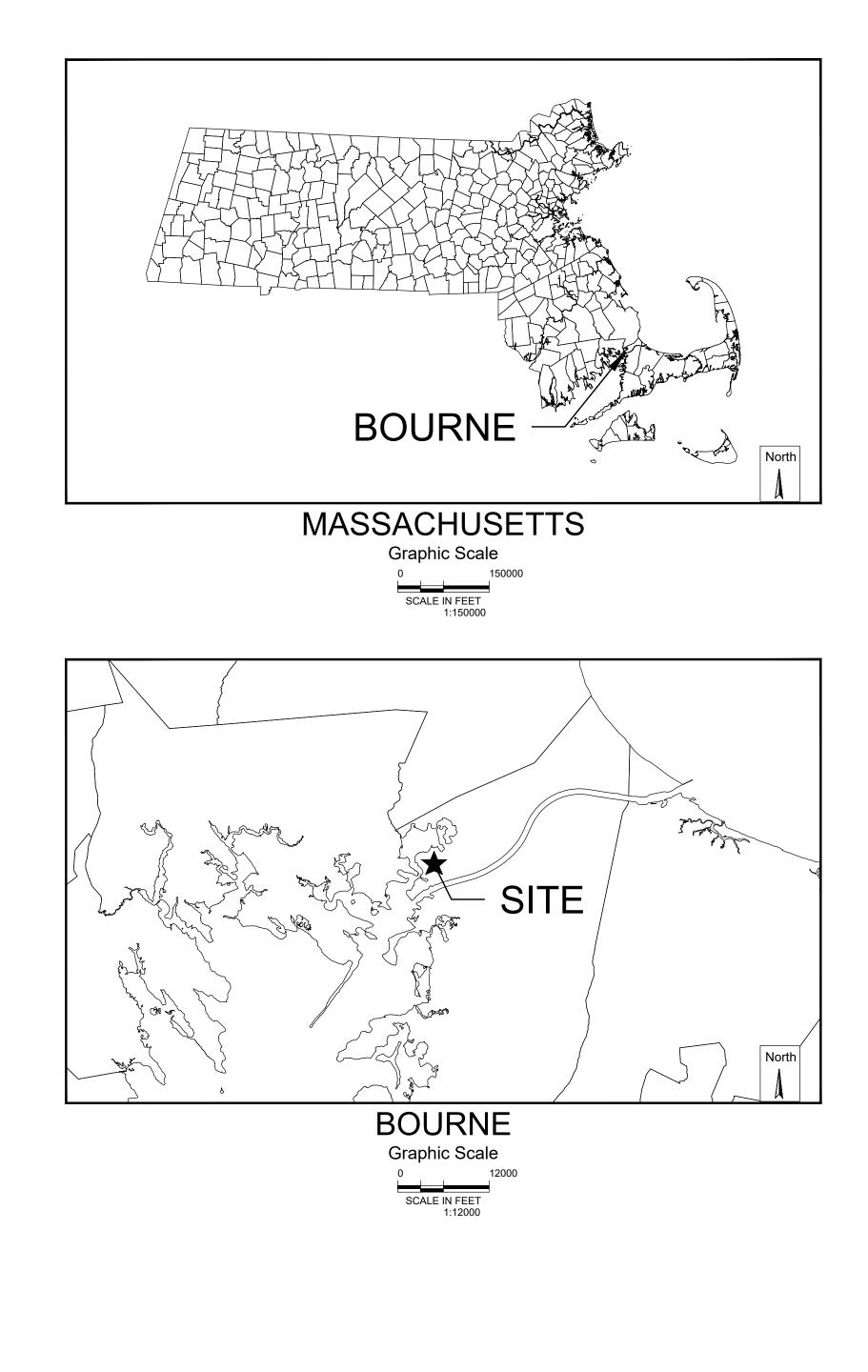
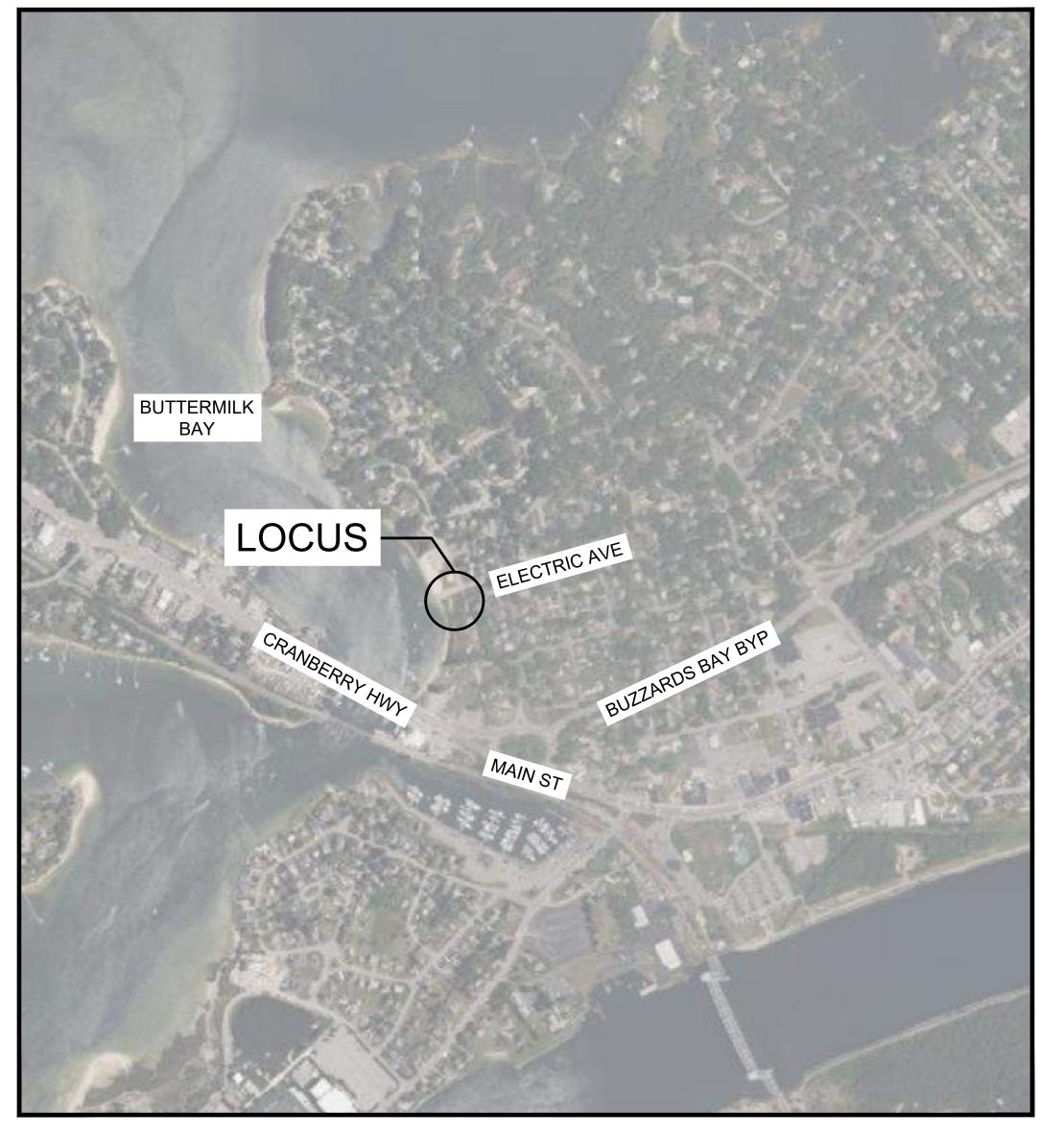
ELECTRIC AVENUE CAPE COD BOAT RAMP STORMWATER **RETROFIT PROJECT- PERMITTING PLANS** BOURNE, MASSACHUSETTS NOVEMBER 2023





VICINITY MAP **Graphic Scale** 1-inch = 500-feet

	Sheet List Table			
Sheet Number	Sheet Title			
1	COVER SHEET			
2	NOTES & LEGEND			
3	EROSION & SEDIMENT CONTROL PLAN			
4	SITE & GRADING PLAN			
5	DETAILS (1)			
6	DETAILS (2)			
7	LANDSCAPE PLAN			
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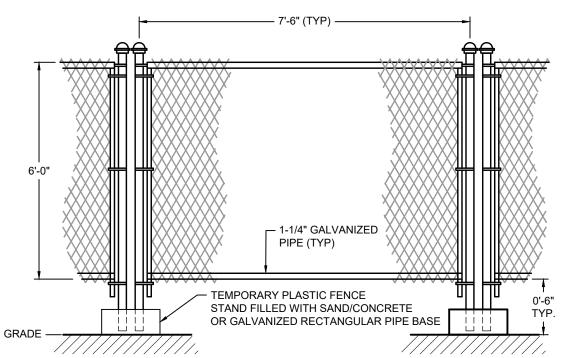
GENERAL NOTES:

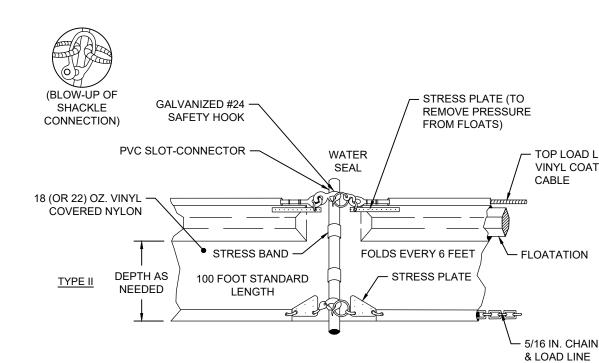
- 1. THIS PLAN SET IS FOR PERMITTING ONLY AND NOT FOR CONSTRUCTION.
- 2. THE TOPOGRAPHY AND EXISTING SITE CONDITIONS DEPICTED HEREON ARE THE RESULT OF AN ON THE GROUND FIELD SURVEY CONDUCTED BY THE HORSLEY WITTEN GROUP, INC. DECEMBER 28, 2022. HORIZONTAL DATUM IS MASS STATE PLANE COORDINATE SYSTEM. DATUM ESTABLISHED BY RTK GPS. THE ELEVATIONS DEPICTED HEREON WERE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 4. PROPERTY LINES APPROXIMATE ONLY.
- ABUTTER INFORMATION FROM ASSESSOR'S MAP.
- 6. SITE INFORMATION:
 - MAF 23.1 PARCEL 152
 - ADDRESS: 0 ELECTRIC AVENUE
- ZONING DISTRICT: R40 7. THE PROPERTY IS LOCATED WITHIN F.I.R.M ZONE AE (ELEV. 16) AS SHOWN ON COMMUNITY PANEL NO.
- 25001C0501J DATED JULY 16, 2014. 8. THE WETLAND DELINEATION SHOWN HEREON WAS CONDUCTED BY THE HORSLEY WITTEN GROUP, INC. ON DECEMBER 2, 2022.

