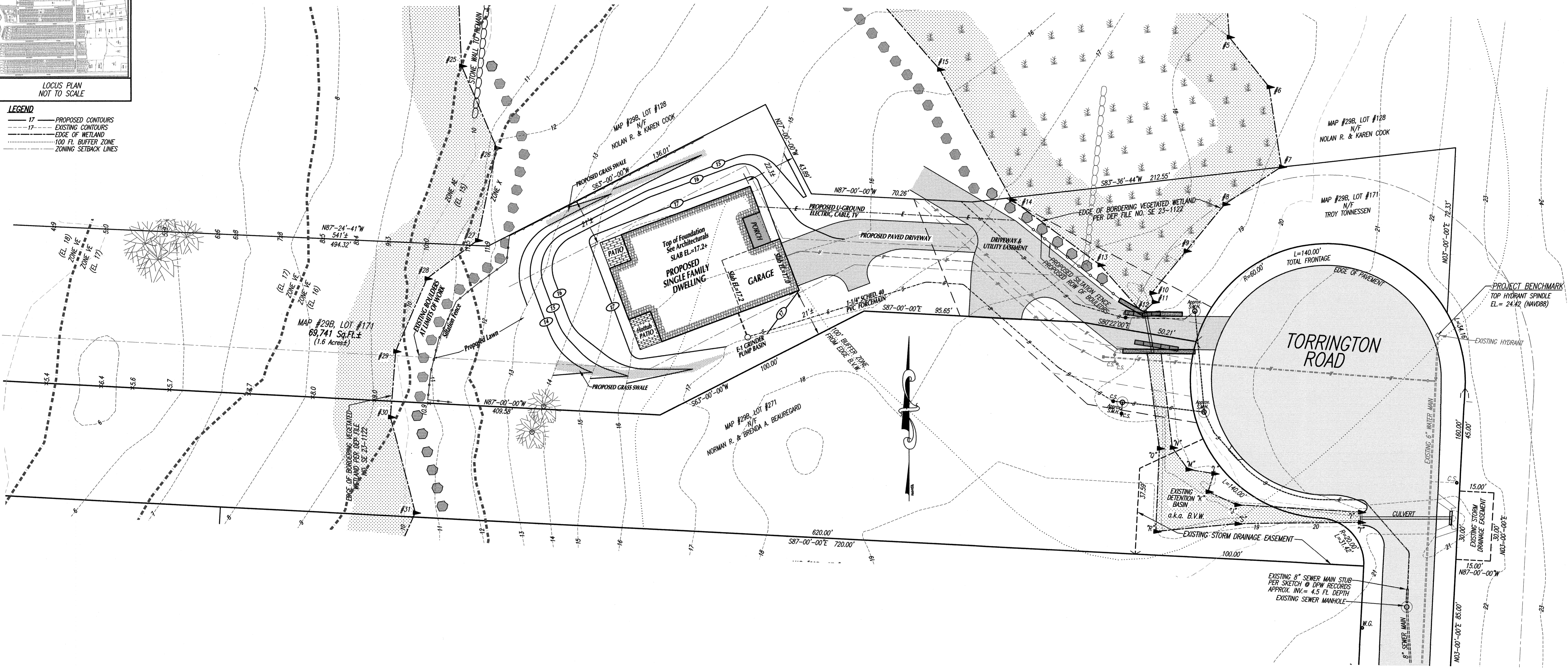
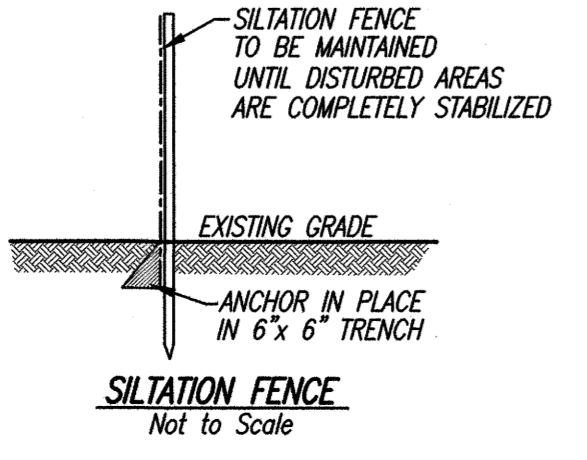


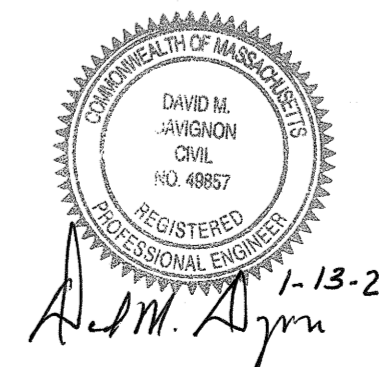
**LEGEND**  
 - - - 17 PROPOSED CONTOURS  
 - - - 17 EXISTING CONTOURS  
 - - - EDGE OF WETLAND  
 - - - 100 FT. BUFFER ZONE  
 - - - ZONING SETBACK LINES



- GENERAL NOTES:**
- 1.) CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION THROUGH "DIG SAFE" AND OTHER APPROPRIATE AGENCIES, AND REPORT ANY DISCREPANCIES TO THIS OFFICE.
  - 2.) PRIOR TO ANY CONSTRUCTION, CONTRACTOR SHALL INSTALL SILTATION MEASURES WHICH SHALL BE INSPECTED BY THE CONSERVATION COMMISSION AGENT BEFORE CONTINUATION OF WORK.
  - 3.) CONTRACTOR SHALL NOTIFY THIS OFFICE OF ANY AND ALL DISCREPANCIES FOUND BETWEEN THE SITE CONDITIONS AND THOSE SHOWN ON THIS PLAN PRIOR TO THE CONTINUATION OF WORK.
  - 4.) ANY AND ALL CHANGES FROM THE SITE DESIGN LAYOUT SHOWN MUST BE APPROVED BY THIS OFFICE, THE CONSERVATION COMMISSION AND OTHER APPROPRIATE LOCAL OFFICIALS.
  - 5.) ALL SEWER AND WATER TIE-IN CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE TOWN OF FAIRHAVEN B.P.W. - SEWER DEPARTMENT REQUIREMENTS.
  - 6.) PRIOR TO BACKFILLING THE SEWER AND WATER TRENCHES, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE TOWN OF FAIRHAVEN B.P.W. - SEWER AND WATER DEPARTMENTS FOR INSPECTIONS.
  - 7.) ALL CONCRETE WASHOUT FROM CEMENT TRUCKS SHALL OCCUR WITHIN THE BUILDING FOOTPRINTS.



**SITE INFORMATION:**  
 ASSESSORS MAP # 298  
 ASSESSORS LOTS # 171  
 SITE ADDRESS: TORRINGTON ROAD  
 ZONING DISTRICT: RURAL RESIDENCE  
 CURRENT BUILDING SETBACKS:  
 FRONT: 30' SIDE: 20'  
 REAR: 30' ELEV. N/A  
 FEMA FLOOD ZONE: X  
 FIRM COMMUNITY PANEL NO. 25025C 0501E  
 OWNERS/APPLICANTS:  
 EDWARD & LISA LAVALETTE  
 21 IVY LANE  
 MILFORD, MA 01757  
 DEED BOOK 12202, PAGE 312.



NOTES:  
 THE PURPOSE OF THIS PLAN IS TO SUPERSEDE THE PREVIOUS 9-02-11 SITE PLAN OF RECORD PREPARED FOR TROY TENNESSEN AND APPROVED UNDER DEP FILE NO. SE 23-1122 FOR THE DEVELOPMENT OF THE SUBJECT HOUSE SITE UNDER A NEW ORDER OF CONDITIONS. WORK COMPLETED TO DATE INCLUDES THE INSTALLATION OF THE COMMON DRIVEWAY ENTRANCE AND WATER AND SEWER SVC. CONNECTION LINES.

Rev. #	DATE	BY	DESCRIPTION
2	1-13-20	D.M.D.	CHANGE HOUSE FOOTPRINT, OMIT INGROUND POOL
1	5-28-19	D.M.D.	REDUCE RET. WALL & POOL PATIO HEIGHT BY 6 FT. + AND CHANGE ENGINEERING COMPANY NAME

**SITE PLAN**  
 SHOWING A PROPOSED HOUSE  
 on TORRINGTON ROAD in  
 FAIRHAVEN, MA.  
 PREPARED FOR  
**EDWARD & LISA LAVALETTE**

SCALE: 1"=20'  
 DATE: JANUARY 25, 2019

**SCHNEIDER, DAVIGNON & LEONE, INC.**  
 PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS  
 1 COUNTY RD, P.O. BOX 480, MATTAPOISETT, MA 02739  
 1-508-758-7866

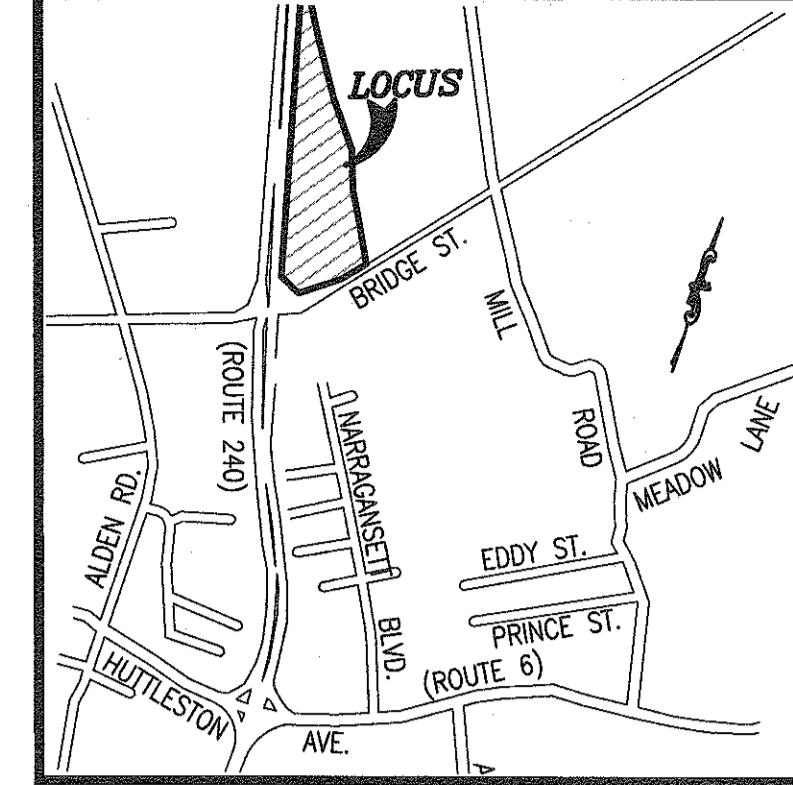
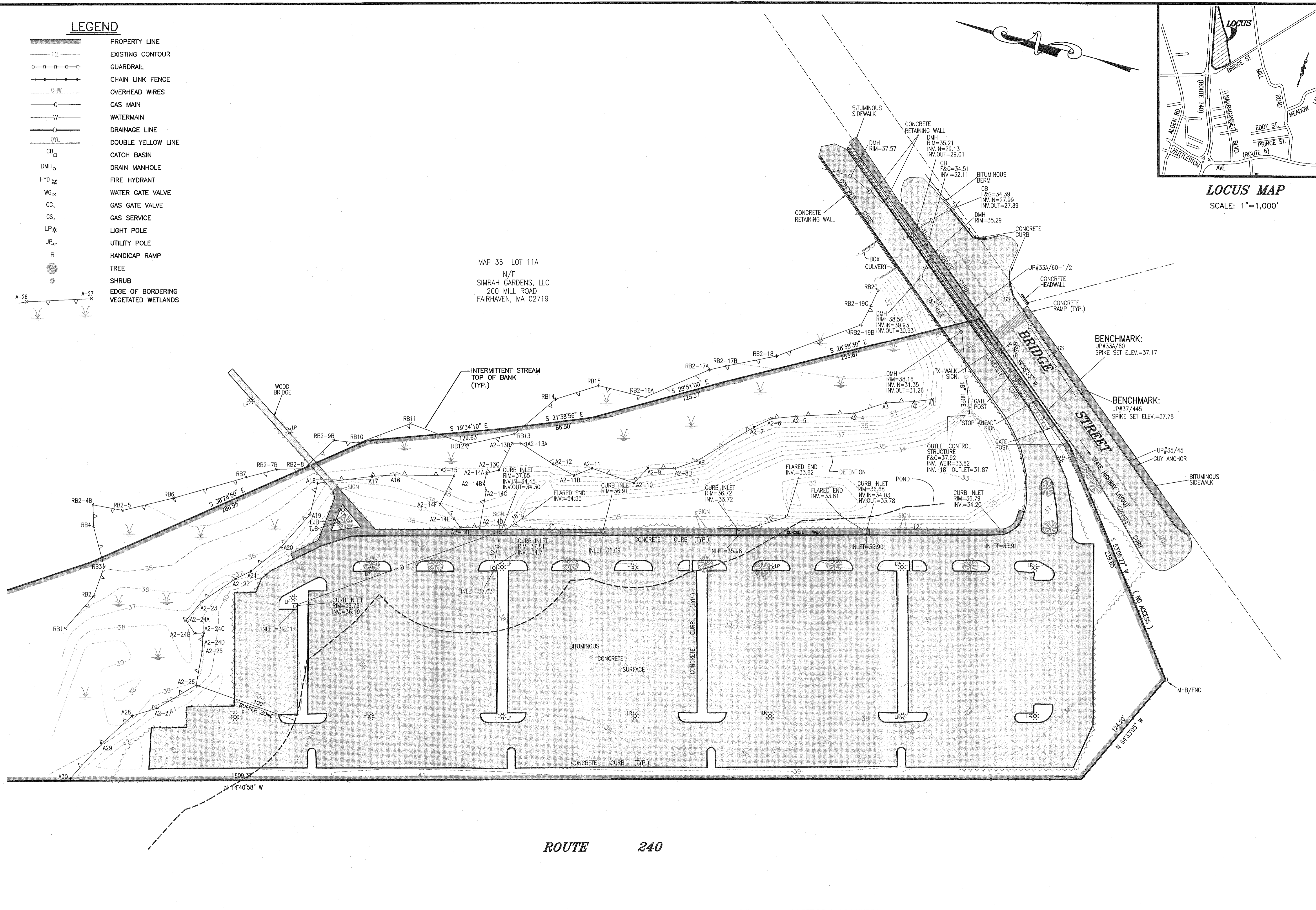
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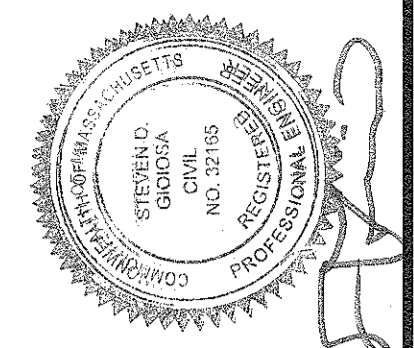
**LEGEND**

- 12 — PROPERTY LINE
- - - - - EXISTING CONTOUR
- GUARDRAIL
- x—x— CHAIN LINK FENCE
- OHV— OVERHEAD WIRES
- G— GAS MAIN
- W— WATERMAIN
- D— DRAINAGE LINE
- DYL— DOUBLE YELLOW LINE
- CB □ CATCH BASIN
- DMH ○ DRAIN MANHOLE
- HYD ✱ FIRE HYDRANT
- WG ✱ WATER GATE VALVE
- GG ✱ GAS GATE VALVE
- GS ✱ GAS SERVICE
- LP ✱ LIGHT POLE
- UP ✱ UTILITY POLE
- R ○ HANDICAP RAMP
- TREE
- SHRUB
- ▽— EDGE OF BORDERING VEGETATED WETLANDS

MAP 36 LOT 11A  
 N/F  
 SIMRAH GARDENS, LLC  
 200 MILL ROAD  
 FAIRHAVEN, MA 02719



**LOCUS MAP**  
 SCALE: 1"=1,000'



App'd. by	Revision Description	Date	No.
			1

scale: 1"=40'  
 date: AUGUST 5, 2021  
 drawn: DJF  
 checked: SDG  
 approved: SDG  
 sheet 1 of 1  
 drawing number: EC-1

project: SELF-STORAGE FACILITY ASSESSORS MAP 36 - LOT 15J FAIRHAVEN, MASSACHUSETTS  
 client: FAIRHAVEN PROPERTIES, LLC  
 drawing title: EXISTING CONDITIONS

SITEC, Inc.  
 449 France Corner Road  
 (508) 898-7477  
 (508) 898-2335  
 FAX (508) 898-7554  
 WWW.SITEC-ENGINEERING.COM

**SITEC**  
 Civil and Environmental Engineering  
 Land Use Planning

Acad No. FVN 20-7565 EC.dwg  
 File No. 304-338

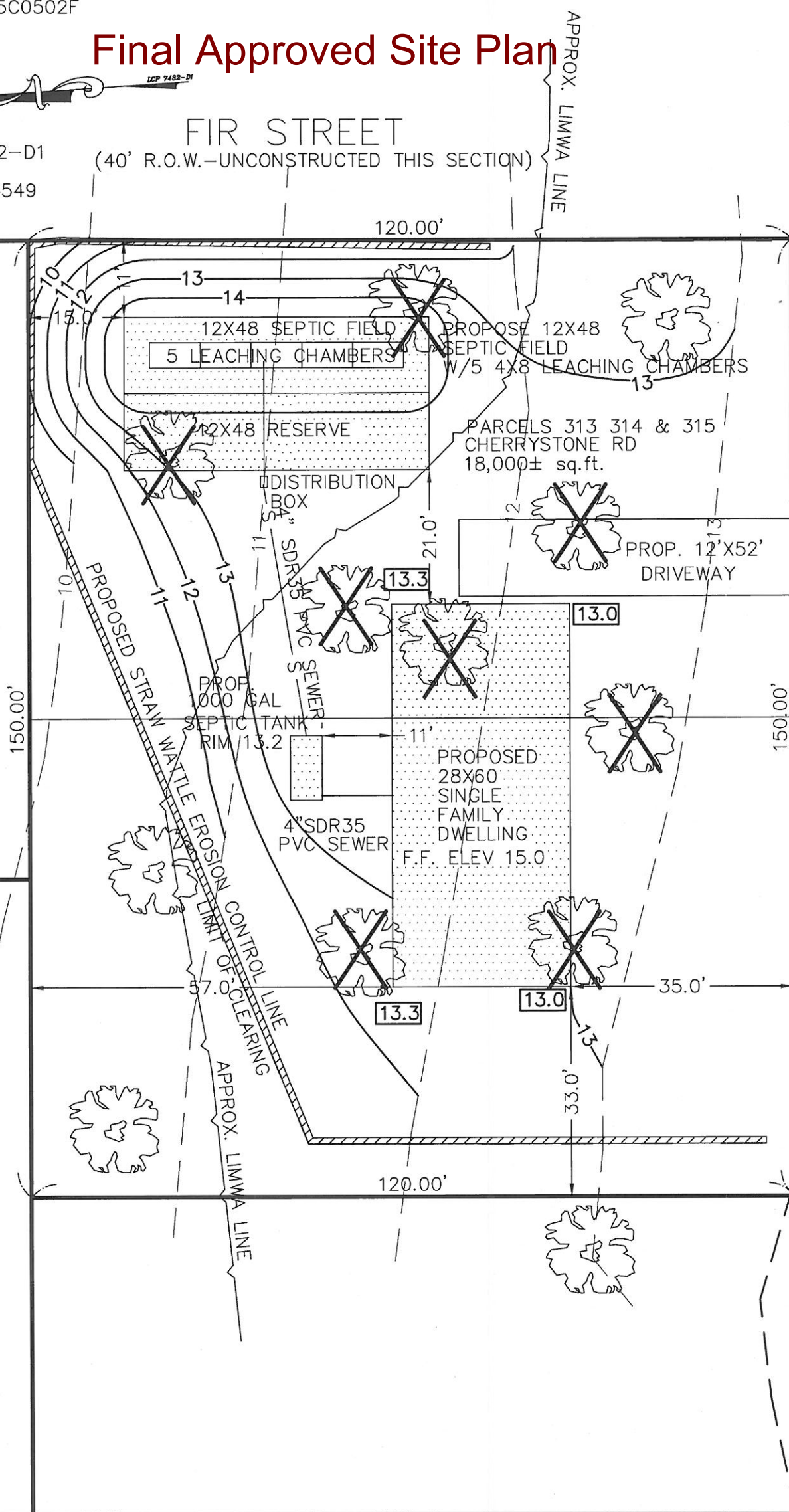


NOTE: NO BORDERING VEGETATED WETLAND WITHIN 100' OF LOCUS  
 ENTIRE LOT RESIDES IN FEMA AE14 FLOOD ZONE AS  
 SHOWN ON PANEL 25005C0502F

# Final Approved Site Plan

REFERENCES:  
 LAND COURT PLAN 7432-D1  
 DEED:  
 CERTIFICATES 14548, 14549

FIR STREET  
 (40' R.O.W.-UNCONSTRUCTED THIS SECTION)



CHERRYSTONE ROAD  
 (40' R.O.W.-UNCONSTRUCTED THIS SECTION)



TREES TO BE REMOVED

APPROX. LIMIT OF MODERATE  
 WAVE ACTION LINE

EBONY STREET  
 (40' R.O.W.)



