

# ENF Environmental Notification Form

*For Office Use Only*  
*Executive Office of Environmental Affairs*

EOEA No.: *13763*  
MEPA Analyst: *Briony Angus*  
Phone: *617-626-1029*

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.

<b>Project Name: Phinneys Harbor Dredge &amp; Monument Beach Beach Nourishment Project</b>		
<b>Street: off Shore Road and Emmons Road</b>		
<b>Municipality: Bourne</b>	<b>Watershed: Buzzards Bay</b>	
<b>Universal Transverse Mercator Coordinates:</b>	<b>Latitude: N 41° 42' 50.53"</b>	
	<b>Longitude: W 70° 37' 1.13"</b>	
<b>Estimated commencement date: Oct 15, 2006</b>	<b>Estimated completion date: Feb. 15, 2007</b>	
<b>Approximate cost: \$ 75,000 – 100,000</b>	<b>Status of project design: new % complete</b>	
<b>Proponent: Town of Bourne</b>		
<b>Street: 24 Perry Avenue</b>		
<b>Municipality: Bourne</b>	<b>State: MA</b>	<b>Zip Code: 02532</b>
<b>Name of Contact Person From Whom Copies of this ENF May Be Obtained: Norman Hayes or Brad Holmes</b>		
<b>Firm/Agency: The BSC Group, Inc.</b>	<b>Street: 384 Washington Street</b>	
<b>Municipality: Norwell</b>	<b>State: MA</b>	<b>Zip Code: 02061</b>
<b>Phone: (781) 659 - 7981</b>	<b>Fax: (617) 345 - 8027</b>	<b>E-mail: bholmes@bscgroup.com</b>

- 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): Not Applicable

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

List Local or Federal Permits and Approvals: Bourne Conservation Commission-Order of Conditions  
DEP Waterways Permit, DEP 401 Water Quality Certification, USACOE – Category II PGP,  
Massachusetts Coastal Zone Management – Federal Consistency Review (jurisdictional only),  
Cape Cod Commission Review (jurisdictional only)

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

- |                                 |  |  |
|---------------------------------|--|--|
| <input type="checkbox"/> Land   | <input checked="" 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 Permit <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 checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>  <b><u>USACOE PGP Cat II</u></b>  <b><u>NOTE: The majority of the project is maintenance dredging (see Site Plans attached)</u></b>
Total site acreage	6.7 acres (land)			
New acres of land altered		0.8 acres or 35,000 sq. ft. (basin, temp. storage area)		
Acres of impervious area	Not Applicable	Not Applicable	Not Applicable	
Square feet of new bordering vegetated wetlands alteration		Not Applicable		
Square feet of new other wetland alteration		39,230 sq. ft. (Land Under the Ocean)		
Acres of new non-water dependent use of tidelands or waterways		Not Applicable		
<b>STRUCTURES</b>				
Gross square footage	Not Applicable	Not Applicable	Not Applicable	
Number of housing units	Not Applicable	Not Applicable	Not Applicable	
Maximum height (in feet)	Not Applicable	Not Applicable	Not Applicable	
<b>TRANSPORTATION</b>				
Vehicle trips per day	Not Applicable	Not Applicable	Not Applicable	
Parking spaces	Not Applicable	Not Applicable	Not Applicable	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	Not Applicable	Not Applicable	Not Applicable	
GPD water withdrawal	Not Applicable	Not Applicable	Not Applicable	
GPD wastewater generation/treatment	Not Applicable	Not Applicable	Not Applicable	

Length of water/sewer mains (in miles)	Not Applicable	Not Applicable	Not Applicable
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**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

**RARE SPECIES:** Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify: see Massachusetts Natural Heritage Estimated Habitat Map of Rare Wildlife)  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 (Letter sent to MA Historic Comm, enclosed)

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, site is south of Bourne Back River ACEC)  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.)

a.) The Town of Bourne is proposing the Phinneys Harbor Maintenance Dredging and Monument Beach Nourishment Project, which involves dredging the existing boat ramp navigation channel with associated upland disposal and maintenance dredging the Tobys Island navigation channel with associated beach nourishment. The proposed dredging locations are located in the southeastern portion of Phinneys Harbor bordered by the Monument Beach Marina to the north, Tobys Island to the west, and Monument Beach to the east. Phinneys Harbor is a coastal waterway connected to Buzzards Bay and is accessed by a public boat ramp located at the Monument Beach parking lot. Phinneys Harbor supports recreational and commercial shellfishing and recreational boating. There are no eel grass beds or salt marsh flats within the project area. Shellfish resources are significant within the project areas as determined through BSC's shellfish survey. However, the Town of Bourne Natural Resources Department has opened both areas to recreational shellfishing. Further, the site is subject to a put and take shellfish transplant and release program for the benefit of the Town of Bourne and Sandwich.