Plan Set:	COD BOAT R PROJECT	AMP - PEF	S RM	ГС 7	VENUE DRMWATE TING PLA CHUSETT	
Prepared For:		Town (24 Pe Bour (508) 7	erry	y / ,	Ave ЛА	
Prepared By: Headquar 90 Route Sandwich, M (508) 833-660 (508) 833-37	Sustaina With ters 6A A 02563 00 voice (617) 574-	ble Envi ww.hors eet 6th Floor A 02109 8193 voice	ron leyv	me viti ne Tr F (Youp, Inc. Ental Solutions En.com Providence, RI 02906 401) 272-1717 voice (401) 439-8368 fax	0 113 R2 Water Street Exeter, NH 03833 (603) 658-1660 voice
Date Issued: NOVEMBER 2023 Designed By: JLV Drawn By:	Registration:	Revisio	ns			Project Number: 22032 Sheet Number: 1 of 8
JLV Checked By: MW	PROFESSIONAL CHARTER 23	▲ ▲ A Rev. Date	By	Appr.	Description	Drawing Number:

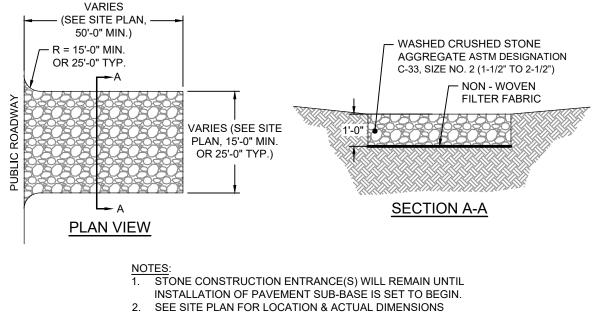
GENERAL CONSTRUCTION NOTES:

- ALL SITE WORK TO COMPLETE THIS PROJECT AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- IMMEDIATELY CONTACT AND COORDINATE WITH THE ENGINEER AND OWNER IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED.
- UTILIZE ALL PRECAUTIONS AND MEASURES TO ENSURE THE SAFETY OF THE PUBLIC, ALL PERSONNEL AND PROPERTY DURING CONSTRUCTION IN ACCORDANCE WITH OSHA STANDARDS, INCLUDING THE INSTALLATION OF TEMPORARY FENCING BARRICADES, SAFETY LIGHTING CONES POLICE DETAIL AND/OR FLAGMEN AS DETERMINED NECESSARY BY THE TOWN. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF POLICE DETAIL AND FOR COORDINATING WITH THE LOCAL OR STATE POLICE DEPARTMENT FOR ALL REQUIRED POLICE DETAIL
- MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS. PAY ALL FEES INCLUDING POLICE DETAILS AND POST ALL BONDS, IF NECESSARY, ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE OWNER AND THE ENGINEER.
- ALL EXISTING CONDITIONS SHOWN ARE APPROXIMATE AND ARE BASED ON THE BEST INFORMATION AVAILABLE. PRIOR TO THE START OF CONSTRUCTION VERIFY THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLING ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED.
- THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS INDICATED ON THE DRAWINGS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND WHEREVER POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY IN THE TOWN, AND "DIGSAFE" (1-888-344-7233) AT LEAST THREE BUSINESS DAYS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR MUST RESOLVE CONFLICTS BETWEEN THE PROPOSED UTILITIES AND FIELD-LOCATED UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED, INCOMPLETELY OR INACCURATELY SHOWN. THE CONTRACTOR MUST MAINTAIN ACCURATE RECORDS OF THE LOCATION AND ELEVATION OF ALL WORK INSTALLED AND EXISTING UTILITIES FOUND DURING CONSTRUCTION FOR THE PREPARATION OF THE AS-BUILT PLAN.
- COORDINATE AND MAKE ALL CONNECTION ARRANGEMENTS WITH UTILITY COMPANIES, AS REQUIRED.
- THE CONTRACTOR MUST MAINTAIN ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ALL COST RELATED TO THE REPAIR OF UTILITIES. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES MUST BE DONE BY HAND.
- COORDINATE ALL TRENCHING WORK WITHIN ROADWAYS WITH THE PROPER LOCAL & STATE AGENCY. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY INCLUDING ANY LOCAL AND/OR STATE PERMITS REQUIRED FOR THE TRENCH WORK. IF THIS WORK IS REQUIRED TO OCCUR OUTSIDE THE AGREED UPON HOURS OF OPERATION FOR THE FACILITY, THE CONTRACTOR MUST PLAN ACCORDINGLY.
- SAWCUT ALL TRENCH WORK WITHIN EXISTING PAVEMENT AS INDICATED ON THE DRAWINGS. BACKFILL AND COMPACT TRENCH WORK AS INDICATED ON THE DRAWING AND IN THE SPECIFICATIONS. IF SETTLEMENT OCCURS DUE TO INADEQUATE COMPACTION, AS DETERMINED BY THE ENGINEER, WITHIN THE WARRANTY PERIOD, CONTRACTOR IS REQUIRED TO REMOVE, PATCH AND REPAVE AFTER ONE COMPLETE 12-MONTH CYCLE.
- IMPORT ONLY CLEAN MATERIAL. MATERIAL FROM AN EXISTING OR FORMER 21E SITE AS DEFINED BY THE MASSACHUSETTS CONTINGENCY PLAN 310 CMR 40.0000 WILL NOT BE ACCEPTED .
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH AND MAINTAIN ALL CONTROL POINTS AND BENCHMARKS DURING 13. CONTAIN ALL SEDIMENT ONSITE. SWEEP ALL EXITS FR CONSTRUCTION INCLUDING BENCHMARK LOCATIONS AND ELEVATIONS AT CRITICAL AREAS. COORDINATE WITH THE ENGINEER THE LOCATION OF ALL CONTROL POINTS AND BENCHMARKS.
- SITE LAYOUT SURVEY REQUIRED FOR CONSTRUCTION MUST BE PROVIDED BY THE CONTRACTOR AND PERFORMED BY A MASSACHUSETTS' REGISTERED PROFESSIONAL LAND SURVEYOR. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH 15. PROVIDE ON SITE OR MAKE READILY AVAILABLE THE N THE SURVEYOR FOR ALL SITE SURVEY WORK.
- 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. RE-STAKING OF PREVIOUSLY SURVEYED SITE FEATURES IS THE RESPONSIBILITY (INCLUDING COST) OF THE CONTRACTOR.
- 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 (THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY AND BRIDGES 2020 EDITION, AND THE SUPPLEMENTAL SPECIFICATIONS DATED JUNE 30, 2020).
- PROVIDE ALL CONSTRUCTION SERVICE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS REGARDING NOISE, VIBRATION, ^{17.} DUST. SEDIMENTATION CONTAINMENT, AND TRENCH WORK.
- COLLECT SOLID WASTES AND STORE IN A SECURED DUMPSTER. THE DUMPSTER MUST MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS.
- RESTORE ALL SURFACES EQUAL TO THEIR ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETE PER SPECIFICATIONS. LEAVE ALL AREAS NOT DISTURBED BY CONSTRUCTION IN THEIR NATURAL STATE. TAKE CARE TO PREVENT DAMAGE TO SHRUBS, TREES, OTHER LANDSCAPING AND/OR NATURAL FEATURES. WHEREAS THE PLANS DO NOT SHOW ALL LANDSCAPE FEATURES, EXISTING CONDITIONS MUST BE VERIFIED BY THE CONTRACTOR IN ADVANCE OF THE WORK.
- 9. LEDGE OR BOULDER EXCAVATION IS NOT ANTICIPATED FOR THIS SITE. D. REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. PROMPTLY REMOVE ALL DEMOLITION DEBRIS FROM THE SITE TO AN APPROVED DUMP SITE.
- 21. ALL TRUCKS LEAVING THE SITE MUST BE COVERED.
- 2. DO NOT WASH ANY CONCRETE TRUCKS ONSITE. REMOVE BY HAND ANY CEMENT OR CONCRETE DEBRIS LEFT IN THE DISTURBED ARFA
- 23. BURIAL OF ANY STUMPS, SOLID DEBRIS, AND/OR STONES/BOULDERS ONSITE IS PROHIBITED. DO NOT USE ROAD SALT OR OTHER DE-ICING CHEMICALS ON THE ACCESS ROADWAY.
- AT THE END OF CONSTRUCTION, REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIALS FROM THE SITE AS INDICATED IN THE SPECIFICATIONS. PERFORM A THOROUGH INSPECTION OF THE WORK PERIMETER. COLLECT AND REMOVE ALL MATERIALS AND BLOWN OR WATER CARRIED DEBRIS FROM THE SITE.



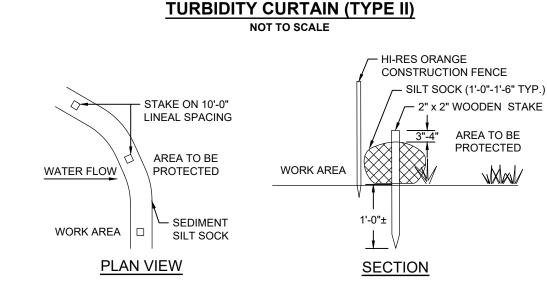






STONE CONSTRUCTION ENTRANCE

NOT TO SCALE





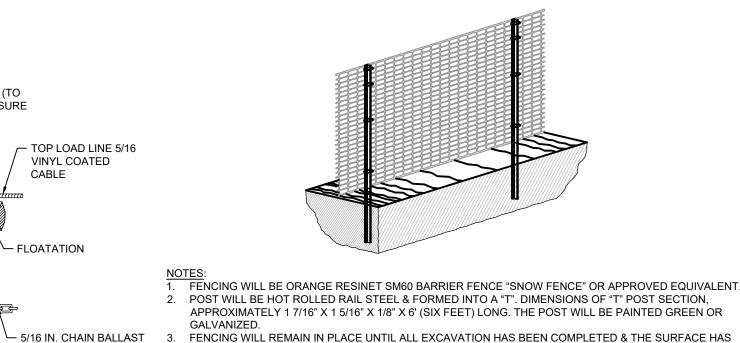
- SILT SOCK MANUFACTURER WILL BE SILT SOXX OR ENGINEER APPROVED EQUAL. ALL MATERIAL WILL MEET MANUFACTURER'S SPECIFICATIONS. SEDIMENT SILT SOCK WILL BE FILLED WITH LEAF COMPOST AND/OR WOODY MULCH PER MANUFACTURER'S REQUIREMENTS.
- 4. FOLLOWING CONSTRUCTION & SITE STABILIZATION, COMPOST MATERIAL WILL BE REMOVED OR DISPERSED ON SITE, AS APPROVED BY THE ENGINEER.
 - SEDIMENT SILT SOCK NOT TO SCALE

- 1. DESIGNATE THE SITE CONSTRUCTION FOREMAN AS TH MAINTENANCE OF ALL SEDIMENT AND EROSION CONT EROSION AND PREVENT SEDIMENT FROM LEAVING THE
- 2. INSTALL ALL EROSION AND SEDIMENT CONTROL (ESC) CONSERVATION AGENT, AND ENGINEER BEFORE ANY EROSION CONTROL MEASURES, AS NECESSARY, DUR PERIMETER EROSION CONTROLS ARE THE DESIGNATE THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEY PERIOD
- 3. MAINTAIN A MINIMUM SURPLUS OF 100 FEET OF EROS PROTECT THE ADJACENT RESOURCE AREA FROM SED
- OWNER & IN CONFORMANCE WITH THE ORDER OF CO 5. PROVIDE CONSTRUCTION EXITS AS INDICATED ON DRA
- REPLACE THE CRUSHED STONE PAD, AS NECESSARY, KEEP THE LIMIT OF CLEARING, GRADING AND DISTURE PHASE THE SITE WORK IN A MANNER TO MINIMIZE ARE
- AND GRUB ONLY THOSE AREAS WHICH ARE ACTIVELY PRIOR TO BEGINNING ANY LAND CLEARING ACTIVITY A MONITOR LOCAL WEATHER REPORTS DURING CONSTR
- CONSTRUCTION ACTIVITIES WHICH I FAVE LARGE DIS BEST PROFESSIONAL JUDGEMENT AND GOOD CONSTR ENSURE THE NECESSARY EROSION CONTROL DEVICE ANY IMPENDING WEATHER EVENTS.
- INSPECT EROSION AND SEDIMENT CONTROL DEVICES EVENT OF .25 INCH OR GREATER. REPAIR IDENTIFIED ARE IN GOOD WORKING ORDER. RESET OR REPLACE
- 9. SURROUND THE PERIMETER OF SOIL STOCKPILES WITH WITH STRAWBALE, AS DETERMINED NECESSARY.
- 10. DISTURBED AREAS AND SLOPES MUST NOT BE LEFT UI INACTIVE WINTER SEASON. PROVIDE APPROPRIATE S BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCT REINFORCE TEMPORARY AREAS HAVING A SLOPE GRE SITE IS PROPERLY STABILIZED. TEMPORARY SWALES ENGINEER
- INSTALL A SILT SACK OR APPROVED EQUIVALENT IN E 11. INSTALLATION OF EACH CATCH BASIN, INSTALL A SILT SIGNIFICANT STORM EVENT AND REMOVE AND EMPTY
- 12. SMALL SEDIMENTATION BASINS MAY BE CONSTRUCTED OF SITE RUNOFF AND SEDIMENT. IT WILL BE THE RESI ENGINEER, TO SIZE AND CREATE THESE BASINS IN AP
- PAVED AREAS AS NEEDED TO REMOVE SEDIMENT AND
- 14. REMOVE ACCUMULATED SEDIMENT FROM ALL TEMPO FOR THE DURATION OF THE PROJECT TO ENSURE ALL MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSE THE CONTRACTOR MUST CONTINUE TO PROVIDE PERS PROPERLY MAINTAIN AND REPAIR ALL EROSION AND S
- 16. PRIOR TO THE INSTALLATION OF THE MEDIA WITHIN TH ACCUMULATED IN ANY TEMPORARY SEDIMENT TRAP U FLEVATION AT A MINIMUM 1-FOOT ABOVE THE BOTTOM PARTIALLY CONSTRUCTED BIORETENTION AREAS. TH THE BIORETENTION AREA PRIOR TO MEDIA/FABRIC INS
- CONTROL DUST BY WATERING OR OTHER APPROVED 18. THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECT FACILITIES INSTALLED OR AFFECTED BY THE PROJECT