PARCEL ID 43B-313, 43B-315

ADD GRADING AROUND SEPTIC SYSTEM	L.J.B.	4/26/2021
<b>CONSERVATION SITE PLAN</b> LOTS 313, 314 & 315 CHERRYSTONE ROAD WEST ISLAND FAIRHAVEN MA FOR <b>HENEBURY FAMILY TRUST</b>		
<b>CIVIL ENVIRONMENTAL CONSULTANTS LLC</b> 8 OAK STREET PEABODY, MA 01960 (978)531-1191		
SHEET NO: 1 OF 1	DATE 4/2/2021	JOB NO:
	DRAWN BY: L.J.B.	

COMMONWEALTH OF MASSACHUSETTS  
 LEONARD JOSEPH BOUFFARD  
 No. 56150  
 PROFESSIONAL LAND SURVEYOR

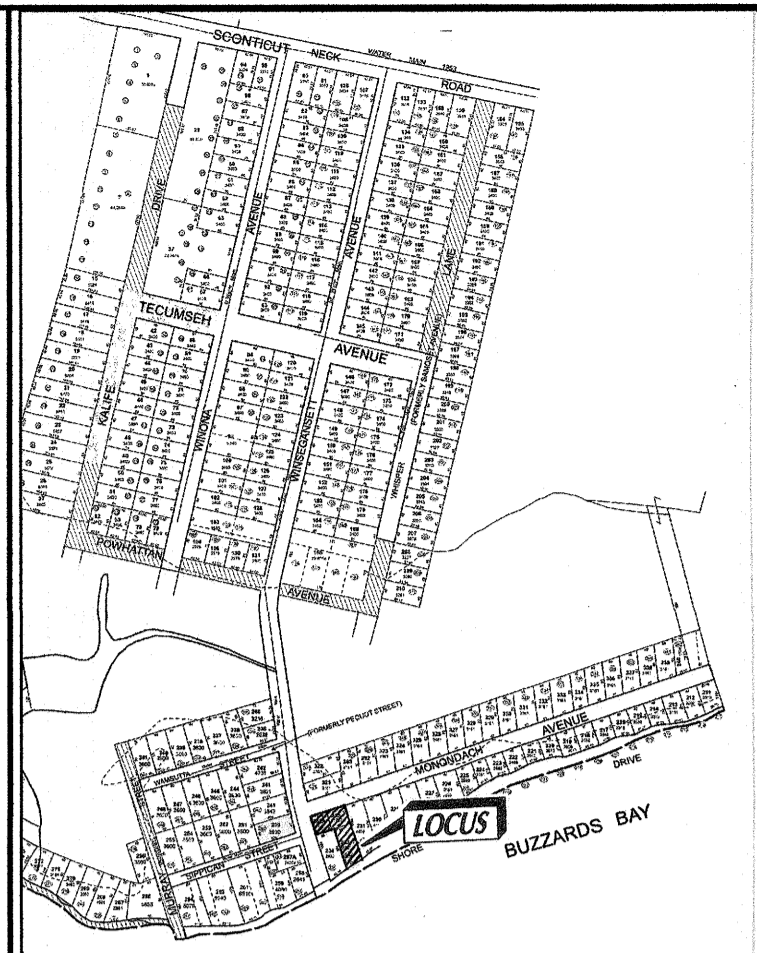
OWNER: HENEBURY FAMILY TRUST  
 CATHERINE D HENEBURY TRUSTEE  
 22 GREEN STREET FAIRHAVEN MA 02719





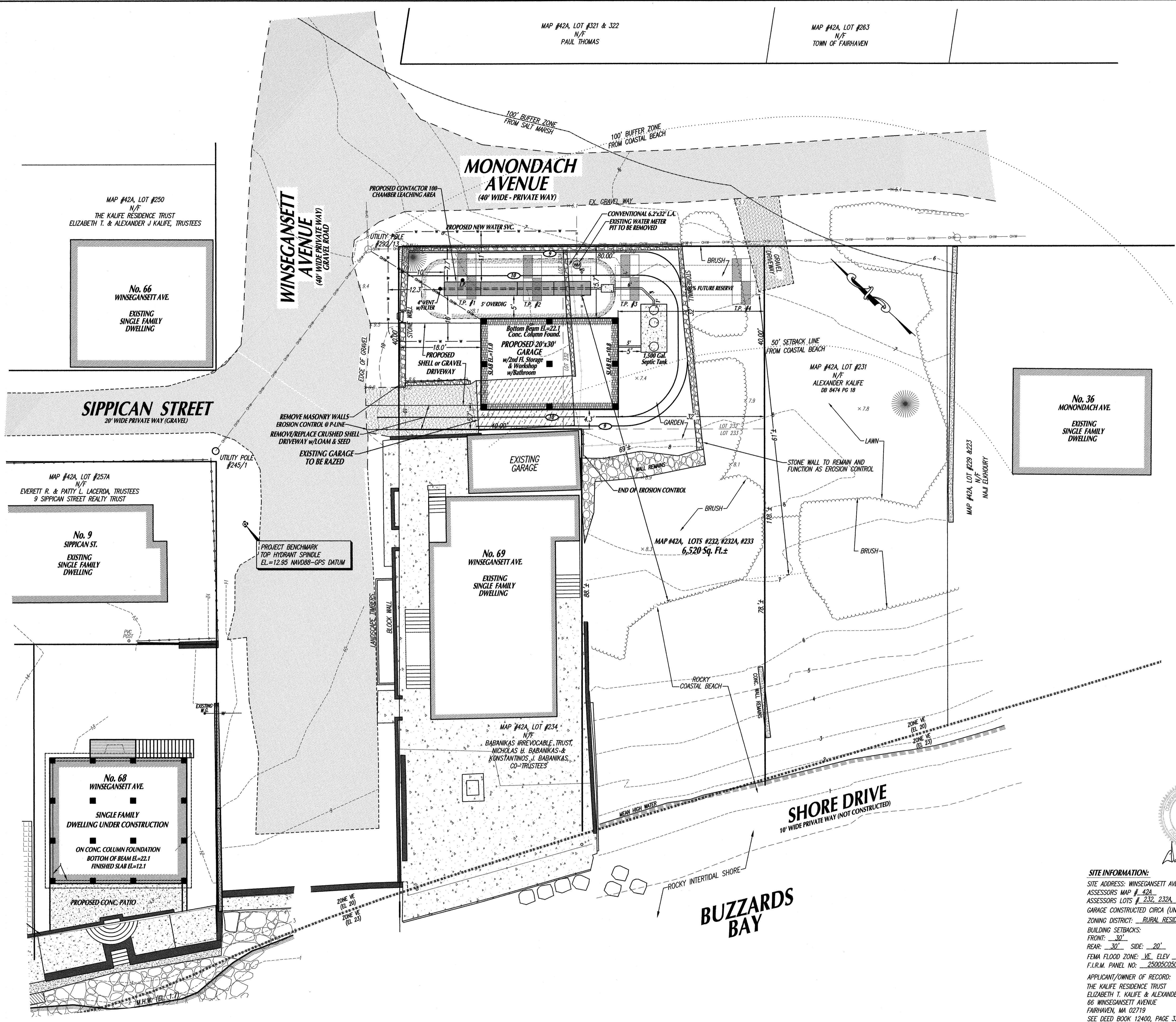
MAP #42A, LOT #321 & 322  
N/F  
PAUL THOMAS

MAP #42A, LOT #263  
N/F  
TOWN OF FAIRHAVEN

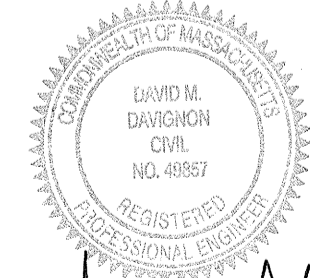


LOCUS VIEW  
NOT TO SCALE

- LEGEND**
- PROPOSED CONTOURS
  - EXISTING CONTOURS
  - 100' BUFFER ZONE-COASTAL BEACH
  - 100' BUFFER ZONE-SALT MARSH
  - FLOOD ZONE LINE
  - LIMITS OF 5' OVERDIG
  - EXISTING BRUSHLINE
  - PROPOSED WATER SVC.
  - TEST PIT LOCATION
  - 8.5± EXISTING ELEVATIONS
  - 8.90 PROPOSED ELEVATIONS



**PRIOR PROJECT APPROVALS:**  
REFER TO VARIANCES APPROVED BY THE ZBA - DECISION RECORDED AT BRISTOL REGISTRY OF DEEDS IN BOOK 13308, PAGE 228 ON 7-22-2020  
REFER TO BOARD OF HEALTH APPROVAL FOR THE INSTALLATION OF A SEPTIC SYSTEM FOR A TOILET & SINK ON 6-21-2018.  
APPROVAL SUBJECT TO A DEED RESTRICTION



**SITE INFORMATION:**  
 SITE ADDRESS: WINSEANSETT AVENUE  
 ASSESSORS MAP # 42A  
 ASSESSORS LOTS # 232, 232A, 233  
 GARAGE CONSTRUCTED CIRCA (UNKNOWN)  
 ZONING DISTRICT: RURAL RESIDENCE (RR)  
 BUILDING SETBACKS:  
 FRONT: 30'  
 REAR: 30' SIDE: 20'  
 FEMA FLOOD ZONE: VE ELEV 20.0  
 F.I.R.M. PANEL NO.: 2500500501F  
 APPLICANT/OWNER OF RECORD:  
 THE KALIFE RESIDENCE TRUST  
 ELIZABETH T. KALIFE & ALEXANDER J. KALIFE, CO-TRUSTEES  
 66 WINSEANSETT AVENUE  
 FAIRHAVEN, MA 02719  
 SEE DEED BOOK 12400, PAGE 328

Rev. #	DATE	BY	DESCRIPTION
1			

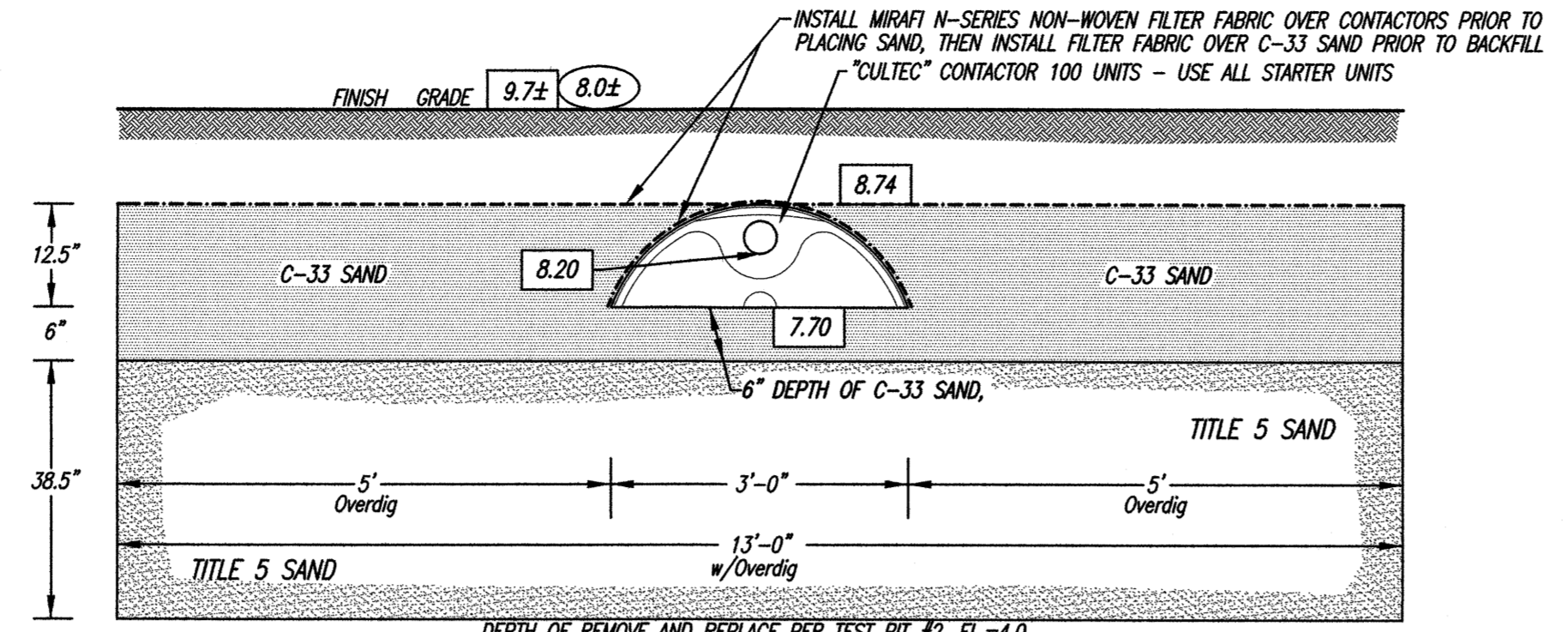
**SEWAGE DISPOSAL SYSTEM - SITE PLAN**  
 DEPICTING A PROPOSED GARAGE RECONSTRUCTION ON PROPERTY LOCATED  
 on WINSEANSETT AVENUE in  
 FAIRHAVEN, MA  
 PREPARED FOR  
 THE KALIFE RESIDENCE TRUST

Sheet 1 of 2 Sheets

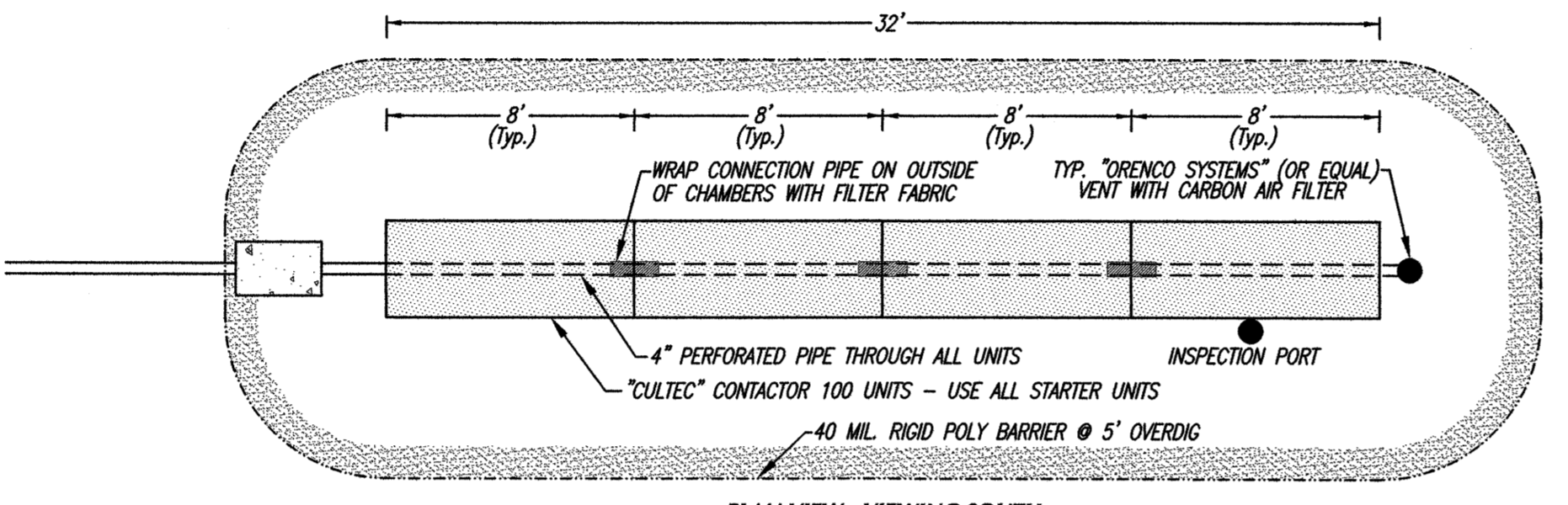
SCALE: 1"=10' DATE: NOVEMBER 16, 2021  
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**SCHNEIDER, DAVIGNON & LEONE, INC.**  
 PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS  
 1 COUNTY RD, P.O. BOX 480, MATTAPOISETT, MA 02739  
 1-508-758-7866

