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May 23, 2014

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

PROJECT NAME	: Beacon Street Multimodal Improvements and Streetscape Enhancement
PROJECT MUNICIPALITY	: Somerville
PROJECT WATERSHED	: Charles River
EEA NUMBER	: 15193
PROJECT PROPONENT	: Massachusetts Department of Transportation and City of Somerville
DATE NOTICED IN MONITOR	: April 23, 2014

Pursuant to the Massachusetts Environmental Policy Act (MEPA) (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).

Project Description

As described in the Environmental Notification Form (ENF), the project consists of the reconstruction of a 1.1-mile long portion of Beacon Street in Somerville to improve safety for bicyclists, pedestrians, and drivers, provide streetscape improvements such as street trees and other plantings, benches and trash receptacles, and resurface the street and sidewalks. The project will begin at the bridge abutment at Oxford Street and end at the Somerville-Cambridge municipal boundary at the intersection of Beacon and Dickinson Streets. The project will reconstruct the roadway to include sidewalks on both sides of the street, generally 10 feet wide where space allows; an 11-foot wide vehicular travel lane in each direction; either cycle tracks or bike lanes in both directions; and a parking lane along at least one side of the street. The project also includes full-depth road reconstruction, traffic signal improvements, provisions for compliance with the Americans with Disabilities Act (ADA), new pavement markings and

signage, and new street trees. The project will remove 161 of the 346 existing parking spaces along Beacon Street to accommodate bicycle and pedestrian facilities and streetscape features.

The project will construct the following roadway improvements:

1. Oxford Street to Museum Street (1,975 feet)
    - Six-foot wide cycle track with a mountable curb on the northeast side of the street;
    - Nine-foot wide cycle track on the southwest side of the street;
    - Ten-foot wide sidewalks on both sides of the street;
    - Nine-foot wide parking lane on the southwest side of the street; and
    - Two 10-foot wide travel lanes.

2. Museum Street to Park and Scott Streets (925 feet)
    - Five-foot wide bike lanes on both sides of the street;
    - Ten-foot wide sidewalk on the northeast side of the street;
    - A new 5.5-foot wide sidewalk along the southwest side of the street;
    - Seven-foot wide parking lane on the northeast side of the street; and
    - Two 11-foot wide travel lanes.

3. Park and Scott Streets to Washington Street (950 feet)
    - Six-foot wide cycle track with a mountable curb on the northeast side of the street;
    - Nine-foot wide cycle track on the southwest side of the street;
    - Ten-foot wide sidewalks on both sides of the street;
    - Nine-foot wide parking lane on the southwest side of the street; and
    - Two 10-foot wide travel lanes.

4. Washington Street to Cambridge City Limit (1,925 feet)
    - Five-foot wide bike lanes on both sides of the street;
    - Ten-foot wide sidewalks on both sides of the street;
    - Seven-foot wide parking lanes on both sides of the street; and
    - Two 11-foot wide travel lanes.

The project also includes modifications to four intersections, including new signals with vehicle and bicycle detection and emergency vehicle pre-emption, wheelchair ramps and pedestrian push buttons designed to meet current ADA and MassDOT standards, and pavement markings and signage. Pedestrian hybrid beacons, known as High-intensity Activated crossWalK(HAWK) signals, will be installed at Beacon Street/Sacramento Street and Beacon Street/Kent Street/Museum Street. These pedestrian-activated signals will be mounted on mast arms and will stop all vehicular traffic to allow pedestrians to cross Beacon Street.

A fully actuated signal will be installed at Beacon Street/Park Street/Scott Street and Beacon Street/Washington Street. The signal will include a concurrent pedestrian phase with a Lead Pedestrian Interval (LPI) to allow pedestrians to enter the crosswalk before adjacent

vehicles have a green signal indication. The concurrent phasing is expected to improve the level-of-service (LOS) compared to the existing signals, which have an exclusive pedestrian phase that delays vehicular traffic. To reduce delays and improve LOS at the Beacon Street/Washington Street intersection, the project will facilitate left turns from Washington Street eastbound onto Beacon Street northbound by providing a two-lane approach to Washington Street eastbound and a protected/permissive phase for this left turn.

Project Site

Beacon Street is an urban arterial that runs northwest from the Cambridge city line to Somerville Avenue. The roadway width is 44 feet within a 66-foot wide layout and includes one travel lane in each direction and parking on both sides of the street. Beacon Street currently includes sidewalks varying in width between 10 to 11 feet, except for the segment between Museum Street to Park and Scott Streets, where there is no sidewalk on the southwest side of the street. Approximately four-foot wide bicycle lanes are provided in both directions. The roadway is heavily used and in poor condition, with traffic and pedestrian signals that do not conform to current Manual of Uniform Traffic Control Devices (MUTCD) requirements or ADA standards.

Beacon Street serves as an important connection for bicyclists between Somerville and Cambridge and Boston. According to counts of bicyclists conducted by the City of Somerville, Beacon Street includes the top three intersections for usage by cyclists in the city. The improvement of Beacon Street for all modes of transportation, with a focus on pedestrians and bicyclists, was identified as a goal in SomerVision: City of Somerville Comprehensive Plan 2010-2030.

The project is located adjacent to properties and districts listed in the State and National Registers of Historic Places and identified in the Massachusetts Historical Commission's (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth. The ENF includes correspondence from the Massachusetts Department of Transportation's (MassDOT) Cultural Resources Unit to MHC in accordance with the Federal Highway Administration's Section 106 review process in which MassDOT indicates its belief that the project will have no adverse effect on properties or districts that are listed or eligible for listing in the National Register of Historic Places.

