

**ENF Environmental Notification Form**

<i>For Office Use Only</i>	
<i>Executive Office of Environmental Affairs</i>	
EOEA No.:	<u>13617</u>
MEPA Analyst:	<u>DEIRDRE BUCKLEY</u>
Phone: 617-626-	<u>1044</u>

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Proposed Maintenance Dredging of Existing Channel		
Street: 237 Seapuit Rd.		
Municipality: Barnstable (Osterville)	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates:	Latitude: 041° 37' 41.9" N Longitude: 070° 23' 49.6" W	
Estimated commencement date: 1-1-06	Estimated completion date: 1-31-06	
Approximate cost: \$200,000.	Status of project design: 100 %complete	
Proponent: Seapuit Partners LLC		
Street: c/o Floyd Silvia, PO Box 430		
Municipality: Osterville	State: MA	Zip Code: 02655
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Beth Hays		
Firm/Agency: Coastal Engineering Co., Inc.	Street: 260 Cranberry Hwy	
Municipality: Orleans	State: MA	Zip Code: 02653
Phone: 508-255-6511	Fax: 508-255-6700	E-mail: bhays@ceccapecod.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  
 Yes  No
- Has this project been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Has any project on this site been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8))  Yes  No
  - a Special Review Procedure? (see 301 CMR 11.09)  Yes  No
  - a Waiver of mandatory EIR? (see 301 CMR 11.11)  Yes  No
  - a Phase I Waiver? (see 301 CMR 11.11)  Yes  No

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): N/A

Are you requesting coordinated review with any other federal, state, regional, or local agency?  
 Yes (Specify \_\_\_\_\_)  No

List Local or Federal Permits and Approvals: ACOE #2005-1071 (issued) Order of Conditions (Pending) Water Quality Certificate (Pending) Chapter 91 Dredge Permit (Pending)

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- |                                 |                                       |  |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land   | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water  | <input type="checkbox"/> Wastewater   | <input type="checkbox"/> Transportation                              |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air          | <input type="checkbox"/> Solid & Hazardous Waste                     |
| <input type="checkbox"/> ACEC   | <input type="checkbox"/> Regulations  | <input type="checkbox"/> Historical & Archaeological Resources       |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input checked="" type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:
Total site acreage	N/A			
New acres of land altered		0		
Acres of impervious area	N/A	N/A	N/A	
Square feet of new bordering vegetated wetlands alteration		N/A		
Square feet of new other wetland alteration		31,500± maintenance dredging		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	N/A			
Number of housing units	N/A			
Maximum height (in feet)				
<b>TRANSPORTATION</b>				
Vehicle trips per day	N/A			
Parking spaces	N/A			
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	N/A			
GPD water withdrawal	N/A			
GPD wastewater generation/treatment	N/A			
Length of water/sewer mains (in miles)	N/A			

**CONSERVATION LAND:** Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify \_\_\_\_\_)  No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify \_\_\_\_\_)  No

**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?

Yes (Specify \_\_\_\_\_ )  No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify \_\_\_\_\_ )  No

**AREAS OF CRITICAL ENVIRONMENTAL CONCERN:** Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify \_\_\_\_\_ )  No

**PROJECT DESCRIPTION:** The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

**PROJECT DESCRIPTION**

The proposed work under this request is as shown on plan SS-1, SS-2 "Maintenance Dredging and Pier Modification Reconstruction" by Coastal Engineering Co., Inc., dated February 9, 2005 and revised June 9, 2005 as described below. The work involves replacement and improvements to an existing licensed pier (DEQE Lic. No. 179) and maintenance dredging. The categorical inclusion for this Environmental Review is for the maintenance dredging portion of this project and therefore this analysis addresses those impacts and alternatives.

The proposed work will continue to provide shorefront access from an existing dwelling. The existing pier is to be replaced with a structure better suited to the coastal environment in North Bay. The addition of a ramp and float along with maintenance dredging will allow boats to be docked in deeper water away from the salt marsh. The dredging will also increase tidal flow to Ishams Pond which will improve the entire ecosystem's habitat situation by the increased flushing and reducing the buildup of silty organic material, which causes a loose stratum, and unsuitable for the setting of shellfish (see attached shellfish report by Woods Hole Group).