	EROSION & SEDIMENT CONTROL NOTES:	SIC CONSTRUCTION SEQUENCE:	GE
		FOLLOWING CONSTRUCTION SEQUENCE IS TO BE USED AS A GENERAL GUIDELINE. COORDINATE WITH THE OWNER, ENGINEERS, IDSCAPE ARCHITECT AND SUBMIT A PROPOSED CONSTRUCTION SEQUENCE FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION	
	2. INSTALL ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES AS INDICATED ON DRAWINGS IN CONSULTATION WITH THE	SURVEY AND STAKE THE PROPOSED LIMIT OF DISTURBANCE AND LIMIT OF SEDIMENTATION BARRIERS.	3.
	CONSERVATION AGENT, AND ENGINEER BEFORE <u>ANY CONSTRUCTION ACTIVITIES</u> BEGIN. INSPECT, MAINTAIN REPAIR AND REPLACE EROSION CONTROL MEASURES, AS NECESSARY, DURING THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT. THE SITE PERIMETER EROSION CONTROLS ARE THE DESIGNATED LIMIT OF WORK. INFORM ALL PERSONNEL WORKING ON THE PROJECT SITE THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGHOUT THE CONSTRUCTION	PLACE SEDIMENTATION BARRIERS AS INDICATED ON DRAWINGS AND STAKED OUT IN THE FIELD. UNDER NO CIRCUMSTANCES IS T LIMIT OF WORK TO EXTEND BEYOND THE SEDIMENTATION BARRIERS/LIMIT OF DISTURBANCE AS INDICATED ON DRAWINGS AS APPROVED BY THE LOCAL CONSERVATION COMMISSION AND DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP).	HE 4. 5.
LL	PERIOD. 3. MAINTAIN A MINIMUM SURPLUS OF 100 FEET OF EROSION CONTROL BARRIER (SILT SOCK AND/OR SILT FENCE) ONSITE AT ALL TIMES.	INSTALL TEMPORARY CONSTRUCTION ENTRANCES IN LOCATIONS INDICATED ON DRAWINGS. NO OTHER ENTRANCES ARE TO BE USED TO GAIN ACCESS TO THE SITE BY ANY CONSTRUCTION OR DELIVERY VEHICLES.	6.
4Υ H	 MAINTAIN A MINIMUM SURFLUS OF 100 FEET OF EROSION CONTROL BARNIER (SIET SOCK AND/OR SIET FERCE) ONSTELLAT ALL TIMES. PROTECT THE ADJACENT RESOURCE AREA FROM SEDIMENTATION DURING PROJECT CONSTRUCTION UNTIL ACCEPTANCE BY THE 4 	BEGIN CLEARING THE SITE AS REQUIRED.	7
•	OWNER & IN CONFORMANCE WITH THE ORDER OF CONDITIONS.	SURVEY AND STAKE CENTERLINE OF THE PROPOSED ROADS, STORMWATER MANAGEMENT AREAS, AND DRAINAGE LINES.	
	5. PROVIDE CONSTRUCTION EXITS AS INDICATED ON DRAWINGS TO SHED DIRT FROM CONSTRUCTION VEHICLE TIRES. CLEAN AND/OR REPLACE THE CRUSHED STONE PAD, AS NECESSARY, TO MAINTAIN ITS EFFECTIVENESS.	EXCAVATE AND ROUGH GRADE THE PROPOSED TEMPORARY SEDIMENT TRAPS PER THE DRAWINGS AND ANY ADDITIONAL TEMPORARY BASINS NECESSARY TO CONTROL SITE RUNOFF AND SEDIMENTS. TEMPORARILY STABILIZE AS NECESSARY TO REDU	
	6. KEEP THE LIMIT OF CLEARING, GRADING AND DISTURBANCES TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. PHASE THE SITE WORK IN A MANNER TO MINIMIZE AREAS OF EXPOSED SOIL. IF TREES ARE TO BE CUT ON THE ENTIRE SITE, CLEAR AND GRUB ONLY THOSE AREAS WHICH ARE ACTIVELY UNDER CONSTRUCTION. PROPERLY INSTALL THE SEDIMENTATION CONTROLS	SIDE SLOPE EROSION AND SEDIMENT ACCUMULATION. BEGIN CLEARING AND DEMOLITION OF THE CONCRETE PAD AND CONCRETE WALL IN THE BIORETENTION AREA. TOPSOIL IS TO BE	<u>ST</u>
IS	PRIOR TO BEGINNING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK.	STRIPPED FROM THE AREA OF THE PROPOSED STORMWATER MANAGEMENT AREAS AND STOCKPILED IN APPROVED LOCATIONS. TOPSOIL STOCKPILES MUST BE PROTECTED BY A SEDIMENT BARRIER.	IHE
Y	7. MONITOR LOCAL WEATHER REPORTS DURING CONSTRUCTION AND PRIOR TO SCHEDULING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES WHICH LEAVE LARGE DISTURBED AREAS UNSTABILIZED. IF INCLEMENT WEATHER IS PREDICTED, USE BEST PROFESSIONAL JUDGEMENT AND GOOD CONSTRUCTION PRACTICES WHEN SCHEDULING CONSTRUCTION ACTIVITIES AND	INSTALL PROPOSED RETAINING WALL PER THE DRAWINGS.	1.
	ENSURE THE NECESSARY EROSION CONTROL DEVICES ARE INSTALLED AND FUNCTIONING PROPERLY TO MINIMIZE EROSION FROM 1 ANY IMPENDING WEATHER EVENTS.	ROUGH GRADE THE PROPOSED BIORETENTION AREA PER THE DRAWINGS.TEMPORARILY STABILIZE AS NECESSARY TO REDUCE S SLOPE EROSION AND SEDIMENT ACCUMULATION.	SIDE 2.
RK	8. INSPECT EROSION AND SEDIMENT CONTROL DEVICES AND STABILIZED SLOPES ON A WEEKLY BASIS AND AFTER EACH RAINFALL 1 EVENT OF .25 INCH OR GREATER. REPAIR IDENTIFIED PROBLEMS WITHIN 24 HOURS TO ENSURE EROSION AND SEDIMENT CONTROLS	BEGIN DEMOLITION OF THE ROAD PAVEMENT.	3.
	ARE IN GOOD WORKING ORDER. RESET OR REPLACE MATERIALS AS REQUIRED.	INSTALL DRAINAGE PIPES, WATER QUALITY UNITS, AND INFILTRATION TRENCH. BEGIN WITH INSTALLING RB 100 AND PROGRESS UI GRADIENT. THE STORMWATER MANAGEMENT AREA(S) AND DRAINAGE NETWORK ARE TO BE PROTECTED FROM SEDIMENTATION	4
DN	9. SURROUND THE PERIMETER OF SOIL STOCKPILES WITH SILT SOCK, SILT FENCE, STRAWBALES, OR A COMBINATION OF SILT FENCE WITH STRAWBALE, AS DETERMINED NECESSARY.	UNTIL ALL UN-STABILIZED AREAS ARE STABILIZED WITH STONE SUB-BASE OR VEGETATION. INSTALL SEDIMENT BARRIERS AT ALL POINTS OF ENTRY INTO THE DRAINAGE NETWORK. TAKE PARTICULAR CARE TO PROTECT THE UNDERGROUND STRUCTURES FRO SEDIMENT.	
	10. DISTURBED AREAS AND SLOPES MUST NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. PROVIDE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED.	PERMANENTLY SEED ALL DISTURBED AREAS OUTSIDE OF THE AREA TO BE PAVED.	
IIS		UPON COMPLETION OF UNDERGROUND DRAINAGE INSTALLATION, PLACE PAVEMENT SUBBASE LAYERS AND ROUGH GRADE THE ROADWAY IN ACCORDANCE WITH THE SITE PLANS AND IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL REGULATIONS AS SOON AS POSSIBLE.	
N,	11. INSTALL A SILT SACK OR APPROVED EQUIVALENT IN EACH EXISTING CATCHBASIN RECEIVING RUNOFF FROM THE SITE. UPON THE INSTALLATION OF EACH CATCH BASIN, INSTALL A SILT SACK OR APPROVED EQUIVALENT. INSPECT SILT SACKS, AFTER EACH SIGNIFICANT STORM EVENT AND REMOVE AND EMPTY AS NEEDED FOR THE DURATION OF THE CONSTRUCTION PERIOD.	BEGIN ROADWAY CONSTRUCTION PER SITE PLANS AND IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL REGULATIONS. ROADWAY IS NOT TO BE PAVED UNTIL ALL DRAINAGE STRUCTURES AND PIPES ARE INSTALLED AND READY FOR CONNECTION TO STORMWATER MANAGEMENT AREAS.	
	12. SMALL SEDIMENTATION BASINS MAY BE CONSTRUCTED ON AN AS-NEEDED BASIS DURING CONSTRUCTION TO AID IN THE CAPTURE OF SITE RUNOFF AND SEDIMENT. IT WILL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR, IN CONSULTATION WITH THE ENGINEER, TO SIZE AND CREATE THESE BASINS IN APPROPRIATE LOCATIONS.	FINISH PERMANENT STABILIZATION. COMPLETE PERMANENT STORMWATER MANAGEMENT AREA SEEDING AND PLANTING AFTER T CONTRIBUTING AREA TO THE BASIN HAS REACHED A MINIMUM OF 80% STABILIZATION AND IS NO LONGER REQUIRED AS A CONSTRUCTION SEDIMENTATION BASIN.	THE
-	13. CONTAIN ALL SEDIMENT ONSITE. SWEEP ALL EXITS FROM THE SITE AS NECESSARY INCLUDING ANY SEDIMENT TRACKING. SWEEP ¹ PAVED AREAS AS NEEDED TO REMOVE SEDIMENT AND POTENTIAL POLLUTANTS ACCUMULATED DURING SITE CONSTRUCTION.	COMPLETE COASTAL BANK PLANTING AND ANY REMAINING PLANTING AND SEEDING ON SITE.	
		SWEEP THE ROADWAY AND PARKING LOT TO REMOVE ALL SEDIMENTS. REPAIR DRAINAGE STRUCTURES AND BASINS AS REQUIRE CLEAN AND FLUSH THE DRAINAGE STRUCTURES AND PIPES AT THE END OF CONSTRUCTION AND REMOVE ALL ACCUMULATED	
	15. PROVIDE ON SITE OR MAKE READILY AVAILABLE THE NECESSARY EQUIPMENT AND SITE PERSONNEL DURING CONSTRUCTION HOURS	SEDIMENTS IN THE STORMWATER MANAGEMENT AREAS. CONTRACTOR MUST INSPECT THE DRAINAGE NETWORK AND REPAIR AN DAMAGE IMMEDIATELY.	IY
٨S	FOR THE DURATION OF THE PROJECT TO ENSURE ALL EROSION AND SEDIMENTATION CONTROL DEVICES ARE PROPERLY MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSIBLE MANNER. IF SITE WORK IS SUSPENDED DURING THE WINTER MONTHS THE CONTRACTOR MUST CONTINUE TO PROVIDE PERSONNEL AND EQUIPMENT EITHER ON SITE OR READILY AVAILABLE TO PROPERLY MAINTAIN AND REPAIR ALL EROSION AND SEDIMENTATION CONTROL DEVICES IN A TIMELY AND RESPONSIBLE MANNER	ENGINEER TO APPROVE THE REMOVAL OF ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES FOLLOWIN VEGETATIVE ESTABLISHMENT OF ALL DISTURBED AREAS AND DETERMINE WHEN THE CONTRIBUTING AREA HAS REACHED A MININ OF 80% STABILIZATION.	
3		EWATERING:	
N	ACCUMULATED IN ANY TEMPORARY SEDIMENT TRAP USED FOR SEDIMENT CONTROL DURING CONSTRUCTION. PROVIDE A SURFACE 1 ELEVATION AT A MINIMUM 1-FOOT ABOVE THE BOTTOM OF MEDIA ELEVATION AS SHOWN IN THE BIORETENTION SCHEDULE FOR PARTIALLY CONSTRUCTED BIORETENTION AREAS. THIS ALLOWS FOR AN OVER-DIG OF THE COLLECTED SEDIMENT FROM WITHIN	A HIGH WATER TABLE IS NOT ANTICIPATED. HOWEVER, IF DEWATERING IS REQUIRED DURING EXCAVATION, TEMPORARILY LOWER THE WATER TABLE PER SPECIFICATIONS.	R
R	THE BIORETENTION AREA PRIOR TO MEDIA/FABRIC INSTALLATION.	PRIOR TO ANY DEWATERING, THE DEWATERING PLAN MUST BE APPROVED BY THE ENGINEER.	
.,	 17. CONTROL DUST BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER. 18. THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE DURING CONSTRUCTION OF ALL STORMWATER 	IF DEWATERING IS NECESSARY DURING CONSTRUCTION, IMPLEMENT THE PROPER ESC MEASURES ON SITE TO PREVENT EROSIO OR SEDIMENT RUNOFF. THESE MEASURES CAN INCLUDE DEWATERING BAGS, TEMPORARY STRAWBALES, SILT FENCES, SILT SOC AND/OR OTHER APPROVED DEVICES AS INDICATED IN THE DETAILS.	
E		ENERAL DEMOLITION NOTES:	
E		S PLAN SET DOES NOT INCLUDE DETAILS & SPECIFICATIONS FOR ALL DEMOLITION WORK REQUIRED WITHIN THE PROPOSED NSTRUCTION LIMITS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER AND PROJECT ENGINEERS OLVED WITH THE PROPOSED NEW CONSTRUCTION TO DEVELOP A SUITABLE DEMOLITION PLAN.	
	1	UNLESS OTHERWISE NOTED, THE CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION, DEMOLITION, REMOVAL AND DISPOSAL, I LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL EXISTING SITE ELEMENTS AND STRUCTURES INCLUDING, BUT NO LIMITED TO ROADWAYS, BITUMINOUS CONCRETE, CEMENT CONCRETE, CONCRETE RETAINING WALL, GRAVEL, CURBS, WALKWAYS SIDEWALKS, BERMS, FENCES, BOLLARDS, POSTS, TREES, SHRUBS, DRAINAGE STRUCTURES AND ALL OTHER STRUCTURES SHOW AND NOT SHOWN WITHIN CONSTRUCTION UMITS. AND WHERE NEEDED, TO ALL OW FOR NEW CONSTRUCTION, ALL FACILITIES TO	DT S, /N

