

Commonwealth of Massachusetts

Executive Office of Environmental Affairs ■ MEPA Office

ENF

Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOE No.: 13498
 MEPA Analysis: **Nick ZAVOLAS**
 Phone: 617-626-1030
 MAR 5 1 2005

The information requested on this form must be completed to begin MEPA review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Safety Improvement Project Route 138 - Two Locations		
Street: Route 138 (Turnpike Street) and Randolph Street, Route 138 (Turnpike/Washington Streets) and Washington Street		
Municipality: Canton	Watershed: Boston Harbor/Neponset River	
Universal Tranverse Mercator Coordinates: 325365E/4671862N and 325075E/4672969N	Latitude: 42.1814°N and 42.1912°N Longitude: 71.1146°W and 71.1184°W	
Estimated commencement date: Summer 2005	Estimated completion date: Summer 2006	
Approximate cost: \$1.5 million	Status of project design: 75% complete	
Proponent: The Town of Canton/MassHighway		
Street: MassHighway 10 Park Plaza		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Lori Macdonald		
Firm/Agency: MassHighway	Street: 10 Park Plaza, Room 4260	
Municipality: Boston	State: MA	Zip Code: 02116
Phone: (617) 973-7764	Fax: (617) 973-8879	E-mail: lori.macdonald@state.ma.us

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No

Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No

Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
 a Single EIR? (see 301 CMR 11.06(8)) Yes No
 a Special Review Procedure? (see 301 CMR 11.09) Yes No
 a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): **80 percent Federal Funds and 20 percent State Funds to be allocated for construction**

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals: **Order of Conditions in accordance with the**

Massachusetts Wetlands Protection Act, Categorical Exclusion in accordance with the National Environmental Policy Act (NEPA), National Pollution Discharge Elimination Systems (NPDES) Construction General Permit, and Army Corps of Engineers Massachusetts Programmatic General Permit.

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|--|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input checked="" type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	2.5 ha (6.2 ac)			
New acres of land altered		0.91 ha (2.26 ac)		
Acres of impervious area	1.658 ha 4.098 ac	+0.166 ha +0.411 ac	1.824 ha 4.509 ac	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		800 sm (8,611 sf) of Riverfront		
Acres of new non-water dependent use of tidelands or waterways		none		
STRUCTURES				
Gross square footage	N/A			
Number of housing units	N/A			
Maximum height (in feet)	N/A			
TRANSPORTATION				
Vehicle trips per day	43,860 (1999) Washington Street and 138 28,650 (1999) Randolph Street and 138	0	43,860 (1999) Washington Street and 138 28,650 (1999) Randolph Street and 138	
Parking spaces	0	0	0	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	N/A			
GPD water withdrawal	N/A			
GPD wastewater generation/ treatment	N/A			

Length of water/sewer mains (in miles)	N/A		
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CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

In compliance with federal Section 106 of the National Historic Preservation Act, MassHighway's Cultural Resource Unit (CRU) will coordinate its review with the State Historic Preservation Officer (SHPO) for potential project impacts to National/State Register listed or National Register eligible historic properties.

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify Fowl Meadow/Ponkapoag Bog) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

The Massachusetts Highway Department, in conjunction with the Town of Canton, is proposing transportation and safety improvements at two locations on Route 138: the intersections of Washington Street and Route 138 (Turnpike and Washington Streets) and Randolph Street and Route 138 (Turnpike Street). An Environmental Notification Form has been filed in accordance with 310 CMR 11.03 (11) since a portion of the proposed work falls within the mapped Fowl Meadow/Ponkapoag Bog Area of Critical Environmental Concern (ACEC). Portions of the proposed design include traffic mitigation related to the Reebok World Headquarters located on the south side of Royall Street, west of the Route 138/Royall Street Intersection and abutting I-93/Route 128 (EOEA #11280).

Existing Conditions: Route 138 within the project limits is an Urban Principal Arterial serving as a north/south route connecting metropolitan Boston and the Route 128 corridor with communities south of the city. Each of the intersections consists of two travel lanes (one in each direction) and no exclusive turning lanes. The intersection of Route 138 and Washington Street is a three-legged signalized intersection. The land use in this vicinity is mostly commercial and residential. The Fowl Meadow/Ponkapoag Bog ACEC is adjacent to the east side of Route 138 at the Washington Street intersection. The intersection of Route 138 and Randolph Street is a four-legged signalized intersection. Land use in this vicinity is primarily residential mixed with some small businesses.

Presently, both intersections are routinely extremely congested and the site of many accidents. Both intersections operate at an LOS* F (long delays) during the morning and evening peak hours. The Washington Street intersection has problems with lack of channelization, wide curb cuts, and poor definition of traffic flow which all contribute to driver confusion and traffic congestion. At the Randolph Street intersection there were 16 reported accidents involving personal injury during a three year period from January 1997 to December 1999. There have been 22 accidents reported at the Washington Street intersection between January 1994 and December 1996.

Proposed Improvements: Improvements for both intersections include roadway widening, drainage improvements, upgrading existing traffic signals, pavement markings, and signs to accommodate modified geometry and providing emergency pre-emption equipment.

