
PUBLIC NOTICE



**US Army Corps
of Engineers**®
New England District
696 Virginia Road
Concord, MA 01742-2751

Comment Period Begins: 25 June 2013
Comment Period Ends: 26 July 2013
File Number: NAE 2006-1350
In Reply Refer To: Mr. Brian E. Valiton
Phone: (978) 318-8166
E-mail: brian.e.valiton@usace.army.mil

The District Engineer has received a permit application to conduct work in waters of the United States as described below.

APPLICANT: Earl's Marina, Inc., 56 Goulart Memorial Drive, Fairhaven, Massachusetts 02719

ACTIVITY: To perform new work, including both improvement and maintenance dredging with upland disposal, and installing new structures including a new floating breakwater and 10 new commercial moorings as well as establishing a reconfiguration perimeter/zone at the marina within which docks can be re-arranged and new piles driven. This is also to seek authorization to retain structures and fill and a boat ramp placed in aquatic resource areas previously without appropriate Corps authorization including pile-supported docks, mooring piles, 65 commercial moorings, and an existing commercial scalloping facility on pile-supported platforms and existing floating docks. The proposed dredging consists of dredging approximately 1800 cu. yds. of material from an area of approximately 30,100 sq. ft. to a depth of -4 ft. m.l.w. with disposal of the material on a nearby upland parking area totalling approximately 2000 sq. ft. The fill to be retained was placed on an area of salt marsh totalling approx. 4,700 sq. ft. The applicant is proposing to mitigate for the wetland loss by removing material placed by others over historic salt marsh and re-plant the area with native marsh species. This mitigation work is to improve tidal flushing in this phragmites area. The proposed mitigation area is in an area of filled marsh at the continuation of Cottonwood Street south of Bass Creek Road at the southern end of West Island near West Island Beach in Fairhaven.

A detailed description and plans of the activity are attached.

WATERWAY AND LOCATION OF THE PROPOSED WORK

This work is proposed in Nasketucket Bay at 56 Goulart Memorial Drive, Fairhaven, Massachusetts, with the proposed wetland mitigation site nearby at the intersection of Cottonwood Street and Bass Creek Road, Fairhaven. The site coordinates are: Latitude 41° 35.787' N Longitude 70° 50.669' W.

AUTHORITY

Permits are required pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899
- Section 404 of the Clean Water Act
- Section 103 of the Marine Protection, Research and Sanctuaries Act).

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against

CENAE-R

FILE NO. NAE-2006-1350

its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972 as amended.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

This project will have an adverse effect on a total of approximately 1.13 acres of Essential Fish Habitat (EFH) of the waters of Nasketucket Bay. This includes the dredging (30,100 sq. ft.), the salt marsh fill (4,700 sq. ft.), the existing unauthorized structures including the piles, floats, fixed piers over water (13,350 sq. ft.), mooring anchors, and the proposed new floating breakwater (wave attenuator) (approx. 6000 sq. ft.) and the 10 new mooring anchors. The Bay is considered Essential Fish Habitat (EFH) for Atlantic cod (eggs, larvae, juveniles, adults), haddock (eggs, larvae), winter flounder (eggs, larvae, juveniles, adults), red hake (larvae, juveniles, adults), long finned squid (juveniles, adults), windowpane flounder (eggs, larvae, juveniles, adults), American plaice (juveniles, adults), Atlantic sea herring (juveniles, adults), bluefish (juveniles, adults), Atlantic butterfish (eggs, larvae, juveniles, adults), Atlantic mackerel (egg, larvae, juveniles, adults), summer flounder (egg, larvae, juveniles, adults), scup (eggs, larvae, juvenile, adults), black Sea Bass (larvae, juvenile, adults), surf clam (juveniles, adults), King Mackerel (eggs, larvae, juveniles, adults), Spanish mackerel (eggs, larvae, juveniles, adults), cobia (eggs, larvae, juveniles, adults), sandbar shark (adults), and bluefin tuna (juveniles).

Habitat at the dredging site is predominantly sand. The habitat in the deeper water areas where the majority of the structures that are the subject of this action are or where they will be placed consists of mud and sand with shell litter covered by green algae and slipper shells. The fill in the salt marsh has eliminated 4,700 sq. ft. of salt marsh habitat for which mitigation is being provided. The District Engineer has reviewed the expanded EFH assessment submitted by the applicant and has made a preliminary determination that a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision. If the National Marine Fisheries Service recommends any conservation measures, the Corps will coordinate with the applicant regarding implementation of these recommendations. The EFH consultation will be concluded prior to the final decision.

NATIONAL HISTORIC PRESERVATION ACT

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed

CENAE-R
FILE NO. NAE-2006-1350

work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

- a. The permit area has been extensively modified by previous work.
- b. The permit area has been recently created.
- c. The proposed activity is of limited nature and scope.
- d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
- e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s)

ENDANGERED SPECIES CONSULTATION

The New England District, U.S. Army Corps of Engineers, has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the project site. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect any Federally listed endangered or threatened species or their designated critical habitat. By this Public Notice, we are requesting that the appropriate Federal Agency concur with our determination.