AND NOT SHOWN WITHIN CONSTRUCTION LIMITS. AND WHERE NEEDED. TO ALLOW FOR NEW CONSTRUCTION. ALL FACILITIES TO BE REMOVED ARE TO BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER SPECIFICATIONS.

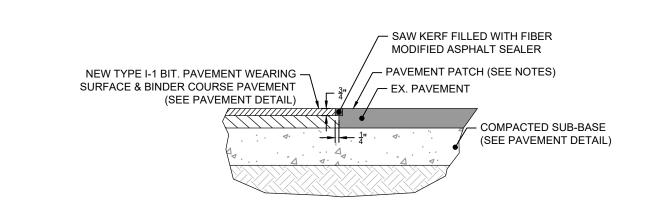
- 2. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
- 3. REMOVE ALL DEBRIS FROM THE SITE AND DISPOSE OF THE DEBRIS IN A PROPER AND LEGAL MANNER.
- 4. OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
- 5. COORDINATE WITH THE TOWN OF BOURNE ON ACCESS CLOSURE DATES AND NOTIFICATIONS.



BEEN RE-ESTABLISHED

2. POST WILL BE HOT ROLLED RAIL STEEL & 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 WILL BE PAINTED GREEN OR

> VISIBILITY FENCE NOT TO SCALE



AREA TO BE

PROTECTED

- 1. EXISTING BITUMINOUS PAVEMENT WILL BE REMOVED TO A CLEAN STRAIGHT EDGE VIA SAW CUTTING. THE SAW CUT WILL BE COMPLETED PERPENDICULAR TO THE ROADWAY/SIDEWALK. 2. PRIOR TO INSTALLING THE WEARING COURSE, THE EXISTING VERTICAL PAVEMENT SURFACE
- WILL BE SWEPT COMPLETELY CLEAN. 3. AFTER PROPER COMPACTION (SEE PAVEMENT DETAIL), SAW CUT NEW PAVEMENT ABUTMENT 3/4" DEEP & FILL WITH FIBER MODIFIED ASPHALT SEALER AS SHOWN.
 - **SAWCUT & PAVEMENT PATCH**

NOT TO SCALE

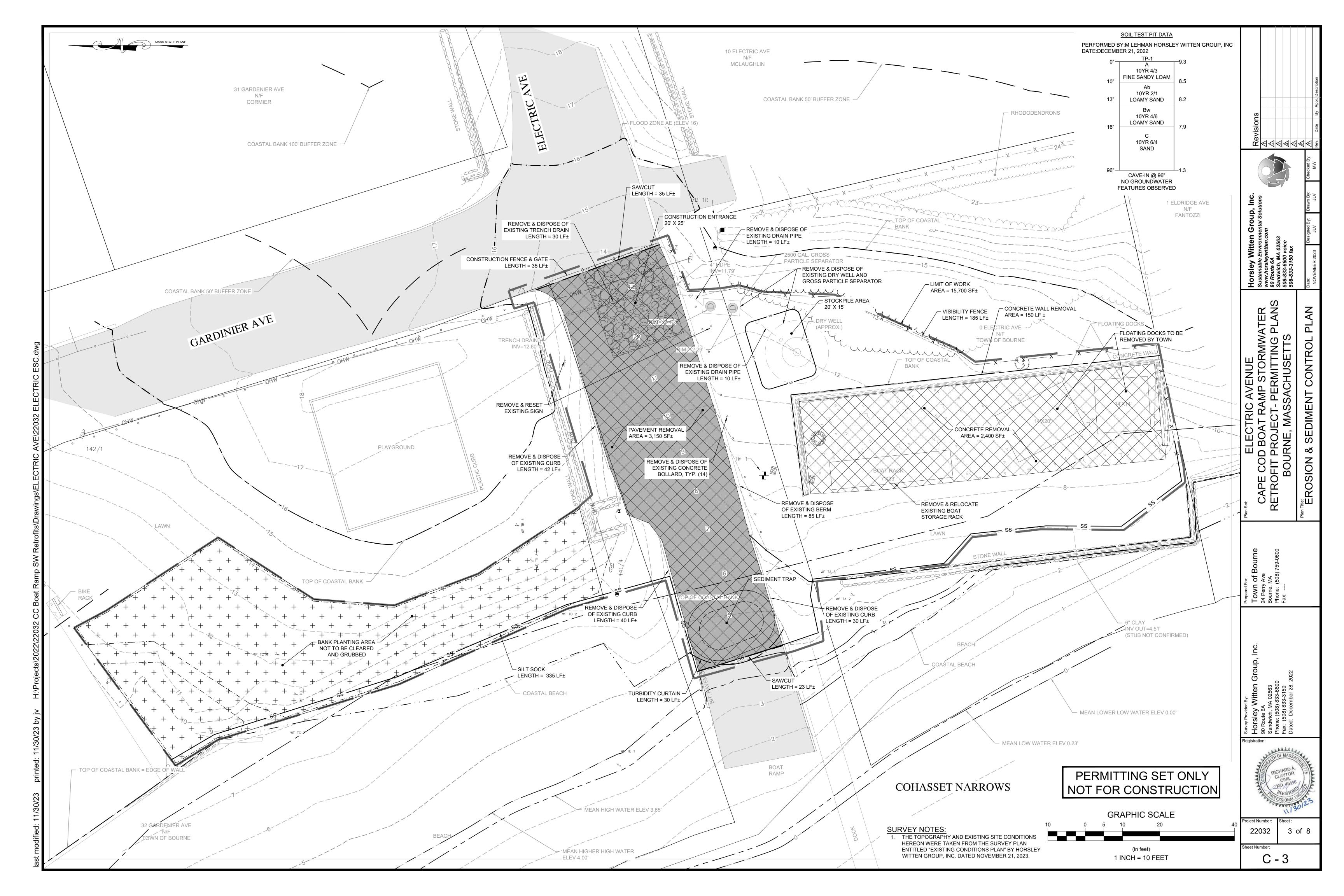
 INVESTIGATION OR GEOTECHNICAL R ALL DRAINAGE STRUCTURES AND PIP PAVING WILL <u>NOT BE ALLOWED</u> IF THI THIS INCLUDES THE STABILIZATION OF FLOORS AND SIDE SLOPES STORMWATER FACILITY OPE THE CONTRACTOR IS RESPONSIBLE FOR T OUTLINED BELOW DURING CONSTRUCTION AND THE ENGINEER. INSPECT AND RESTORE/CLEAN ALL S' AND INFILTRATION TRENCH) AS DESC REMOVE AND DISPOSE ALL SEDIMENT AT A MINIMUM INSPECT MONTHLY AN DURATION OF THE CONSTRUCTION PF SPECIFIC MAINTENANCE REQUIRED D A. <u>DRAINAGE STRUCTURES (WA</u> EXISTING AND PROPOSED DF DETERIORATION. CLEAN AND REQUIRED. INFILTRATION TRENCH: PROT SEDIMENT ACCUMULATION. IN NEEDED, AND CLOGGED PIPE B. <u>INFILTRATION SYSTEMS</u>: RE INCLUDING WEIR WALLS, DF ANY CLOGGED STRUCTURES 	3:1 OR FLATTER UNLESS OTHERW LS SHOWN AT 1 FOOT. (ALS SHOWN AT 1 FOOT. MENT AS NECESSARY TO ASSURE TO FINISH PAVEMENT OR GRADE TION MUST BE DONE IN STRICT AG EPORTS PREPARED FOR THIS SIT PES MUST BE CONNECTED TO THE E DRAINAGE SYSTEM FOR THE PR OF ALL DISTURBED AREAS CONTRI ERATION & MAINTENAN (HE PROPER INSPECTION AND MAIN AND UNTIL SUCH TIME THAT THE TORMWATER FACILITIES (WATER CRIBED BELOW OF SEDIMENT AND AND DEBRIS TO A PRE-APPROVED D AFTER STORM EVENTS GREATED ROJECT AND THE FIRST 3 MONTHS DURING CONSTRUCTION: ATER QUALITY UNIT, AND OVERFLOC RAINAGE STRUCTURES FOR PROF D REMOVE SEDIMENT FRO THE STI FIECT (INLET PROTECTION) AND RE USE INSPECTION PORT TO CHECK ES, IF NECESSARY. EQULARLY INSPECT TO ENSURE PF RAINAGE INLETS, OUTLET STRUCT S DURING INSPECTIONS. PRIOR TO	E A SMOOTH FIT AND CONTIN UNLESS NOTED OTHERWISH CCORDANCE WITH THE RECO TE. DRAINAGE SYSTEM PRIOR COPOSED PAVED AREA IS NO BUTING TO THE DRAINAGE S CE: INTENANCE OF ALL STORMW E ROADWAYS AND ASSOCIAT QUALITY UNIT, OVERFLOW S D DEBRIS PRIOR TO THE OWN D LOCATION. R THAN OR EQUAL TO 1" OF F AFTER CONSTRUCTION TO E DEBRIS OPERATION, COLLECTION RUCTURES (INCLUDING SUMF GULARLY INSPECT THE CATO TRENCH FOR SEDIMENT ACC ROPER FUNCTION. MONITOR A FURES AND SPILLWAYS, FOR O THE COMPLETION OF CONS	E. DMMENDATIONS OF ANY SUBSURFACE TO THE INSTALLATION OF ANY PAVEMENT. T COMPLETELY AND PROPERLY INSTALLEN YSTEMS AND ANY STORMWATER BASIN ATER MANAGEMENT FACILITIES AS ED UTILITIES ARE ACCEPTED BY THE OWN TRUCTURE (BUBBLER), BIORETENTION AR NER'S ACCEPTANCE.	Iey Witten Group, Inc. P J P J rable Environmental Solutions orsleywitten.com P J P J re 6A P A A P A re 6A P A A A re 6A P A A A re 6A P A A re 6A P A A re 6A P A A 3-6600 voice P A A 3-3150 fax Designed By: Drawn By: Checked By: A MBER 2023 JLV JLV MW Rev. Date E
NECESSARY. IF SEDIMENT O AND SURFACE ROTO-TILLED D. <u>ROUTINE MAINTENANCE</u> : OT PERIMETER AREAS, AND STR	R ORGANIC DEBRIS BUILD-UP LIMI TO A DEPTH OF 12". THER ROUTINE MAINTENANCE INC REET AND PARKING LOT SWEEPIN NT IN THE DRAINAGE SYSTEM. INS	TS THE INFILTRATION CAPAB	ILITIES, REMOVE THE TOP 6" OR GREATER ASH AND LITTER FROM PAVED AND INSTRUCTION TO AVOID EXCESSIVE CTURES FOR SEDIMENT ACCUMULATION	IWATER IG PLANS
EXISTING	PROPOSED	LIMIT OF WORK PROPERTY LINE (GIS) CURB BERM CENTERLINE CONTOUR - MINOR CONTOUR - MINOR CONTOUR - MAJOR PAVEMENT GRASS PAVE PAVEMENT REMOVAL GRASS PAVE PAVEMENT REMOVAL CONSTRUCTION FENCE VISIBILITY FENCE FENCE - CHAIN LINK FENCE - VINYL FENCE - WOOD STONE WALL - RETAINING WALL - STONE	SYMBOLS BENCHMARK BENCHMARK CONSED SPOT GRADE CLEANOUT CLEANO	Plan Set. CAPE COD BOAT RAMP STORMV CAPE COD BOAT RAMP STORMV RETROFIT PROJECT- PERMITTINC BOURNE, MASSACHUSETT Plan Tite. NOTES & LEGEND
UT	SS	CONCRETE STORMWATER AREA CROSSWALK/PAVEMENT STRIPING TREE LINE SILT SOCK SILT FENCE SAWCUT	GAS VALVE GUY TEST PIT UTILITY POLE WATER VALVE WF WETLAND FLAG	Prepared For: Town of Bourne 24 Perry Ave Bourne, MA Phone: (508) 759-0600 Fax:
G OHW D D		GAS LINE OVERHEAD WIRE DRAIN PIPE COASTAL BANK COASTAL BANK 50' BUFFE COASTAL BANK 100' BUFFE COASTAL BANK 100' BUFFE COASTAL BEACH FEMA FLOOD ZONE MEAN LOWER LOW WATER MEAN LOW WATER MEAN HIGHER HIGH WATE FILLED TIDELANDS	DENCH PICNIC TABLE R ZONE R ZONE	Rurey Provided By: Burvey Provided By: HORSIEV Witten Group, Inc. 90 Route 6A Sandwich, MA 02563 Phone: (508) 833-6600 Fax: (508) 833-3150 Dated: December 28, 2022