b.) The proposed dredging project is necessary to provide safe boating operations between Tobys Island bay and Phinneys Harbor as well as safe boat launching and removal from the boat ramp at the Monument Beach parking lot. The boat ramp navigation channel is proposed for dredging to - 8 feet MLW, pay -9 feet MLW and will provide ample boat launching and removal for a variety of vessels during all tides. The Tobys Island navigation channel is proposed for dredging to -1 foot MLW, pay -2 feet MLW and will provide limited navigation for small vessels during all tides. Please refer to the site plans for a breakout of new and improvement dredging versus maintenance dredging. The Town of Bourne Waterways Commission has determined that these depths are necessary for ongoing recreational and commercial use and are consistent with previous dredge depths as shown on the attachments. Finally the dredging of the Tobys Island channel will dramatically increase tidal flushing.

Sampling and analysis within the proposed dredge footprints revealed that proposed dredge material (approximately 1,000 cubic yards) from the Tobys Island navigation channel can be used as beach nourishment on Monument Beach operated by the Town of Bourne since the dredge material will be at least 90% sand. Sampling and analysis within the proposed dredge footprint of the boat ramp navigation channel (approximately 1,500 cubic yards)

revealed less than 90% sand, which requires disposal of this material at an upland reuse site or daily cover at a landfill such as the Bourne Landfill. For more information on the proposed dredge material characteristics, please refer to the Laboratory Analytical Results Matrix attached.

The Barnstable County Dredge (the Cod Fish) will be used for the proposed dredging of the Boat Ramp navigation channel and a portion of the Tobys Island navigation channel. The Cod Fish is a hydraulic cutterhead dredge, which uses mechanical agitation and suction to dredge material and pump to a receiving beach or dewatering area through a 14-inch discharge pipe. This method of dredging minimizes disturbances to the aquatic environment because once the material is located with the suction device there is no means of escape into the surrounding waters, it is transported quickly to the disposal site in a closed system. The remaining portions of the Tobys Island navigation channel will be dredged by a crane and bucket stationed on a barge and/or positioned on Tobys Island bridge with hand digging necessary in the portion of the navigation channel under the Tobys Island bridge. A dewatering area, approximately 28,620 square feet, is proposed on the coastal beach above the Mean High Water line for processing the dredge material for use as beach nourishment or transport to an upland reuse site or landfill. Upon completion of dewatering activities, the coastal beach will be beach nourished and returned to its similar profile.

There are no long-term anticipated impacts to coastal resource areas. Dredge material is to be discharged at the rear of the dredge through a 14-inch pipeline where it will be pumped up to a dewatering basin created between MHW and the toe of the Coastal Dune. The hydraulic cutterhead technique, when properly implemented and operated, results in low turbidity at the dredging site. Beach nourishment will enhance the coastal beach in front of the Monument Beach parking area. Also, dredging and beach nourishment operations will occur during late fall/winter seasons to minimize impacts to shellfish. All water will be discharged back into the Phinneys Harbor via a stand pipe constructed within the dewatering basin. This ensures sediments will precipitate out before the water elevation reaches the top of the stand pipe outflow.

c.) Mitigation plans will be incorporated into the project in order to minimize impacts to wetland and natural resource areas. Ongoing inspections will ensure compliance with the mitigation plan. The proposed dredge project is to occur between October and February 15th of 2006, which will avoid impacts to shellfish and fish spawning activities and breeding and nesting periods for avian species.

d.) This ENF is for maintenance dredging of the boat ramp navigation channel as shown on Little Bay & Phinneys Harbor Dredging Plans prepared by Anderson & Nichols dated January 14, 1981. Reference is made to USACOE Permit #NEDOD-R-15-81-449C made part of this submittal. Maintenance dredging of the spur channel extending under Emmons Road Bridge will be dredged to depths ranging from MLW to -1 ft. MLW pay 2 ft. MLW. This channel will also involve improvement dredging along its western portion. Dredge material that is suitable for beach nourishment will be used on Monument Beaches. These beaches have been nourished at least twice during other dredge events. Reference is made to DPW Plan Contract #1487 Proposed Beach Improvements, Dredging, Drainage and Stone Jetty, Monument Beach, Bourne, April 1955.

For more information detailing the proposed project, please refer to the attached Project Description and BSC Site Plans.