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved **Coastal Zone Management Programs**. Where applicable the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- (X) Permit, License or Assent from State.
- (X) Permit from Local Wetland Agency or Conservation Commission.
- (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions, please contact Mr. Brian Valiton at (978) 318-8166, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

CENAE-R
FILE NO. NAE-2006-1350

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.



Karen K. Adams
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here () and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____
PHONE: _____

PROPOSED WORK AND PURPOSE

This application is to do new dredging and add new structures, including a floating wave attenuator and an additional 10 moorings and to retain various structures and other work, including filling, done over the years to expand a marina that was first authorized at this location by the State of Massachusetts and the Corps in the 1960's. The work includes the retention of fill material placed in salt marsh many years ago to expand the parking and work area for this longstanding marina. The specific work that is the subject of this application is as follows:

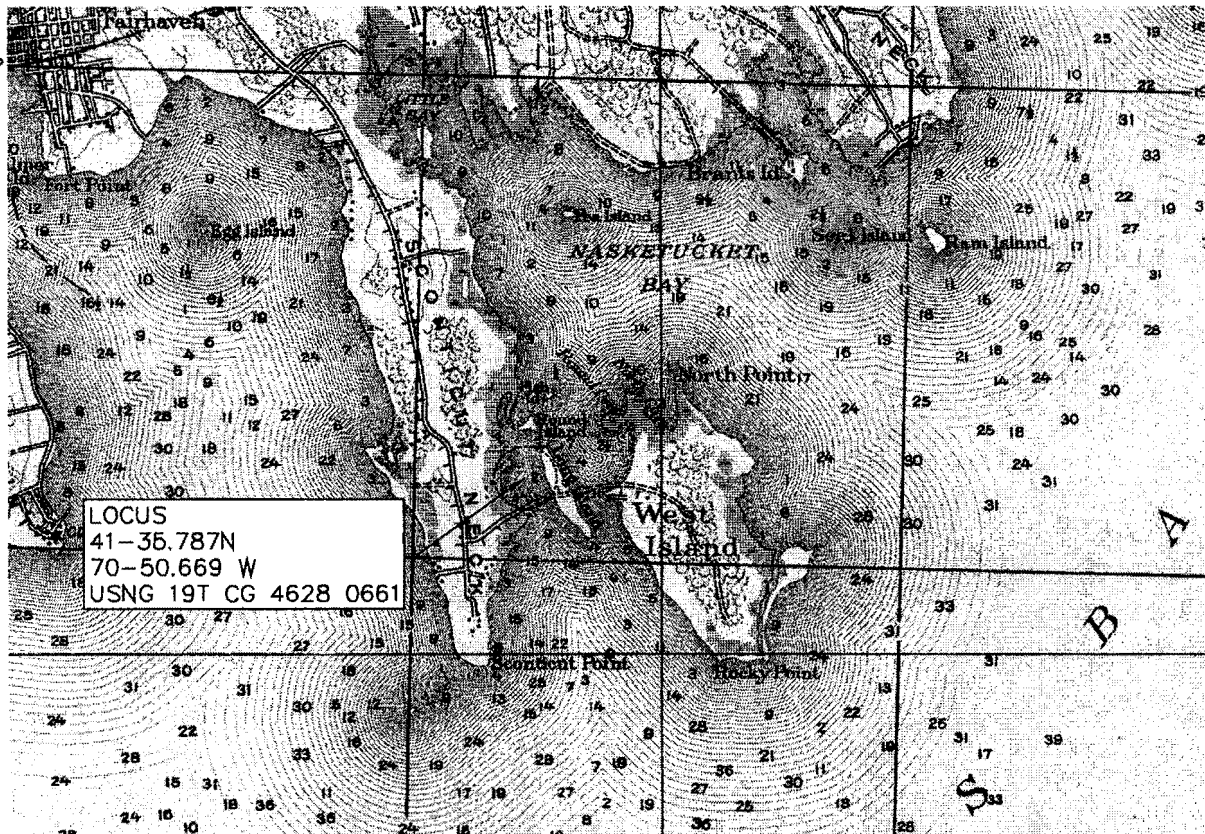
- a. to retain and maintain 500 cubic yards of fill material placed on approx. 4,700 sq. ft. of salt marsh for a parking lot and expanded uplands use area at the marina and to use this filled area as a future disposal and drying site for material to be dredged;
- b. to retain and maintain the existing boat ramp at the marina;
- c. to retain and maintain the structures out in the waterway at the northerly end of the marina property that support the existing commercial scalloping operation including a pile-supported platform (approx. 1,200 sq. ft) and existing pile-anchored floating docks (approx. 2,175 sq. ft.);
- d. to retain and maintain approx. 5,275 sq. ft. of pile anchored floating docks at the marina accommodating approx. 30 vessels;
- e. to retain and maintain 61 existing piles;
- f. to retain and maintain 65 existing rental moorings;
- g. to remove the existing wave barrier and to install a new floating wave attenuator/breakwater that will be approx. 600 feet long and 10 feet wide;
- h. to mechanically dredge to - 4' m.l.w., with upland disposal, an area of approx, 8,050 sq. ft. previously permitted to be dredged to a depth of -4' m.l.w. ;
- i. to mechanically dredge to -4' m.l.w., with upland disposal, an area of approx. 22,050 sq. ft. that was never previously authorized to be dredged (new/improvement dredging);
- j. to establish a reconfiguration perimeter as shown on sheet 5 of 11 within which floats and pilings can be relocated without seeking separate approvals for such changes from the Corps for such changes;
- k. to perform mitigation for the fill placed in the salt marsh by excavating approx. 8,400 sq. ft. of fill placed by others on historic marsh and to clear out 1,300 linear feet of trench where vegetation has grown in to limit the reach of tidal waters. These activities will add to restore salt marsh functions to the affected area.

