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August 7, 2009

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

PROJECT NAME : Stony Brook Salt Marsh and Fish Passage Restoration
PROJECT MUNICIPALITY : Brewster
PROJECT WATERSHED : Cape Cod
EEA NUMBER : 14445
PROJECT PROPONENT : Town of Brewster
DATE NOTICED IN MONITOR : July 8, 2009

Pursuant to the Massachusetts Environmental Policy Act (M.G. L. c. 30, ss. 61-62I) 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 includes the restoration of approximately 20 acres of degraded salt marsh and the enhancement of a fish run at Stony Brook in Brewster. The existing undersized and failing culvert at Route 6A will be replaced with larger culverts sized to maximize natural salt marsh hydrology to the upstream salt marsh, while protecting and enhancing the ability of migratory fish to utilize the culvert and stream channel and access upstream spawning ponds. The project will result in the minor flooding of an existing walking trail through the salt marsh, therefore the project includes the improvement of the trail by raising portions within the existing trail footprint, removing and replacing portions of the trail with low crossings to enhance tidal flow to salt marsh upstream of the trail. To improve accessibility to the trail system (associated with the Cape Cod Museum of

Natural History), the project also includes the construction of a raised Americans with Disabilities Act (ADA)-compliant boardwalk and observation platform in the adjacent uplands.

Estimated project impacts include: 115 linear feet (lf) of alteration to Fish Run; 70 lf of new created Fish Run; 20 square feet (sf) of impact to Land Under Water; 1,260 sf of new created Land Under Water; 72 lf of temporary impact to Coastal Bank; 558 sf of alteration to Salt Marsh; 330 sf of new created Salt Marsh; 7,610 sf of temporary impact to Land Subject to Coastal Storm Flowage; and 6,447 sf of temporary impact to Riverfront Area. The project area crosses the Route 6A State Highway Layout and will require work within the road right of way. The Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP) has identified portions of the project site as being within *Priority* and *Estimated Habitat* according to the most recent Natural Heritage Atlas (13th edition). The project site is located within areas subject to an Executive Office of Energy and Environmental Affairs (EEA) – approved conservation restriction held by the Town of Brewster and the Museum of Natural History.

Jurisdiction

The project is undergoing MEPA review pursuant to Section 11.03(3)(b)(1)(a) of the MEPA regulations because the project requires a State agency action and will result in alteration of Coastal Bank. The project will require a Chapter 91 (c.91) License and Section 401 Water Quality Certificate (401 WQC) from the Massachusetts Department of Environmental Protection (MassDEP) and a Section 404 Permit from the U.S. Army Corps of Engineers (U.S. ACOE). The project will require an Access Permit from the Massachusetts Highway Department (MassHighway) for work within the Route 6A layout. The project may be subject to Coastal Zone Management (CZM) federal consistency review. The project will also require an Order of Conditions from the Brewster Conservation Commission.

The Proponent has received funding from the Massachusetts Department of Fish and Game, Wetlands Restoration Program. Therefore, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Wetlands, Waterways and Tidelands

The project's primary goal is the restoration of approximately 20 acres of degraded salt marsh and the enhancement of a fish run at Stony Brook in Brewster. The project will remove the existing undersized and failing culvert (identified as BR-6 in the Cape Cod Atlas of Tidally Restricted Salt Marshes) and replace it with twin 9-foot wide pre-cast concrete box culverts. Numerous salt marsh restoration alternatives were evaluated in hydrological studies performed in 2008 by the Woods Hole Group, Inc., entitled *Final Report: Hydraulic Study to Assess the Feasibility of Tidal Restoration Stony Brook, Brewster, MA*. These alternatives included a No Action alternative, the Preferred Alternative and an alternative that considered the replacement of both the BR-6 culvert and the nearby BR-5 culvert. The later alternative was dismissed as it

was determined that replacement of the BR-5 culvert had the potential to confuse and trap fish populations during their migration period. The Preferred Alternative provides a similar amount of tidal exchange, but eliminates the possible hindrance to fish passage.

Culvert replacement will allow for greater tidal flushing in the upper reaches of the marsh, promote fish passage through the improvements to air space and water velocities within the culvert, and assist in limiting the spread of *Phragmites australis*, an invasive species. Additionally, the new box culvert will allow for the draining of freshwater from the marsh. MassDEP has indicated that additional data will be required in the Notice of Intent and 401 WQC permitting processes to confirm the limited nature of upstream flooding subsequent to culvert replacements. The Proponent should identify the lateral extent and increased depths in flooding in the areas upstream of the culvert in these permit applications.

The project also includes the construction of an ADA-compliant boardwalk and viewing platform as well as the creation of swales and corresponding elevated decks within the existing trail system to facilitate sheet flow across the marsh. These activities will occur within wetland resource areas and their related buffer zones.

Pursuant to 301 CMR 13.02, I am declining to require an additional Public Benefit Review for the project. Furthermore, as a water-dependent project, it is presumed that this project will provide adequate public benefit in accordance with 301 CMR 13.04. I am satisfied that the project's impacts to tideland resources can be adequately addressed during the permitting process.

