



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

100 Cambridge Street, Suite 900

Boston, MA 02114-2524

MITT ROMNEY
GOVERNOR

KERRY HEALEY
LIEUTENANT GOVERNOR

STEPHEN R. PRITCHARD
SECRETARY

Tel. (617) 626-1000
Fax. (617) 626-1181
<http://www.mass.gov/envir>

May 10th, 2006

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME: Phinneys Harbor Dredge & Monument Beach Nourishment Project
PROJECT MUNICIPALITY: Bourne
PROJECT WATERSHED: Buzzards Bay
EOEA NUMBER: 13765
PROJECT PROPONENT: Town of Bourne
DATE NOTICED IN MONITOR: April 10, 2006

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

As described in the Environmental Notification Form (ENF), the project involves maintenance and improvement dredging in Phinneys Harbor in the Town of Bourne. The Town proposes to dredge an existing boat ramp navigation channel and the Tobys Island navigation channel. Shoaling has reduced these navigational channels to depths as shallow as -0.5 feet below Mean Low Water (MLW). Material from the boat ramp navigation channel will be disposed of at an upland reuse site and material from the Tobys Island navigation channel will be used for beach nourishment on Monument Beach. The benefits of the dredging project include both recreational and public safety benefits such as a reduction in vessel damages resulting from navigational hazards; increased flushing within the tidal flat under and south of the Tobys Island Bridge; and the nourishment of a highly utilized recreational beach.

The project is undergoing review pursuant to Section 11.03 (3)(b)(1)(f) of the MEPA regulations because it involves alteration of one-half or more acres of wetlands (in this case, Land Under the Ocean, Land Containing Shellfish, Coastal Beach and Land Subject to Coastal Storm Flowage). The project will require a Chapter 91 Permit and a 401 Water Quality Certificate from the Department of Environmental Protection (DEP); a Section 404 Programmatic General Permit from the U.S. Army Corps of Engineers (ACOE); and an Order of Conditions from the Bourne Conservation Commission. The project is also subject to review from the Office of Coastal Zone Management (CZM) and the Cape Cod Commission.

The proponent is not seeking financial assistance from the Commonwealth for the project. Therefore, MEPA jurisdiction applies to those aspects of the project within the subject matter of required permits with the potential to cause Damage to the Environment. In this case, MEPA jurisdiction is limited to issues of wetlands and waterways.

The boat ramp navigation channel is proposed for dredging to – 8 feet MLW with a one-foot overdredge to provide ample boat launching and removal for a variety of vessels during all tides. Dredging of the boat ramp navigation channel is considered maintenance dredging, and will remove approximately 1,500 cubic yards of material. The Tobys Island navigation channel is proposed for dredging to – 1 foot MLW with a 2 foot overdredge, and will provide limited navigation for small vessels during all tides. The dredging of the Tobys Island channel will also dramatically increase tidal flushing in the area. The quantity of maintenance dredge material from the Tobys Island Channel is approximately 480 cubic yards and the quantity of improvement dredge material is approximately 520 cubic yards.

Sampling and analysis within the proposed dredge footprints reveal that the dredge material from the Tobys Island navigation channel will be at least 90% sand and can be used as beach nourishment on the Town of Bourne's Monument Beach. Sampling and analysis within the proposed dredge footprint of the boat ramp navigation channel 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.

The Barnstable County Dredge will be used for dredging the boat ramp navigation channel and a portion of the Tobys Island navigation channel. The remaining portions of the Tobys Island navigation channel will be dredged by a crane and bucket stationed on a barge or positioned on the Tobys Island bridge. Hand digging will also be performed as necessary in the portion of the navigation channel under the bridge. An approximately 28,620 square foot dewatering area is proposed on the coastal beach above the Mean High Water line for processing the dredge material. Upon completion of dewatering activities, the coastal beach will be beach nourished and returned to its similar profile.

Dredging and beach nourishment associated with the proposed project will result in temporary disturbance to jurisdictional wetland resource area. Dredging will impact approximately 39,230 square feet of Land Under the Ocean and Land Containing Shellfish. The proposed dewatering basin and temporary storage of dredged material will impact approximately 35,000 square feet of Coastal Beach and Land Subject to Coastal Storm Flowage.

The proponent will be required to provide additional information to DEP during the permitting process regarding the proposed beach nourishment. Specifically, the proponent should submit information on proposed grading, the limits of beach nourishment, and additional cross-sectional data showing existing and proposed conditions throughout the beach nourishment area. In addition, further information on the construction techniques required to transfer the dredge material to the beach may be required during permitting.