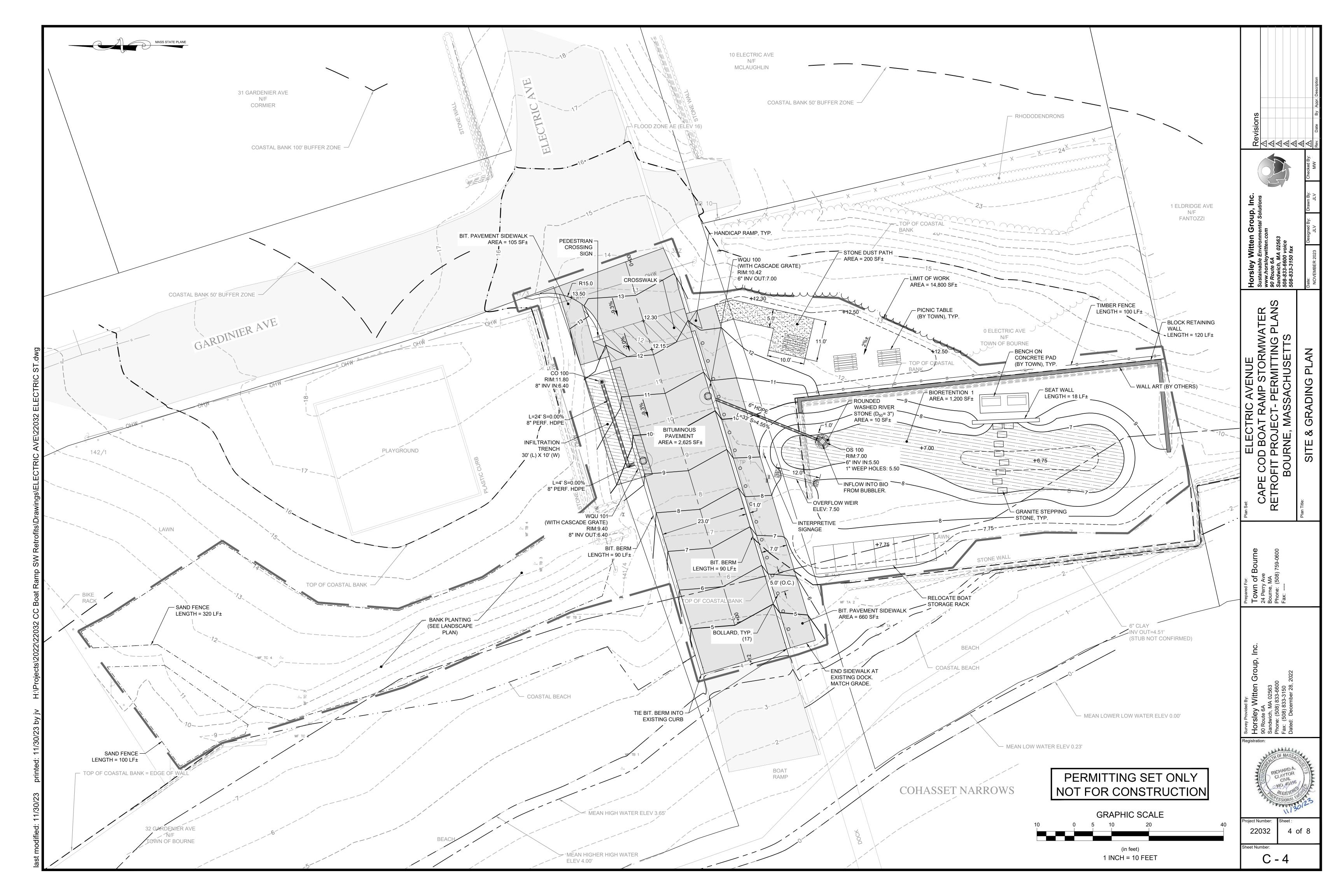
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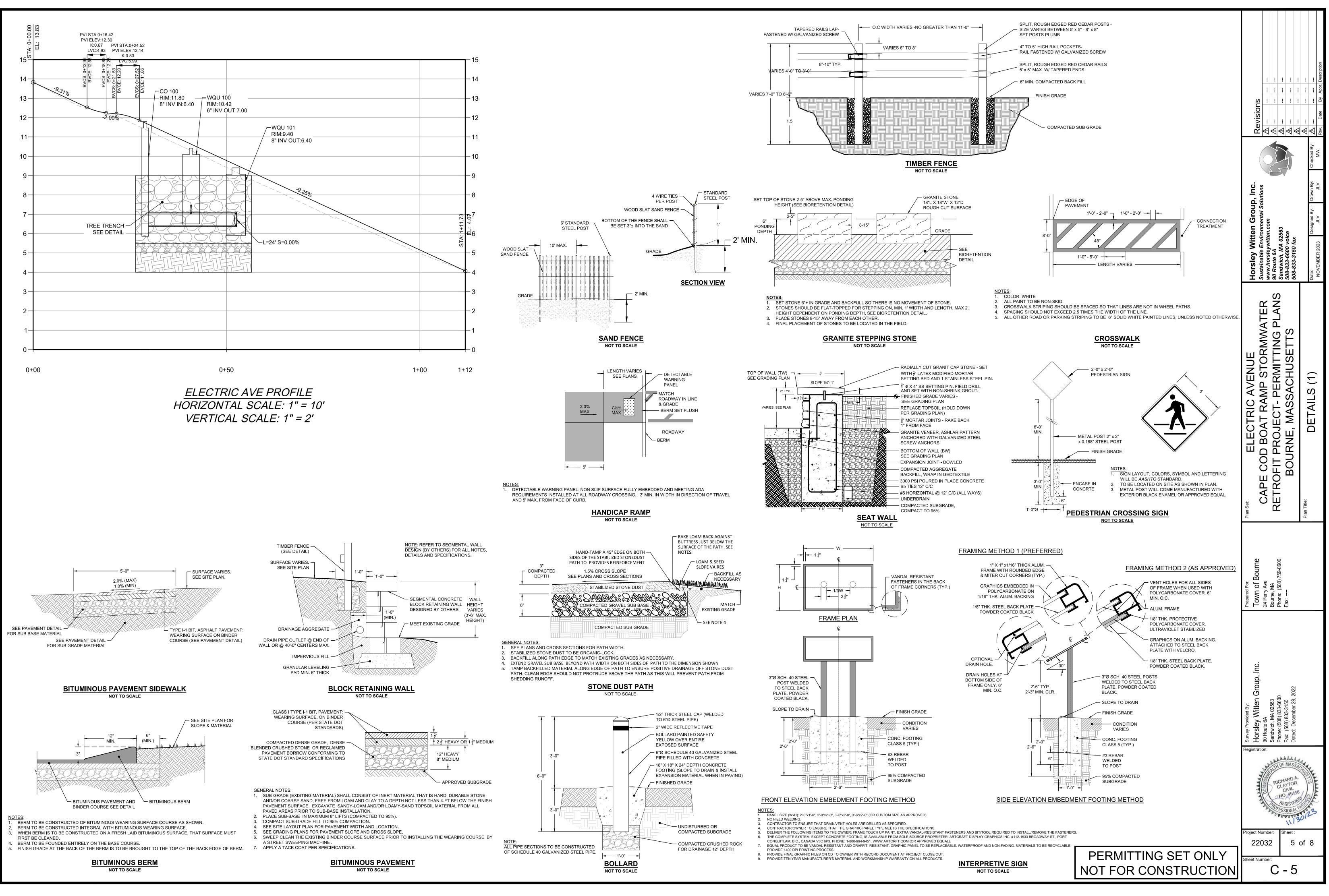
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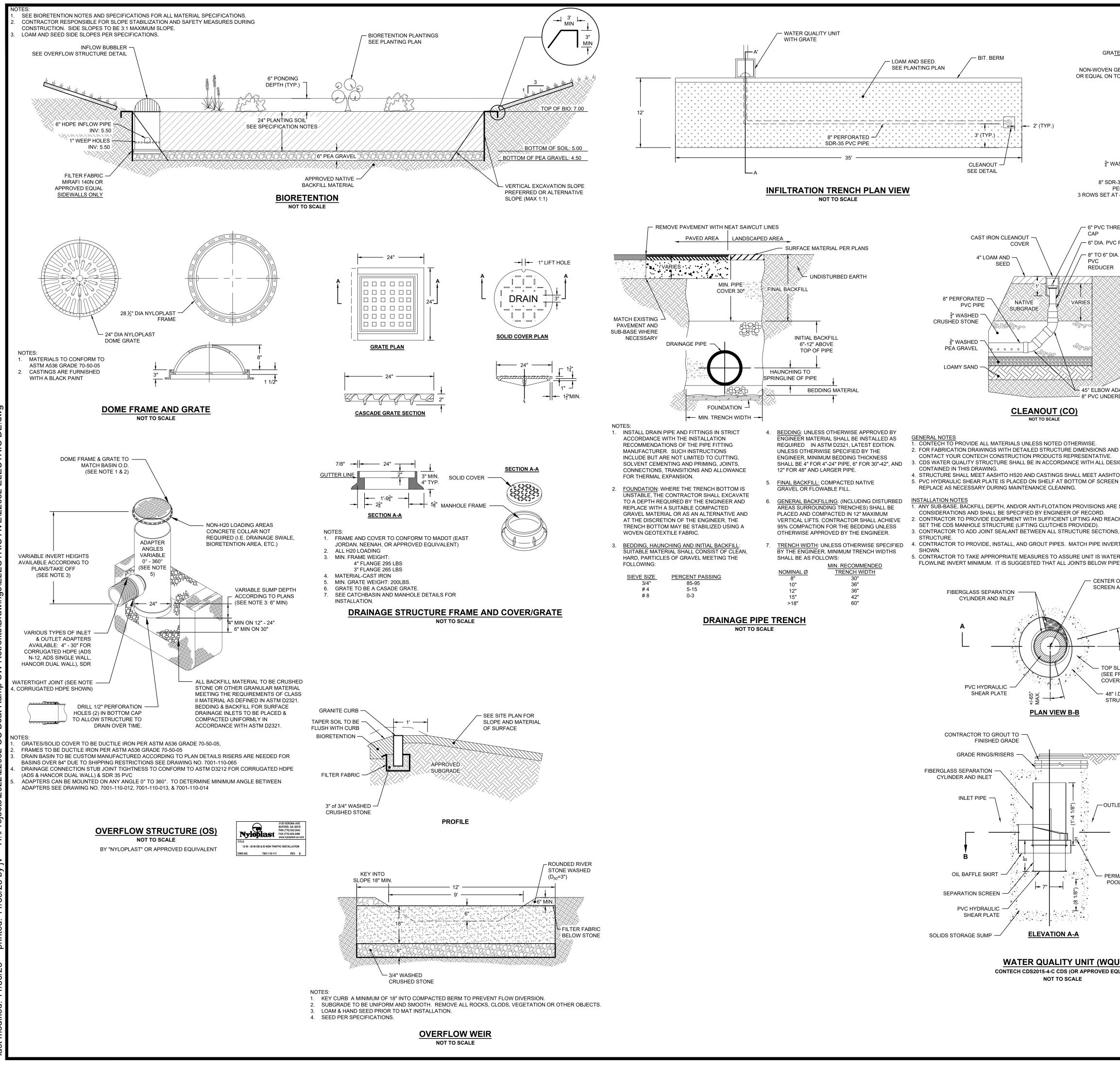
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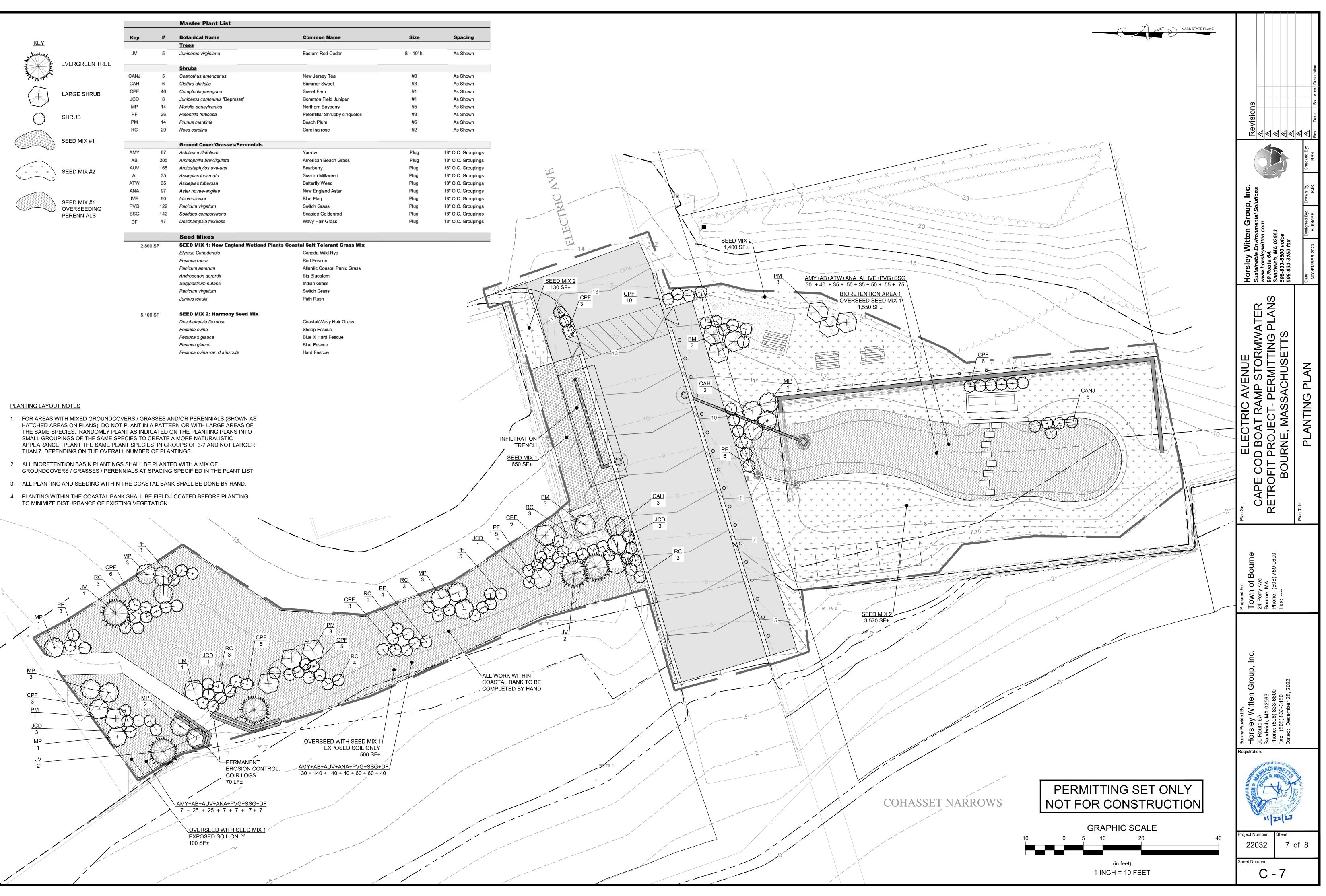