Route 138 (Turnpike/Washington Street) and Washington Street Geometric improvements include minor roadway widening, restriping Route 138 to provide two 3.5 meter (m) (11.5 feet (ft)) through lanes (northbound and southbound) and one 3.5 m (11.5 ft) channelized southbound right turn lane to Washington Street, and restriping the Washington Street eastbound approach to provide an exclusive left turn lane and a shared left/right turn lane. Reconstruction of sidewalk is proposed on the west side of Route 138 for a distance of 204 m (670 ft). Six new wheelchair ramps are proposed for this intersection. Traffic improvements include an exclusive pedestrian phase that is activated upon push button demand as well as an automated bicycle phase. This will facilitate safe pedestrian access to the Canton Metropoulos ice skating rink and the Ponkapoag Golf Course.

The project plans include mitigation measures to ensure the integrity of the ACEC, and other than temporary dewatering measures to allow work to be conducted in the dry, no work is proposed in the ACEC. The proposed project will result in 800 sm (8,611 SF) of permanent impacts and 3,007 sm (32,367 sf) of temporary impacts to Riverfront Area, 10 m (33 m ft) of temporary impacts to Bank, 7 sm (75 sf) temporary impacts to Bordering Vegetated Wetland (BVW), 9 sm (98 sf) of temporary impacts to Land Under Water, and 8 sm (86 sf) of temporary impacts to Bordering Land Subject to Flooding. To eliminate any wetland impacts to the ACEC, a riprap slope is proposed for the east side of Route 138 south of Washington Street.

Route 138 and Randolph Street All approaches of Route 138 and Randolph Street are to be widened and restriped. All proposed travel lanes are designed at a width of 3.5 m (11.5 ft). Route 138 north and southbound will have two through lanes. Randolph Street eastbound will have one left-through lane and one exclusive right turn lane, and the westbound approach will have an exclusive left turn lane and one shared through-right lane. A right shoulder width of 1 meter (3.28 feet) and a curb lane width of 4.5 m (14.75 ft) are proposed for both roadways in order to accommodate bicycle traffic. Reconstruction of sidewalk is proposed on the west side of Route 138 for a distance of 57.24 m (187.8 ft) and on the south side of Randolph Street for a distance of 51 m (167.3 ft). New sidewalk at this intersection is proposed for approximately 82.06 m (269.2 ft). Four new wheelchair ramps are proposed at this intersection. Proposed traffic improvements include providing bicycle detection on all approaches and protected lead phases for left turn movements for the Route 138 southbound approach and Randolph Street westbound approach.

Drainage Improvements The project involves the redevelopment of previously developed sites and therefore according to the Department of Environmental Protection's (DEP) Stormwater Management Policy, the project must meet the DEP's Stormwater Management Standards to the greatest extent practicable. Proposed drainage improvements include the installation of deep sump catch basins, drainage manholes, and a headwall. All paved waterways at the intersections will be removed. These drainage improvements will improve the water quality of the stormwater entering Ponkapoag Brook.

Alternatives:

No-Build This alternative was not chosen because it would allow for the traffic flow conditions to continue operating at LOS F during peak hours. Safety deficiencies, including accidents involving personal injury, would continue if this

alternative was chosen.

Proposed Alternative This alternative was chosen because the design improves the existing roadway conditions by upgrading roadway geometry, defining travel lanes and reducing traffic conflicts through intersection signalization upgrades. This alternative minimizes project impacts such as permanent land takings (160.2 sm) and tree removal. Under this alternative the project will require the removal of a total of 29 trees greater than 14" diameter at breast height (dbh). Three of these trees are located on Randolph Street, a non-state highway, and are classified as mature "public shade trees" measuring 14" or more dbh. The remaining 26 trees are on Route 138, a state highway, and are therefore not classified as mature "public shade trees". Where feasible, trees will be retained by employing tree protection measures. In accordance with MassHighway's Landscape Restoration Policy, trees and shrubs will be planted in the project area as mitigation. Due to right of way and wetland constraints, the proposed right shoulder is less than MassHighway's desirable width for an Urban Arterial. The combination shoulder width and outside lane widths meets MassHighway's minimum width requirement to insure safe passage for bicycles. Impact avoidance and mitigation measures for this alternative include the construction of retaining walls to limit impacts to adjacent residential properties, installation of straw bales and silt fence along the east and west sides of Route 138 south of the Washington Street intersection to minimize erosion and sedimentation of down gradient resources during construction, constructing steeper slopes stabilized with riprap adjacent to BVW to avoid permanent impacts to resource areas, and the planting of trees and shrubs within the project area.

MassHighway Minimum Design Criteria Alternative This alternative was not chosen because by using the minimum right shoulder width required by MassHighway design criteria, permanent land takings would be increased at the Randolph Street intersection and be required at the Washington Street Intersection.

The project is consistent with the State's Fix-it-First Policy since the project involves improvements to substandard intersections with documented safety and congestion issues. The project is also consistent with the State's Communities First Policy since the project has incorporated mitigation measures in the design to enhance the streetscape and provide improved pedestrian and bicycle access to local recreational facilities. To offset the project's impacts to trees, trees and shrubs will be planted within the project area per MassHighway's Landscape Restoration Policy. JBL Busline obtains operating assistance from the Massachusetts Bay Transportation Authority and provides flag down service along Route 138 from Mattapan Station to Cobbs Corner via Canton Center. The project will provide a regional benefit by improving operating efficiency at the Washington Street and Turnpike Street intersection which is a substandard intersection along the JBL Bus Line Route.

*LOS- Level of Service is based on the average total delay defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line and is rated on a scale from A to F with LOS A representing free flow conditions and LOS F representing long delays.