



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

DEVAL L. PATRICK
GOVERNOR
TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR
IAN A. BOWLES
SECRETARY

April 11, 2008

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

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
NOTICE OF PROJECT CHANGE

PROJECT NAME : Ponkapoag Golf Course Irrigation Improvements
PROJECT MUNICIPALITY : Washington Street – Canton
PROJECT WATERSHED : Neponset River
EOEA NUMBER : 10573
PROJECT PROPONENT : Department of Conservation and Recreation
DATE NOTICED IN MONITOR : February 20, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) and I hereby determine that this project change **does not require** the preparation of an Environmental Impact Report (EIR). The proponent has requested a Phase I Waiver to allow it to proceed with the Rehabilitation of the Ponkapoag Pond Dam portion of the project prior to submitting its Supplemental FEIR.

The Certificate on this NPC is contingent upon the granting of a Phase I Waiver in the Final Record of Decision (FROD). If the Phase I Waiver is not granted in the FROD, then the Secretary will reissue the Certificate on the NPC with a denial until the Supplemental FEIR has been submitted. The overall golf course irrigation improvements require the preparation of a Supplemental FEIR. This Supplemental EIR was required by the Certificate issued on November 1, 2004. It will incorporate Phase I (the Rehabilitation of the Ponkapoag Pond Dam) into its scope of work. The proponent anticipates that the Supplemental FEIR will be submitted in December of 2008.

Previous MEPA Review

The proposed project consisted of the construction of drainage improvements to the two 18-hole courses at the Ponkapoag Golf Course; the installation of an automatic, centrally controlled irrigation system with a weather station; the installation of two groundwater wells and a reservoir; and the reconstruction of the Ponkapoag Pond Dam. The 239.5 acre project site is

located within the Fowl Meadow and Ponkapoag Bog Area of Critical Environmental Concern (ACEC). On November 1, 2004, the Secretary determined that the FEIR required the submission of a Supplemental FEIR to address issues that arose due to the lapse of time between the review of the DEIR and the FEIR.

NPC Project Change Description

This NPC was submitted for MEPA review on February 15, 2008. The proponent is requesting that it be allowed to undertake its proposed rehabilitation of the existing Ponkapoag Pond Dam. The Ponkapoag Pond Dam is an earthen embankment structure with a length of approximately 1,300 feet and a maximum height of about six feet. The top of the embankment is about 7 to 8 feet wide. There is a stopgap drop inlet serving a 4-foot diameter reinforced concrete conduit that passes through the embankment. The discharge from the concrete conduit forms Ponkapoag Brook. Outflow through the conduit is manually controlled via wooden stop logs. The dam has been found to be in "Poor" condition by dam safety inspections. It is a Significant Hazard dam. Because a delay in dam maintenance and rehabilitation is a direct threat to the existing ecological conditions (the water feature and endangered species habitat) and the safety of downstream life and property, the proponent is seeking to advance the dam maintenance phase of work in advance of the other components of the above project. The proponent is not proposing to withdraw irrigation water from Ponkapoag Pond for the golf course in this dam design. It has also added an emergency spillway as part of the outlet design.

The dam rehabilitation will require a Dam Safety Permit from DCR. It will need a Water Quality Certificate and a Chapter 91 License from MassDEP. The project should be reviewed by the Natural Heritage and Endangered Species Program (NHESP) to determine if the Massachusetts Endangered Species Act will require a take. It must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site from the U.S. Environmental Protection Agency. The project may require a Programmatic General Permit from the U.S. Army Corps of Engineers. The project will require an Order of Conditions for this phase of the project as a "limited" project from the Canton Conservation Commission or a Superseding Order of Conditions from MassDEP.