The work is described on the enclosed plans entitled "APPLICATION BY: EARL'S MARINA PREPARED BY: LAND & SEA ENGINEERING P.O. BOX 2907, AVON, COLORADO 81620 PURPOSE: TO PERFORM DREDGING IN EARL'S MARINA, AND LICENSE NEW & UNAUTHORIZED STRUCTURES FAIRHAVEN, BRISTOL COUNTY," on 11 sheets, and dated "MARCH 2, 2013."

The applicant is seeking approval to retain existing fill on salt marsh that has been in place for decades. This fill is now needed to support parking and access to the commercial scalloping operation and it has not been expanded since it was initially placed. As mentioned in the beginning of the public notice and above, the applicant has included a mitigation project which will involve excavation of an existing area of phragmites to create an area of 8,400 sq. ft. of open salt marsh and to excavate vegetation from approx. 1,300 linear feet of trench.

REFERENCE DATUM IS MEAN LOW WATER=0.0
FEMA DATUM IS N.G.V.D.

REF: TOWN ASSESSORS MAP 42, PARCELS 23B



PLAN

0 1250 2500 5000



1"=5000'

FLOOD ZONE VE - 15.37 (14 NGVD)
HTL - 4.1
MHW - 3.77
NGVD - 1.37
MLW - 0.00

SOURCE: MA NEW BEDFORD QUADRANGLE GRID ZONE A US ACOE

PURPOSE:
TO PERFORM DREDGING
IN EARL'S MARINA, AND LICENSE NEW
& UNAUTHORIZED STRUCTURES
FAIRHAVEN, BRISTOL COUNTY, MA

Land and Sea Engineering



VICINITY MAP

APPLICATION BY:
EARL'S MARINA

PREPARED BY
LAND & SEA ENGINEERING LLC
PO BOX 2907
AVON, CO 81620

MARCH 2, 2013

SHEET 1 OF 11

REFERENCE DATUM IS MEAN LOW WATER=0.0
FEMA DATUM IS N.G.V.D.

REF: TOWN ASSESSORS MAP 15, PARCELS C2-B1

EXISTING
COMMERCIAL
SCALLOP
FACILITY

FLOOD ZONE:
F.I.R.M PANEL NO. 25005C 050 F
DATED JULY 7, 2009

ZONE VE EL. 14.0 NGVD

EXISTING TIMBER
WAVE ATTENUATOR
WITH TIRES

NASKETUCKET BAY (TIDAL)

EXISTING
FLOATS (TYP.)

EXISTING
PILES (TYP.)

EXISTING GRAVEL
PARKING AREA



EDGE OF EXISTING
LEACHING FIELD

EXISTING
FUEL DOCK

FLOOD ZONE VE-15.37 (14 NGVD)
HTL - 4.1
MHW - 3.77
NGVD - 1.37
MLW - 0.00

GOULART MEMORIAL DR. (40' WIDE)

PLAN



1"=100'

PURPOSE:
TO PERFORM DREDGING
IN EARL'S MARINA, AND LICENSE NEW
& UNAUTHORIZED STRUCTURES
FAIRHAVEN, BRISTOL COUNTY, MA

Land and Sea Engineering



EXISTING CONDITONS

APPLICATION BY:
EARL'S MARINA

PREPARED BY
LAND & SEA ENGINEERING LLC
PO BOX 2907
AVON, CO 81620

MARCH 2, 2013

SHEET 2 OF 11

REFERENCE DATUM IS MEAN LOW WATER=0.0
 FEMA DATUM IS N.G.V.D.

REF: TOWN ASSESSORS MAP 15, PARCELS C2-B1

EXISTING COMMERCIAL SCALLOPING FACILITY ON PILE SUPPORTED PLATFORM (APPROX. 1,200 SF) AND EXISTING FLOATS (APPROX. 2,175 SF) TO BE AUTHORIZED (10 PILES)

EXISTING AUTHORIZED TIMBER PILE WAVE ATTENUATOR WITH TIRES (73 PILES)

NASKETUCKET BAY (TIDAL)

EXISTING CONCRETE BOAT RAMP TO BE AUTHORIZED

EXISTING AUTHORIZED TIMBER PILES

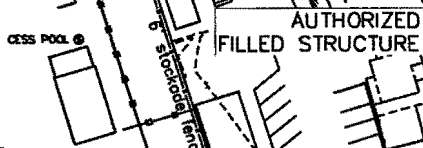
EXISTING AUTHORIZED TIMBER FLOATS

EXISTING FILL AND RIPRAP TO BE AUTHORIZED (APPROX. 4,700 SF) WAS SALT MARSH BEFORE FILLING

EXISTING TIMBER FLOATS TO BE AUTHORIZED (APPROX. 5,275 SF)