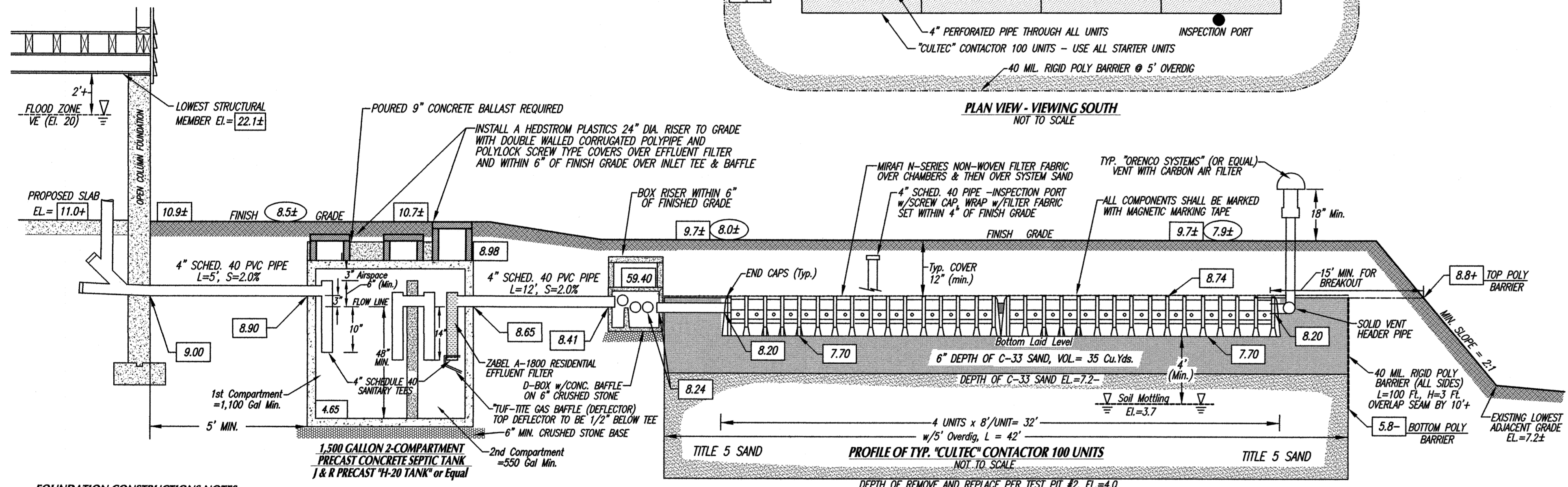
Drawn By: D.M.D. Check By: D.M.D. Job No. 3433



TYP. TRENCH X-SECTION OF CULTEC CONTACTOR 100 UNIT  
NOT TO SCALE



PLAN VIEW - VIEWING SOUTH  
NOT TO SCALE



PROFILE OF TYP. CULTEC CONTACTOR 100 UNITS  
NOT TO SCALE

**"REMOVE AND REPLACE" NOTE:**  
WHERE REQUIRED, CONTRACTOR IS TO REMOVE ALL LOAM, SUBSOIL AND OTHER UNSUITABLE MATERIAL IN THE AREA BENEATH AND FOR 5 FT. ON ALL SIDES OF THE LEACHING FACILITY. EXCAVATED MATERIAL IS TO BE REPLACED WITH CLEAN COARSE SAND FREE FROM CLAY, FINES, OR OTHER UNSUITABLE MATERIAL. IN ACCORDANCE WITH 310CMR 15.25(3) CONTRACTOR SHALL PROVIDE A SIEVE ANALYSIS OF FILL MATERIAL. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN TWO INCHES. A SIEVE ANALYSIS, USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE UP TO 45% BY WEIGHT OF THE SAMPLE MAY BE RETAINED ON THE #4 SIEVE. SIEVE ANALYSIS ALSO SHALL BE PERFORMED ON A FRACTION OF SAMPLE PASSING THE #4 SIEVE. SUCH ANALYSIS MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS AS LISTED TO THE BELOW:

SIEVE SIZE	% THAT MUST PASS SIEVE
#4	100%
#50	10%-100%
#100	0%-20%
#200	0%-5%

BOTTOM OF EXCAVATION SHALL BE LEVEL AT ELEVATION 4.0 INTO HORIZON C, LOAMY SAND/SANDY LOAM MIX STRATA @ 44" DEPTH PER TEST PIT #2 (ELEVATION TO BE VERIFIED BY ENGINEER IN FIELD PRIOR TO INSTALLATION)  
TOP OF FILL PER NOTE TO EXTEND TO EL. = 8.74 TOP OF CHAMBERS  
APPROX. VOLUME OF TITLE 5 SAND REQUIRED = 80 Cu.Yds. (20% Compaction Allowance)  
APPROX. VOLUME OF C-33 SYSTEM SAND REQUIRED = 35 Cu.Yds. (20% Compaction Allowance)

**TEST PIT DATA**  
DATE OF SOIL EVALUATIONS: SEPTEMBER 30, 2021  
SOIL EVALUATOR: JAY MCKINNON, C.S.E.  
INSPECTOR: DAVID FLAHERTY, HEALTH AGENT  
ENGINEERING FIRM: SCHNEIDER, DAVIGNON & LEONE, INC.

TEST PIT #	Depth	Elevation	Soil Description
TEST PIT #1	0"	7.9	FILL/LOAM (GARDEN)
	37"	4.8	HORIZON B LOAMY SAND 10 YR 5/4 V. Friable
	44"	4.2	Soil Mottling
	51"	3.7	HORIZON C LOAMY SAND/SANDY LOAM MIX 10 YR 4/4 Friable
	70"	2.1	Standing Water
TEST PIT #2	0"	7.7	FILL/LOAM (GARDEN)
	37"	4.6	HORIZON B LOAMY SAND 10 YR 5/4 V. Friable
	44"	4.0	Soil Mottling
	55"	3.1	HORIZON C LOAMY SAND/SANDY LOAM MIX 10 YR 4/4 Friable
	69"	2.0	Standing Water
TEST PIT #3	0"	7.0	FILL/LOAM (GARDEN)
	30"	4.5	HORIZON B LOAMY SAND 10 YR 5/4 V. Friable
	34"	4.2	Soil Mottling
	43"	3.4	HORIZON C LOAMY SAND/SANDY LOAM MIX 10 YR 4/4 Friable
	54"	2.5	Standing Water
TEST PIT #4	0"	6.8	FILL/LOAM (GARDEN)
	30"	4.3	HORIZON B LOAMY SAND 10 YR 5/4 V. Friable
	40"	3.5	Soil Mottling
	56"	2.1	HORIZON C LOAMY SAND/SANDY LOAM MIX 10 YR 4/4 Friable
	96"	-1.2	Standing Water

PERC RATE: N/A  
DEPTH TO TOP OF PERC TEST: N/A  
SOIL CLASS: CLASS 2  
DEPTH TO SOIL MOTTLING: 4'-3"  
DEPTH TO STANDING WATER: 5'-10"

**SEWAGE DISPOSAL SYSTEM DESIGN DATA**

**FLOW REQUIREMENTS:**  
PROPOSED NUMBER OF BEDROOMS: ZERO (0)  
PROPOSED USE: WORKSHOP/STORAGE ABOVE GARAGE WITH SINK & TOILET  
PROPOSED DAILY DESIGN FLOW: 110 GALLONS/BEDROOM/DAY (TITLE 5 VARIANCE REQUIRED)

**SEPTIC TANK SIZE:**  
TITLE 5: 110 GAL X 200% = 220 GALLONS  
INSTALL A 1,500 GAL. 2-COMPARTMENT "H-20" PRECAST CONC. SEPTIC TANK w/BALLAST

**TYPICAL CHAMBER LEACHING FIELD:**  
DESIGN SOIL TEXTURAL CLASS: CLASS 2  
DESIGN PERCOLATION RATE: 1 INCH IN 15 MINUTES  
LONG TERM ACCEPTANCE RATE: 0.56  
REQUIRED LEACHING AREA: 110 GAL/DAY Divided By LTR: 0.56 = 196 Sq.Ft.  
LEACHING AREA PROVIDED: 6.7 Sq.Ft./Linear Ft. OF CULTEC CONTACTOR 100 CHAMBERS  
(1 ROW X 4 UNITS/ROW) = 4 UNITS X 8 FT./UNIT = 32 FT. X 6.7 Sq.Ft./LINEAR FT. = 214 Sq.Ft.  
214 Sq.Ft. X 0.56 GAL/Sq.Ft. = 120 GAL LEACHING/DAY

**TOTALS**  
TOTAL NUMBER OF DISTRIBUTION LINES = ONE (1)  
TOTAL NO. OF CULTEC CONTACTOR 100 (IN. = 6") CHAMBERS = 4  
TOTAL LEACHING AREA = 214 > 196 Sq.Ft.  
TOTAL LEACHING CAPACITY = 120 GAL/DAY >> 110 GAL/DAY

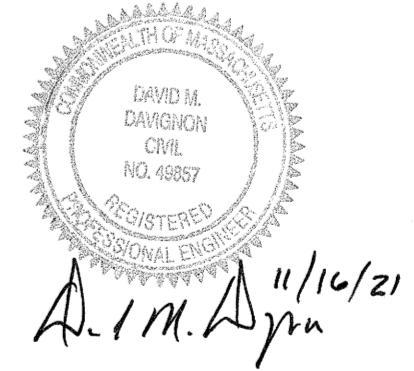
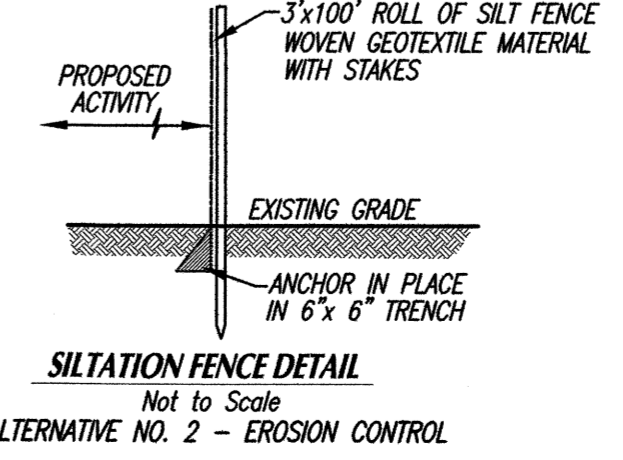
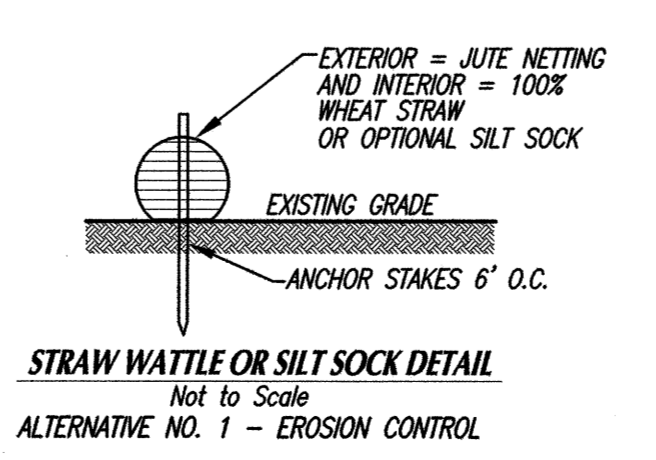
**FOUNDATION CONSTRUCTIONS NOTES:**

- THE PROPOSED DWELLING IS LOCATED IN FLOOD ZONE VE (Elevation 20 - N.A.V.D. Datum of 1988).
- THE LOWEST STRUCTURAL MEMBER SHALL BE SET AT OR ABOVE ELEVATION 22.0 (N.A.V.D.).
- THE PROPOSED FINISH CONCRETE SLAB UNDER DWELLING IS PROPOSED TO BE ELEVATION 11.0±.
- THE PROPOSED FOUNDATION SHALL BE AN OPEN COLUMN COLUMN FOUNDATION DESIGN.
- THE FOUNDATION SHALL BE DESIGNED BY A STRUCTURAL ENGINEER IN COMPLIANCE WITH THE MASS. BUILDING CODE AND F.E.M.A. REQUIREMENTS.
- THE NUMBER AND LOCATION OF COLUMNS SHOWN ARE CONCEPTUAL ONLY AND MAY BE ADJUSTED BY THE STRUCTURAL ENGINEER DURING THE DESIGN PHASE.
- ANY BREAKAWAY PANEL DESIGN SHALL BE PREPARED BY A STRUCTURAL ENGINEER.

**SEPTIC TANK BUOYANCY CALCULATIONS:**  
1,500 GALLON SEPTIC TANK, WORST CASE = EMPTY TANK AND SUBMERGED IN A COASTAL STORM EVENT  
WATER DISPLACED: (5'-8") (10'-6") (6'-0") (62.4 lbs./cu.ft.) = 22,290 lbs.  
WEIGHT OF "J & R PRE-CAST, INC." 1,500 GAL. MONOLITHIC CONCRETE SEPTIC TANK = 14,806 lbs.  
WEIGHT OF SOIL COVER = (5'-8") (10'-6") (1.0') (70 lbs./cu.ft.) = 3,508 lbs.  
WEIGHT OF 9" POURED CONCRETE BALLAST = (5'-8") (10'-6") (0.75') (150 lbs./cu.ft.) = 5,637 lbs.  
BUOYANCY FORCE = 22,290 lbs. - (14,806 + 3,508 + 5,637) lbs. = (Negative) = 1,661 lbs.  
THEREFORE CONTRACTOR SHALL POUR A 9" CONCRETE BALLAST OVER SEPTIC TANK

**GENERAL NOTES:**

- UNLESS OTHERWISE NOTED, ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS SHALL CONFORM TO 310 CMR 15.00, TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND ANY APPLICABLE LOCAL REGULATIONS.
- ANY AND ALL CHANGES TO THIS DESIGN PLAN MUST BE APPROVED BY THE DESIGN ENGINEER AND BOARD OF HEALTH.
- DESIGN ENGINEER AND LOCAL BOARD OF HEALTH ARE TO BE NOTIFIED PRIOR TO BACKFILLING WHEN THE SYSTEM IS NEARLY COMPLETE AND READY FOR INSPECTION. THE SYSTEM IS NOT TO BE BACKFILLED WITHOUT FIRST OBTAINING APPROVAL FROM THE BOARD OF HEALTH AND DESIGN ENGINEER.
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION THROUGH DIG SAFE AND OTHER APPROPRIATE AGENCIES, AND REPORT ANY DISCREPANCIES TO DESIGN ENGINEER.
- CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER OF ANY AND ALL DISCREPANCIES FOUND BETWEEN THE SITE CONDITIONS AND THOSE SHOWN ON DESIGN PLAN PRIOR TO THE COMMENCEMENT OF WORK.
- SEPTIC SYSTEM COMPONENTS SHALL BE H-20 PRODUCTS IF LOCATED UNDER DRIVEWAY, PARKING OR OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. ALL OTHER SYSTEM COMPONENTS SHALL BE H-10 PRODUCTS.
- SEPTIC TANK & PUMP CHAMBER SHALL BE WATER-TIGHT THRU MANUFACTURERS SPECS.
- GROUT OR CAST IN PLACE RUBBER BOOT TO BE USED WHERE PIPES ENTER OR LEAVE ALL CONCRETE STRUCTURES IN ORDER TO PROVIDE A WATER-TIGHT SEAL.
- USE ALL SCHEDULE 40 PVC PIPE IN DISPOSAL SYSTEM AS SPECIFIED.
- SLOPE ALL SOLID PIPE AT 1.0% MINIMUM, 2.0% IS PREFERRED.
- DOUBLE WASHED CRUSHED STONE SHALL BE FREE OF ALL DIRT, DUST & FINES.
- THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE DISPOSAL UNIT, WATER SOFTENER OR OTHER HIGH WATER USAGES.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE.



TITLE 5 VARIANCES - DEED RESTRICTION REQUIRED:  
1.) 310 CMR 15.211, MINIMUM SETBACK DISTANCES:  
LEACHING AREA SEPARATION FROM SLAB FOUNDATION,  
REQUESTING A 5 FT. SETBACK VS. THE 10 FT. MIN. REQUIREMENT  
2.) 310 CMR 15.211, MINIMUM SETBACK DISTANCES:  
SEPTIC TANK SEPARATION FROM SLAB FOUNDATION,  
REQUESTING A 5 FT. SETBACK VS. THE 10 FT. MIN. REQUIREMENT  
3.) 310 CMR 15.211, MINIMUM SETBACK DISTANCES:  
LEACHING AREA SEPARATION FROM SIDELINE OF MONONDACH AVE.  
REQUESTING A 7.7 FT. SETBACK VS. THE 10 FT. MIN. REQUIREMENT  
4.) 310 CMR 15.203, SYSTEM SEWAGE FLOW DESIGN CRITERIA:  
PROPOSED 120 GALLON DAILY FLOW VS. 220 GAL. MIN. REQUIREMENT  
SYSTEM IS TO SERVICE ONLY A SINK & TOILET FOR UNHEATED STORAGE AND WORKSHOP ON 2nd FLOOR

LOCAL BOARD OF HEALTH REGULATIONS:  
1.) CHAPTER 5, SECTION 2  
SEWAGE DISPOSAL SYSTEMS IS NOT IN STRICT COMPLIANCE WITH TITLE 5 PER VARIANCES REQUESTED  
2.) CHAPTER 5, SECTION 14  
LEACHING AREA SEPARATION FROM A COASTAL BEACH  
69' (Primary) and 61' (Reserve) vs. 100' MIN. REQUIREMENT

Rev. #	DATE	BY	DESCRIPTION
1			

**SEWAGE DISPOSAL SYSTEM - SITE PLAN**  
DEPICTING A PROPOSED GARAGE RECONSTRUCTION ON PROPERTY LOCATED  
**on WINGANETT AVENUE in FAIRHAVEN, MA**  
PREPARED FOR  
**THE KALIFE RESIDENCE TRUST**

Sheet 2 of 2 Sheets

SCALE: 1"=10'  
DATE: NOVEMBER 16, 2021

**SCHNEIDER, DAVIGNON & LEONE, INC.**  
PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS  
1 COUNTY RD. P.O. BOX 480, MATTAPOISETT, MA 02739  
1-800-758-7866