BIT. BERM - 4" LOAM AND SE WATER - SEE PLANTING F QUALITY UNIT SEE DETAIL]	ED PLAN		
GEOTEXTILE	TOP OF ³ / ₄ " WASHED CRUSHED STONE: 9.00		io
TOP & SIDES OF STONE			 Appr. Description
	NVERT PERFORATED PIPE: 6.40 BOTTOM OF $\frac{3}{4}$ " WASHED CRUSHED STONE: 5.50	Aevisions 合本 合本 合本 合本 合本 合本 合本 合本 合本 合本	Date By
VASHED CRUSHED STONE	BOTTOM OF PEA GRAVEL: 5.00	Revi 会社 一一一一	Rev.
R-35 PERFORATED PVC PIPE. 8" LEVEL, STABLE S PERFORATED SDR-35 PVC PIPE SCARIFIED TO 3" AT 4-8-12 O'CLOCK (120° APART) DO NOT COMPAC	DEPTH.		Checked By: MW
INFILTRATION TRENCH CROS	SS SECTION A-A'	ten Group, Inc. ronmental Solutions en.com 563 ce	/: Drawn By: JLV
		ten Gro ironmental en.com 2563 cce	Designed By: JLV
		Wit Envi esywitt MA 02 00 voi 50 fax	ate: NOVEMBER 2023
	-	Horsley Sustainable www.horsle 90 Route 6/ 508-833-660 508-833-310	Date: NOVEM
		ER ANS	
ADAPTER FOR ERDRAIN PIPE			
ND WEIGHTS, PLEASE		AVENUE MP STOF PERMITT SACHUSE	(2)
SIGN DATA AND INFORMATION TO M306 LOAD RATING. EN CYLINDER. REMOVE AND		TRIC AVENU T RAMP ST ECT- PERMI MASSACHU	AILS
RE SITE-SPECIFIC DESIGN ACH CAPACITY TO LIFT AND		$0 < \Xi$	DET
NS, AND ASSEMBLE ERTS WITH ELEVATIONS			
ER TIGHT, HOLDING WATER TO PE INVERTS ARE GROUTED. R OF CDS STRUCTURE,		CAPE CO RETROFIT BOU	
AND SUMP OPENING		CAPE RETROF B	Plan Title:
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EFRAME AND ER/GRATE DETAIL) ' I.D. MANHOLE RUCTURE		Prepared For: Town of Bourne 24 Perry Ave Bourne, MA Phone: (508) 759-0600 Fax:	
		Prepared For: Town of 24 Perry Ave Bourne, MA Phone: (508) Fax:	
ILET PIPE		vided By: • Witten Group, Inc. A MA 02563 8) 833-6600 833-3150 cember 28, 2022	
		ed By: Vitten Gr .02563 333-6600 3-3150 ber 28, 2022	
B RMANENT DOL ELEV.		Survey Provided By: Horsley Witten Grou 90 Route 6A Sandwich, MA 02563 Phone: (508) 833-6600 Fax: (508) 833-3150 Dated: December 28, 2022	
		Registration:	La.
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<u>IU)</u> EQUAL)		REGISTERS	ALL BAS
		Project Number: Sheet :	401-
	PERMITTING SET ONLY	Sheet Number:	of 8
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				Master Plant List		
		Key	#	Botanical Name	Common Name	Size
<u>KEY</u>				Trees		
- Junday		JV	5	Juniperus virginiana	Eastern Red Cedar	8' - 10' h.
	EVERGREEN TREE			Shrubs		
23 Martin		CANJ	5	Ceanothus americanus	New Jersey Tea	#3
Made		CAH	6	Clethra alnifolia	Summer Sweet	#3
	LARGE SHRUB	CPF	46	Comptonia peregrina	Sweet Fern	#1
	LARGE SHRUD	JCD	8	Juniperus communis 'Depressa'	Common Field Juniper	#1
		MP	14	Morella pensylvanica	Northern Bayberry	#5
\sim	SHRUB	PF	26	Potentilla fruticosa	Potentilla/ Shrubby cinquefoil	#3
{ + }	SHRUD	PM	14	Prunus maritima	Beach Plum	#5
a ad		RC	20	Rosa carolina	Carolina rose	#2
	SEED MIX #1			Ground Cover/Grasses/Perennials		
\sim		AMY	67	Achillea millefolium	Yarrow	Plug
\frown		AB	205	Ammophilia breviligulata	American Beach Grass	Plug
* *		AUV	165	Arctostaphylos uva-ursi	Bearberry	Plug
	SEED MIX #2	AI	35	Asclepias incarnata	Swamp Milkweed	Plug
\bigcirc \bigcirc		ATW	35	Asclepias tuberosa	Butterfly Weed	Plug
		ANA	97	Aster novae-angliae	New England Aster	Plug
		IVE	50	Iris versicolor	Blue Flag	Plug
	SEED MIX #1 OVERSEEDING	PVG	122	Panicum virgatum	Switch Grass	Plug
	PERENNIALS	SSG	142	Solidago sempervirens	Seaside Goldenrod	Plug
		DF	47	Deschampsia flexuosa	Wavy Hair Grass	Plug
				Seed Mixes		
		2,800) SF	SEED MIX 1: New England Wetland Plants	Coastal Salt Tolerant Grass Mix	
				Elymus Canadensis	Canada Wild Rye	
				Festuca rubra	Red Fescue	
				Panicum amarum	Atlantic Coastal Panic Grass	
				Andropogon gerardii	Big Bluestem	
				Sorghastrum nutans	Indian Grass	
				Panicum virgatum	Switch Grass	
				Juncus tenuis	Path Rush	
		5,100) SF	SEED MIX 2: Harmony Seed Mix		
				Deschampsia flexuosa	Coastal/Wavy Hair Grass	
				Festuca ovina	Sheep Fescue	
				Festuca x glauca	Blue X Hard Fescue	