The dredge footprint is within the historic channel and turning basin that is clearly defined on existing Army Corps of Engineer Plans, DEQE license plans, NOAA charts and USGS quad maps. The channel is also clearly visible from current aerial photography (see attached ortho photo). In order to minimize potential impacts to the adjacent resource areas, the dredging will be done prior to the reconstruction of the pier. The material to be dredged is composed of silty fines (see attached sediment analysis). The silty material will be pumped to an upland de-watering area after which it will be disposed of in an approved upland location. Acceptable disposal areas have been identified for the dredge materials and details are being finalized.

De-watering shall be within a sump on the upland, which will be restored upon completion. De-watering shall be in such a manner to prevent backwash of sediments into the water body, or resource areas. Dredging shall be by hydraulic means, which would minimize sediment disturbance during the operation.

The pier reconstruction will be performed from a work barge. The barge will remain in deep water during the construction period. Additionally, should extreme tides occur that might cause bottoming out of the barge, the barge shall either be positioned seaward so it does not rest on the bottom, or the barge shall be temporarily anchored/moored in deeper water.

The pier piles will be driven from the work barge. No equipment shall operate from the ground outside the easterly or westerly portion of the pier. The piles will be driven by vibratory hammer, which would minimize turbidity and disturbance to adjacent resource areas. The new piles will support the proposed reconstructed pier, float and fender piles. The new pier will be constructed to meet current DEP resource area standards for piers over salt marsh areas.

The proposed float and adjacent fender piles are designed to berth a 60-foot motor vessel with an overall draft of less than five feet. The propulsion system will be inboard motors with a 700 to 1000 horsepower range. The vessel will dock with the bow facing the shore as to minimize the effects of prop wash on the resource areas. The turning basin is of ample size and depth to allow the vessel to turn around without causing damage or erosion to surrounding resource or shellfish areas.

### **Alternative Analysis – Maintenance Dredging**

Alternative 1 - Do nothing – If nothing is done, The existing pier will be utilized with vessels docked that may rest on the bottom at low tides. Additionally, the vessels would constantly disturb fine sediments which exist on the Pond's floor. No improved flushing will occur so the Pond would continue to remain in its marginal environmental condition.

Alternative 2 - Dredge to its previously permitted footprint – The previously permitted dredge footprint brought the proposed channel to the edge of the North Bay Channel. The total dredge area of the previously permitted footprint is approximately 43,500 sf. To recreate that footprint would result in the re-location of two or three moorings that now exist at the edge of the North Bay Channel. The Barnstable Harbormaster prefers that the moorings not be disturbed. Performance of this alternative would recreate the previously permitted dredge footprint, but require the relocation of possibly three moorings.

Alternative 3 – Preferred Alternative – Dredge to the previously authorized footprint, but to a reduced length of channel. This Alternative is the preferred alternative as it is configured to a footprint which meets the satisfaction of the Barnstable Harbormaster. The applicant has negotiated with the Barnstable Harbormaster to decrease the total length of the channel to be dredged by approximately 300 linear feet, or 12,000 square feet, in order to avoid conflicts with the moorings. This reduces the total dredge area to approximately 31,500 sf. Additionally, the Barnstable Shellfish Constable has agreed to the mitigation of the harvesting of shellfish from the area just to the north of the eastern “spit” and relocating the shellfish within the shoal to the north of the western “spit”. Also, the Shellfish Constable has agreed to relocate shellfish propagation cages, as necessary, that were placed to the immediate east of the channel on the eastern “spit”. See attached email from the Shellfish Constable and plan showing shellfish mitigation plan.

This Preferred Alternative will therefore improve flushing within Isham's Pond, thus improving the habitat characteristics of the pond's ecosystem. This Alternative would also provide sufficient water depths to prevent propeller disturbance of sediments during docking and navigation. Finally, the relocation of the shellfish would place the shellfish within a larger intertidal shoal more suitable for a productive shellfish habitat.

### **On-site and Off-site Mitigation**

In both Alternative 2 and the Preferred Alternative 3, the on-site and off-site mitigation are similar. The shellfish will be harvested and re-planted prior to the dredging. The dredging is to be performed by hydraulic means, thus minimizing sub-surface sedimentation distribution. The dredge spoils will be pumped directly to an upland de-watering sump, with sufficient sidewall elevation to contain the backwash for direct leaching within the sump. The de-watered sediment will be then trucked to an approved upland disposal site.