The proponent has prepared an alternatives analysis to examine options for rehabilitating the dam. These alternatives include: the No Action Alternative; the Dam Removal Alternative; and other multiple alternative options for repairing the spillway and the embankment. The options for the embankment repair included: seepage cutoff with a grout curtain; seepage cutoff with sheet piles; seepage cutoff with a clay core; and controlled seepage through a filter. The Preferred Alternative is Embankment Rehabilitation with Controlled Seepage. The key dam safety rehabilitation measures are: the removal of all trees and vegetation from the embankment; the placement of riprap slope protection on the upstream slope; the provision of geosynthetic and granular filter material in the downstream embankment for seepage control; the placement of stone for stability of the downstream slope; the leveling of the top of the embankment; and the construction of a primary and an emergency spillway structure. A 24-inch layer of riprap will be

placed on the upstream slope of the embankment. Geotextile fabric and crushed stone will be used to create a permeable filter through which seepage flow may pass but fine embankment soil may not. The proponent will add additional material (rock) to buttress the downstream slope. It will construct a reinforced concrete spillway structure that includes a primary spillway/low-level outlet, a controlled discharge chamber, and an emergency spillway. The constant flow orifice will continue to discharge flow to the brook at all times to assist with maintaining minimum downstream flows. The proponent anticipates that the Phase I Dam Maintenance and Rehabilitation Project will begin in mid-July and be completed in December of 2008.

According to the proponent, the project will impact the following wetland resource areas: 25,900 sf of Bordering Vegetated Wetlands (BVW) (8,700 sf are permanent); 1,250 linear feet of Bank; 11,950 sf of Riverfront Area (RA); and 1,960 sf of Land Under Water (LUW)(360 sf are permanent). These alterations are associated with the rehabilitation of the dam and caused primarily by the necessary filling along the upstream and downstream slope of the embankment along the 1,300 linear feet of the dam. The proponent will provide for the restoration in place of about 17,200 sf of BVW. It will provide another 9,240 sf of BVW replication for its permanent impacts. The replication area will be located along the same wetland system. The proponent is preparing a wildlife habitat evaluation, which will be included in its Notice of Intent. The dam rehabilitation is anticipated to prevent the overtopping of the dam during the 100-year storm event, and it represents an improvement to the existing potential flooding downgradient of the dam.

The proponent has committed to provide the following mitigation measures to reduce potential impacts from the project:

- Maintain Ponkapoag Pond water levels via reconstruction of the dam;
- Allow for controlled seepage in the dam design to support downgradient wetland hydrology.
- Restore disturbed wetlands at the base of the dam.
- Replicate 9,240 sf of BVW.
- Include a shallow area for seasonal pooling of water at the wetland mitigation site for use by breeding amphibians to enhance the areas overall usefulness to the Blanding's Turtle.
- Develop turtle nesting habitat.
- Develop a construction methodology to exclude turtles from the construction site.
- Monitor and treat for invasive species associated with the dam reconstruction.
- Provide hydrologic monitoring.
- Utilize erosion and sedimentation controls.

The proponent will submit the Supplemental FEIR by December 2008.

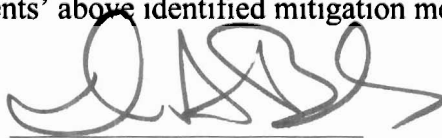
The NHESP has asked the proponent to develop and implement a plan for long-term water level monitoring, as well as a contingency plan for adjusting water levels, consistent with the Water Management Plan, should the dam outlet fail to perform as anticipated and I agree

with this recommendation. NHESP also requested the proponent to consult with MassDEP and the CCC about funding and implementing an invasive species management and monitoring program for Ponkapoag Pond and Bog in lieu of its proposed wetland replication or relocate the proposed wetland replication area to an existing, disturbed, open canopy area within the golf course and adjust the construction staging area accordingly. I also believe that such a program would provide a significant wetland benefit.

Based on a review of the information provided by the proponent in this NPC and prior to submitting the Supplemental FEIR, I am allowing the proponent to proceed with the Ponkapoag Pond Dam Rehabilitation Project as described in the NPC. The proponent should work with MassDEP, the NHESP, and the Canton Conservation Commission as a condition of this Certificate to implement the **proponents' above identified mitigation measures.**

April 11, 2008

Date



Ian A. Bowles

Comments received:

GZA, 2/28/08

GZA, 2/28/08

MassDEP/SERO, 3/7/08

MassDEP/SERO, 3/11/08

Blue Hill Adventure, 3/12/08

GZA, 3/24/08

Friends of the Blue Hills, 3/24/08

Friends of the Blue Hills, 3/31/08

MassWildlife, 3/31/08

MassDEP/SERO, 4/1/08

10573npc

IAB/WTG/wg