The proponent should note comments from DEP that the reuse of dredged material at any upland site would require a Beneficial Use Determination (BUD) approval in accordance with the Solid Waste Regulations at 310 CMR 19.000.

There are no eel grass beds or salt marsh flats within the project area. Portions of the project site are located within Priority and Estimated Habitat of Rare Wildlife. The Division of Fisheries and Wildlife (DFW) Natural Heritage and Endangered Species Program (NHESP) however has stated in its comments on the ENF that the proposed project will not adversely affect state-listed species or their habitats. The proponent should note comments from NHESP regarding potential nesting habitat for Piping Plovers and Least Terns.

The project area lies within mapped quahog (*Mercenaria mercenaria*) and American oyster (*Crassostrea virginica*) habitat. The subject portion of Phinneys Harbor is currently classified as "Conditionally Approved" for shellfishing with an "Open to Harvest" status from November 1 through May 29, of any year, subject to local rules and regulations. Accordingly, the MA Division of Marine Fisheries (DMF) has determined that the project work site lies within "Significant Shellfish Habitat" and is afforded protection under the Wetlands Protection Act (310 CMR, 10.34). In addition, Phinneys Harbor provides spawning habitat for winter flounder (*Pseudopleuronectes americanus*) and Monument Beach and Toby Island are mapped horseshoe crab (*Limulus polyphemus*) spawning and nursery areas.

The proponent should note the following comments from DMF:

- Improvement dredging in the intertidal area, designated as a "special aquatic site" under the Federal Clean Water Act 404(b)(1) guidelines, can cause substantial impacts. In the absence of water flow studies to document potential increases in flushing, every effort should be made to reduce or eliminate improvement dredging of public trust tidelands ;
- All in-water silt producing activity should be prohibited from January 15 through July 15 of any year to protect winter flounder and horseshoe crab spawning and juvenile development;
- Dredging the edges of intertidal flats to a depth of -8' and -1' will most likely result in slumping of the banks and erosion of the intertidal flats;
- Dredged material should not be allowed to spill or runoff during the dewatering process. A containment plan should be developed to limit the spread of suspended bottom sediments during the dredging timetable;
- Eelgrass beds should be avoided at all times. Eelgrass beds provide one of the most productive marine habitats for numerous marine species and are designated "special aquatic sites" under the Federal Clean Water Act 404(b) (1) guidelines;

- Vessels transiting within the Tobys Island navigation channel during periods of low water may prop dredge sensitive shellfish and eelgrass habitat if motorized vessels with less than 2' of water between the bottom of the motor skeg or propeller skeg are allowed;
- No construction equipment or materials should transit or be stored in the intertidal area;
- Heavy equipment travel across the lower beach should be minimized to avoid habitat impacts;
- Beach fill should be limited to the area above the mean high water mark to prevent damage to sensitive marine animals and vegetation in the intertidal habitat.

The proponent has submitted a response to DMF's comments to the MEPA office and the ENF distribution list. In the event that DMF has unresolved concerns following this response, I encourage the proponent to work with the Division to address outstanding issues.

The Massachusetts Board of Underwater Archaeological Resources (BUAR) states in its comments on the ENF that there is no record of any underwater archaeological resources in the vicinity of the boat ramp navigation channel at the project site, but that there is the potential for prehistoric cultural resources in the area of the Tobys Island navigation channel. However, as the proposed dredging of the Tobys Island channel is not to exceed - 1 foot MLW and core samples taken from the area do not suggest the presence of paleosols, BUAR does not anticipate the project will adversely impact submerged prehistoric cultural resources. The proponent should notify the Board if the proposed dredge depth increases. In addition, if potential archaeological resources are encountered during the course of work, the proponent should notify BUAR and take steps to limit adverse impacts to cultural resources.

Conclusion

The impacts of the project within MEPA jurisdiction do not warrant the preparation of an EIR. I conclude that no further MEPA review is required. The proponents may resolve any remaining issues during the state and local permitting processes.

May 10, 2006

Date


Stephen R. Pritchard

Comments received:

4/24/2006	Board of Underwater Archaeological Resources
4/27/2006	BSC Group, Inc. for the Proponent
4/28/2006	Department of Environmental Protection, Southeast Regional Office
4/28/2006	Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program
4/28/2006	MA Division of Marine Fisheries
5/3/2006	BSC Group, Inc. for the Proponent

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