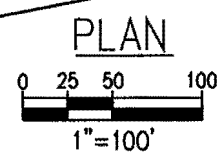
EXISTING TIMBER PILES TO BE AUTHORIZED (12)

EXISTING TIMBER PILES TO BE AUTHORIZED (39)



STRUCTURES TO BE AUTHORIZED:
 FILLED AREA - 4,700 SF
 FLOATS - 7,450 SF
 PLATFORM - 1,200 SF
 PILES - 61 TOTAL

GOULART MEMORIAL DR. (40' WIDE)
 PUBLIC ACCESS AREA



PURPOSE:
 TO PERFORM DREDGING
 IN EARL'S MARINA, AND LICENSE NEW
 & UNAUTHORIZED STRUCTURES
 FAIRHAVEN, BRISTOL COUNTY, MA

EXISTING STRUCTURES
 TO BE
 AUTHORIZED

APPLICATION BY:
 EARL'S MARINA

PREPARED BY
 LAND & SEA ENGINEERING LLC
 PO BOX 2907
 AVON, CO 81620

MARCH 2, 2013

SHEET 3 OF 11

Land and Sea Engineering

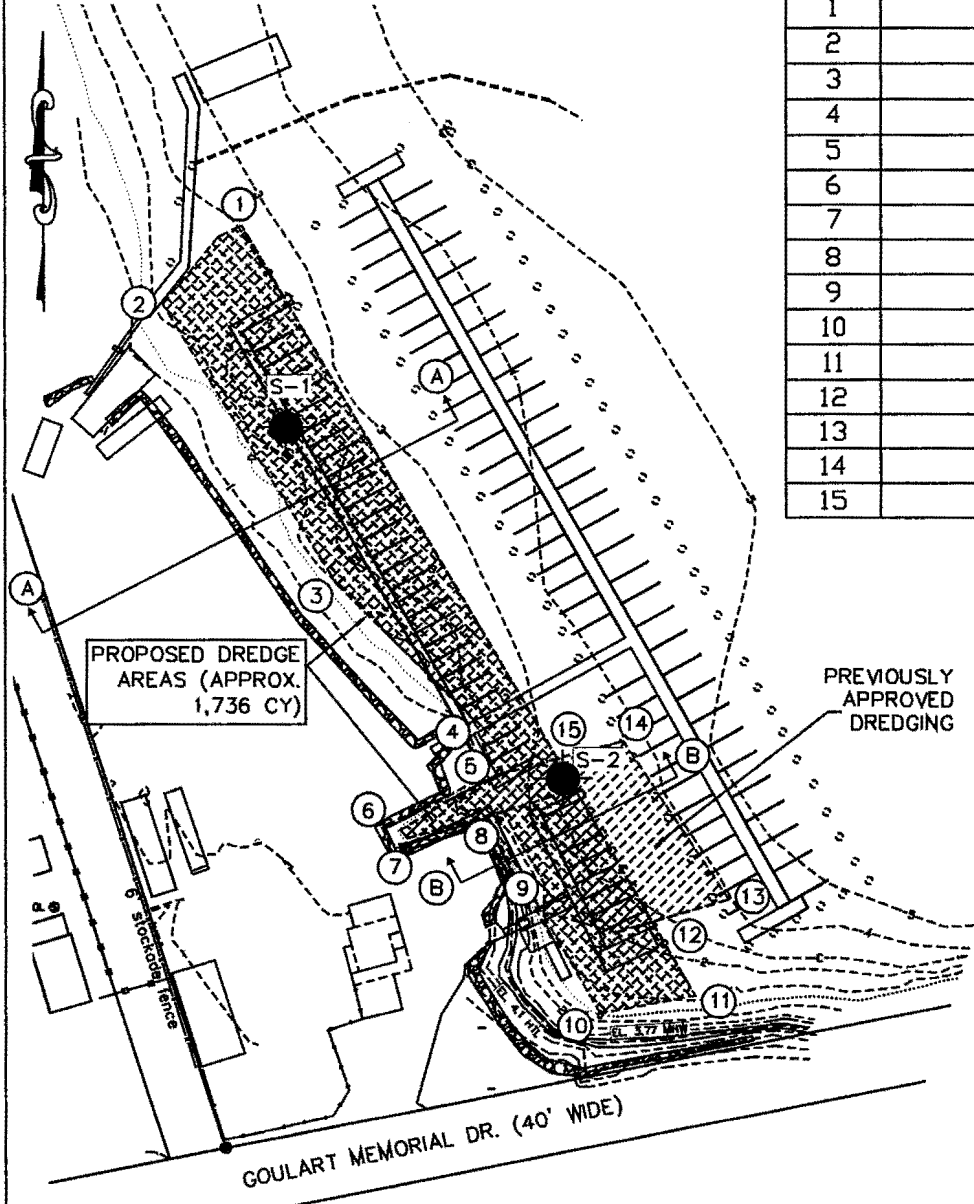


REFERENCE DATUM IS MEAN LOW WATER=0.0
 FEMA DATUM IS N.G.V.D.