Drawn By: D.M.D. Check By: D.M.D. Job No. 3433



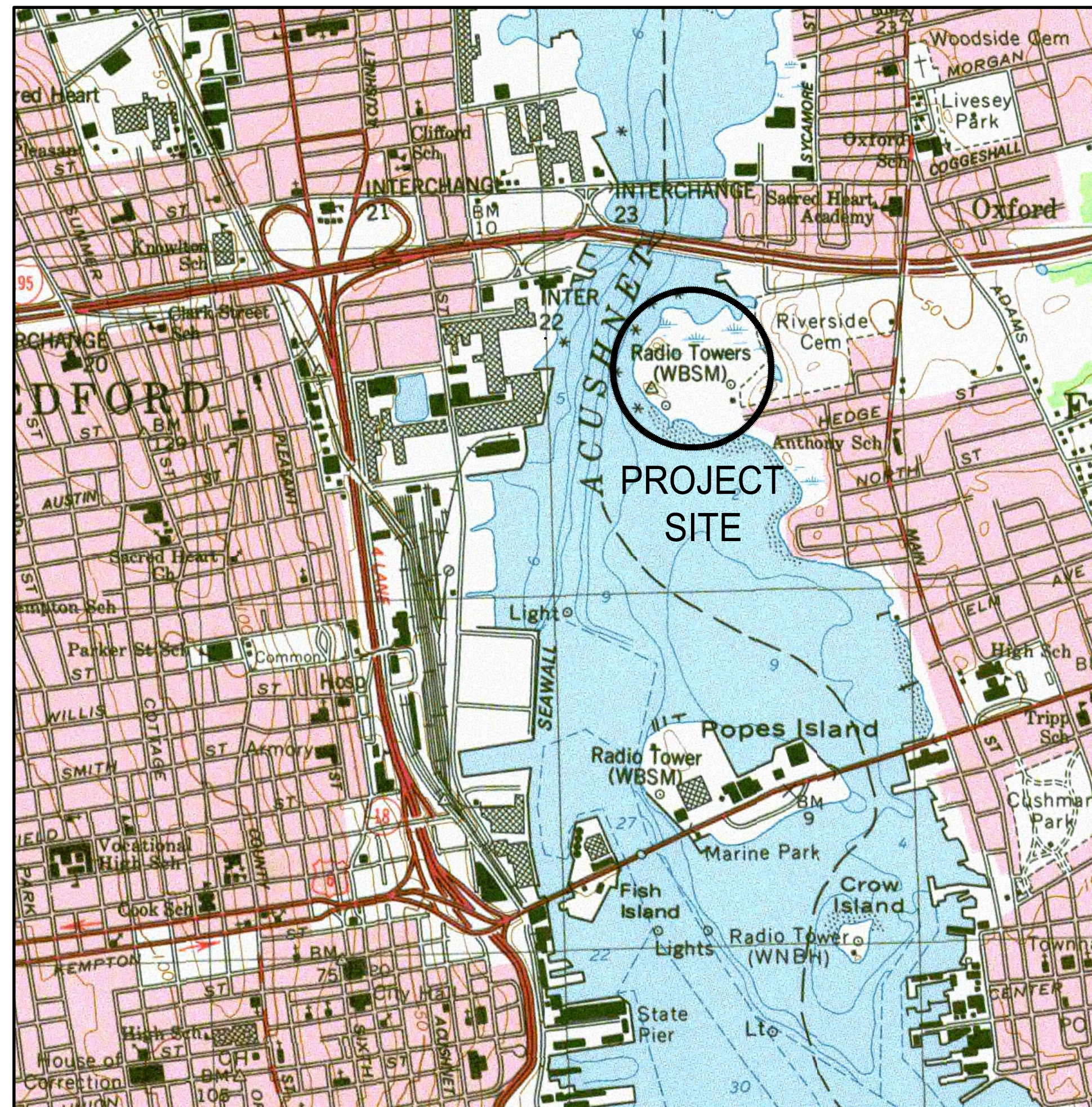
# BUZZARDS BAY COALITION MARSH ISLAND SALT MARSH RESTORATION PERMIT PLANS FAIRHAVEN, MASSACHUSETTS

DRAFT - CONSTRUCTION CONTRACT NO. XXX  
NOVEMBER 2021

NOT FOR CONSTRUCTION

## INDEX OF DRAWINGS

NUMBER	DESCRIPTION
C-1	LEGEND & GENERAL NOTES
C-2	EXISTING CONDITIONS OVERVIEW AND KEY PLAN
C-3	EXISTING CONDITIONS PLAN (1 OF 2)
C-4	EXISTING CONDITIONS PLAN (2 OF 2)
C-5	SITE PHASING PLAN
C-6	SOIL EROSION & SEDIMENT CONTROL PLAN (1 OF 2)
C-7	SOIL EROSION & SEDIMENT CONTROL PLAN (2 OF 2)
C-8	PROPOSED SITE PLAN (1 OF 2)
C-9	PROPOSED SITE PLAN (2 OF 2)
C-10	CROSS SECTION A-A
C-11	CROSS SECTION B-B
C-12	PLANTING PLAN (1 OF 2)
C-13	PLANTING PLAN (2 OF 2)
C-14	CONSTRUCTION DETAILS 1
C-15	CONSTRUCTION DETAILS 2
C-16	CONSTRUCTION DETAILS 3
C-17	EROSION CONTROL DETAILS 1
C-18	EROSION CONTROL DETAILS 2
C-19	SITE LAYOUT PLAN



**LOCATION MAP**  
SCALE: 1"=1,000'



**SITE MAP**  
SCALE: 1"=200'

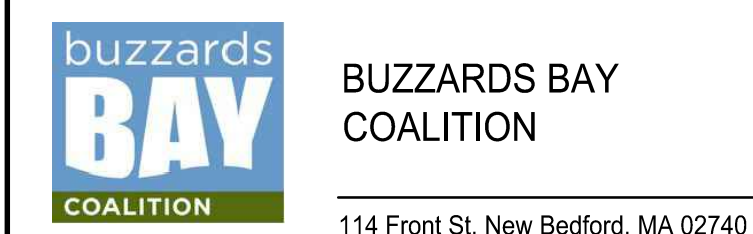
**PROJECT GOALS:** PROJECT PARTNERS SEEK TO RESTORE HISTORICALLY FILLED SALT MARSH AT MARSH ISLAND ALONG THE ACUSHNET RIVER ESTUARY IN FAIRHAVEN, MA AND TO PROVIDE PUBLIC OUTDOOR RECREATION ACCESS TO THE RESTORED SITE.

**PROJECT PARTNERS:** PARTNERS INCLUDE THE BUZZARDS BAY COALITION AND THE NEW BEDFORD HARBOR TRUSTEE COUNCIL, WHICH INCLUDES THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), U.S. DEPARTMENT OF THE INTERIOR (DOI), ACTING THROUGH THE U.S. FISH AND WILDLIFE SERVICE (USFWS), AND THE COMMONWEALTH OF MASSACHUSETTS, ACTING THROUGH THE EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS (EEA) AND THE MASSACHUSETTS DIVISION OF ECOLOGICAL RESTORATION (MA DER).

**FUNDING:** FUNDS FOR THE PROJECT WERE SECURED IN PART THROUGH THE NEW BEDFORD HARBOR TRUSTEE COUNCIL TO RESTORE AQUATIC NATURAL RESOURCES INJURED BY THE CONTAMINATION OF NEW BEDFORD HARBOR, IN PART BY THE NATIONAL FISH AND WILDLIFE FOUNDATION, AND IN PART BY THE COMMONWEALTH OF MASSACHUSETTS DIVISION OF ECOLOGICAL RESTORATION.

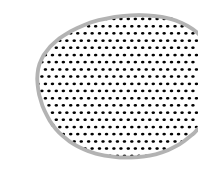

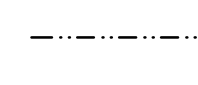





PREPARED FOR:

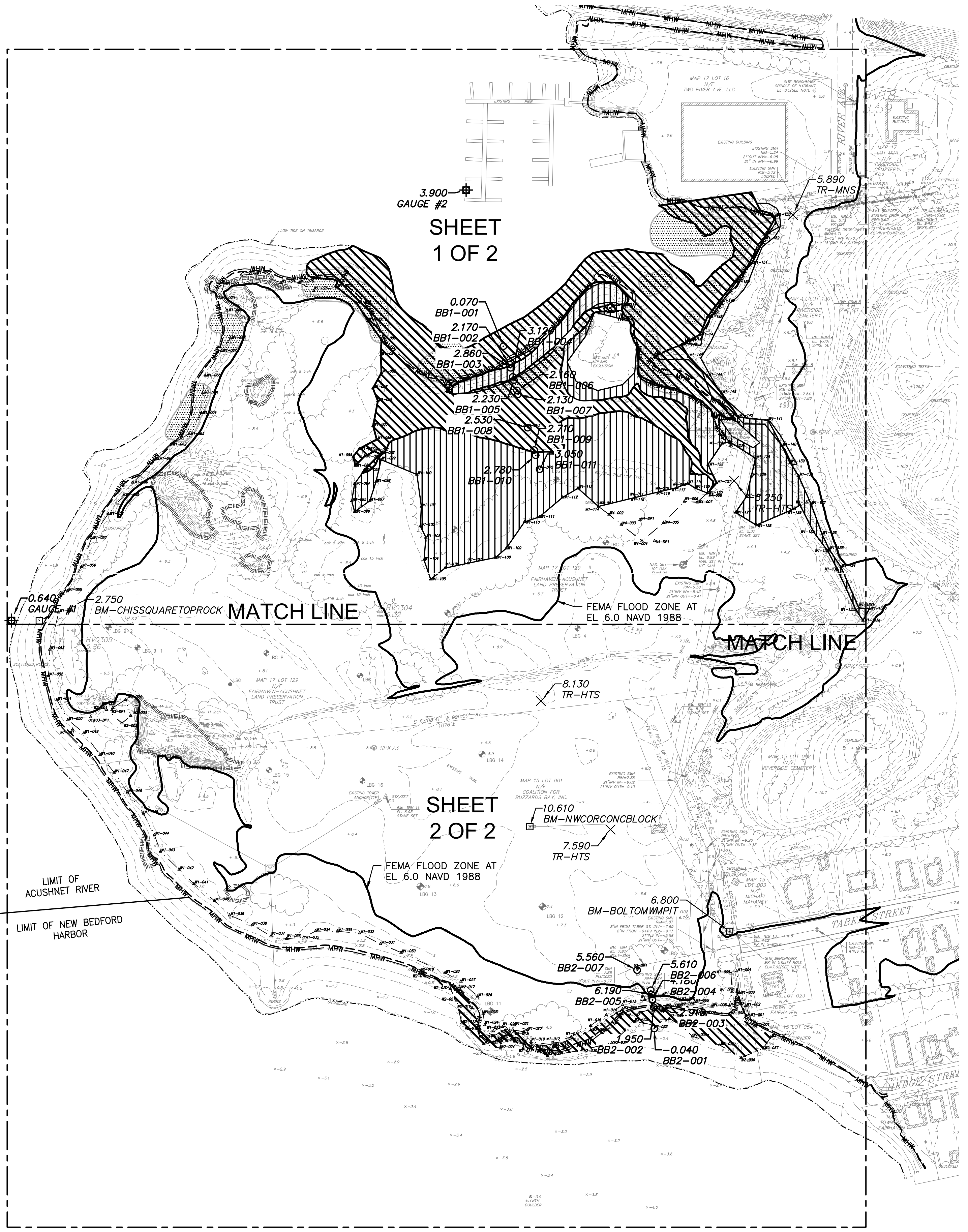
PREPARED BY:





**LEGEND**

-  AREAS OF SHORELINE REMEDIATION (NOT TO BE DISTURBED)
-  ROCK OUTCROP
-  LAND UNDER OCEAN
-  PROPERTY LINE
-  BENCHMARK
-  CONTROL POINT
-  BIO-BENCHMARK
-  WATER GAUGE

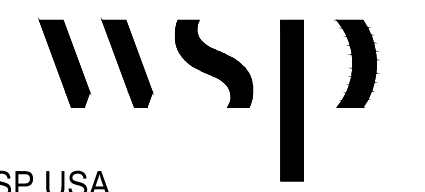
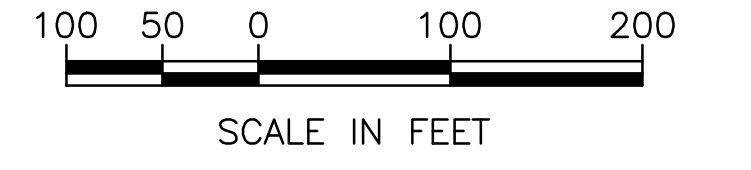


**LIST OF ABUTTERS**

PLAT	LOT	ADDRESS	OWNER
15	002	274 MAIN STREET, FAIRHAVEN, MA 02719	RIVERSIDE CEMETERY, INC.
15	003	2 TABER STREET	MICHAEL MAHANEY & SHERRI L REZENDES
15	023	40 CENTER STREET, FAIRHAVEN, MA 02719	TOWN OF FAIRHAVEN
15	054	2 HEDGE STREET	JOHN L. FOURNIER
17	016	P.O. BOX 678, FAIRHAVEN, MA 02719	TWO RIVER AVE., LLC
17	130	274 MAIN STREET, FAIRHAVEN, MA 02719	RIVERSIDE CEMETERY, INC.
17	131	40 CENTER STREET, FAIRHAVEN, MA 02719	TOWN OF FAIRHAVEN

**BENCHMARK TABLE:**

LABEL	NORTHING	EASTING	POINT ELEVATION	DESCRIPTION
TR-MNS	2699221.8	816357.194	5.89	MAG-NAIL SET
TR-HTS	2698811.024	816266.328	5.25	HUB & TACK SET
TR-HTS	2698470.657	815967.846	8.13	HUB & TACK SET
TR-HTS	2698272.177	816075.316	7.59	HUB & TACK SET
BM-CHISSQUARETOPROCK	2698594.88	815192.9	2.75	CHISSELED SQUARE IN ROCK
BM-NWCORCONCBLOCK	2698276.724	815950.8	10.61	NW CORNER OF CONCRETE BLOCK
BM-BOLTOMWPIT	2698114.692	816259.471	6.8	TOP OF BOLT ON WATER METER PIT



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REV.	DESCRIPTION	DATE

**NOT FOR CONSTRUCTION**



BUZZARDS BAY COALITION  
114 Front St, New Bedford, MA 02740

**MARSH ISLAND SALT MARSH RESTORATION**  
FAIRHAVEN, MASSACHUSETTS

**EXISTING CONDITIONS OVERVIEW AND KEY PLAN**

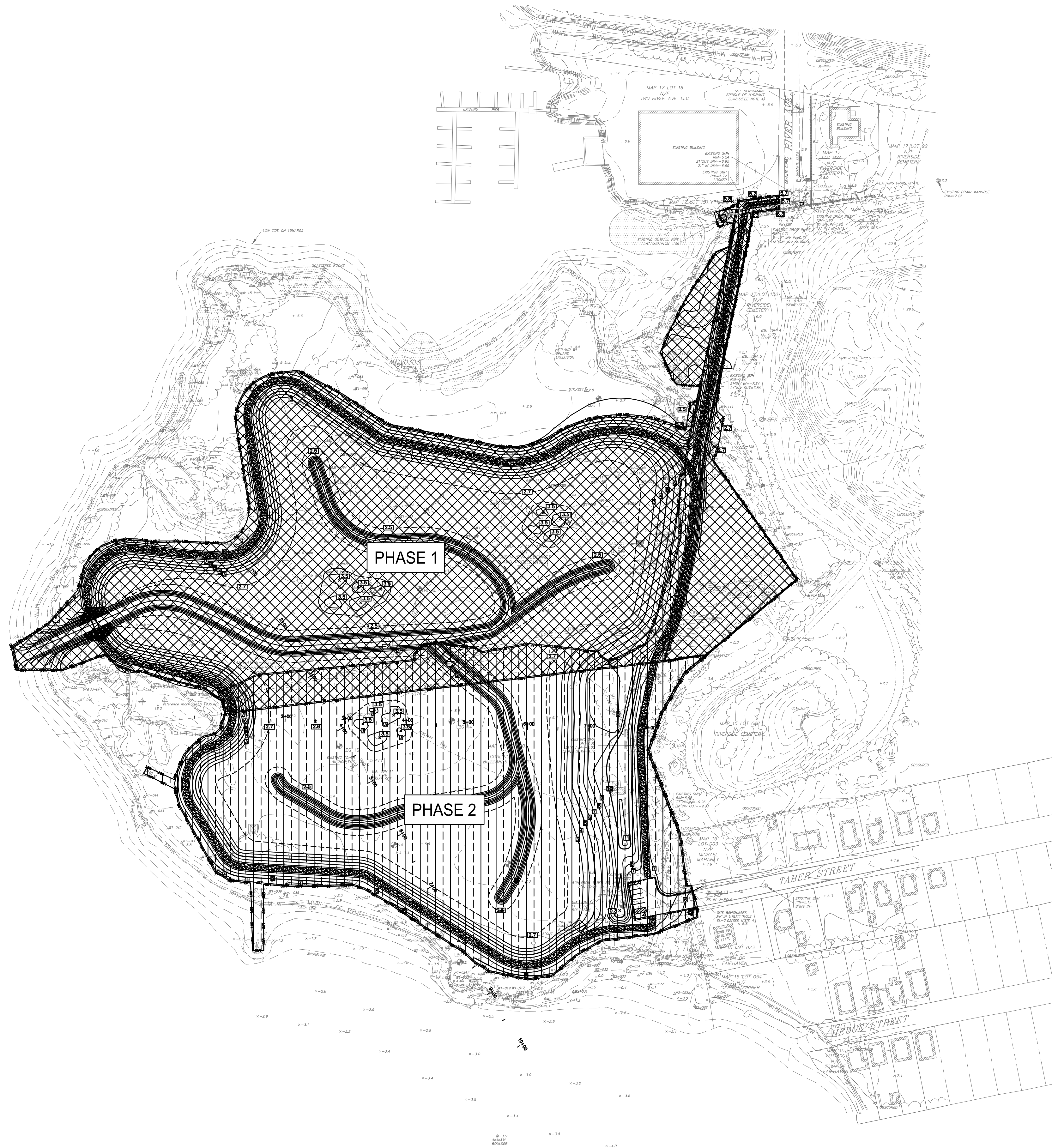
SHEET TITLE:		NOVEMBER 2021	
SCALE:	AS SHOWN	DATE:	NOVEMBER 2021
PROJECT MANAGER:	MH	SHEET No.	<b>C-2</b>
PROJECT ENGINEER:	TC		
CHECKED BY:	CC		
DRAWN BY:	AG/RS		
JOB NUMBER:	31403283		



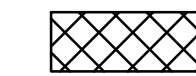
Nov 11, 2021 - 2:45pm \\sps\share\env\va\com\mcbrien\PROJECTS\11403283\Marsh\_Island\_Phased\_Design\_2021\DRAWINGS\ENV\KEY\_PLAN\BUZZARDS\_BAY\_COALITION.dwg







**LEGEND**



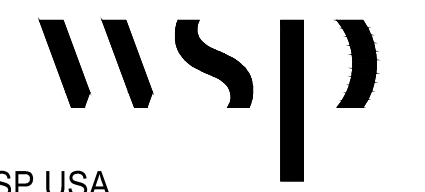
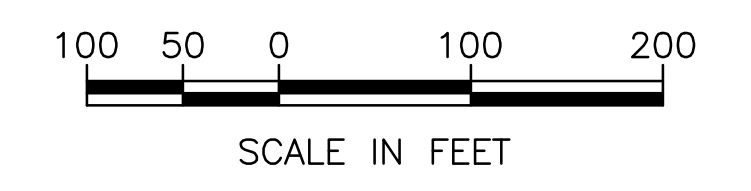
PHASE 1



PHASE 2

**NOTE:**

1. PHASE 2 TO BE IMPLEMENTED UPON RELOCATION OF RADIO COMMUNICATION COMPANY. PHASE 2 MAY BE CONSTRUCTED CONCURRENTLY WITH PHASE 1.