- HATCHED AREAS ON PLANS), DO NOT PLANT IN A PATTERN OR WITH LARGE AREAS OF THE SAME SPECIES. RANDOMLY PLANT AS INDICATED ON THE PLANTING PLANS INTO SMALL GROUPINGS OF THE SAME SPECIES TO CREATE A MORE NATURALISTIC





GENERAL PLANTING NOTES:

- . THE FOLLOWING NOTES ARE PROVIDED AS GENERAL PLANTING GUIDELINES ONLY. THOROUGHLY REVIEW THE PROJECT SPECIFICATIONS FOR ALL LANDSCAPE REQUIREMENTS PRIOR TO THE COMMENCEMENT OF ANY LANDSCAPE WORK. SUBMIT IN WRITING TO THE LANDSCAPE ARCHITECT ANY QUESTIONS OR CLARIFICATIONS REQUIRED AT A MINIMUM OF 30 DAYS PRIOR TO ORDERING ANY MATERIALS OR BEGINNING ANY LANDSCAPE CONSTRUCTION.
- . SUBMIT TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL ALL REQUIRED LANDSCAPE SUBMITTALS AS DESCRIBED IN THE SPECIFICATIONS INCLUDING A PLANT LIST WITH PLANT SIZE AND QUANTITIES TO BE ORDERED PRIOR TO DELIVERY TO THE PROJECT SITE.
- . FURNISH AND INSTALL ALL PLANTS AS SHOWN ON THE DRAWINGS AND IN THE SIZE AND QUANTITIES SPECIFIED ON THE PLANTING SCHEDULE. PLANT SUBSTITUTION SELECTION MUST BE APPROVED BY BIOLOGIST OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 4. ALL PLANTS TO COMPLY WITH APPLICABLE REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK." LATEST EDITION, PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION INC.
- 5. PLANTS TO BE GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST TWO (2) YEARS. USE HEALTHY NURSERY GROWN PLANTS THAT HAVE A WELL DEVELOPED ROOT SYSTEM. PLANTS MUST BE FREE OF DISEASE, INSECTS, EGGS OR LARVAE.
- . INSTALL PLANTS WITHIN ONE (1) WEEK OF PURCHASE. IF PLANTS ARE TO BE STORED AT THE SITE PRIOR TO PLANTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THEY ARE PROPERLY MAINTAINED, WATERED, AND REMAIN HEALTHY.
- PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT. SUBMIT TO THE LANDSCAPE ARCHITECT IN WRITING THE PROPOSED PLANTING SCHEDULE. OBTAIN APPROVAL OF PLANTING SCHEDULE FROM THE LANDSCAPE ARCHITECT PRIOR TO PERFORMING ANY WORK.
- 8. SEASONS FOR PLANTING:

SPRING:	DECIDUOUS: EVERGREEN: PERENNIALS: GROUNDCOVERS:	APRIL 1 TO JUNE 15 APRIL 1 TO JUNE 15 APRIL 15 TO JUNE 1 APRIL 15 TO JUNE 1
FALL:	DECIDUOUS: EVERGREEN: PERENNIALS:	SEPTEMBER 15 TO NOVEMBER 15 SEPTEMBER 15 TO NOVEMBER 15 SEPTEMBER 15 TO NOVEMBER 15

SEPTEMBER 15 TO NOVEMBER 15

9. PLANTING UNDER FROZEN CONDITIONS WILL NOT BE PERMITTED. PLANTING BEFORE OR AFTER THE ABOVE REFERENCED PLANTING DATES WILL INCREASE THE LIKELIHOOD OF PLANT ESTABLISHMENT FAILURE. ANY DEVIATION FROM THE ABOVE REFERENCED PLANTING DATES IS UNDERTAKEN AT SOLE RISK OF THE CONTRACTOR AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY ADDITIONAL MAINTENANCE AND WATERING WHICH MAY BE REQUIRED TO ENSURE SATISFACTORY PLANT ESTABLISHMENT.

GROUNDCOVERS:

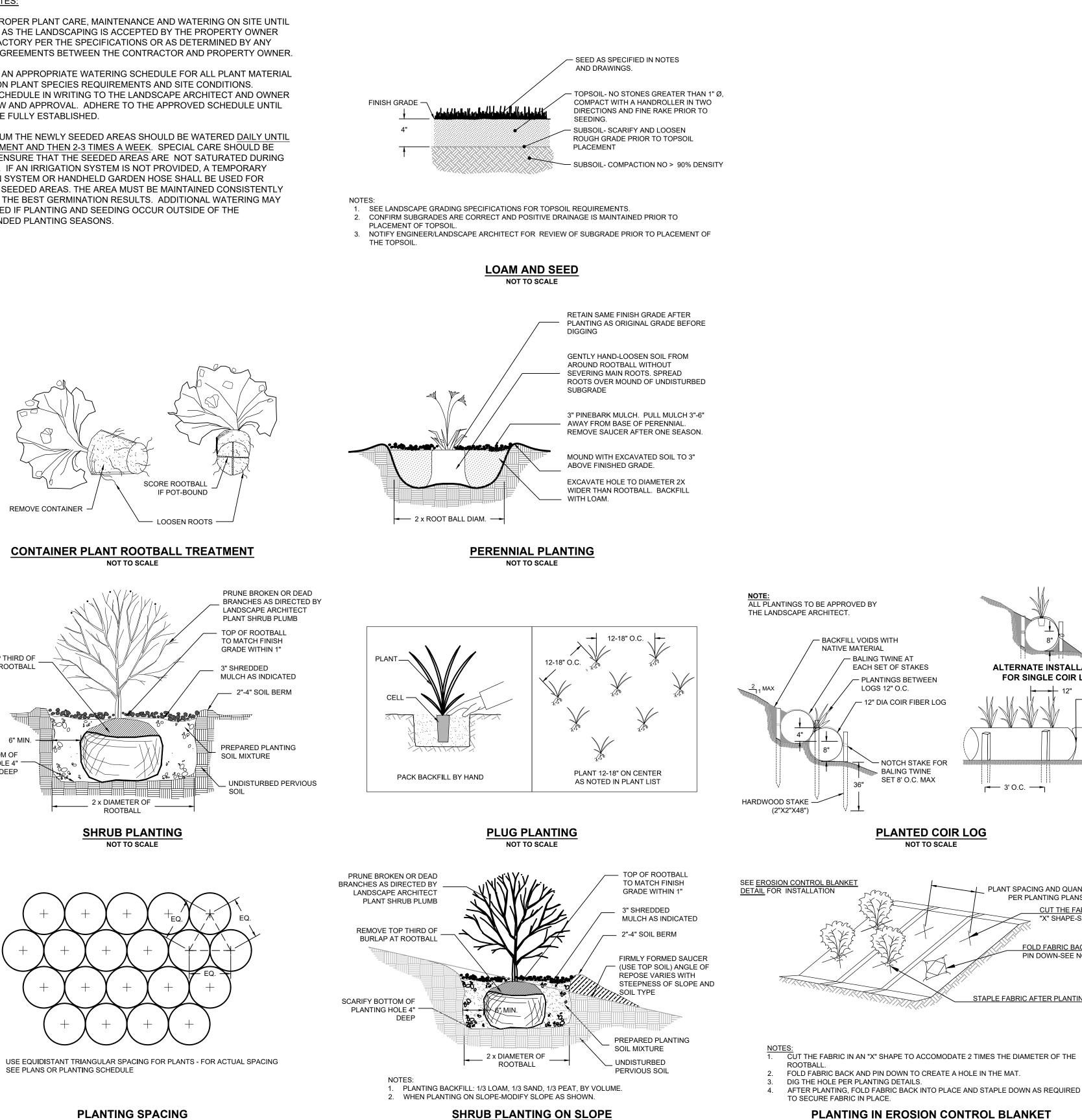
- 10. FURNISH ONE YEAR MANUFACTURER WARRANTY FOR TREES, PLANTS, AND GROUND COVER AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. EXCEPTIONS ARE DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE, NEGLECT OR ABUSE BY OWNER, OR ABNORMAL WEATHER CONDITIONS UNUSUAL FOR WARRANTY PERIOD. THE DATE OF FINAL ACCEPTANCE OF ALL COMPLETED PLANTING WORK ESTABLISHES THE END OF INSTALLATION AND INITIAL MAINTENANCE PERIOD AND THE COMMENCEMENT OF THE GUARANTEE PERIOD.
- 11. INSPECT ALL AREAS TO BE PLANTED OR SEEDED PRIOR TO STARTING ANY LANDSCAPE WORK. REPORT ANY DEFECTS SUCH AS INCORRECT GRADING INCORRECT SUBGRADE ELEVATIONS OR DRAINAGE PROBLEMS, ETC. TO THE LANDSCAPE ARCHITECT AND ENGINEER PRIOR TO BEGINNING WORK. COMMENCEMENT OF WORK INDICATES ACCEPTANCE OF SUBGRADE AREAS TO BE PLANTED, AND THE LANDSCAPE CONTRACTOR ASSUMES RESPONSIBILITY FOR ALL LANDSCAPE WORK.
- 12. PROVIDE PROPER PREPARATION OF ALL PROPOSED PLANTED AND SEEDED AREAS PER THE NOTES AND SPECIFICATIONS.
- 13. ALL PLANT LAYOUT AND ACTUAL PLANTING LOCATIONS ARE TO BE FIELD VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING. NOTIFY THE LANDSCAPE ARCHITECT AT A MINIMUM OF 48 HOURS IN ADVANCE PRIOR TO SCHEDULING ANY FIELD INSPECTIONS.
- 14. BALL AND BURLAP: REMOVE BURLAP AND WIRE BASKETS FROM TOPS OF BALLS AND FROM TOP HALF OF ROOTBALL AS INDICATED ON DRAWINGS. REMOVE PALLETS, IF ANY, BEFORE SETTING.
- 15. POTTED PLANTS: REMOVE THE PLANT FROM THE POT AND LOOSEN OR SCORE THE ROOTS BEFORE PLANTING TO PROMOTE OUTWARDS ROOT GROWTH INTO THE SOIL.
- 16. PLUGS: PLANT UPRIGHT AND NOT AT AN ANGLE. DIG PLANTING HOLES LARGE ENOUGH AND DEEP ENOUGH TO ACCOMMODATE THE ENTIRE ROOT MASS. PLANT PLUGS WITH NO TWISTED OR BALLED ROOTS AND WITH NO ROOTS EXPOSED ABOVE THE GRADE LINE. HAND PACK THE SOIL AROUND THE ENTIRE PLUG ROOT MASS
- 17. DIG THE THE PLANTING HOLE TO THE SAME DEPTH AS THE ROOT BALL AND TWO TO THREE TIMES WIDER. SCORE ALL SIDES OF THE HOLE, PLACE THE PLANT IN THE HOLE SO THE TOP OF ROOT BALL IS EVEN WITH SOIL SURFACE. FILL THE HOLE HALFWAY AND THEN ADD WATER ALLOWING IT TO SEEP INTO BACK FILLED MATERIAL. BE SURE TO REMOVE ALL AIR POCKETS FROM BACK FILLED SOIL. DO NOT SPREAD SOIL ON TOP OF THE ROOTBALL. IF SOIL IS EXTREMELY POOR, REPLACE BACK FILL WITH GOOD QUALITY TOP SOIL. AMEND THE SOIL, AS NECESSARY.
- 18. CREATE A 2" TO 4" BERM AROUND THE EDGE OF PLANTING HOLE WITH REMAINING SOIL TO RETAIN WATER.
- 19. REMOVE ALL PLANT TAGS AND FLAGS FROM THE PLANTS.
- 20. MULCH ALL PLANTING BEDS AS INDICATED ON DRAWINGS. UNLESS NOTED OTHERWISE, ALL PLANTS TO RECEIVE 2-3 INCHES OF MULCH. DO NOT PILE OR MOUND MULCH AROUND THE PLANT STEMS OR TRUNK. DO NOT MULCH WITHIN THE BIORETENTION AREAS.
- 21. TRIM BROKEN AND DEAD BRANCHES FROM SHRUBS AFTER PLANTING. NEVER CUT A LEADER.
- 22. THE SITE IS LOCATED ADJACENT TO A WETLAND RESOURCE AREA, THEREFORE, DO NOT USE NITROGEN CONTAINING FERTILIZERS, PESTICIDES OR CHEMICALS DURING PLANTING AND MAINTENANCE OF THE LANDSCAPING OR LAWN AREAS UNLESS APPROVED BY THE CONSERVATION COMMISSION.