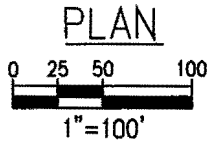
REF: TOWN ASSESSORS MAP 15, PARCELS C2-B1

DREDGE AREA COORDINATES

	NORTHING	EASTING
1	835549.04	2679102.50
2	835504.70	2679057.49
3	835602.46	2678895.38
4	835679.19	2678817.56
5	835692.55	2678785.61
6	835638.33	2678754.35
7	835642.08	2678749.74
8	835696.12	2678765.00
9	835719.92	2678723.27
10	835751.39	2678649.43
11	835805.38	2678659.72
12	835780.91	2678702.05
13	835824.50	2678714.80
14	835764.40	2678805.14
15	835726.06	2678795.04



PROPOSED DREDGE
 1,786± C.Y
 30,072± S.F.
 DREDGE TO -4 MLW



PURPOSE:
 TO PERFORM DREDGING
 IN EARL'S MARINA, AND LICENSE NEW
 & UNAUTHORIZED STRUCTURES
 FAIRHAVEN, BRISTOL COUNTY, MA

Land and Sea Engineering



PROPOSED DREDGING

APPLICATION BY:
 EARL'S MARINA

PREPARED BY
 LAND & SEA ENGINEERING LLC
 PO BOX 2907
 AVON, CO 81620

MARCH 2, 2013

SHEET 4 OF 11

REFERENCE DATUM IS MEAN LOW WATER=0.0
 FEMA DATUM IS N.G.V.D.

REF: TOWN ASSESSORS MAP 15, PARCELS C2-B1,

PROPOSED
 FLOATING WAVE
 ATTENUATOR

NASKETUCKET BAY
 (TIDAL)

EXISTING WAVE
 ATTENUATOR
 SYSTEM TO BE
 REMOVED

PROPOSED
 3'x3'x12"
 SPLASH PAD WITH
 FLARED PIPE

PROPOSED
 STORMCEPTOR
 UNIT (SEE DETAIL)

PROPOSED
 GABION ROW AROUND
 OUTER PERIMETER TO
 SUPPORT DREDGE
 MATERIAL (SEE DETAIL)

RECONFIGURATION
 ZONE

PROPOSED
 AREA TO RECEIVE
 DREDGE MATERIAL
 (APPROX. 2,000 CY)

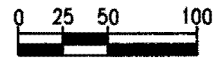
PROPOSED
 DRAINAGE
 TRENCH
 (SEE DETAIL)

CESS POOL

STORM DRAINAGE
 TRENCH

GOULART MEMORIAL DR. (40' WIDE)

PLAN



1"=100'

PURPOSE:
 TO PERFORM DREDGING
 IN EARL'S MARINA, AND LICENSE NEW
 & UNAUTHORIZED STRUCTURES
 FAIRHAVEN, BRISTOL COUNTY, MA

Land and Sea Engineering



PROPOSED WAVE
 ATTENUATOR, DISPOSAL
 AREA, AND DRAINAGE

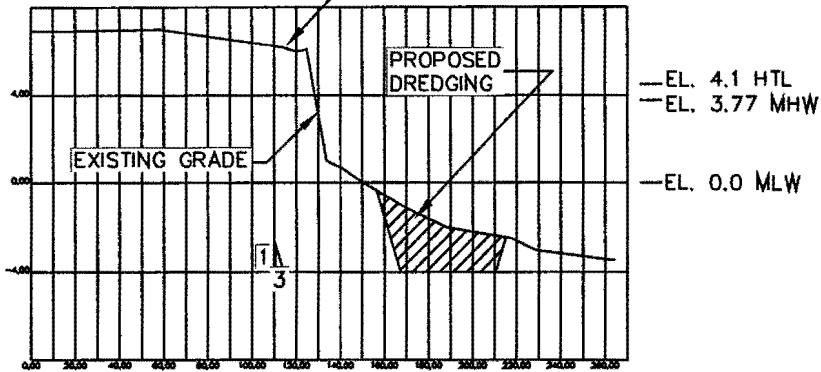
APPLICATION BY:
 EARL'S MARINA

PREPARED BY
 LAND & SEA ENGINEERING LLC
 PO BOX 2907
 AVON, CO 81620

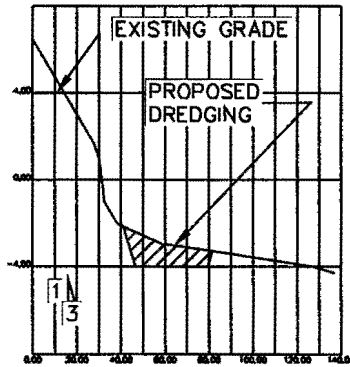
MARCH 2, 2013

SHEET 5 OF 11

EXISTING GRAVEL PARKING
TO BE MODIFIED TO ACCEPT
1,786 CY OF DREDGE MATERIAL
(SEE DETAIL ON PAGE 9)



SECTION A-A



SECTION B-B

FLOOD ZONE VE-15.37 (14 NGVD)
HTL - 4.1
MHW - 3.77
NGVD - 1.37
MLW - 0.00

VERTICAL SCALE: 1"=8'
HORIZONTAL SCALE: 1"=80'

