# Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs Massachusetts Environmental Policy Act (MEPA) Office

## **Environmental Notification Form**

For Office Use Only EEA#: 1386#	12.0
MEPA Analyst: Alex Steysky	

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Fore River Avenue Seawall				
Street Address: Fore River Avenue				
Municipality: Weymouth	Watershed: Fore River			
Universal Transverse Mercator Coordinates:	Latitude: 42.247429			
	Longitude: -70.956407			
Estimated commencement date: Spring 2018	Estimated completion date: Fall 2018			
Project Type: Seawall Reconstruction	Status of project design: 20% complete			
Proponent: Town of Weymouth				
Street Address: 120 Winter Street				
Municipality: Weymouth	State: MA Zip Code: 02188			
Name of Contact Person: Blake Peters				
Firm/Agency:	Street Address:			
GEI Consultants, Inc.	3 Bent Street			
Municipality: Franklin	State: MA Zip Code: 02038			
Phone: (508)533-6666 Fax: (508)533-060	00 E-mail: bpeters@geiconsultants.com			
Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?				
☐Yes ⊠No				
If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a				
Notice of Project Change (NPC), are you requesting:				
Troube of Froject Gridinge (Fit G), are you requesting.				
a Single EIR? (see 301 CMR 11.06(8))				
a Special Review Procedure? (see 301CMR 11.09)				
a Waiver of mandatory EIR? (see 301 CMR 11.11)				
a Phase I Waiver? (see 301 CMR 11.11)  (Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)				
(Note: Greenhouse Gas Emissions analysis must be included in the Expanded EM .)				
Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?				
301 CMR 11.03 (3)(b) 1.e., 1.f., and 6.				
Mileiah Chata Amaran Damaita will the mariant require	Charter 04 Weter ways License			
Which State Agency Permits will the project require	er Chapter 91 waterways License			
Identify any financial assistance or land transfer fro	om an Agency of the Commonwealth			
Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:				
The same and the s				
Project is dependent upon future funding from th	e Seaport Advisory Council.			

13.00 Street

Summary of Project Size	Existing	Change	Total
& Environmental Impacts			7 T A P ( ) S S S S S S S S S S S S S S S S S S
LAND		<b>国</b> 专用是包含193	
Total site acreage	1.26		
New acres of land altered	A MONTH ROLL	0.20	<b>基本自由的工作。</b>
Acres of impervious area	0.92	-0.08	0.84
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration – Coastal Beach		8,500	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	0	0	0
Number of housing units	0	0	0
Maximum height (feet)	0	0	0
TF.	RANSPORTAT	ION	
Vehicle trips per day	0	0	0
Parking spaces	0	0	0
	WASTEWATE	R	
Water Use (Gallons per day)	0	0	0
Water withdrawal (GPD)	0	0	. 0
Wastewater generation/treatment (GPD)	0	0	0
Length of water mains (miles)	0	0	0
Length of sewer mains (miles)	0	0	0
Has this project been filed with MEPA  ☐ Yes (EEA #	0	ore?	

### GENERAL PROJECT INFORMATION - all proponents must fill out this section

#### PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

The Fore River Avenue seawall reconstruction site consists of approximately 905 feet of seawall extending from the eastern edge of the Fore River Avenue/Sea Street intersection on the east to the terminus of Fore River Avenue on the west (see Locus Map).

The seawall over its full length is a cast-in-place concrete seawall with rip rap stone along the outshore edge. The rip rap has a 3.5 to 4.0-foot wide top at approximate elevation +13 feet MLW, then drops off at an approximate 1:1 slope down to the existing beach elevation. Beach elevations at the toe of the rip rap are between +8 and +9 feet MLW for most of the site, rising from +9 feet to +12 feet MLW at the western end (see attached drawing Sheet 1 of 3).

The east end of the Fore River Avenue seawall angles inshore at the transition to the adjoining concrete seawall and the rip rap outshore of the seawall continues eastward in front of the adjoining wall. This adjoining wall and associated rip rap appear to be in good condition. The first 324 feet of the eastern end of the seawall has a top elevation of approximately +14.5 feet MLW which is approximately 2.5 feet above the adjacent road. The west end of the seawall has been repaired by concrete encapsulation which raised the height of the seawall by approximately two feet, giving a top elevation of approximately +16.8 feet MLW, or approximately four feet above the adjacent road. As part of the encapsulation, a concrete slab (six to eight inches thick) was placed outshore of the seawall over the top of the rip rap. Within the wall, there are five beach access openings that are designed for installation of flood protection planking during storm events.

This seawall was identified in the Massachusetts Coastal Infrastructure Inventory and Assessment Project (2009) as having a high priority in terms of the level of protection given to upland infrastructure and homes but of being in poor condition. Such a finding indicates a concern that they could fail during the next major coastal storm event. The results of surveys conducted by Bourne Consulting Engineering in 2008 and 2011 support this general finding and note such specific conditions as spalling and cracking of the concrete east of the encapsulated segment and some shifting and movement of the rip rap revetment stones leaving some voids and gaps. The 2011 survey noted that the previously encapsulated wall segment appears to be in good condition, although the shifting of rip rap has left some voids and gaps below the encasement.

