



Environmental Notification Form

<i>For Office Use Only</i>	
<i>Executive Office of Environmental Affairs</i>	
EOEA No.:	<u>14248</u>
MEPA Analyst:	<u>NICK ZAVOLAS</u>
Phone:	<u>617-626-1030</u>

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: Intersection Improvements at Four Locations along Route 44 in Middleborough		
Street: Route 44 at Old Centre St., Everett St., Plymouth St., and Route 105		
Municipality: Middleborough	Watershed: Taunton	
Universal Transverse Mercator Coordinates: 19 03 41 415E; 46 41 349N	Latitude: 41° 54' 27.4" N Longitude: 70° 54' 44.5" W	
Estimated commencement date: Spring 2009	Estimated completion date: Spring 2011	
Approximate cost: 3.5 million	Status of project design: 75% Complete	
Proponent: Massachusetts Highway Department		
Street: 10 Park Plaza		
Municipality: Boston	State: MA	Zip Code: 02116-3973
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Catherine Rilla		
Firm/Agency: MassHighway	Street: 10 Park Plaza	
Municipality: Boston	State: MA	Zip Code: 02116-3973
Phone: 617-973-7882	Fax: 617-973-8879	E-mail: Catherine.Rilla@MHD.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. 8337) No

October 10, 1990 an ENF was filed for the Route 44 Reconstruction Project from Raynham to Carver. This project is currently on-hold but may be designed and/or constructed as mitigation for a proposed development in Middleborough.

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 301CMR 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): **It is anticipated that the Massachusetts Highway Department will fund 20% and the Federal Highway Administration will fund 80% of the construction costs.**

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

List Local or Federal Permits and Approvals: **Federal Highway Administration Categorical Exclusion**

Checklist, U.S. Army Corps of Engineers Massachusetts Programmatic General Permit (MA PGP), Middleborough Conservation Commission Order of Conditions. NPDES Construction General Permit with a Storm Water Pollution Prevention Plan.

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 checked="" type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input 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 (including Legislative Approvals) – Specify: _____ _____ _____ _____ _____ _____
Total site acreage Four Intersection Areas on Rt. 44	12.8			
New acres of land altered		1.3		
Acres of impervious area	10.5	1.3	11.8	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration (Bank-Interrmittent Stream)		920 LF		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	0	0	0	
Number of housing units	0	0	0	
Maximum height (in feet)	0	0	0	
TRANSPORTATION				
Vehicle trips per day	0	0	0	
Parking spaces	0	0	0	
WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

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 No

The NHESP (File No. 06-19908) has reviewed the project and determined that portions of the project occur within the habitat of the Eastern Box Turtle. In a letter dated June 2, 2006 the NHESP determined that the project will not result in an adverse effect to the actual resource areas and a "take" of the turtle will be avoided if no work occurs during the month of June within the Habitat areas, as this avoids the peak movement period for this species. See attached NHESP letter and locus map.

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 No

The project is located within or adjacent to the Muttock Historic and Archaeological District is National Register-listed. Also, "The Green" District located adjacent to the site is National Register-eligible.

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? * See Historical and Archaeological Resources Section IA

Yes (Specify _____) No

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

Yes (Specify _____) 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 is proposing intersection improvements at four locations along Route 44 in Middleborough, Massachusetts. The project begins at the intersection of Route 44 and Old Centre Street proceeding east ending at the Route 44 and Route 105/Plympton Street intersection. The proposed project length is approximately 2.8 miles. Route 44 is a major east west connector between Route 24, Route 495, and Route 3. Within the project area, Route 44 is a two lane undivided roadway with several at-grade intersections. To the east of the project area, Route 44 consists of a new segment of limited access highway with two lanes in each direction separated by a median.

These four intersections along the undivided section of Route 44 in Middleborough have a history of angle and rear end collisions and safety deficiencies associated with existing lane use, traffic operations, visibility and signal equipment. The locations are:

- Route 44 at Old Centre Street
- Route 44 at Everett Street
- Route 44 at Plymouth Street
- Route 44 at Route 105/Plympton

Existing Conditions: The existing Route 44 corridor from the Middleborough Rotary to Route 58 is one lane in each direction. The Route 44 approaches to all four intersections currently provide a shared left/through lane

and an exclusive right-turn lane. The existing roadway pavement width of Rt. 44 at the intersections is approximately 48 feet. The typical (existing) cross section of the Route 44 approaches to the intersections consist of the following: a 12' travel lane, a 12' right turn lane, a 2' offset approaching the intersection; and a 16' travel lane and a 6' shoulder leaving the intersection.