PURPOSE:
TO PERFORM DREDGING
IN EARL'S MARINA, AND LICENSE NEW
& UNAUTHORIZED STRUCTURES
FAIRHAVEN, BRISTOL COUNTY, MA

CROSS SECTIONS

APPLICATION BY:
EARL'S MARINA

PREPARED BY
LAND & SEA ENGINEERING LLC
PO BOX 2907
AVON, CO 81620

MARCH 2, 2013

SHEET 7 OF 11

Land and Sea Engineering



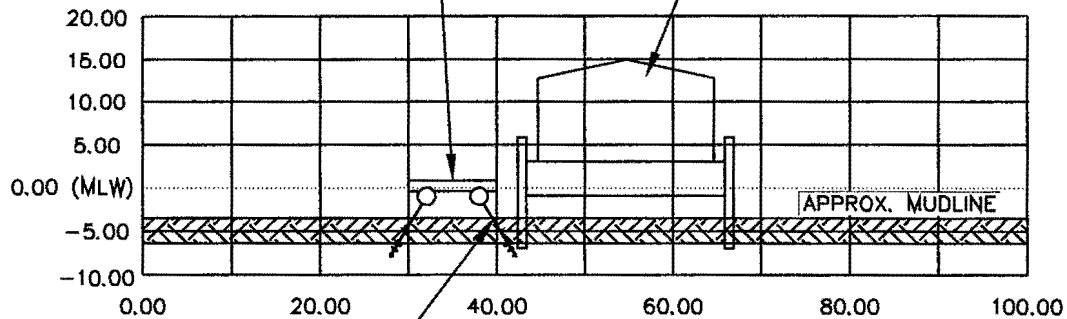
REFERENCE DATUM IS MEAN LOW WATER=0.0
 FEMA DATUM IS N.G.V.D.

REF: TOWN ASSESSORS MAP 15, PARCELS C2-B1



PROPOSED WAVE ATTENUATOR
 APPROX. 500 LFx10'W (5,000 SF)
 COMPRISED OF FLOATING TIMBER
 AND 24" DIA HDPE PIPE SUPPORTS

EXISTING ONE STORY
 SCALLOPING FACILITY
 ON A PILE
 SUPPORTED PLATFORM



PROPOSED HELICAL ANCHORS
 SPACED EVERY 20'

SECTION C-C

SCALE: 1"=20'

FLOOD ZONE VE-15.37 (14 NGVD)
 HTL - 4.1
 MHW - 3.77
 NGVD - 1.37
 MLW - 0.00

PURPOSE:
 TO PERFORM DREDGING
 IN EARL'S MARINA, AND LICENSE NEW
 & UNAUTHORIZED STRUCTURES
 FAIRHAVEN, BRISTOL COUNTY, MA