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REV.	DESCRIPTION	DATE

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BUZZARDS BAY COALITION  
114 Front St, New Bedford, MA 02740

**MARSH ISLAND SALT MARSH RESTORATION**  
FAIRHAVEN, MASSACHUSETTS

**SITE PHASING PLAN (1 OF 1)**

SHEET TITLE:		NOVEMBER 2021	
SCALE:	AS SHOWN	DATE:	NOVEMBER 2021
PROJECT MANAGER:	MH	SHEET No.	<b>C-5</b>
PROJECT ENGINEER:	TC		
CHECKED BY:	CC		
DRAWN BY:	AG/RS		
JOB NUMBER:	31403283		



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CONTINUED ON SHEET C-9

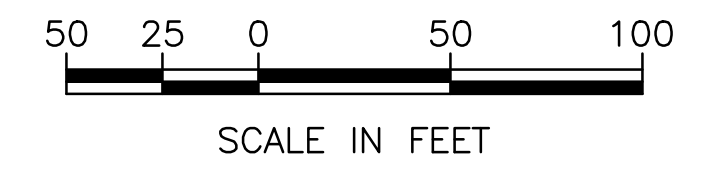


- LOO — LIMIT OF DISTURBANCE
- P — PROPOSED CONTOUR
- SF — SILT FENCE
- X — X — X — 6-FOOT CHAIN LINK FENCE
- □ — □ — □ — TIMBER GUARDRAIL
- [Pattern] — PERIMETER ACCESS ROAD

RESOURCE AREA IMPACT SUMMARY

	PERMANENT (SF)	TEMPORARY (SF)
BORDERING VEGETATED WETLAND	6,168	
COASTAL BEACH	2,624	3,415
COASTAL BANK	123 LF	92 LF
SALT MARSH	3,478	644
SALT MARSH - PHRAG	3,155	29,078
LAND SUBJECT TO COASTAL STORM FLOWAGE		
TOTAL	701,983	
FILLED	133,029	
LOWERED	566,325	
TEMP	2,628	
RIVERFRONT AREA		
TOTAL	140,027	
WITHIN 100' OF RIVER	25,510	
WITHIN 100' - 200' OF RIVER	114,517	
BUFFER ZONE	139,136	129,063

**NOTES:**  
 1. ALL AREAS SHALL BE GRADED WITHIN THE PROPOSED SALT MARSH TO PROMOTE POSITIVE DRAINAGE TOWARD PROPOSED CHANNELS.



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REV.	DESCRIPTION	DATE

NOT FOR CONSTRUCTION

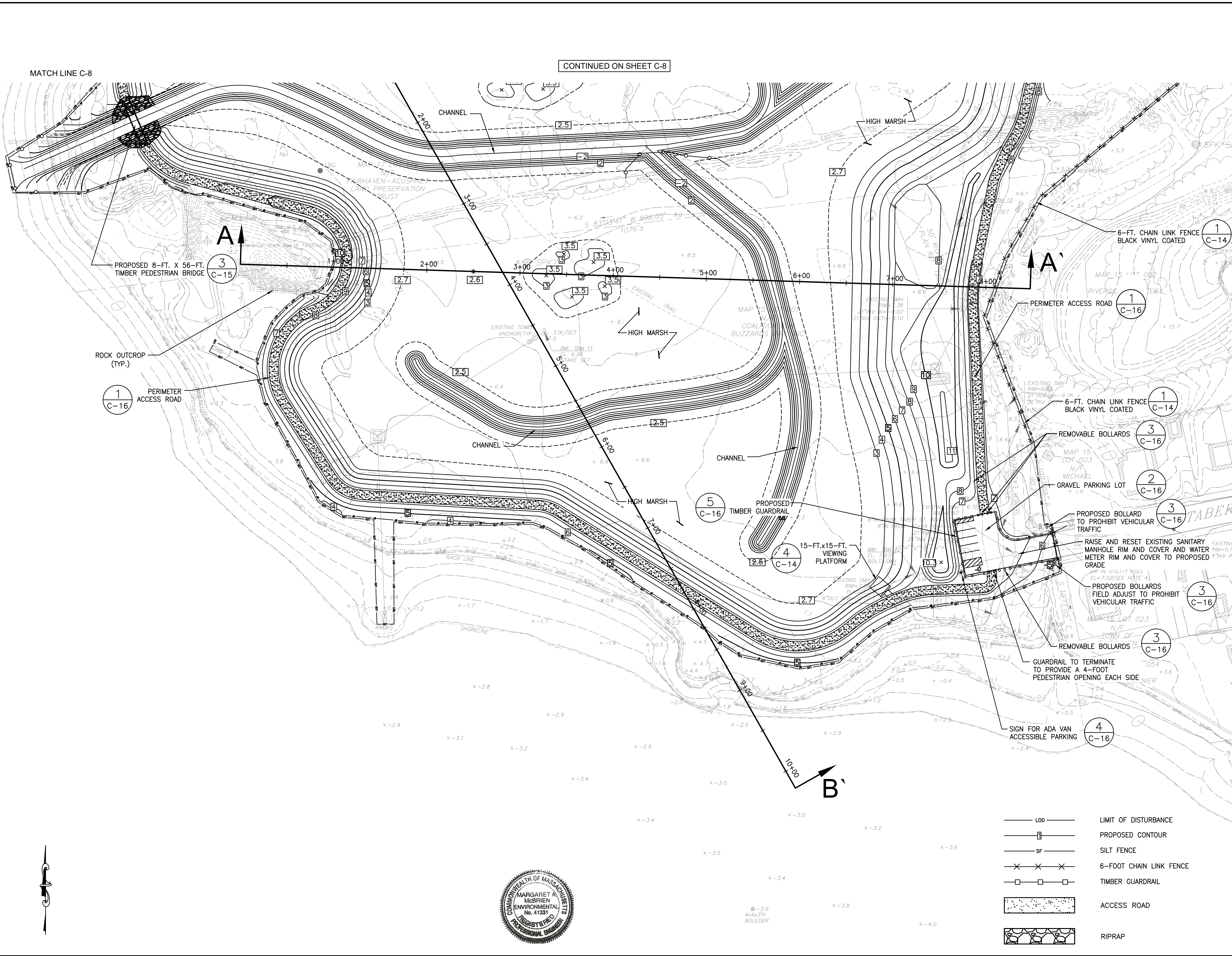


BUZZARDS BAY COALITION  
 114 Front St, New Bedford, MA 02740

MARSH ISLAND SALT MARSH RESTORATION  
 FAIRHAVEN, MASSACHUSETTS

PROPOSED SITE PLAN (1 OF 2)

SHEET TITLE:		DATE: NOVEMBER 2021
SCALE: AS SHOWN	PROJECT MANAGER: MH	
PROJECT ENGINEER: TC	CHECKED BY: CC	SHEET No. <b>C-8</b>
DRAWN BY: AG/RS	JOB NUMBER: 31403283	



**RESOURCE AREA IMPACT SUMMARY**

	PERMANENT (SF)	TEMPORARY (SF)
BORDERING VEGETATED WETLAND	6,168	
COASTAL BEACH	2,624	3,415
COASTAL BANK	123 LF	92 LF
SALT MARSH	3,478	644
SALT MARSH - PHRAG	3,155	29,078
LAND SUBJECT TO COASTAL STORM FLOWAGE		
TOTAL	701,983	
FILLED	133,029	
LOWERED	566,325	
TEMP	2,628	
RIVERFRONT AREA		
TOTAL	140,027	
WITHIN 100' OF RIVER	25,510	
WITHIN 100' - 200' OF RIVER	114,517	
BUFFER ZONE	139,136	129,063

- NOTES:**
- ALL AREAS SHALL BE GRADED WITHIN THE PROPOSED SALT MARSH TO PROMOTE POSITIVE DRAINAGE TOWARDS PROPOSED CHANNELS.
  - INLET CONNECTION WORK TO OCCUR AT LOW TIDE.



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REV.	DESCRIPTION	DATE

**NOT FOR CONSTRUCTION**



BUZZARDS BAY COALITION  
114 Front St, New Bedford, MA 02740

**MARSH ISLAND SALT MARSH RESTORATION**  
FAIRHAVEN, MASSACHUSETTS

**PROPOSED SITE PLAN (2 OF 2)**

SHEET TITLE:		SHEET No. <b>C-9</b>
SCALE:	AS SHOWN	
PROJECT MANAGER:	MH	
PROJECT ENGINEER:	TC	
CHECKED BY:	CC	
DRAWN BY:	AG/RS	
JOB NUMBER:	31403283	
DATE:		NOVEMBER 2021

**EMERGENT PLANTINGS — PLUGS : LOW MARSH AND HIGH MARSH**

- NO AREA SHALL BE PLANTED UNTIL FINAL GRADE IS COMPLETED AND THE AREA HAS BEEN CLEARED OF WRACK AND OTHER DEBRIS. COMPLETION OF CLEARING SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING. ALL AREAS PLANTED SHALL BE PROTECTED BY HERBIVORY FENCING AT THE END OF EACH PLANTING DAY.
- THE PLANTING WINDOW IS FROM APRIL 1 TO JUNE 15.
- THE PLUGS SHALL BE PLANTED IN THE SOIL NO MORE THAN ONE INCH (1") DEEPER THAN GROWN IN THE NURSERY AND TO A DEPTH THAT WILL ENSURE THAT THE TOP OF THE ROOTSTOCK MASS LIES NO MORE THAN ONE INCH (1") BELOW THE SOIL SURFACE.
- PRIOR TO PLACEMENT OF THE PLANT IN THE PLANTING HOLE, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE PLANTING HOLE (OSMOCOTE 18-6-12) AT THE RATE OF THIRTY (30) GRAMS PER PLANT. THE PLANTS SHALL THEN BE PLACED AT THE APPROPRIATE DEPTH WITH THE ROOT SYSTEM ORIENTED DOWNWARD. WHILE THE PLANT IS IN THIS POSITION, THE SOIL PROFILE OR SECTION SHALL BE FULLY AND FIRMLY CLOSED. IF A SOIL DEPRESSION IS FORMED ABOVE OR IMMEDIATELY ADJACENT TO THE PLANTING LOCATION, ENOUGH SOIL SHALL BE SLOUGHED FROM THE SURROUNDING AREA AND FIRMLY TAMPED INTO THE DEPRESSION TO LEAVE THE PLANTING AREA AT THE SAME ELEVATION AS THE SURROUNDING SOIL OR SLIGHTLY HIGHER. NO WATER OR AIR VOIDS SHALL REMAIN WITHIN THE PLANTING HOLE AFTER INSTALLATION AND TAMPING.



**PLANTING LEGEND**

- AREAS OF SHORELINE REMEDIATION. NOT TO BE DISTURBED
- LOW MARSH  
ELEVATION 2.0-2.5  
1.01 ACRES
- LOWER HIGH MARSH  
ELEVATION: 2.5-2.7  
6.06 ACRES
- UPPER HIGH MARSH  
ELEVATION: 2.7-3.0  
1.88 ACRES
- SCRUB SHRUB WETLAND  
ELEVATION: 3.0-3.5  
0.35 ACRES
- COASTAL SANDPLAIN GRASSLAND  
ELEVATION: 3.5 +  
5.76 ACRES



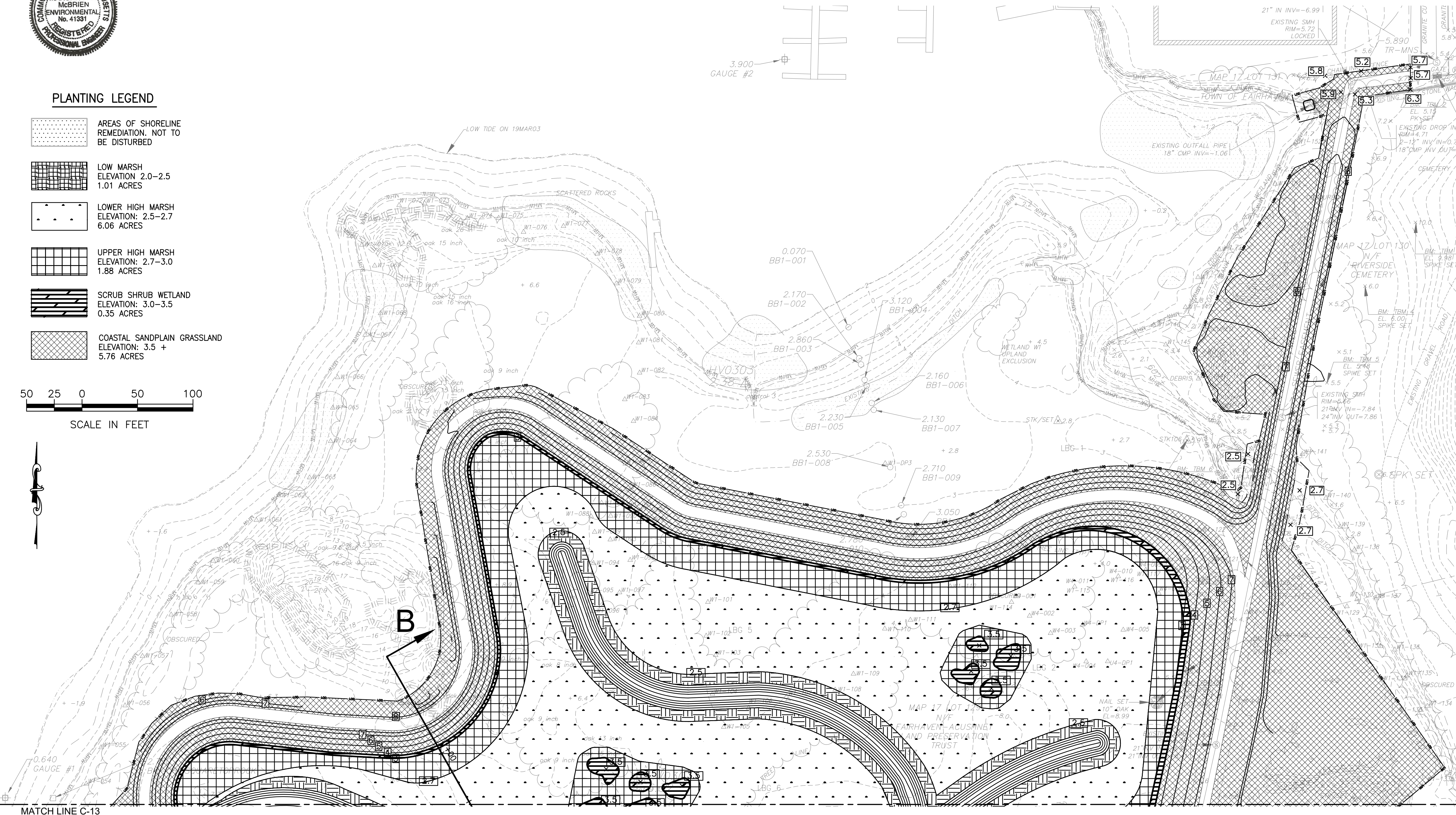
**PLANTING NOTES**

**COASTAL SANDPLAIN GRASSLAND SEEDING:**

- THE COASTAL SANDPLAIN GRASSLAND SEED MIXTURE SHALL BE AS SHOWN IN THE TABLE AND SEEDED AT A RATE OF 15 POUNDS OF PURE LIVE SEED (PLS) PER ACRE. SEEDING SHALL OCCUR AFTER MARCH 15 AND BEFORE JUNE 1.
- THE SEEDED AREA SHALL BE FIRMED TO FORM A GOOD SEED BED. UNLESS HYDROSEEDING, THE SEEDED AREA SHALL BE DRAGGED WITH A CHAIN OR TINE HARROW AND FIRMED TO ENSURE GOOD SOIL TO SEED CONTACT.
- NITROGEN FERTILIZER SHALL NOT BE APPLIED AT THE TIME OF THE SEEDING.
- AT LEAST SIX WEEKS BEFORE SEEDING, 9 DISCRETE SOIL SAMPLES SHALL BE TAKEN IN THE TOP SIX INCHES OF SOIL AND MIXED INTO THREE COMPOSITE SOIL SAMPLES AND TESTED FOR pH. DISCRETE SAMPLING LOCATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. IF SOIL pH IS ABOVE 6.5, APPLY A SOIL AMENDMENT OF ELEMENTAL SULFUR AT A RATE OF 91 G S/M<sup>2</sup> THREE WEEKS BEFORE SEEDING.
- ALL DISTURBED AREAS NOT SPECIFICALLY CALLED OUT FOR SEEDING SHALL BE RESTORED IN ACCORDANCE WITH COASTAL SANDPLAIN GRASSLAND SEEDING.

**SCRUB SHRUB PLANTINGS**

- SCRUB SHRUB MARSH BETWEEN ELEVATIONS 3.0 TO 3.5 (NAVD88) SHALL BE PLANTED WITH SALT TOLERANT SPECIES AS SHOWN IN THE TABLE. PLANTINGS SHALL BE CLUSTERED BY SPECIES WITH 5-10 PLANTS OF ONE SPECIES AND INDIVIDUAL PLANTS SPACED AT 5-FOOT ON CENTER. THE PLANTING WINDOW IS APRIL 1 TO MAY 15.
- ALL SHRUBS SHALL CONFORM TO THE MATERIAL SPECIFICATION REQUIREMENTS OF THE AMERICAN STANDARD FOR NURSERY STOCK (1986 OR LATER EDITION).
- PLANT PITS SHALL BE DUG APPROXIMATELY FOUR INCHES (4") WIDER THAN THE STOCK SIZE. PRIOR TO PLACEMENT OF THE PLANT IN THE PLANTING HOLE, A 20-GRAM FERTILIZER AGRIFORM TABLET (20-10-5 ANALYSIS) SHALL BE PLACED IN THE BOTTOM OF THE PLANTING HOLE. BACKFILL SOIL MATERIALS SHALL BE THE SAME AS EXCAVATED FOR THE PLANTING PITS.