Wetland resource areas outshore of the seawall and rip rap revetment include "coastal beach" (extending from mean low water to the base of the revetment), "land under the ocean", (extending from mean low water seaward), and land containing shellfish (extending from mean low water seaward and supporting Blue Mussel and Soft Shelled Clam). The entire seawall and adjacent roadway is "land subject to coastal storm flowage". The outshore area is a MA Division of Marine Fisheries "designated shellfish growing area (conditionally restricted)".

There currently is no drainage system in Fore River Avenue. All stormwater sheet flows to scuppers cast into the base of the seawall.

Describe the proposed project and its programmatic and physical elements:

#### **Purpose**

The purpose of the project is to reconstruct the existing deteriorated seawall to the east of the previously encapsulated segment and extend the length of the rip rap revetment so as to provide shore and flood protection during the 100-year storm event. Additionally, a closed drainage system is to be installed in Fore River Avenue.

#### Background

Given the findings of the 2008 and 2011 condition surveys, together with the 2009 Coastal Infrastructure Inventory and Assessment Project, the Town of Weymouth retained the services of Bourne Consulting Engineers to begin preliminary design for the repair/replacement of the Fort Point Road seawall beginning in 2011. The preliminary design work included the examination of a range of alternatives with the goal being to provide shoreline protection for all storms up to and including the 100-year event and provide varying degrees of flood relief during storms up to and including the 10-year event. The range of alternatives considered included no-build, beach nourishment, expanded rip rap revetment, and a number of seawall reconstruction designs of varying height and width providing varying degrees of both shoreline and flood protection. A preferred design alternative was selected and an Environmental Notification Form (ENF) was filed with the secretary of EOEEA in June of 2013. Assigned EOEEA #15064, this ENF was withdrawn with the consent of the secretary prior to the issuance of a Secretary's Certificate.

Following the withdrawal of the ENF, the project designers and representatives of the Town of Weymouth met with representatives of the Massachusetts Office of Coastal Zone Management (CZM) on March 27, 2015 and both CZM and representatives of the Massachusetts Division of Marine Fisheries on June 12, 2015 to review the findings of the 2013 preliminary design study and identify additional design options for consideration. Additionally, meetings were held with residents of the Fore River Avenue neighborhood to review concerns and discuss options. The current proposal was developed to address the issues and concerns raised during these consultations and meetings.

#### **Project Elements**

The proposed project consists of the reconstruction of the existing seawall to the east of the previously encapsulated segment to a top elevation of 17.0', or approximately the same elevation of the encapsulated segment, and the permanent sealing/closure of the existing beach access openings. In addition to this reconstruction, the existing rip rap revetment will be extended from its current width of approximately eight to ten feet to a width of 26 feet (see attached drawing Sheet 2 of 3). To minimize expansion of the rip rap onto the existing coastal beach, the reconstructed segment of seawall (east of Holbrook Road) will be placed 23 feet back from the wall's current location. This relocation will reduce the width of Fore River Avenue east of Holbrook Road from 51 feet to 28 feet. To relieve existing flooding of Fore River Avenue east of Holbrook Road, the surface of Fore River Avenue will be raised to an elevation of 13.5 feet at Sea Street and sloped back to existing grade at Holbrook Road

To retain beach access for pedestrians, two sets of access stairs will be installed. The stairs will allow for unimpeded passage over the wall (see attached drawing Sheet 3 of 3).

The existing scuppers through which drainage from Fore River Avenue flows will be capped at all locations in the encapsulated segment of the seawall and a new closed drainage system will be installed in Fore River Avenue. The new drainage system will include deep sump catch basins, an oil/grease separator, a Stormceptor (or other proprietary separator), and a flow control vault or outlet pipe fitted with a Tide Flex valve.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

See attached Description of Alternatives.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

To minimize the extent of rip rap revetment to be placed on the existing coastal beach, the 324-foot segment of seawall to be reconstructed will be set back 23 feet from its current location. This will ensure that the additional rip rap in this segment will not extend more than three feet beyond the toe of the existing rip rap. The new drainage system in Fore River Avenue will include deep sump catch basins, and oil/grease separator, and a Stormceptor (or its equivalent) to provide pre-treatment of stormwater runoff prior to discharge to the ocean.

If the project is proposed to be constructed in phases, please describe each phase:

This is not being proposed as a phased project.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:
Is the project within or adjacent to an Area of Critical Environmental Concern?
Yes (Specify)
⊠No
if yes, does the ACEC have an approved Resource Management Plan? Yes _X_ No;
If yes, describe how the project complies with this plan.
Will there be stormwater runoff or discharge to the designated ACEC?Yes _X_ No; If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.
RARE SPECIES:  Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see
http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)
HISTORICAL /ARCHAEOLOGICAL RESOURCES:  Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?
If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐Yes (Specify) ☒No
WATER RESOURCES: Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site?Yes _X_No; if yes, identify the ORW and its location
(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)
Are there any impaired water bodies on or within a half-mile radius of the project site?Yes _X_ No; if yes, identify the water body and pollutant(s) causing the impairment:
Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission?Yes _X_ No