Land and Sea Engineering



CROSS SECTIONS

APPLICATION BY:
 EARL'S MARINA

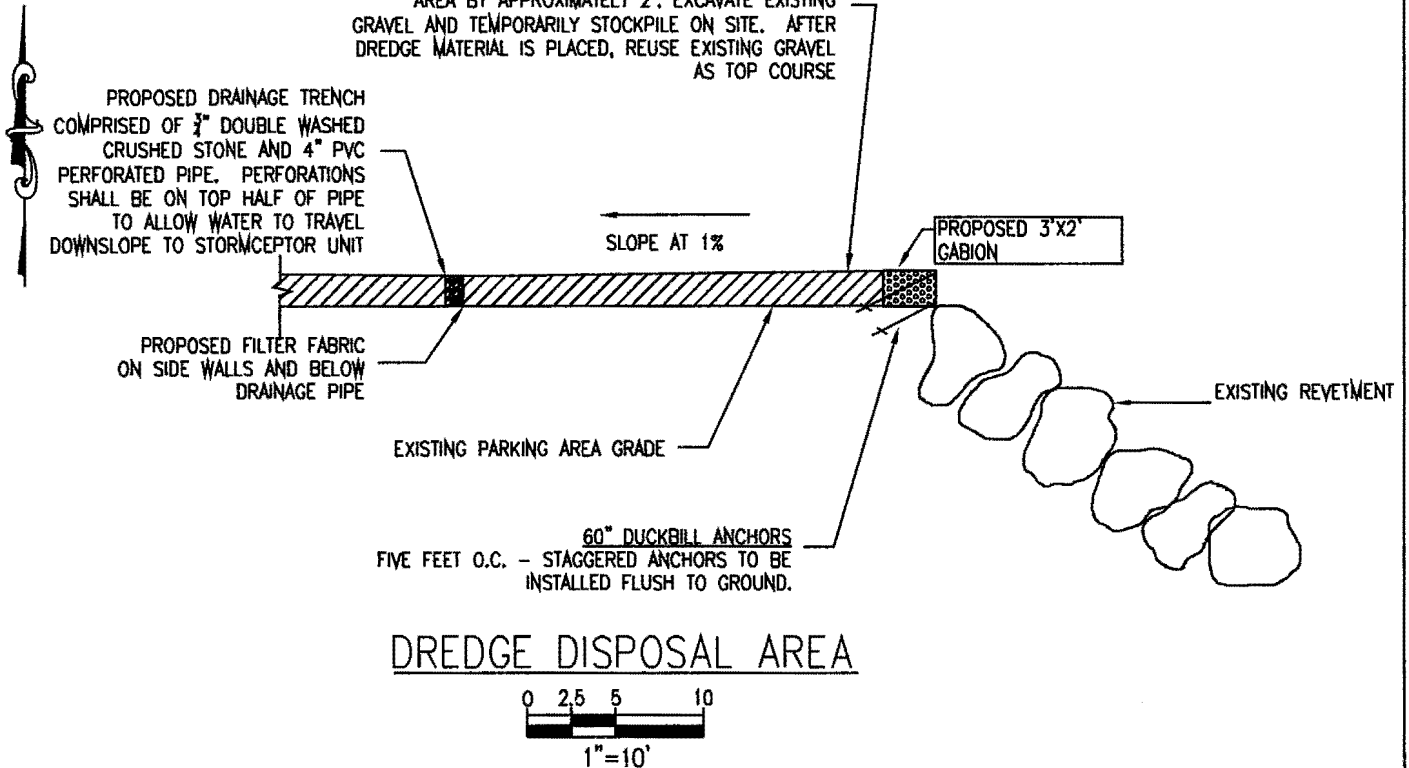
PREPARED BY
 LAND & SEA ENGINEERING LLC
 PO BOX 2907
 AVON, CO 81620

MARCH 2, 2013

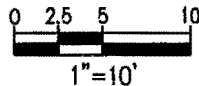
SHEET 8 OF 11

REFERENCE DATUM IS MEAN LOW WATER=0.0
 FEMA DATUM IS N.G.V.D.

REF: TOWN ASSESSORS MAP 15, PARCELS C2-B1
 PROPOSED DREDGE MATERIAL TO RAISE PARKING AREA BY APPROXIMATELY 2'. EXCAVATE EXISTING GRAVEL AND TEMPORARILY STOCKPILE ON SITE. AFTER DREDGE MATERIAL IS PLACED, REUSE EXISTING GRAVEL AS TOP COURSE



DREDGE DISPOSAL AREA



GENERAL NOTES:

1. HYDROGRAPHIC DATA SHOWN HEREON WAS COLLECTED IN SEPTEMBER 2012 BY LAND AND SEA ENGINEERING, LLC.
2. SOUNDINGS AND ELEVATIONS ARE SHOWN IN FEET AND TENTHS BASED ON A MEAN LOW WATER DATUM. POSITIVE VALUES REPRESENT DEPTH ABOVE THAT SAME PLAN.
3. DREDGE AREAS SHOWN ARE TO EL. -4. SIDE SLOPES TO MEET EXISTING GRADE AT 1V:3H SLOPE. COORDINATES ARE GIVEN IN MASS MAINLAND NAD 83 COORDINATE SYSTEM
4. THE ESTIMATED QUANTITY OF DREDGING AND AREA OF IMPACT IS AS FOLLOWS:
 MAINTENANCE DREDGING: EL. -4 AND 8,049 SF
 IMPROVEMENT DREDGING: EL. -4 AND 22,023 SF

TO TOTAL 30,072 SF OR 1,786 CY

5. RESOURCE AREAS INVOLVED:
 LAND CONTAINING SHELLFISH 30,072
 LAND UNDER OCEAN - 30,072

PURPOSE:
 TO PERFORM DREDGING
 IN EARL'S MARINA, AND LICENSE NEW
 & UNAUTHORIZED STRUCTURES
 FAIRHAVEN, BRISTOL COUNTY, MA

Land and Sea Engineering



CROSS SECTIONS

APPLICATION BY:
 EARL'S MARINA

PREPARED BY
 LAND & SEA ENGINEERING LLC
 PO BOX 2907
 AVON, CO 81620

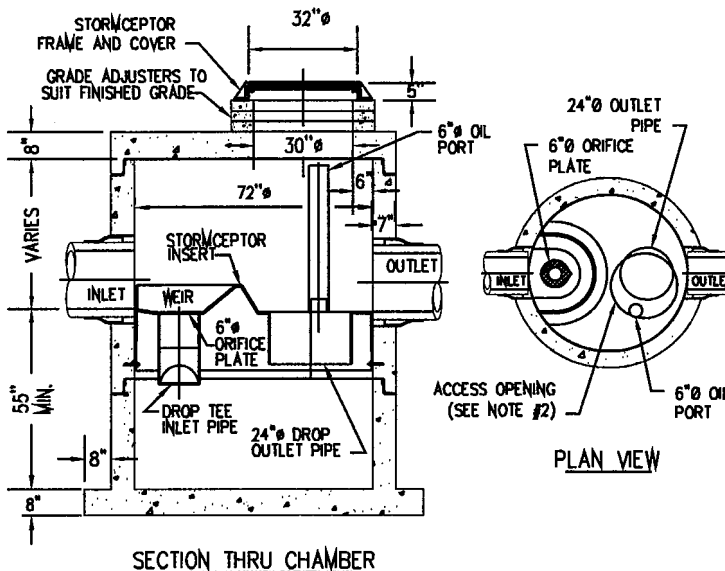
MARCH 2, 2013

SHEET 9 OF 11

REFERENCE DATUM IS MEAN LOW WATER=0.0
 FEMA DATUM IS N.G.V.D.