Low Marsh (Elevation 2.0 Feet NAVD88 - 2.5 Feet NAVD88)						
Area (acres)	Species Name (Common Name)	% of Plantings	Root	Height	Spacing	Units
1.01	Spartina alterniflora (Smooth Cordgrass)	100%	2 IN x 2 IN Minimum Plug	6 IN MN.	2 FT. On Center	Each 10,989

Lower High Marsh (Elevation 2.5 Feet NAVD88 - 2.7 Feet NAVD88)						
Area (acres)	Species Name (Common Name)	% of Plantings	Root	Height	Spacing	Units
6.06	Distichlis spicata (Salt Grass)	75%	2 IN x 2 IN Minimum Plug	6 IN MN.	2 FT. On Center	Each 49,455
	Spartina patens (Innongonia) (Saltmeadow Cordgrass)	25%				Each 16,485
	Juncus gerardi (Saltmeadow Rush)	25%				Each 16,485

Upper High Marsh (Elevation 2.7 Feet NAVD88 - 3.0 Feet NAVD88)						
Area (acres)	Species Name (Common Name)	% of Plantings	Root	Height	Spacing	Units
1.88	Distichlis spicata (Salt Grass)	63%	2 IN x 2 IN Minimum Plug	6 IN MN.	2 FT. On Center	Each 12,919
	Spartina patens (Innongonia) (Saltmeadow Cordgrass)	10.5%				Each 2,154
	Juncus gerardi (Saltmeadow Rush)	10.5%				Each 2,154
	Spartina pectinata (Prairie Cordgrass)	8%				Each 263
	Panicum virgatum (Switchgrass)	8%				Each 263

Scrub Shrub Wetland (Elevation 3.0 Feet NAVD88 - 3.5 Feet NAVD88)						
Area (acres)	Species Name (Common Name)	% of Plantings	Root	Height	Spacing	Units
0.35	Ava frutescens (High-Tide Bush)	12.5%	Container No. 1	18-24 IN	5 FT. On Center	Each 77
	Baccharis halimifolia (Roundsel Tree)	12.5%				Each 77
	Ava frutescens (High-Tide Bush)	12.5%				Each 77
	Baccharis halimifolia (Roundsel Tree)	12.5%				Each 77
	Spartina pectinata (Prairie Cordgrass)	25%				Each 959
	Panicum virgatum (Switchgrass)	25%				Each 959

Coastal Sandplain Grassland Seed Mix* (Elevation 3.5 + Feet NAVD88)		
Species Name	Common Name	Proportion By Volume
Schizachyrium scoparium	Little Bluestem	25
Panicum virgatum	Switchgrass	12
Astilbe tuberosa	Butterfly Weed	8
Baptisia stricta	Yellow Wild Indigo	8
Tephrosia virginiana	Goat's Rue	8
Solidago sempervirens	Seaside Goldenrod	8
Hudsonia tomentosa	Golden Heather	8
Lathyrus japonicus	Beach Pea	8
Senecio caperatus	Toothed White Toppled Aster	5
Phytolacca	Sickle-Leaved Golden Aster	5
Impatiens linearifolia	Stiff Aster	5
Total		100

\*SEEDED AT A RATE OF 15 POUNDS PURE LIVE SEED (PLS) PER ACRE



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BUZZARDS BAY COALITION  
114 Front St, New Bedford, MA 02740

**MARSH ISLAND SALT MARSH RESTORATION**  
FAIRHAVEN, MASSACHUSETTS

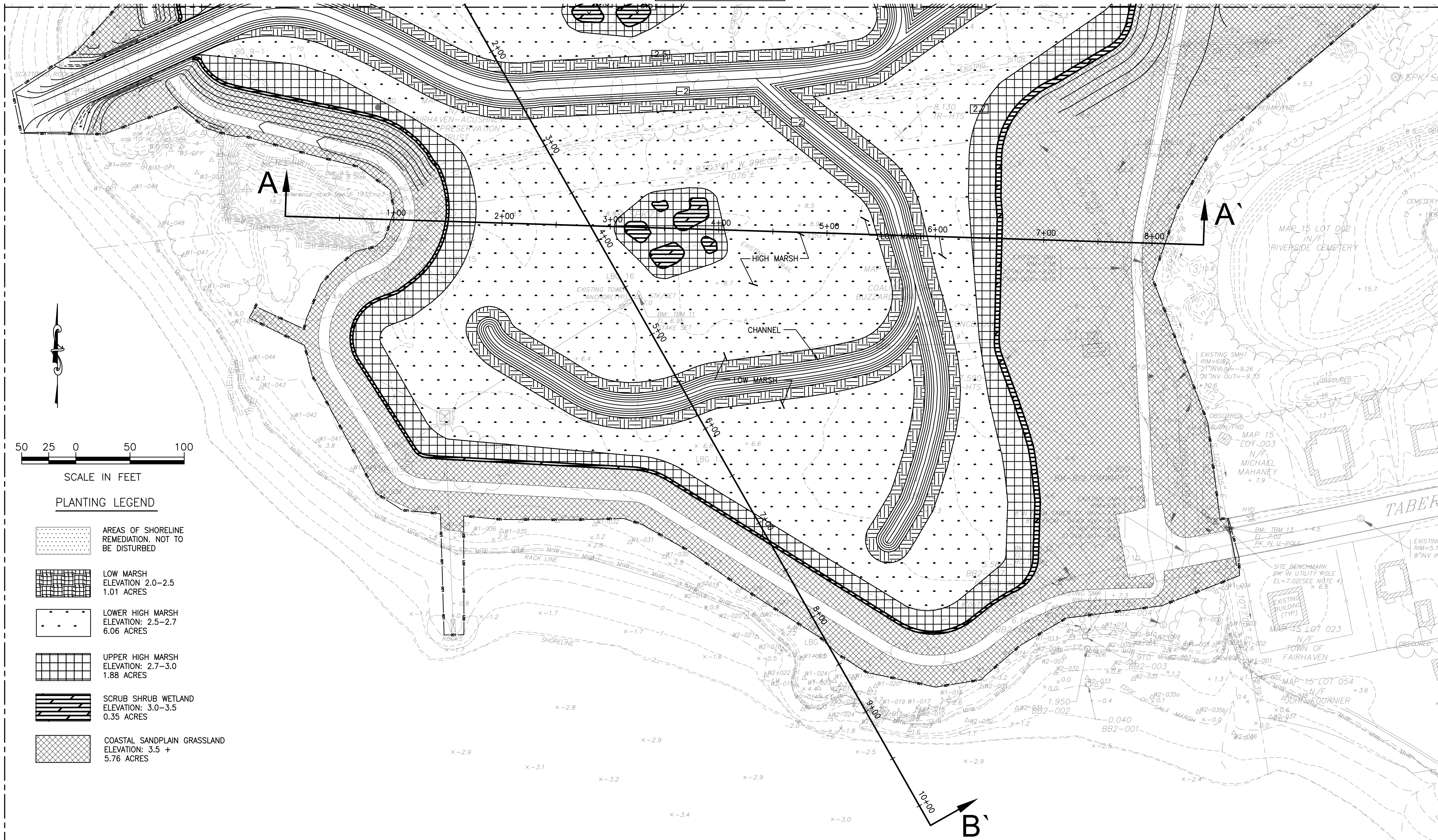
**PLANTING PLAN 1**  
(1 OF 2)

SHEET TITLE:		DATE: NOVEMBER 2021	
SCALE:	AS SHOWN	PROJECT MANAGER:	MH
CHECKED BY:	CC	PROJECT ENGINEER:	TC
DRAWN BY:	AG/RS	CHECKED BY:	CC
JOB NUMBER:	31403283	DRAWN BY:	AG/RS
		SHEET No. <b>C-12</b>	

CONTINUED ON SHEET C-13



CONTINUED ON SHEET C-12



SCALE IN FEET

PLANTING LEGEND

- AREAS OF SHORELINE REMEDIATION, NOT TO BE DISTURBED
- LOW MARSH ELEVATION 2.0-2.5 1.01 ACRES
- LOWER HIGH MARSH ELEVATION: 2.5-2.7 6.06 ACRES
- UPPER HIGH MARSH ELEVATION: 2.7-3.0 1.88 ACRES
- SCRUB SHRUB WETLAND ELEVATION: 3.0-3.5 0.35 ACRES
- COASTAL SANDPLAIN GRASSLAND ELEVATION: 3.5 + 5.76 ACRES

PLANTING NOTES

EMERGENT PLANTINGS -- PLUGS : LOW MARSH AND HIGH MARSH

- NO AREA SHALL BE PLANTED UNTIL FINAL GRADE IS COMPLETED AND THE AREA HAS BEEN CLEARED OF WRACK AND OTHER DEBRIS. COMPLETION OF CLEARING SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING. ALL AREAS PLANTED SHALL BE PROTECTED BY HERBIVORY FENCING AT THE END OF EACH PLANTING DAY.
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COASTAL SANDPLAIN GRASSLAND SEEDING:

- THE COASTAL SANDPLAIN GRASSLAND SEED MIXTURE SHALL BE AS SHOWN IN THE TABLE AND SEEDED AT A RATE OF 15 POUNDS OF PURE LIVE SEED (PLS) PER ACRE. SEEDING SHALL OCCUR AFTER MARCH 15 AND BEFORE JUNE 1.
- THE SEEDED AREA SHALL BE FIRMED TO FORM A GOOD SEED BED. UNLESS HYDROSEED, THE SEEDED AREA SHALL BE DRAGGED WITH A CHAIN OR TIRE HARROW AND FIRMED TO ENSURE GOOD SOIL TO SEED CONTACT.
- NITROGEN FERTILIZER SHALL NOT BE APPLIED AT THE TIME OF THE SEEDING.
- AT LEAST SIX WEEKS BEFORE SEEDING, 9 DISCRETE SOIL SAMPLES SHALL BE TAKEN IN THE TOP SIX INCHES OF SOIL AND MIXED INTO THREE COMPOSITE SOIL SAMPLES AND TESTED FOR pH. DISCRETE SAMPLING LOCATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. IF SOIL pH IS ABOVE 6.5, APPLY A SOIL AMENDMENT OF ELEMENTAL SULFUR AT A RATE OF 91 G S/M<sup>2</sup> THREE WEEKS BEFORE SEEDING.
- ALL DISTURBED AREAS NOT SPECIFICALLY CALLED OUT FOR SEEDING SHALL BE RESTORED IN ACCORDANCE WITH COASTAL SANDPLAIN GRASSLAND SEEDING.

SCRUB SHRUB PLANTINGS

- SCRUB SHRUB MARSH BETWEEN ELEVATIONS 3.0 TO 3.5 (NAVD88) SHALL BE PLANTED WITH SALT TOLERANT SPECIES AS SHOWN IN THE TABLE. PLANTINGS SHALL BE CLUSTERED BY SPECIES WITH 5-10 PLANTS OF ONE SPECIES AND INDIVIDUAL PLANTS SPACED AT 5-FOOT ON CENTER. THE PLANTING WINDOW IS APRIL 1 TO MAY 15.
- ALL SHRUBS SHALL CONFORM TO THE MATERIAL SPECIFICATION REQUIREMENTS OF THE AMERICAN STANDARD FOR NURSERY STOCK (1986 OR LATER EDITION).
- PLANT PITS SHALL BE DUG APPROXIMATELY FOUR INCHES (4") WIDER THAN THE STOCK SIZE. PRIOR TO PLACEMENT OF THE PLANT IN THE PLANTING HOLE, A 20-GRAM FERTILIZER AGRIFORM TABLET (20-10-5 ANALYSIS) SHALL BE PLACED IN THE BOTTOM OF THE PLANTING HOLE. BACKFILL SOIL MATERIALS SHALL BE THE SAME AS EXCAVATED FOR THE PLANTING PITS.



Low Marsh (Elevation 2.0 Feet NAVD88 - 2.5 Feet NAVD88)						
Area (acres)	Species Name (Common Name)	% of Plantings	Root	Height	Spacing	Units
1.01	Spartina alterniflora (Smooth Cordgrass)	100%	2 IN x 2 IN Minimum Plug	6 IN MNL	2 FT. On Center	Each 10,989

Lower High Marsh (Elevation 2.5 Feet NAVD88 - 2.7 Feet NAVD88)						
Area (acres)	Species Name (Common Name)	% of Plantings	Root	Height	Spacing	Units
6.06	Distichlis spicata (Salt Grass)	75%	2 IN x 2 IN Minimum Plug	6 IN MNL	2 FT. On Center	Each 49,455
	Spartina patens (Innongyna) (Saltmeadow Cordgrass)	25%				Each 16,485
	Juncus gerardi (Junco) (Saltmeadow Rush)	25%				Each 16,485

Upper High Marsh (Elevation 2.7 Feet NAVD88 - 3.0 Feet NAVD88)						
Area (acres)	Species Name (Common Name)	% of Plantings	Root	Height	Spacing	Units
1.88	Distichlis spicata (Salt Grass)	63%	2 IN x 2 IN Minimum Plug	6 IN MNL	2 FT. On Center	Each 12,919
	Spartina patens (Innongyna) (Saltmeadow Cordgrass)	10.5%				Each 2,154
	Juncus gerardi (Junco) (Saltmeadow Rush)	10.5%				Each 2,154
	Spartina pectinifera (Prairie Cordgrass)	8%				Each 263
	Panicum virgatum (Switchgrass)	8%			5 FT. On Center	Each 269

Scrub Shrub Wetland (Elevation 3.0 Feet NAVD88 - 3.5 Feet NAVD88)						
Area (acres)	Species Name (Common Name)	% of Plantings	Root	Height	Spacing	Units
0.35	Ava frutescens (High-Tide Bush)	12.5%	Tubelings	6 IN MNL	5 FT. On Center	Each 77
	Baccharis halimifolia (Groundsel Tree)	12.5%				Each 77
	Ava frutescens (High-Tide Bush)	12.5%				Each 77
	Baccharis halimifolia (Groundsel Tree)	12.5%				Each 77
	Spartina pectinifera (Prairie Cordgrass)	25%				2 IN x 2 IN Minimum Plug
	Panicum virgatum (Switchgrass)	25%			2 FT. On Center	Each 959

Coastal Sandplain Grassland Seed Mix\* (Elevation 3.5 + Feet NAVD88)

Species Name	Common Name	Proportion By Volume
Schizachyrium scoparium	Little Bluestem	25
Panicum virgatum	Switchgrass	12
Asclepias tuberosa	Butterfly Weed	8
Baptisia frictiflora	Yellow Wild Indigo	8
Tephrosia virginiana	Goat's Rue	8
Solidago sempervirens	Seaside Goldenrod	8
Hudsonia ericoides	Golden Heather	8
Lathyrus japonicus	Beach Pea	8
Senecopus asteroides	Toothed White Topped Aster	5
Phlyopsis falcata	Sickle-Leaved Golden Aster	5
Imnactis linearifolia	Stiff Aster	5
	Total	100

\*SEEDED AT A RATE OF 15 POUNDS PURE LIVE SEED (PLS) PER ACRE



WSP USA  
412 Mount Kemble Ave, Morristown, NJ 07962

REV.	DESCRIPTION	DATE

NOT FOR CONSTRUCTION



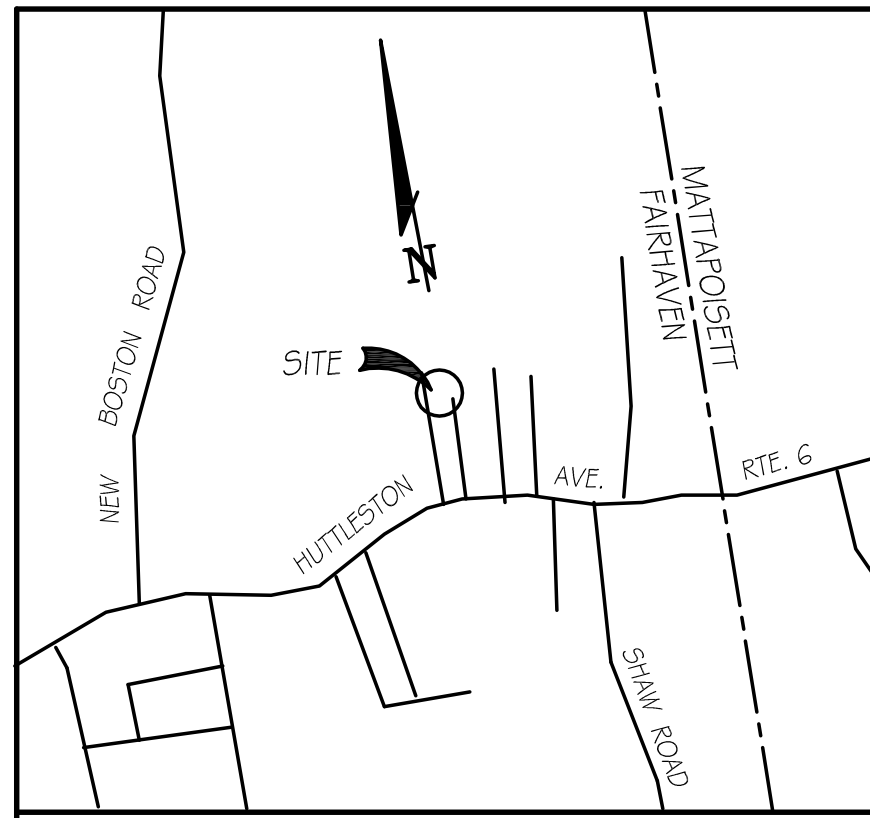
BUZZARDS BAY COALITION  
114 Front St, New Bedford, MA 02740

MARSH ISLAND SALT MARSH RESTORATION  
FAIRHAVEN, MASSACHUSETTS

PLANTING PLAN 2 (2 OF 2)

SHEET TITLE:		DATE: NOVEMBER 2021	
SCALE:	AS SHOWN	PROJECT MANAGER:	MH
CHECKED BY:	CC	PROJECT ENGINEER:	TC
DRAWN BY:	AG/RS	CHECKED BY:	CC
JOB NUMBER:	31403283	DRAWN BY:	AG/RS
		JOB NUMBER:	31403283

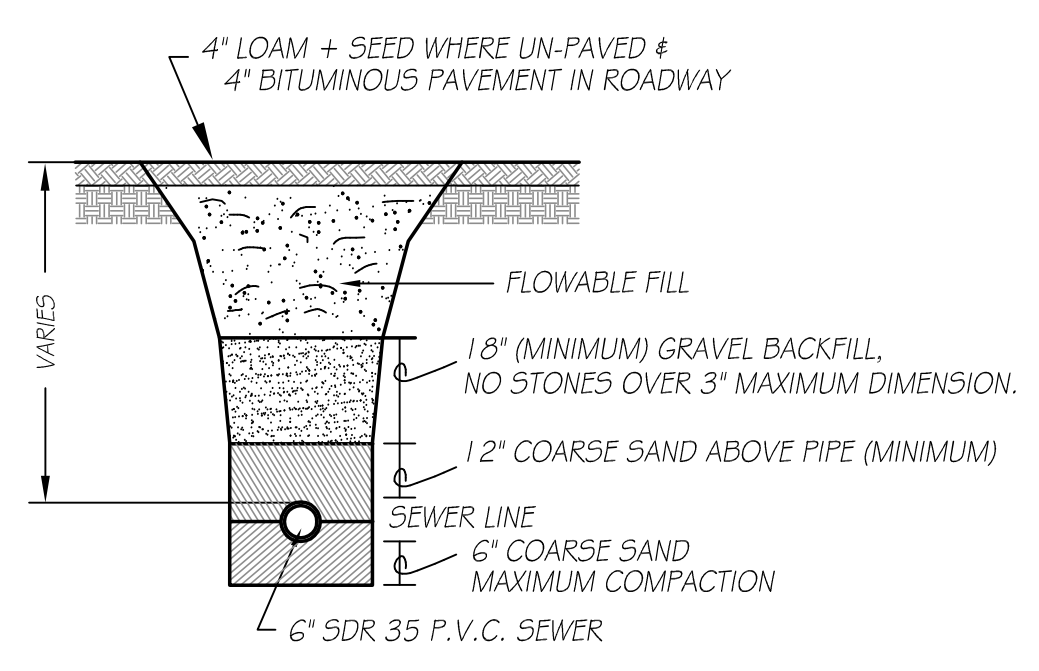
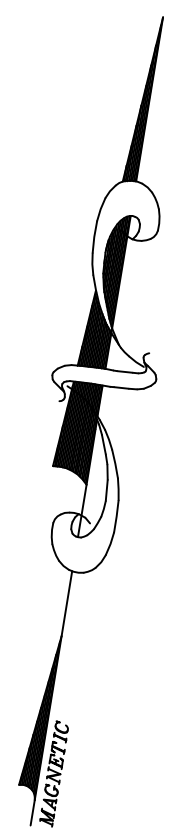
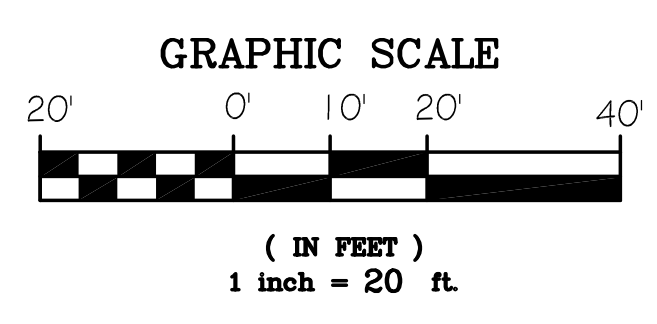
SHEET No. C-13