Permitting and Jurisdiction

The project is undergoing MEPA review and requires preparation of an ENF pursuant to 301 CMR 11.03 (6)(b)(2)(b) because it is being undertaken by the Massachusetts Department of Transportation (MassDOT), a State Agency, and consists of maintenance of a roadway that will cut five or more living public shade trees of 14 or more inches in diameter at breast height (dbh).

This project is subject to review by MHC in accordance with Section 106 of the National Historic Preservation Act. The project will be reviewed by MassDOT and the Federal Highway Administration for a Categorical Exclusion Determination under the National Environmental Policy Act (NEPA) and will be required to obtain a National Pollutant Discharge Elimination

System Construction General Permit (NPDES CGP) from the United States Environmental Protection Agency (EPA).

The project is being undertaken by a State Agency and includes state funding. Therefore, MEPA jurisdiction is broad in scope and extends to all aspects of the project that may cause Damage to the Environment, as defined in the MEPA regulations.

Review of the ENF

The ENF identified existing conditions along the length of the project route, contained a set of design plans, described potential environmental impacts and mitigation measures, and provided an analysis of alternative designs considered for the project.

The ENF reviewed three alternative roadway cross sections that would provide bicycle facilities while maintaining sidewalks, parking lanes on both sides of the street, and travel lanes. Alternative 1 included ten-foot wide shoulders adjacent to the travel lanes in both directions, within which the bicycle accommodations would be located. This alternative would add space for bicycles compared to the existing four-foot wide bike lanes. The 20 feet added to the roadway cross section would result in a 72-foot right-of-way that would require land acquisition along the project right-of-way. This alternative was determined to be infeasible because of the cost of the land acquisition. Alternative 2 would essentially maintain existing conditions. This alternative was rejected because it would not adequately accommodate the expected growth in bicycle ridership or improve safety and traffic flow. Alternative 3 would expand the bicycle lanes on both sides of the street from four feet to five feet, requiring a two-foot expansion of the roadway cross section. While this expansion could be accommodated within the existing right-of-way, it would require the relocation of water and sewer lines, as well as over 100 utility poles, at a significant cost. The Preferred Alternative, outlined above, provides cycle tracks or bike lanes generally within the existing roadway, thereby eliminating the cost involved in relocating utility poles.

Traffic and Transportation

The project is designed to encourage bicycle and pedestrian use of Beacon Street and improve safety and traffic flow for all users. The project is consistent with MassDOT's GreenDOT Policy directive which includes the goals of reducing GHG emissions; promoting healthy transportation options such as walking, bicycling, and public transportation; and supporting smart growth development. As noted in the ENF and by the City of Cambridge, Beacon Street is a critical regional corridor for bicyclists, including those who rely on it as a primary means of transportation. In addition to improving conditions for existing bicyclists and pedestrians, the project will reduce traffic congestion, improve air quality, and reduce GHG emissions. Unique features of the project design include its use of cycle tracks to provide a bicycle lane separated from vehicular traffic, and two HAWK pedestrian crossing signals. These safety features are expected to increase bicycle ridership and pedestrian convenience. The City of Cambridge and WalkBoston suggested several bicycle and pedestrian design features that MassDOT and the City should consider as the project design is finalized.

Shade Trees

In order to move the curb line to accommodate the street cross section, the project will cut eight public shade trees 14 inches or more dbh, and 22 additional trees of a smaller diameter. None of the trees to be removed are located in a historic district. To mitigate this impact, MassDOT and the City will plant 208 deciduous trees approximately two to 3.5 inches in diameter. The project will also incorporate measures to protect trees during the construction period.

Stormwater

The project site includes approximately 870 square feet (sf) of permeable surface. The project will create an additional 0.13 acres (approximately 5,663 sf) of permeable surface area, primarily through the addition of several small vegetated areas. According to the ENF, the project is a redevelopment project pursuant to the Massachusetts Stormwater Management Standards and will meet the requirements to the maximum extent practicable, including four-foot deep sumps in all new catch basins. The City of Cambridge notes the importance of maintaining appropriate drainage patterns after the roadway is reconstructed to ensure that runoff is not directed toward low-lying areas adjacent to the project corridor. The Massachusetts Water Resources Authority (MWRA) recommends that MassDOT and the City contact MWRA staff regarding the need for a Temporary Construction Site Dewatering Discharge Permit, which would be required if there are to be discharges during the construction period into the MWRA wastewater system.

Construction Period

According to the ENF, the project will employ MassDOT's Sustainable Design and Construction Best Practices, including the use of recycled materials in pavement and warm mix asphalt. The project must prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the NPDES CGP to address construction related erosion and sedimentation control measures, and comply with the Solid Waste and Air Pollution Control regulations, pursuant to M.G.L. c.40, s.54. I encourage the City and MassDOT to set an aggressive target for the recycling of construction and demolition debris.

The construction period is expected to last for less than 24 months. This project will be undertaken in close proximity to a densely-populated residential area and should implement measures to reduce air quality and noise impacts. According to the ENF, MassDOT requires contractors to install emission control devices in all off-road vehicles. Contractors should also be instructed to limit engine idling and use ultra-low sulfur diesel fuel. All construction activities should be undertaken in compliance with the conditions of all State and local permits.

Conclusion

Based on a review of the information provided in the EENF and consultation with the relevant public agencies, I find that the potential impacts of this project do not warrant further

MEPA review. Outstanding issues may be addressed during the local, State, and federal permitting processes.

May 23, 2014
Date

Richard K. Sullivan Jr.

Comments received:

05/13/2014 City of Cambridge
05/14/2014 Massachusetts Water Resources Authority (MWRA)
05/16/2014 WalkBoston

RKS/AJS/ajs