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July 25, 2007

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

PROJECT NAME : Shaft 7 to WASM3 Connecting Mains Project
PROJECT MUNICIPALITY : Arlington, Belmont, Boston, Watertown
PROJECT WATERSHED : Mystic River, Charles River
EEA NUMBER : 13086
PROJECT PROPONENT : Massachusetts Water Resources Authority
DATE NOTICED IN MONITOR : June 25, 2007

Pursuant to the Massachusetts Environmental Policy Act (M. 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) submitted on this project and hereby determine that it **does not require** the preparation of an Environmental Impact Report.

Project Description and MEPA History

The project, as originally described in the Environmental Notification Form (ENF) submitted in 2003, entailed the installation of 19,100 feet of new 48-inch diameter water pipeline, and the rehabilitation of 16,400 feet of existing pipeline to supplement the water supply and distribution system serving Arlington, Belmont, Boston, and Watertown. The Certificate on the ENF issued on October 31, 2003, did not require the preparation of an EIR. The project was divided into several phases: CP-1 involved installation of 15,500 feet of pipeline from Belmont and Watertown; CP-2 involved installation of 4,100 feet of pipeline from Watertown to the existing water supply mains at the Charles River Crossing; CP-3 involved rehabilitation of 16,400 feet of existing pipeline in Arlington.

The project was subject to environmental review pursuant to 301 CMR 11.03 (1)(b) of the MEPA regulations because it involved conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution to a purpose not in accordance with Article 97; 11.03 (3)(b)(1)(d) for alteration of more than 5000 square feet (sf) of bordering vegetated wetlands; and 11.03 (6)(b)(2)(b) for cutting more than five living public shade trees measuring more than 14 inches in diameter at breast height. The project requires a Chapter 91 License and 401 Water Quality Certification from the Department of Environmental Protection (MassDEP). The project requires an a Permit to Conduct Work within a Satate Highway Layout from the Massachusetts Highway Department (MHD). The project also requires Orders of Conditions from the Watertown and Boston Conservation Commissions, and a Section 404 General Programmatic Permit from the Army Corps of Engineers, for work along the Charles River. It is considered a "limited project" under 310 CMR 10.53 (3)(d) of the Wetlands Protection Act regulations because it involves construction and maintenance of water distribution infrastructure. Since a temporary transfer of state-owned land is required to undertake this project, MEPA jurisdiction broadly applies to all aspects of the project that have the potential to result in Damage to the Environment.

The proposed Charles River crossing described in the ENF involved temporary alteration of 33,800 square feet (sf) of wetlands resources (6,400 sf of bordering vegetated wetlands, 6,400 sf of inland bank, and 21,000 sf of land under water). The Wetlands Protection Act performance standards required that the proponent evaluate reasonable alternative routes that may pose fewer environmental impacts, employ best available measures to minimize construction impacts, and substantially restore and re-vegetate affected resource areas. The alternatives analysis presented in the ENF indicated that the proponent had explored reasonable alternative routes for the pipeline and had selected one that posed the fewest environmental impacts and no permanent impacts.

A temporary construction easement was also required to cross the Watertown Arsenal Park, which is protected land under Article 97 and within the purview of the Division of Conservation and Recreation (DCR). EEA's Article 97 Land Disposition Policy requires an alternatives analysis for any transfer of Article 97 public open space, and the identification of compensatory open space with land of significantly greater resource value. (This is referred to as the "no net loss" policy.) No facilities were proposed to be constructed on the surface of the easement, and as such, there will be no permanent net loss of land. The pipeline will also be constructed within a railroad right-of-way, which is part of the proposed bikeway master plan for Charles River Park.

Current Project Change Description

As described in the NPC, the project change entails relocating the 48-inch diameter pipeline connecting the Weston Aqueduct Supply Main 3 (WASM3) water main and WASM4 to a route between Grove and Newton Street in Waltham and Washington and Harrington Street in Newton. The ENF for the project described three contracts for water main work, including

Contract CP-1 for a new pipeline in Belmont and Watertown; Contract CP-2 proposed a different alignment to WASM4 water main, between Alexander Street in Belmont to School Street and a railroad easement in Watertown; and Contract CP-3, a pipeline rehabilitation project in Watertown, Belmont, and Arlington.

As originally described in the ENF, the project required a 300-foot section water main crossing of the Charles River, under Contract CP-2. The project change requires a narrower, 100-foot crossing of the Charles River. As described in the NPC the pipeline will follow and cross Cheesecake Brook. However, most of the project is within roadway layouts and will be constructed using an open cut-and-cover method.

Wetlands

As described in the NPC, the project would alter about 1,300 square feet (sf) of Bordering Vegetated Wetlands (BVW) and 2,240 square feet of Land Under Water (LUW) for the Charles River pipeline crossing. The wetlands impacts are significantly reduced by the alternative route proposed in the NPC as compared to what was originally proposed in the ENF. The preferred route in the ENF was estimated to alter 6,400 sf of BVW, 21,000 sf of LUW, and about 40,000 square feet of Riverfront Area in Boston and Watertown. MassDEP has stated in its comment letter that it supports pipe jacking, rather than the cut-and-cover method for pipeline crossing at Cheesecake Brook to minimize potential impacts.

The NPC indicates that smelt spawning season in the Charles River occurs between March 15 and June 15. However, the Division of Marine Fisheries (DMF) recommends March 1 as more appropriate date for commencement of the spawning period in larger rivers and in most rivers in warmer winters because adult smelt are staging in the vicinity of the spawning habitat by that date. As a scheduled end-of-construction date of February 28th is almost coincident with the start of the smelt-spawning season, construction should be timed to end earlier in February. In addition, the Newton Conservation Commission typically has time-of-year restrictions on construction in the area of Cheesecake Brook due to the presence of American eel, which are especially prevalent between Watertown Street and Craft Street.

According to the NPC, approximately 30 trees will be removed from the banks of the Charles River during construction. I remind the proponent that disturbance and tree cutting along the banks should be minimized to the extent possible to preserve habitat and bank stability. During the review of the ENF the proponent committed to retain a certified arborist to conduct a tree evaluation study, and to also consult with each affected municipality to manage tree protection, removal and pruning activities. I also remind the proponent that provisions should be made to replace rocks and cobbles removed during excavation along the streambed.

As noted in the NPC, the project will require both a Chapter 91 license and a 401 Water Quality Certificate from MassDEP for the river crossing. The pipeline is considered an infrastructure crossing facility under the Chapter 91 Waterways regulations.

The proponent should also be aware that new regulations were promulgated on December 29, 2006 with respect to 401 Water Quality Certification. I strongly advise the proponent to consult with MassDEP and address all the issues raised in its comment letter prior to permitting. In preparing an application for the 401 Water Quality Certificate, the applicant should consult the regulations for requirements for water quality sampling during dredging; dredge material sampling, handling, and disposal requirements; and dredging performance standards. As it appears that the river bottom material to be dredged has not been sampled yet, MassDEP recommends that this important information be collected soon so that any necessary dredging, handling, or disposal measures can be developed. Although the NPC indicates that half of the 400 cubic yards of sediment and soil from the Charles River crossing will be used to backfill the pipeline trench, the NPC has only generally described the issues involved with contaminated riverbed soil and dewatering spoils

Conclusion

Based on a review of the information provided in the NPC, and after consultation with the relevant public agencies, I find that the potential impacts of this project change do not warrant the preparation of an EIR. No further MEPA review is required at this time.

July 25, 2007
Date


Ian A. Bowles

Comments received:

07/16/07 Department of Environmental Protection, NERO

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