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August 7, 2009

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

PROJECT NAME : Flood Mitigation Facilities for the City of Peabody  
PROJECT MUNICIPALITY : Peabody  
PROJECT WATERSHED : North Coast  
EOEA NUMBER : 14251  
PROJECT PROPONENT : City of Peabody  
DATE NOTICED IN MONITOR : July 8, 2009

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I hereby determine that this Notice of Project Change (NPC) **continues to require** the preparation of a Draft Environmental Impact Report (DEIR) as determined in the Certificate dated August 22, 2008.

Original Project Description and MEPA History

As described in the Environmental Notification Form (ENF) filed in May, 2008, the original project consisted of three distinct projects which comprise the City of Peabody's flood mitigation plan for Peabody Square. Peabody Square has experienced significant flooding events since the 1950s, including three floods (1996, 2004 and 2006) that were declared Federal Disasters. The City has been actively studying flood mitigation alternatives for this area for several years. Project 1 entails relocating and enlarging the Goldthwaite Brook culverts from Oak Street to its confluence with the North River, and cleaning part of the Foster Street culvert upstream of Oak Street. Project 2 involves widening the North River, as well as the construction of new river walls, elimination of two bends in the river and replacement of the Howley Street Bridge culvert. Project 3, which would be undertaken by the U. S. Army Corps of Engineers (ACOE) and sponsored by the City of Peabody and the City of Salem, involves work downstream in the North River in Peabody and Salem that will likely involve widening of the

river, realigning a river bend and the excavation of contaminated materials. While the ENF was under review, the proponent filed supplemental information, which redefined the project to consist solely of Projects 1 and 2, rather than the three projects initially proposed. However, several commenters (including permitting agencies) expressed concern that implementation of Projects 1 and 2 alone could limit future implementation of project alternatives downstream that could have fewer overall impacts. Consequently, on August 22, 2008, I determined that an EIR was required for the project, and that all three projects should be addressed in the EIRs for this project.

NPC for the inclusion of Strongwater Brook and enhanced upstream storage in Goldwaite Brook

With the current NPC, the proponent wishes to include the Strongwater Brook (Sub) Watershed as an integral part of the overall hydraulic modeling and evaluation of opportunities for flood control and water quality improvement for the North River watershed. Strongwater Brook enters the North River east of Howley Street. It has a direct effect on, and contributes to the flood elevation in the North River. In addition, the City has identified several areas throughout the Strongwater Brook Watershed and newly identified areas in the Goldthwaite Brook Watershed where there exists the potential for enhanced upstream storage.

This NPC presents the proposed scope of services and modeling efforts planned in the Strongwater Brook Watershed. The proponent will analyze the effects of potential upstream improvements at several locations, including: increased storage at Meadow Pond at Swampscott Road/Adelaide Avenue and within the wetland complex west of Meadow Pond; several potential Low Impact Development (LID) projects in the vicinity of the Welch School; and improvements along the channel between Clement Avenue and Pleasant Street to reduce flooding in the Pierpont Street/Fountain Street area. The City has identified several specific locations within the Goldthwaite Brook Watershed that have the potential to enhance upstream storage to slow the release of stormwater flows and lessen the impact of storm events on receiving waters as well as provide better water quality control and overall improved stormwater management at a localized level. These areas for potential stormwater management improvements include; Perkins Street at Allens Lane (at Higgins Middle School); Summit Avenue Retention Basins; Christian Books Retention Ponds; Technology Drive/Centennial Park Retention Ponds; and the Scouting Way culvert. The Goldthwaite Brook Detention Basin Optimization Project has also identified four detention basins for potential enhancement. These four detention basins are located at Technology Drive and Centennial (Industrial) Park between Technology Drive and Summit Street.

Beyond localized flood control and reducing the flow of water to Peabody Square, these projects could potentially provide benefits, including: increased localized recharge, wetlands restoration, reduction of uncontrolled runoff, reduced erosion, improved water quality as well as potential aesthetic improvements and educational opportunities through the use of LID practices

for stormwater management. The significance of this NPC involves the expansion of the original project to include potential flood mitigation and/or stormwater management improvement projects in the Strongwater Brook Watershed and the Goldthwaite Brook Watershed.

### MEPA Jurisdiction

The original project was subject to MEPA review pursuant to Sections 11.03(3)(b)(1)(b), 11.03(3)(b)(1)(e), and 11.03(3)(b)(1)(f) because the project alters 500 or more linear feet of bank along a fish run or inland bank; provides a new structure in a regulatory floodway; and alters 0.5 or more acres of any other wetlands. When Project 3 was added to the project, the entire project was determined to require a mandatory EIR pursuant to Sections 11.03(3)(a)(1)(b) and 11.03(3)(a)(2) because it may alter ten or more acres of wetlands and may require a Variance in accordance with the Wetlands Protection Act from the Massachusetts Department of Environmental Protection (MassDEP). Orders of Conditions will be required from the Peabody Conservation Commission for Projects 1 and 2 as a "limited" project. A Superseding Order of Conditions will be required from MassDEP if the Orders are appealed. The project will require a Chapter 91 Waterways Permit for the dredging of the North River and a Chapter 91 License for some of the proposed structures from MassDEP. The project will also require a Water Quality Certificate from MassDEP. It may also require a Notice of Intent to Perform Utility-Related Abatement Measures (URAM) with MassDEP. The project may need to comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site. A Programmatic General Permits (PGP) may also be needed from the U.S. Army Corps of Engineers.

Because state funding is being utilized for portions of this project and a Chapter 91 Permit/License is required, MEPA jurisdiction is broad and extends to all aspects of the project that may cause Damage to the Environment as defined in the MEPA regulations.