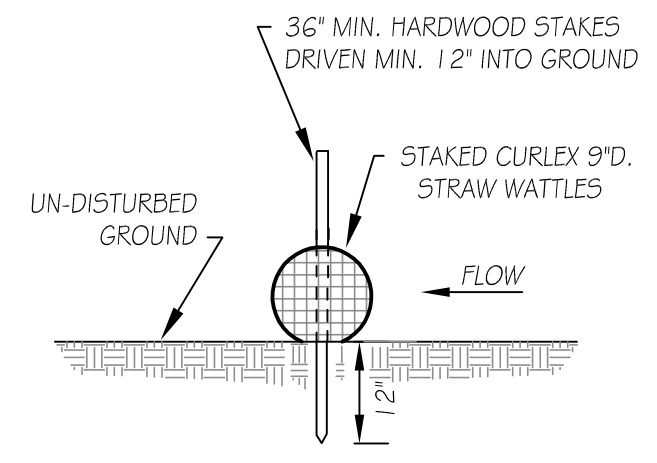
**LOCUS PLAN**  
1 INCH = 2000 FT. ±



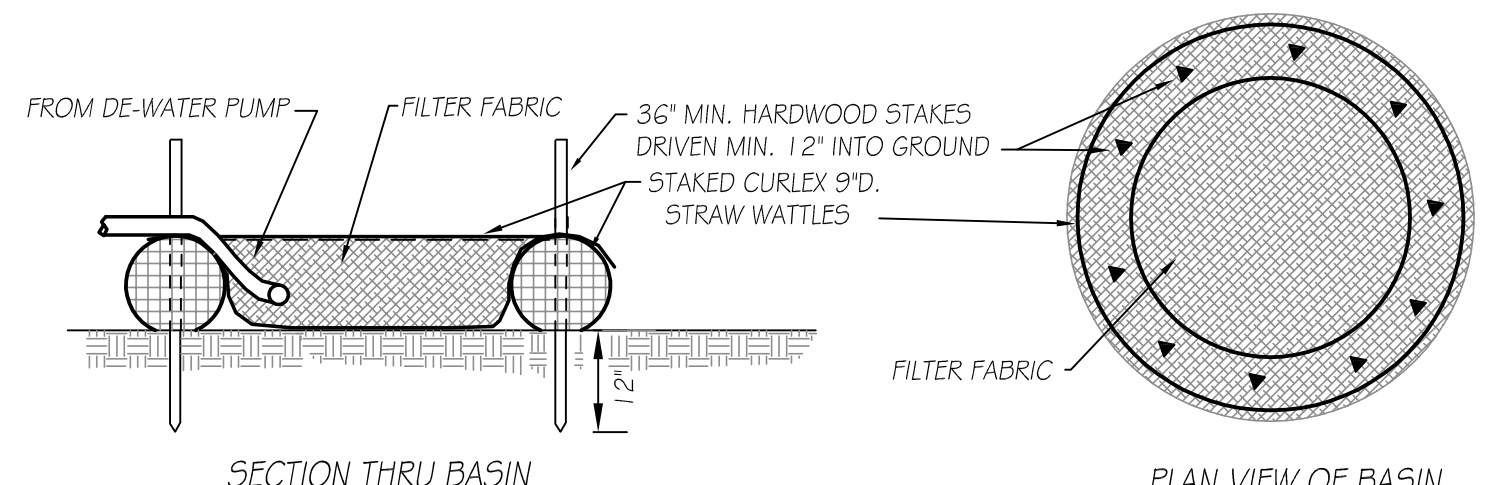
**SITE PLAN**  
SCALE: 1" = 20 FT.



**TRENCH PIPE BEDDING DETAIL**  
NOT TO SCALE

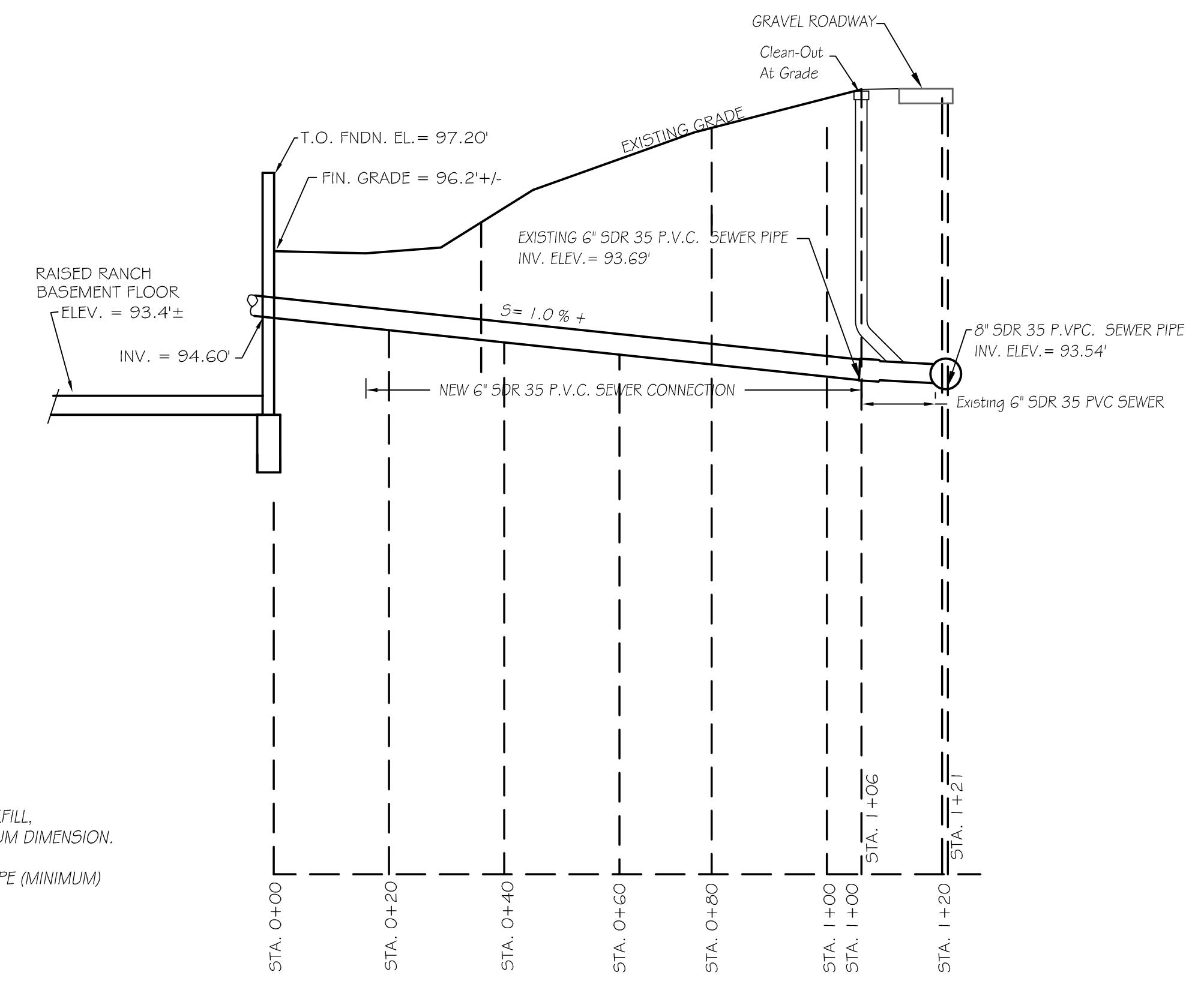


**SILTATION BARRIER DETAIL**  
N.T.S.



**DE-WATERING SILT TRAP**  
NOT TO SCALE

NOTE:  
1. ALL EXCAVATION BELOW THE GROUND WATER TABLE SHALL BE DE-WATERED WITH PUMP DISCHARGE TO DE-WATERING SILT TRAP.



**SEWER PROFILE**  
HORIZONTAL: 1" = 20 FT.  
VERTICAL: 1" = 2 FEET

**SPECIFICATIONS:**

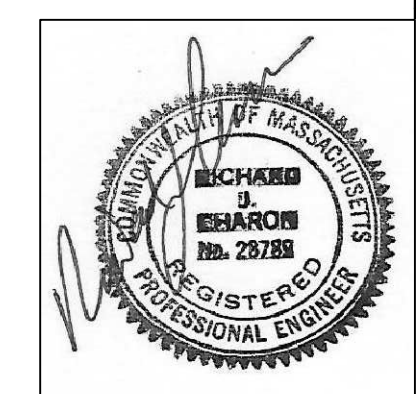
1. SEWER PIPE SHALL BE S.D.R. 35 P.V.C. PIPE WITH GASKETED JOINTS, LAID TRUE TO GRADE. PIPE SHALL BE BEDDED IN COMPACTED SAND AS SHOWN ON PIPE BEDDING DETAIL. PIPE SHALL BE INSPECTED IN PLACE BY THE ENGINEER AND THE FAIRHAVEN B.P.W. REPRESENTATIVE PRIOR TO FINAL COVER.

**GENERAL NOTES:**

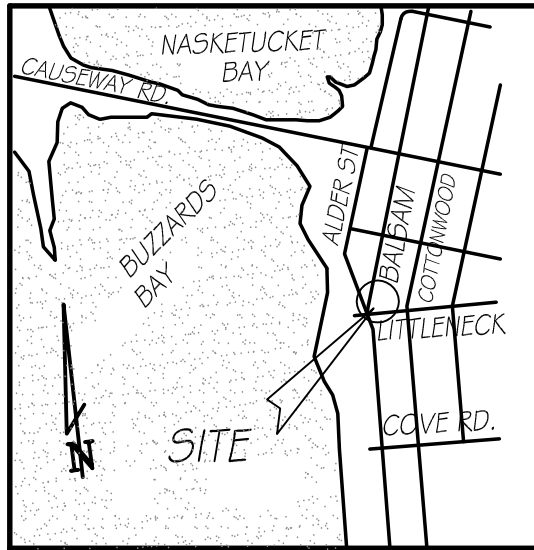
- NOTE 'A': THE SUBJECT PARCEL IS SHOWN AS LOT 15 OF ASSESSORS MAP 30B, COMPRISED OF LOTS 15 THRU 20.
- NOTE 'B': ZONING IS RESIDENCE A WITH MINIMUM FRONTAGE = 100 FT. & LOT AREA = 15,000 S.F. SETBACKS ARE: FRONT = 20 FT.; SIDE = 10 FT. & REAR = 30 FT. MAX. BUILDING COVERAGE = 30%; MAX. LOT COVERAGE = 50% PROPOSED BUILDING COVERAGE = 1,776 S.F. / 13,286 S.F. = 13.4% PROPOSED LOT COVERAGE = (1,776 S.F. + 626 S.F.) / 13,286 S.F. = 18.1% PROPOSED HOUSE SETBACKS REQUIRE APPROVAL FROM THE ZONING BOARD OF APPEALS.
- NOTE 'C': THE DWELLING SHOWN HEREON DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON F.E.M.A. COMMUNITY PANEL NO. 25005C0413G DATED JULY 6, 2021.
- NOTE 'D': NOTIFY DIG-SAFE CENTER, LOCAL UTILITIES AND FAIRHAVEN B.P.W. 72 HOURS PRIOR TO START OF WORK!
- NOTE 'E': WETLANDS DELINEATION (FLAGS #1 - 9) WAS PERFORMED BY SABATIA, INC.; REVISED FLAGS #1A - 3A WERE SET BY CONSERVATION AGENT AT 1/11/21 SITE INSPECTION.
- NOTE 'F': NO WORK IS PROPOSED WITHIN 100 FT. OF THE PERENNIAL STREAM.

**PLAN OF SITE, PROPOSED HOUSE & SEWER CONNECTION**  
PREPARED FOR  
**DANIEL POUNDS**  
89 AKIN STREET  
FAIRHAVEN, MASS.

**CAI** Charon Associates, Inc.  
Consulting Engineers  
323 Neck Road - Rochester, MA 02770  
Tel: 508-763-8362 Fax: 508-763-9582



SCALE: AS NOTED  
DATE: NOVEMBER 22, 2021  
DWG. NO. L-1



LOCUS PLAN  
SCALE: 1" = 2000'+

MAP 43A  
LOT 55 & 57  
NF DEMERS

MAP 43A  
LOT 59 & 60  
NF DEMERS

ELEVATE HOUSE, MOVE AND  
RE-SET ONTO NEW FLOOD  
ZONE-COMPLIANT FOUNDATION

CONC. BND.  
#D.H. (FND.)  
MAP 43A  
LOT 64, 64 & 67  
NF PARECE

MAP 43A  
LOT 84  
NF LOPRESTI

MAP 43A  
LOT 85  
NF COPPES

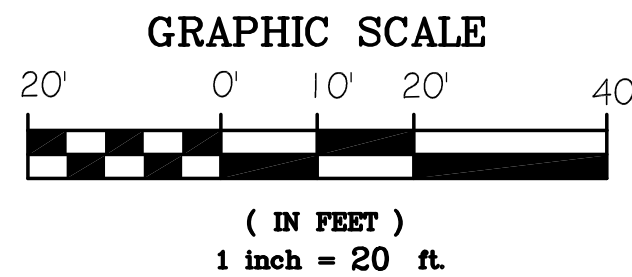
MAP 43A  
LOT 85  
NF FEDERICO PAUL & STEIN ANNE

MAP 43A  
LOT 92 & 93  
NF CHIODO

MAP 43A  
LOT 90 & 91  
NF BEASTON

BENCHMARK SPIKE FND IN UTILITY  
POLE ELEV. = 14.30 NAVD88

SITE PLAN  
SCALE: 1" = 20 FT.

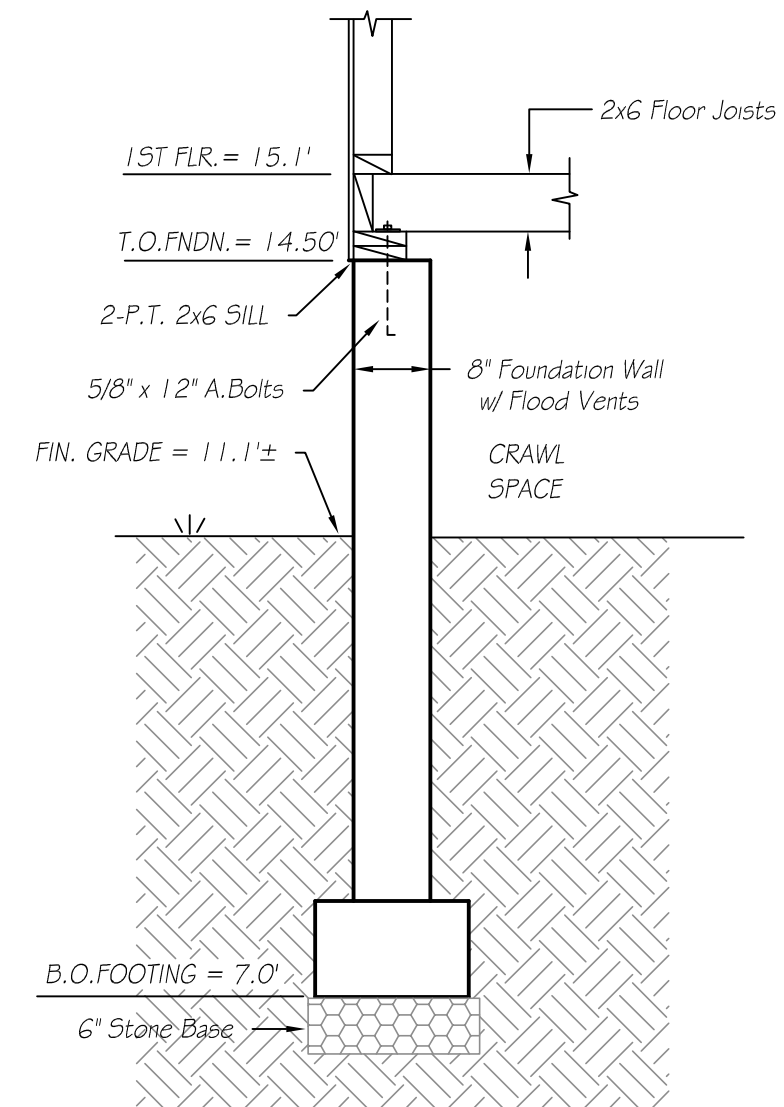


GENERAL NOTES:

1. THIS PARCEL IS SHOWN AS LOTS 86 & 87 OF ASSESSORS MAP 43A, AND ALSO SHOWN AS LOTS 86 & 87 ON A PLAN RECORDED AT THE BRISTOL COUNTY REGISTRY OF DEEDS LAND COURT SECTION PLAN 7432C ON SHEET 2.
2. THE PARCEL SHOWN HEREON LIES WITHIN A SPECIAL FLOOD HAZARD AREA, F.E.M.A. ZONE AE, EL. 14' AS DELINEATED ON F.E.M.A. COMMUNITY PANEL 25005C0502F DATED JULY 7, 2009.
3. DEED REFERENCE: L.C. CERT. 25333
4. ZONING DISTRICT: RURAL RESIDENCE 'RR'  
FRONTAGE = 140 FT.; MIN. LOT AREA = 30,000 S.F.  
FRONT & REAR SETBACKS = 30 FEET; SIDE SETBACK = 20'  
MAXIMUM BUILDING COVERAGE = 15%; MAXIMUM LOT COVERAGE = 25%  
EXISTING BLDG. COVERAGE = (HOUSE @ 658 S.F. + SHED @ 147 S.F.) / LOT AREA = 805 S.F. / 12,000 S.F. = 6.7%  
PROP'D. BLDG. COVERAGE = (HOUSE @ 978 S.F. + SHED @ 147 S.F.) / LOT AREA = 1,125 S.F. / 12,000 S.F. = 9.4%  
EXISTING LOT COVERAGE = (BLDG. @ 805 S.F. + DWAY. @ 388 S.F.) / LOT AREA = 1,193 S.F. / 12,000 S.F. = 9.9%  
PROP'D. LOT COVERAGE = (BLDG. @ 1,125 S.F. + DWAY. @ 388 S.F.) / LOT AREA = 1,513 S.F. / 12,000 S.F. = 12.6%

SCOPE OF WORK:

- THE SCOPE OF WORK INCLUDES (1) ELEVATING THE EXISTING HOUSE AND MOVING IT TO THE TEMPORARY LOCATION; (2) CONSTRUCTION OF NEW FLOOD ZONE-COMPLIANT FOUNDATION; (3) SETTING HOUSE ONTO NEW FOUNDATION; (4) RENOVATIONS TO HOUSE AND CONSTRUCTION OF ADDITIONS; AND (5) ASSOCIATED SITE WORK.

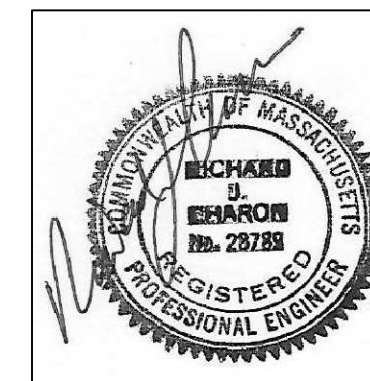


FOUNDATION SECTION  
NOT TO SCALE

PLAN OF SITE, EXISTING CONDITIONS  
& PROPOSED RENOVATIONS

PREPARED FOR  
**PAUL J. & FRANCESCA FEDERICO**  
10 LITTLENECK ROAD  
FAIRHAVEN, MASS.