REF: TOWN ASSESSORS MAP 15, PARCELS C2-B1

STC 900 PRECAST CONCRETE STORMCEPTOR
 (900 U.S. GALLON CAPACITY)



GENERAL NOTES:

1. THE USE OF FLEXIBLE CONNECTION IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE OUTLET DROP PIPE AND THE OIL PORT.
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
4. CONTACT A CONCRETE PIPE DIVISION REPRESENTATIVE FOR FURTHER DETAILS NOT LISTED ON THIS DRAWING.

STC 900 PRECAST CONCRETE STORMCEPTOR DETAIL

NOT TO SCALE

OIL-WATER/ SEDIMENT SEPARATOR SHALL BE
 STORMCEPTOR STC-900 OR APPROVED EQUAL

PURPOSE:
 TO PERFORM DREDGING
 IN EARL'S MARINA, AND LICENSE NEW
 & UNAUTHORIZED STRUCTURES
 FAIRHAVEN, BRISTOL COUNTY, MA

Land and Sea Engineering



DRAINAGE DETAIL

APPLICATION BY:
 EARL'S MARINA

PREPARED BY
 LAND & SEA ENGINEERING LLC
 PO BOX 2907
 AVON, CO 81620

MARCH 2, 2013

SHEET 10 OF 11

836475.6	2679173	Sakara
837449.3	2679430	RAMP
836131.2	2678903	EM 1
836207.8	2679019	EM 2
836103.2	2678994	EM 3
836219.9	2679226	EM 4
836391.9	2679391	EM 5
836299.8	2679506	EM 6
836294.1	2679652	EM 7
836289.3	2679688	EM 8
836197.4	2679785	EM 9
836228.1	2679937	EM 10
836246	2679979	EM 11
836153.6	2680136	EM 12
836152	2679165	EM 13
836201.3	2679280	EM 14
836191.3	2679396	EM 15
836130.6	2679571	EM 16
836166.4	2679663	EM 17
836106.2	2679784	EM 18
836114.6	2679875	EM 19
836068.6	2679929	EM 20
838510.9	2680094	EM 21
836040.3	2679468	EM 22
836016.3	2679625	EM 23
835997.6	2679686	EM 24
835946.2	2679843	EM 25
835950.4	2679892	EM 26
835912.9	2680025	EM 27
836050.7	2679298	EM 28
835878.3	2679776	EM 29
835932.1	2679309	EM 30
835875.3	2679582	EM 31
835851.5	2679709	EM 32

835809.6	2679824	EM 33
835799.7	2679921	EM 34
835855	2676290	EM 35
835830.6	2679466	EM 36
835770.9	2679514	EM 37
835709.8	2679757	EM 38
835690.5	2679896	EM 39
835727	2679301	EM 40
835676.3	2679374	EM 41
835621.2	2679422	EM 42
835767.2	2679411	EM 43
835624.8	2679543	EM 44
835619.1	2679689	EM 45
835729.2	2679605	EM 46
835618.8	2679732	EM 47
835627.2	2679823	EM 48
835594.4	2679944	EM 49
836420.8	2679774	EM 50
836387.9	2679901	EM 51
836368.9	2680011	EM 51
836345	2680156	EM 53
836262.1	2680253	EM 54
836171.3	2680216	EM 55
836071.3	2680178	EM 56
835944.3	2680086	EM 57
835834.9	2680085	EM 58
835712.3	2680030	EM 59
836403.2	2679695	EM T1
836393.4	2679786	EM T2
835842.3	2680304	EM Hic
835822	2679988	EM Wal
836049.9	2679407	EM She
835940.1	2679449	EM Act
835746.3	2679751	EM T4

836598.5	2679205	UID
836690.2	2679132	Kennedy
836717	2679206	Braley
836867.2	2679243	Nelson
837021.9	2679281	Konicki
836935	2679310	Curelop
837034.8	2679372	Hyland
837071.5	2679348	Nelson
836802.2	2679394	UID
836701.9	2679388	UID
836552	2679320	Hoppy
836527.8	2679508	Baker
836883.8	2679456	Edward
837185.2	2679385	UID
837457.9	2680080	DeTerra
837230.5	2679422	UID
837148.2	2679446	Connaug
837065.7	2679512	Rock
836964.8	2679590	UID
836919.7	2679523	UID
836850.1	2679674	UID
836799.3	2679765	Abel
836839.4	2679887	Broad
836976.5	2679839	GGrand
837073.4	2679688	Rola
837170	2679586	UID
837246.6	2679696	UID
837246.6	2679696	UID
837231.8	2679841	Correi
837187	2679744	Cardin
837125.9	2679980	Gregg
837234.8	2680042	Willia
837365.3	2680261	Shurtl
837432.8	2680371	Elande

PURPOSE:
TO PERFORM DREDGING
IN EARL'S MARINA, AND LICENSE NEW
& UNAUTHORIZED STRUCTURES
FAIRHAVEN, BRISTOL COUNTY, MA

Land and Sea Engineering



MOORING COORDINATES

APPLICATION BY:
EARL'S MARINA

PREPARED BY
LAND & SEA ENGINEERING LLC
PO BOX 2907
AVON, CO 81620

MARCH 2, 2013

SHEET 11 OF 11