The NPC will require additional review by the Peabody Conservation Commission with the necessary Orders of Conditions. A 401 Water Quality Certificate and Chapter 91 License/Permits (depending on the amount of dredging and the structures proposed) may also be required for these additional flood mitigation measures from MassDEP. The projects may also need to comply with the NPDES General Permit for stormwater discharges.

### Review of the NPC

I commend the City for expanding the scope of the project to include upstream storage in the Strongwater Brook and Goldthwaite Brook Watersheds. If this project is done properly, it has the potential to reduce flooding in Peabody Square and to improve water quality in the North River Watershed. Because this project continues to require a DEIR, I am adding the following additional items to the Scope that was issued in the Certificate of May 21, 2008, for all of the

areas within the Scope as necessary to determine the total project impacts, permitting requirements, and subsequent mitigation measures.

### ADDITIONAL SCOPE

#### Project Description

The DEIR should identify potential upstream stormwater storage through best management practices (BMPs) and Low Impact Development (LID) strategies not only in the Strongwater Brook and Goldthwaite Brook Watersheds, but in the entire North River Watershed, which includes Proctor Brook and Cedar Pond (which is the headwater area of Goldthwaite Brook). The DEIR should identify if there are opportunities to provide additional stormwater retention areas in Centennial (Industrial) Park, the Crowninshield Pond area, and particularly in the densely developed downstream area of Strongwater Brook. Several commenters also noted specific detention ponds/basins that are not functioning properly and that could be improved to provide additional storage. The DEIR should address how the proponent will rectify these situations as part of its maintenance program. It should also determine if additional potential stormwater management and LID practices for stormwater management in the Strongwater and the Goldthwaite Brook Watersheds are relevant to reducing the flow to the North River in a significant flood event. The DEIR should include maps showing the complete watersheds of all the tributaries that flow into the North River, and the ponds and major roadways should be clearly identified in these figures. The DEIR should identify the specific projects within each sub-watershed of the North River and whether these individual projects are part of Projects 1, 2, or 3. It should develop the phasing of each project within the DEIR.

#### Waterways Licensing/Permitting

The DEIR should explore whether dredging and/or installation of water release controls to lower water levels in key ponds before storm events would reduce flooding to Peabody Square.

#### Wetlands

The DEIR should update and elaborate on the wetlands resource area impacts and alternatives that result from the inclusion of the Strongwater Brook, Goldthwaite Brook, and any other additional stormwater storage areas proposed by the proponent. It should propose additional wetland mitigation, replication, and restoration to address these impacts. According to MassDEP comments, the proponent will need to mitigate for a Variance from the Wetlands Protection Act. There should be a visible component of actual restoration to meet the intent of 310 CMR 10.53(4) – the limited project category under which the project was proposed.

### Marine Fisheries Resources

The DEIR should identify if there are additional fisheries resources within the expanded project area.

### Flooding

The DEIR should identify the reductions in runoff volume from potential LID projects. The hydraulic modeling data should clearly explain what is included in the modeling and the proponent's assumptions. The DEIR should explain the related reduction in flood level modeled to better understand the potential gains possible through LID related methods. It should identify the watershed areas included in the model. The proponent should consider and identify other LID proposals as suggested by commenters, such as incorporating green roofs on the Welch School and Police Station, cisterns to collect runoff, and augmenting existing detention areas. The DEIR should review the calculations for detention pond 100-1 in Table 1 of the NPC. It should identify if more flow data has been collected and describe the data results. The hydraulic model should be tested with the mean high high tides. It provided output for nine locations, but none of the locations are downstream of Grove Street in Salem. The DEIR should consider adding a model output below Grove Street.

The NPC noted that the Army Corps ability to undertake Project 3 would be eliminated if the North River flow at Howley Street during the statistical ten-year storm were to fall below 800 cubic feet per second (cfs). The DEIR should address this issue and identify the ten-year flows in the North River under the various scenarios developed by the proponent.

### Hazardous Waste/Mitigation

The flood mitigation work will require a remediation component to clean up the former industrial contamination along the North River and its tributaries. The DEIR should identify the specific remediation components. It should include figures and a discussion of the location and extent of contamination areas that would be impacted by flood mitigation. MassDEP has indicated that it would be willing to coordinate an effort among the various agencies regarding the remediation components of the project. The DEIR should address this issue.

### Response to Comments

The DEIR should respond to the comments contained at the end of this Certificate.

### Conclusion

The proponent is still required to submit its DEIR for the Flood Mitigation Facilities for

Peabody Square. If the proponent submits additional NPCs, it should consider submitting a request for a Special Review Procedure (SRP) as recommended by MassDEP. Pursuant to 301 CMR 11.09(1), a SRP could better facilitate an orderly review process for Projects 1, 2, and 3 and the phased construction of the projects.

Based on a review of the information provided by the proponent, a review of the comment letters, and after consultation with the state agencies, I find that the DEIR should include the additional analysis outlined above.

August 7, 2009  
Date



Ian A. Bowles

Comments received:

Russell Donovan, 7/27/09

William A. Toomey, 7/27/09

Fran Tower, 7/27/09

Ronald Christensen, 7/28/09

Massachusetts Division of Ecological Restoration, 7/28/09

Salem Sound Watch, 7/28/09

Neil Fabbo, 7/28/09

Stewart Lazares, 7/28/09

John D. O'Brien, 7/28/09

Massachusetts Division of Fisheries & Wildlife, 7/28/09

Massachusetts Historical Commission, 7/28/09

Massachusetts Department of Environmental Protection/Northeast Regional Office, 7/29/09

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