CAI *Charon Associates, Inc.*  
Consulting Engineers  
323 Neck Road - Rochester, MA 02770  
Tel: 508-763-8362 Fax: 508-763-9582

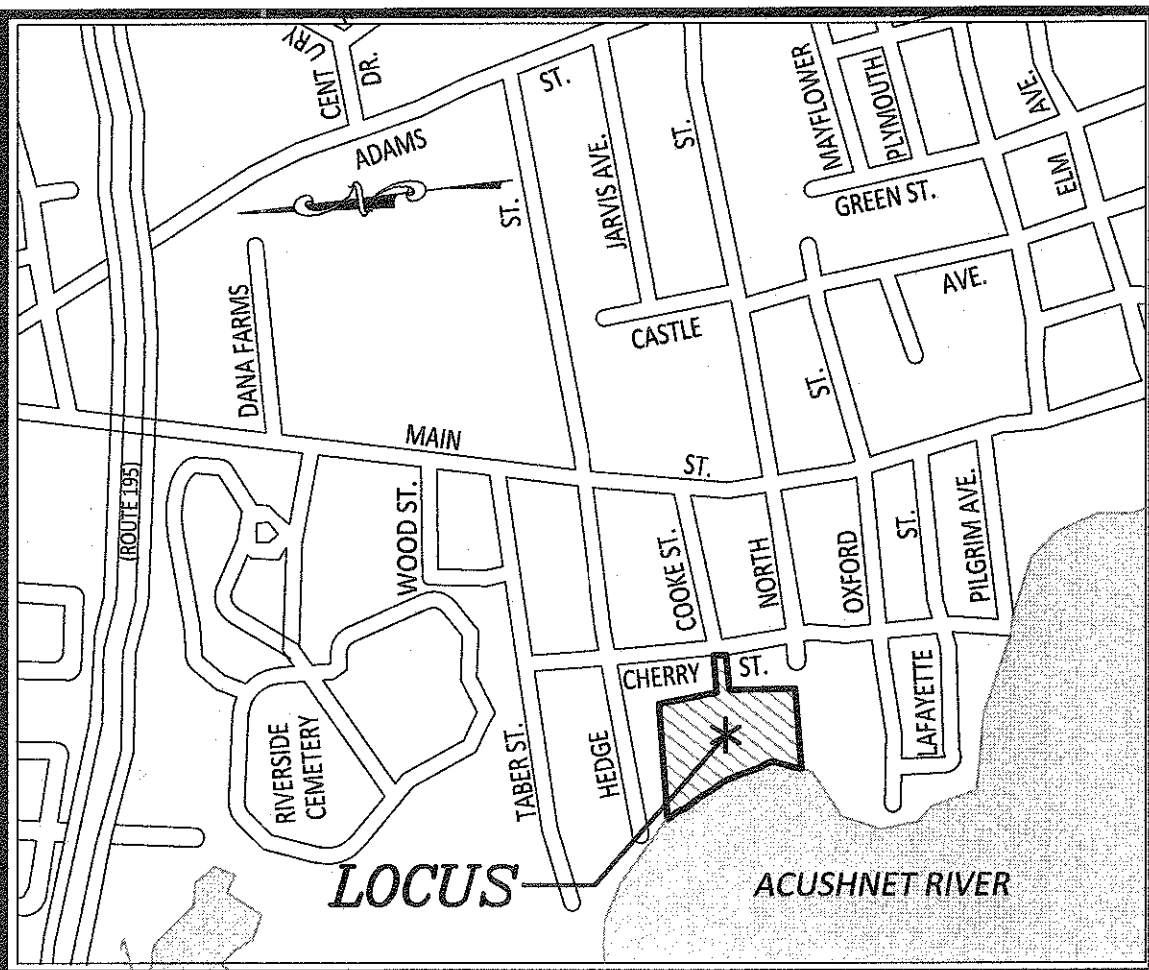


SCALE: AS NOTED  
DATE: NOVEMBER 16, 2021

DWG. NO.  
**L-1**

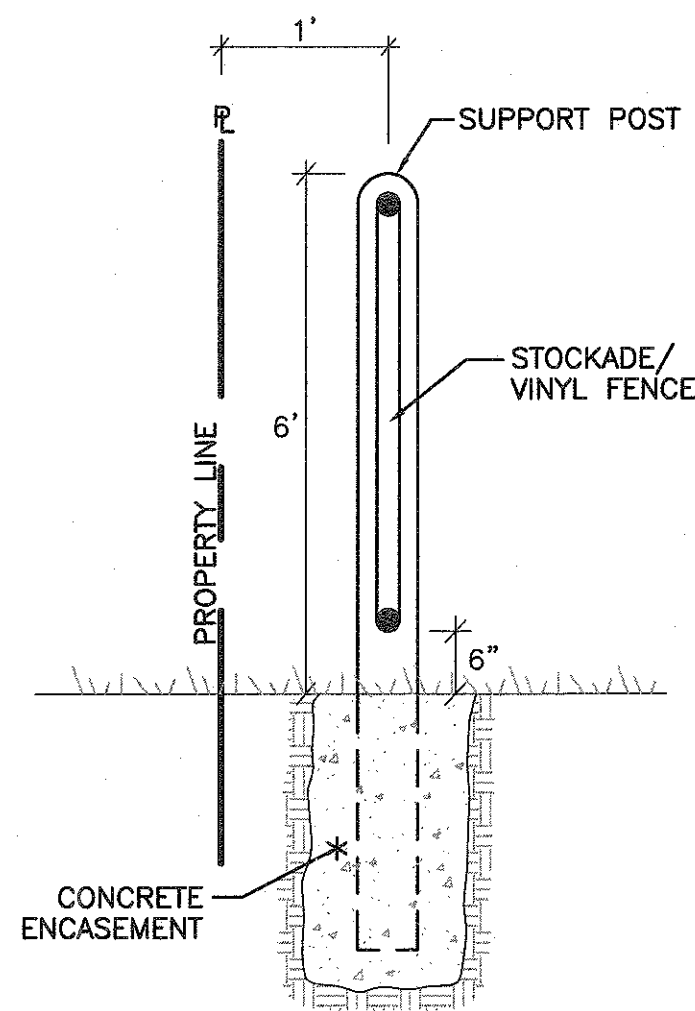
LEGEND:

- EXISTING CONTOURS:
- PROPOSED CONTOURS:
- EDGE OF WETLANDS:
- LIMIT OF BUFFER ZONE:
- LIMITS OF F.E.M.A. ZONES:
- SPOT ELEVATIONS: 53.9
- TEST PIT LOCATION:
- SEPTIC TANK: #6
- DELINEATION FLAG:

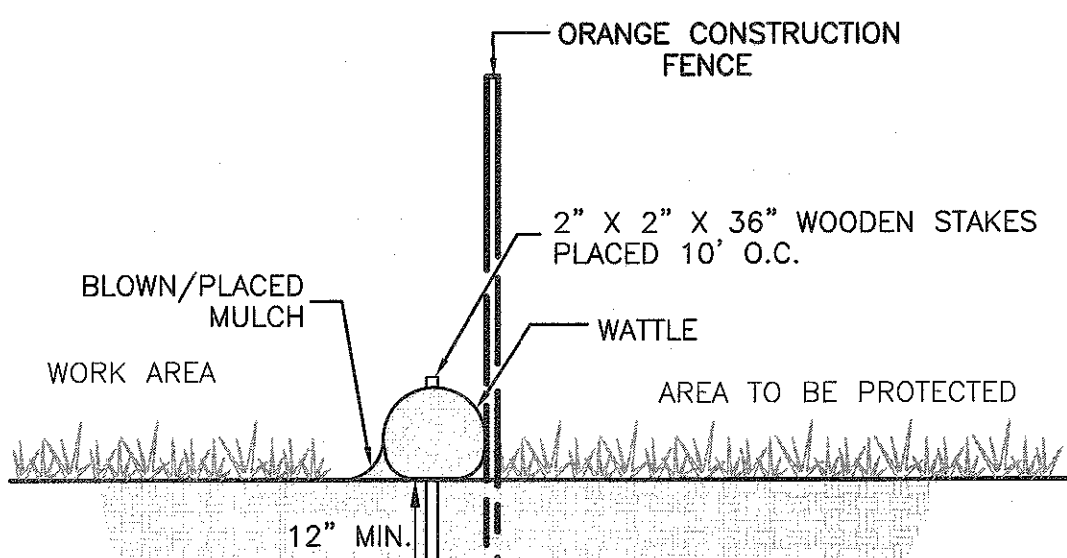


**LOCUS MAP**

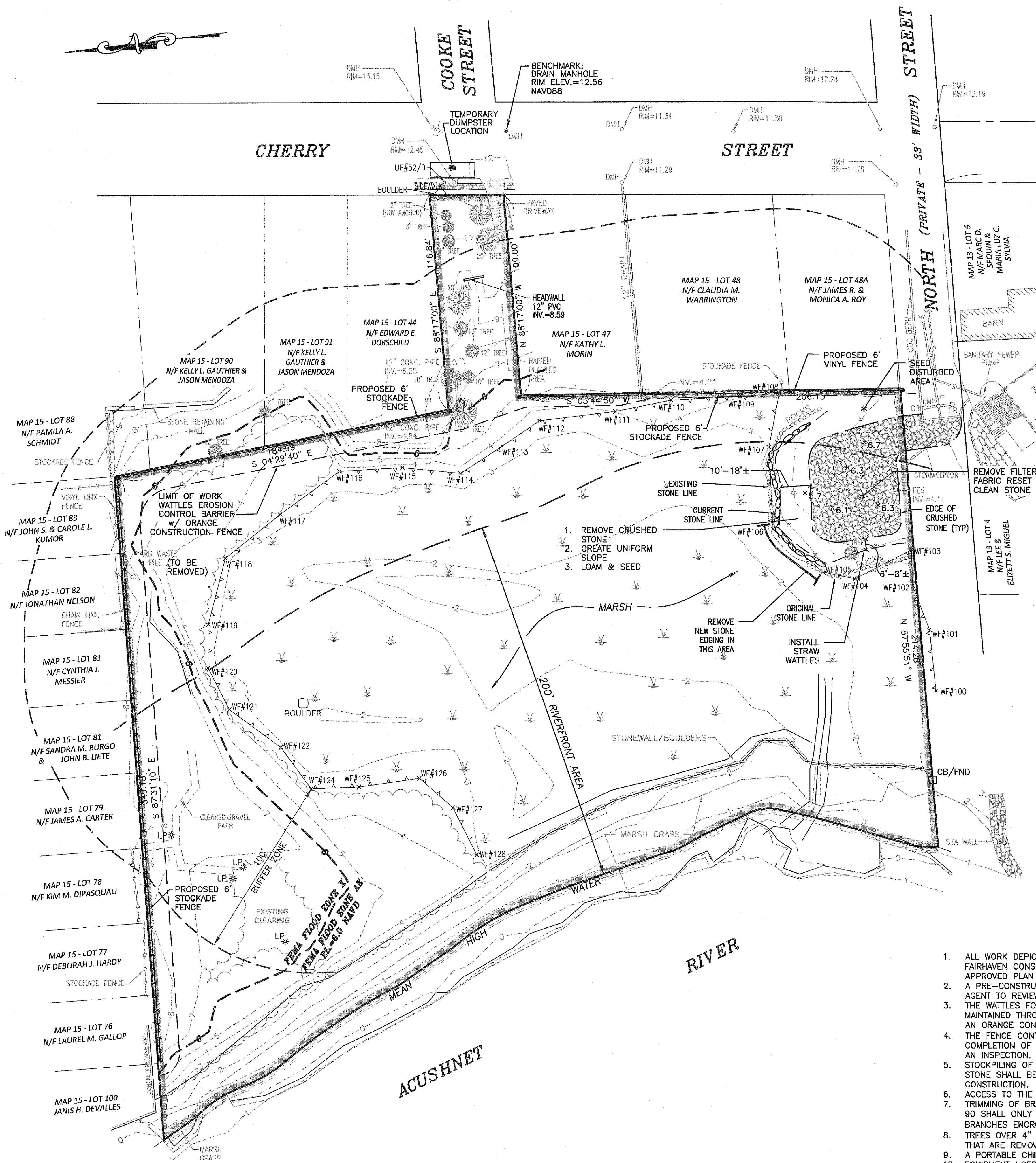
SCALE: 1"=600'±



**FENCE DETAIL**  
(NOT TO SCALE)



**WATTLE EROSION CONTROL DETAIL**  
(NOT TO SCALE)

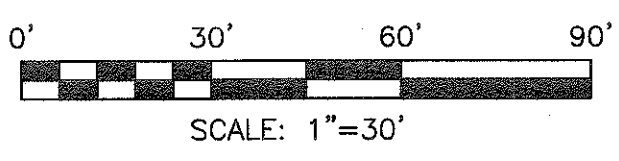


**LEGEND**

- PROPERTY LINE
- - - EXISTING CONTOUR
- ⊖ STONEWALL
- S SEWER LINE
- D DRAINAGE LINE
- CB CATCH BASIN
- DMH DRAIN MANHOLE
- SMH SEWER MANHOLE
- UP UTILITY POLE
- LP LAMP POST
- CHAIN LINK FENCE
- STOCKADE FENCE
- TREE LINE/BRUSH LINE
- TREE
- WF#111 WF#112 EDGE OF BORDERING VEGETATED WETLANDS
- ×6.7 SPOT GRADE

- RESTORATION**
1. SET & MAINTAIN STRAW WATTLES.
  2. REMOVE NEW STONE EDGING AS SHOWN.
  3. REGRADE PERIMETER TO PRE-ALTERATION SLOPE.
  4. REMOVE CRUSHED STONE, REMOVE FILTER FABRIC.
  5. BASED ON 2019 AERIAL PHOTOGRAPH, RESET CLEAN CRUSHED STONE TO ORIGINAL LIMITS OF COMPACT GRAVEL SURFACE.
  6. LOAM & SEED PERIMETER DISTURBED AREA OR USE SOD TO OBTAIN STABILIZED SURFACE AS AN ALTERNATIVE.

- CONSTRUCTION NOTES**
1. ALL WORK DEPICTED ON THIS PLAN IS SUBJECT TO ALL ORDER OF CONDITIONS ISSUED BY THE FAIRHAVEN CONSERVATION COMMISSION. THE CONTRACTOR SHALL HAVE A COPY OF THE ORDER AND APPROVED PLAN ON SITE AT ALL TIME DURING THE CONSTRUCTION PROVIDED.
  2. A PRE-CONSTRUCTION MEETING WILL BE SCHEDULED BY THE CONTRACTOR WITH THE CONSERVATION AGENT TO REVIEW THE REQUIREMENTS OUTLINED IN THE ORDER OF CONDITIONS.
  3. THE WATTLES FOR EROSION CONTROL SHALL BE SET PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS UNTIL ALL DISTURBED AREAS ARE STABILIZED. AN ORANGE CONSTRUCTION FENCE SHALL BE INSTALLED BEHIND THE WATTLES.
  4. THE FENCE CONTRACTOR SHALL MARK ANY TREES OVER 4" DIAMETER PRIOR TO CLEARING. UPON COMPLETION OF MARKING THE CONTRACTOR SHALL NOTIFY THE CONSERVATION OFFICE TO SCHEDULE AN INSPECTION.
  5. STOCKPILING OF MATERIALS SHALL BE LIMITED TO THE DESIGNATED UPLAND AREA. CLEAN CRUSHED STONE SHALL BE RE-SPREAD OVER THE STOCKPILE AREA AT THE CONCLUSION OF THE CONSTRUCTION.
  6. ACCESS TO THE SITE SHALL BE THROUGH THE CHERRY STREET FRONTAGE.
  7. TRIMMING OF BRANCHES, AS NEEDED, FROM THE TREE LOCATED ON THE BOUNDARY AT MAP 15-LOT 90 SHALL ONLY BE COMPLETED BY A QUALIFIED ARBORIST. TRIMMING SHALL BE LIMITED TO BRANCHES ENCRANCHING ON APPLICANT'S PROPERTY TO THE EXTENT NEEDED TO INSTALL THE FENCE.
  8. TREES OVER 4" IN DIAMETER SHALL NOT BE REMOVED UNLESS DIRECTLY ON FENCE LINE. ANY TREES THAT ARE REMOVED SHALL BE REPLACED WITH LEYLAND CYPRESS OR APPROVED EQUAL.
  9. A PORTABLE CHIPPER SHALL BE USED TO CREATE MULCH FROM MATERIAL CUT IN THE WORK ZONE.
  10. EQUIPMENT USED TO COMPLETE THE FENCE INSTALLATION SHALL BE LIMITED TO HAND TOOLS AND HAND AUGER. THE FENCE ALONG THE WEST LINE OF LOTS 47, 48, 48A, AS SHOWN, SHALL BE INSTALLED USING HAND TOOLS AND HAND AUGER ONLY.
  11. EXCESS SOILS SHALL BE SPREAD NEAR THE FENCE POSTS, AND THE AREA SEEDED FOR STABILIZATION. IF REQUIRED, THE SOILS WILL BE AMENDED WITH ORGANIC TOPSOIL TO FACILITATE GRASS GROWTH.
  12. IF REQUIRED, A LINED CONCRETE WASHOUT PIT SHALL BE SET IN THE STOCKPILE AREA WITH SILT FENCING SET ALONG THE DOWNGRADE PERIMETER OF THE PIT.



**OWNER/APPLICANT:**  
LEE & ELIZETT S. MIGUEL  
3 NORTH STREET  
FAIRHAVEN, MA 02719

No.	Date	Revision Description	Checked By	Approved By
7	NOVEMBER 26, 2021	REVISE REMEDIATION PLAN	SDG	SDG
6	NOVEMBER 05, 2021	REVISION PLAN	SDG	SDG
5	OCTOBER 18, 2021	ASBUILT CRUSHED STONE	SDG	SDG
4	MARCH 15, 2021	MODIFY CONSTRUCTION NOTES	SDG	SDG
3	FEBRUARY 26, 2021	ADD CONSTRUCTION NOTES	SDG	SDG
2	DECEMBER 28, 2020	ELIMINATE PORTION OF FENCE	SDG	SDG
1	DECEMBER 07, 2020	REVISIONS PER CONSERVATION COMMISSION COMMENTS	SDG	SDG

Scale: 1"=30'  
Date: JULY 2, 2020  
Drawn: KJ  
Checked: SDG  
Approved: SDG  
Sheet number of drawing: 1  
Drawing number: SP-1

Project: ASSESSORS MAP 15, LOT 43 NORTH STREET / CHERRY STREET FAIRHAVEN, MASSACHUSETTS  
Client: LEE & ELIZETT MIGUEL  
Drawing Title: SITE PLAN

**SITEC, Inc.**  
449 Fence Corner Road  
Dorchester, MA 02747  
(508) 998-2125  
FAX (508) 998-7554  
WWW.SITEC-ENGINEERING.COM

**SITEC**  
Civil and Environmental Engineering  
Land Use Planning

Acad No. FVN 18-7102 SP.DWG  
File No. 18-7102