Fisheries

The Division of Marine Fisheries (*Marine Fisheries*) has identified Stony Brook as an important diadromous fish run. Blueback herring (*Alosa aestivalis*), Alewife (*Alosa pseudoharengus*) and American eel (*Anguilla rostrata*) all use this portion of Stony Brook for a portion of their life cycle. *Marine Fisheries* has recommended a time-of-year (TOY) restriction on all in-the-water work from March 15 through July 31 to protect diadromous fish passage, migration and spawning. *Marine Fisheries* has also indicated that if the coffer dam obstructs Stony Brook in its entirety that the TOY restriction should be extended beyond July 31st to September 30th to protect the fall downstream migration of juvenile fish. The Proponent should incorporate these TOY restrictions into the proposed construction sequencing plan.

Rare Species

According to NHESP's comment letter, the project site is mapped as *Priority and Estimated Habitat* for the following species: Eastern Box Turtle (*Terrapene carolina*), Water-Willow Stem Borer (*Papaipema sulphurata*), Mitchell's Sedge (*Carex mitchelliana*), and Salt Reedgrass (*Spartina cynosuroides*). These species are protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c.131A) and its implementing regulations (321 CMR 10.00). As noted by NHESP and in the ENF, the Proponent has been consulting with NHESP during the design process of the project. The NHESP comment letter noted that based on

preliminary review, they do not anticipate any concerns to the Eastern Box Turtle or Water-Willow Stem Borer in conjunction with the project. However, based on initial consultations, NHESP has expressed concern about potential impacts to Mitchell's Sedge and Salt Reedgrass.

To mitigate potential impacts to rare species, the Proponent should continue to work with NHESP to develop a habitat management plan. This habitat management plan should address the potential impact to identified species based upon the modified salt marsh hydrologic regime. Upon completion of a habitat management plan, the project may qualify for a MESA filing exemption (321 CMR 10.14(11)). Should the project not qualify for an exemption, the Proponent will be required to undertake further review in accordance with MESA. Impacts to rare species habitat should also be discussed in the Notice of Intent filing to ensure compliance with the Massachusetts Wetlands Protection Act (M.G.L. c.131, s.40) and its implementing regulations (310 CMR 10.00).

Traffic

The project will require an Access Permit from MassHighway for work within the State Highway Layout of Route 6A, a State-controlled highway. The project will require the temporary closure of Route 6A in the vicinity of the work area during portions of the construction period. The Proponent intends to commence work in Fall 2010 to avoid road closures during the peak summer months. As recommended at the MEPA site visit, the Proponent should work with MassHighway to ensure that design plans are consistent with MassHighway standards in advance of filing the Access Permit application. The Proponent must work with the Town of Brewster and MassHighway to develop appropriate detour routes to be implemented during road closures and present this information in the MassHighway permit application.

Historical and Archaeological Resources

The Massachusetts Historical Commission (MHC) has indicated that the project area is located within the Old King's Highway Regional Historic District (BRE.G), listed in the State Register of Historic Places and a local historic district. The project has received a Certificate of Appropriateness from the Brewster Historic District Committee.

In its comments, MHC has requested that an intensive (locational) archaeological survey (950 CMR 70) be performed in the limited portions of the project impact area that are located in upland areas. The Proponent should work with MHC as appropriate to ensure compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) and M.G.L. c.9, Sections 26-27C (950 CMR 71).

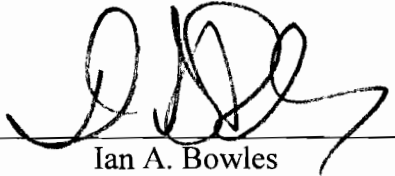
Reporting/Monitoring

The Proponent intends to establish wetlands monitoring and reporting protocols, which will also likely include monitoring of rare species habitat, in association with the project. This monitoring plan should include baseline data and be conducted for a reasonable time period post-construction to ensure overall project success. I recommend that the monitoring program incorporate the documentation of attainment of habitat restoration goals, identify the limits and extent of invasive plant populations, and identify measures to improve the efficiency, reduce cost, or improve effectiveness of future projects. I anticipate that the monitoring program protocols will be established and reviewed during the Notice of Intent and 401 WQC application processes and as part of the MESA habitat management plan review.

Based on the information in the ENF and after consultation with relevant public agencies, I find that no further MEPA review is required at this time. The project may proceed to State permitting.

August 7, 2009

Date



Ian A. Bowles

Comments received:

07/14/2009	Massachusetts Historical Commission
07/17/2009	Division of Marine Fisheries
07/24/2009	Board of Underwater Archaeological Resources
07/24/2009	Division of Fisheries and Wildlife – Natural Heritage and Endangered Species Program
07/27/2009	Massachusetts Department of Environmental Protection – SERO
07/28/2009	Cape Cod Commission

IAB/HSJ/hsj