GENERAL SEEDING NOTES:

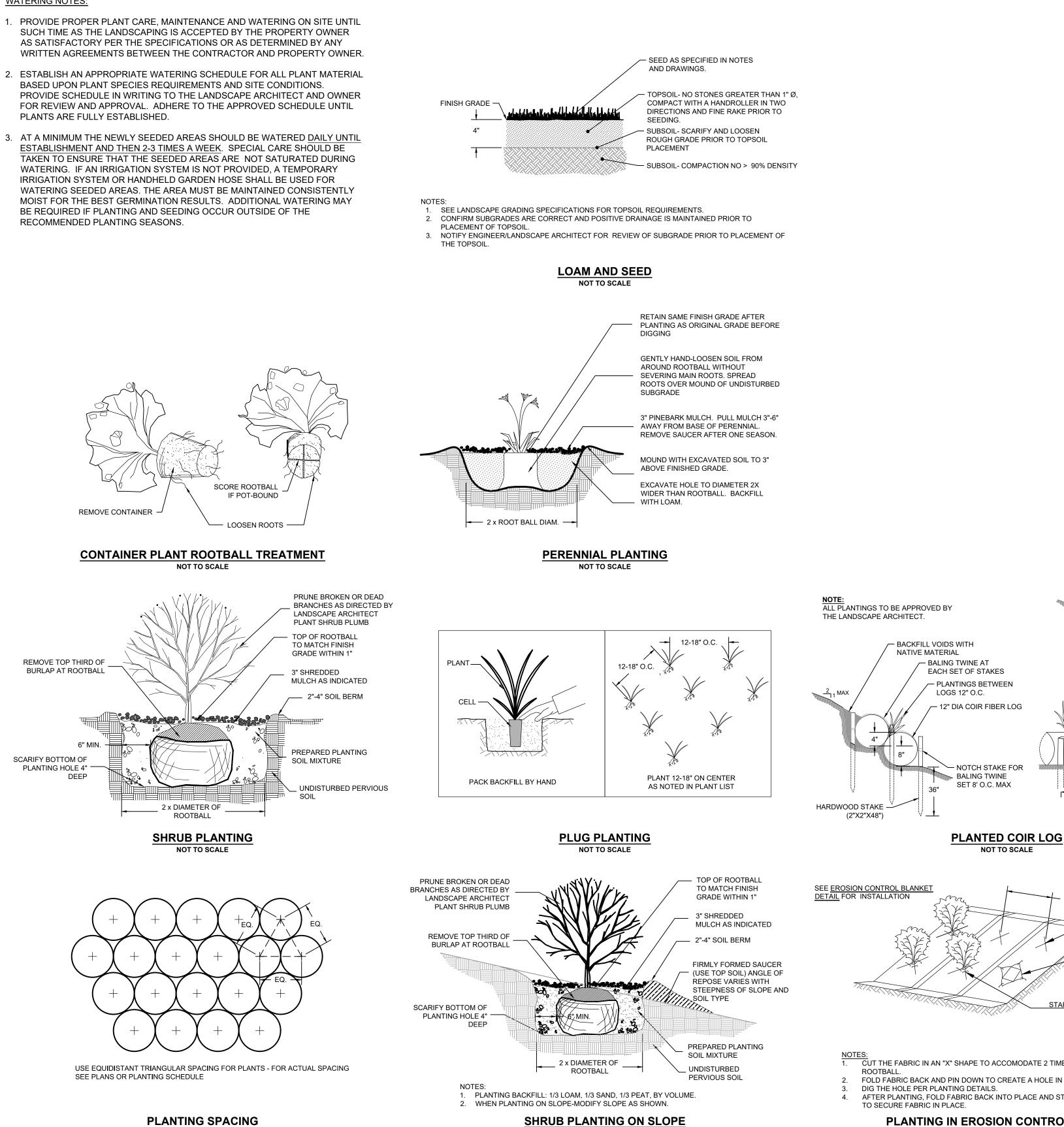
- 1. SEND A REPRESENTATIVE SAMPLE OF THE TOPSOIL TO A TESTING LABORATORY FOR STANDARD SOIL ANALYSIS AS DESCRIBED IN THE SPECIFICATIONS. SUBMIT TO THE LANDSCAPE ARCHITECT AND ENGINEER TEST RESULTS WITH RECOMMENDED SOIL TREATMENTS TO PROMOTE PLANT AND GRASS GROWTH. CORRECT DEFICIENCIES IN THE LOAM AND STOCKPILED TOPSOIL AS DIRECTED BY THE TESTING AGENCY.
- 2. ALL AREAS THAT ARE DISTURBED AND/OR GRADED DURING CONSTRUCTION ARE TO BE BROUGHT TO FINISHED GRADE WITH AT LEAST 4" MINIMUM DEPTH OF GOOD QUALITY LOAM AND SEEDED WITH A QUICK GERMINATING GRASS SEED SUCH AS NEW ENGLAND EROSION CONTROL RESTORATION MIX OR AS SPECIFIED ON THE PLANS.
- 3. PRIOR TO THE PLACEMENT OF TOP SOIL, LOOSEN THE SUBGRADE OF ALL PROPOSED SEEDED AREAS TO A DEPTH OF 6" AND RAKE TO REMOVE STONES LARGER THAN 1 INCH, STICKS, ROOTS, RUBBISH AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE TO AN OFF SITE LOCATION.
- 4. DO NOT SPREAD TOPSOIL IF THE SUBGRADE IS FROZEN, EXCESSIVELY WET, COMPACTED OR NOT PROPERLY PREPARED PER THE NOTES AND SPECIFICATIONS.
- 5. SEE SPECIFICATIONS FOR SEASONAL REQUIREMENTS FOR SEEDING.

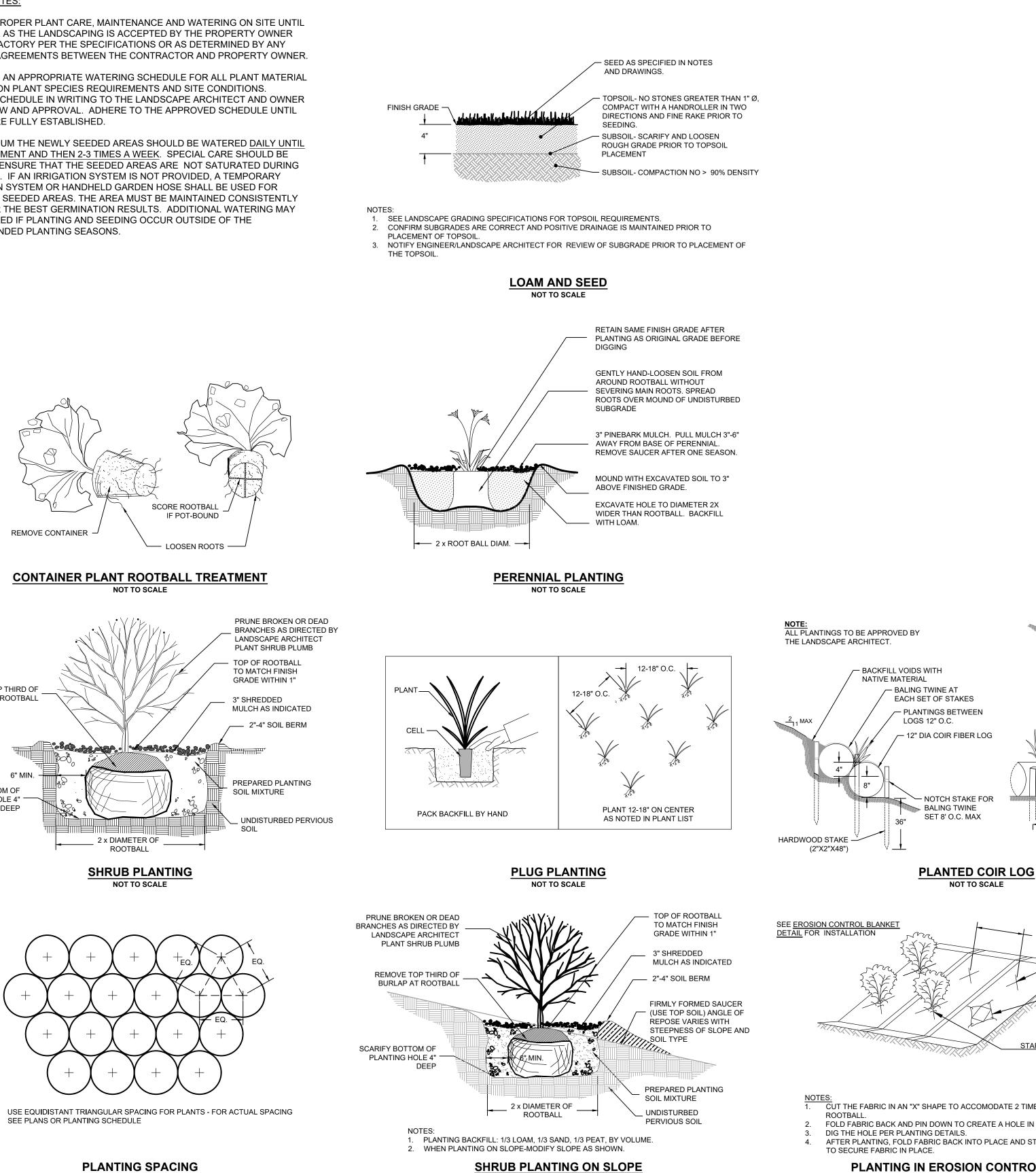
WATERING NOTES:

- PLANTS ARE FULLY ESTABLISHED.
- BE REQUIRED IF PLANTING AND SEEDING OCCUR OUTSIDE OF THE RECOMMENDED PLANTING SEASONS.

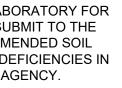


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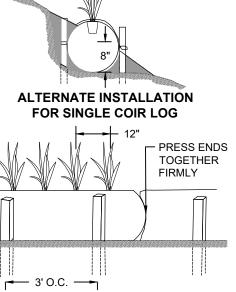
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NOT TO SCALE

STAPLE FABRIC AFTER PLANTING

FOLD FABRIC BACK AND PIN DOWN-SEE NOTES

PLANT SPACING AND QUANTITIES PER PLANTING PLANS CUT THE FABRIC IN AN "X" SHAPE-SEE NOTES



NOT FOR CONSTRUCTION

PERMITTING SET ONLY	

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	Checked By: BRK
Horsley Witten Group, Inc. Sustainable Environmental Solutions www.horsleywitten.com 90 Route 6A Sandwich, MA 02563 508-833-6600 voice 508-833-3150 fax	Designed By: Drawn By: KJK/MBE KJK
Horsley Witten Group, Inc Sustainable Environmental Solutions www.horsleywitten.com 90 Route 6A Sandwich, MA 02563 508-833-6600 voice 508-833-3150 fax	Date: D NOVEMBER 2023
Plan Set CAPE COD BOAT RAMP STORMWATER CAPE COD BOAT RAMP STORMWATER RETROFIT PROJECT- PERMITTING PLANS BOURNE, MASSACHUSETTS	PLANTING DETAILS
Prepared For: Town of Bourne 24 Perry Ave Bourne, MA Phone: (508) 759-0600 Fax:	
Survey Provided By: Horsley Witten Group, Inc. 90 Route 6A Sandwich, MA 02563 Phone: (508) 833-6600 Fax: (508) 833-3150 Dated: December 28, 2022	
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Project Number: Sheet : 22032 8 of Sheet Number:	8

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