The proposed project is intended to address operational safety issues that currently exist, while the long term improvement plans are developed. A larger scale project is under review that includes the above mentioned intersection locations. This long term project consists of adding a general purpose travel lane in each direction of travel separated by a median. As a part of this long term project, intersections will be further improved and upgraded or grade separated.

On October 10, 1990, an ENF was filed for the Route 44 Reconstruction Project from Raynham to Carver. That project, which is currently on hold, involved adding a travel lane in each direction throughout the project corridor and grade separation at Route 105 and the Middleborough Rotary. These four intersections are within one small section of that overall project. The larger project is currently on-hold but may be designed and/or constructed as mitigation for a proposed development in Middleborough. Regardless of whether or not the larger project moves forward, these proposed intersection improvements will provide an immediate safety benefit on Route 44 in Middleborough.

Proposed Improvements: The proposed intersection safety improvements at these four locations will widen Rt. 44 approximately 10 feet to add a new exclusive left turn lane and maintain a through and right turn lane. The project also includes the replacement and upgrading of traffic signals, modifications to intersection geometry, new signs, and pavement markings. The proposed roadway pavement width will be 58 feet. The typical (proposed) cross section of the Route 44 approaches to the intersections will consist of the following: a 12' exclusive left turn lane, a 12' travel lane, a 12' right turn lane, and a 4' shoulder approaching the intersection; and a 12' travel lane and a 6' shoulder leaving the intersection.

Alternatives Considered: Three alternative cross sections were evaluated for each intersection. One alternative evaluated consisted of opposing left turn lanes, through travel lanes, and exclusive right turn lanes at each intersection (preferred). The other alternative evaluated consisted of opposing left turn lanes, through travel lanes without an exclusive right turn lane at each intersection. And the last alternative evaluated was the no change alternative. Each alternative was evaluated using the following criteria- traffic volumes, accident data, turning movements, operational and safety issues, and environmental constraints.

The other alternative studied considered off-grading with two to one (2:1) slopes versus constructing retaining walls along the edge of the road. Constructing retaining walls along the edge of the roadway in certain areas was chosen as the preferred alternative in lieu of off-grading for purposes of minimizing impacts to adjacent wetlands.

Stormwater Management: The existing drainage system consists of catchbasins and manholes, which connect to headwalls and culverts, as well as a number of non-structural Best Management Practices (BMP's) including grass swales and sedimentation basins. Stormwater runoff drains via either overland flow or infiltration to the Nemasket River (near Plymouth Street), and various upland and wetland areas along Route 44 between Old Centre Street and Route 105/Plympton Street.

The proposed drainage system has been developed in accordance with the MassHighway Storm Water Handbook and will incorporate new deep sump catch basins into the existing infrastructure to collect the runoff from the roadway. The stormwater will then be directed through either existing grass swales or replacement swales and sedimentation basins which will provide removal of Total Suspended Solids (TSS). The existing stormwater BMP's appear to be adequate to accommodate the proposed improvements. During construction the existing catchbasins, manholes, culverts, drainage swales and sedimentation basins will be inspected, and maintained where needed, to ensure that they are in good operating condition. No new point discharges are proposed as a result of the intersection improvements. The increase in pavement is minor and can be accommodated by the existing stormwater system BMP's.

Environmental Resources, Impacts, and Mitigation: Wetlands, the Nemasket River, Natural Heritage and Endangered Species Program Estimated and Priority Habitat, a recreation area, and water supply Zone II protection area are within the project limits.

At the Route 44 intersection with Route 105/Plympton Street, the Zone II municipal groundwater protection area

is directly adjacent to the northeast of the intersection. Roadway drainage is currently directed outside of the Zone II and the project will not change the drainage pattern. No wetland impacts are associated with the improvements to the Route 105/Plympton Street intersection. Work will take place within the Buffer Zone at this location. At the Plymouth Street intersection, the drainage swales, classified as intermittent streams, on the eastbound and westbound sides will be shifted approximately 5 to 10 feet to accommodate the widening for the turning lanes. Approximately 920 LF of Bank will be altered. The relocated swales will provide 920 LF of replacement bank. No work is proposed for the slopes directly above the culvert for the Nemasket River. The existing herring run will not be adversely impacted. At the Route 44 intersection with Everett Street work will take place within the Buffer Zone directly adjacent to the wetland but impacts to Bordering Vegetated Wetland (BVW) will be avoided with the proposed slope design using a mechanically stabilized earth wall. At the Route 44 intersection with Old Centre Street no wetland impacts are associated with the proposed improvements. Some work will take place within the Buffer Zone at this location as well.

The Middleborough Conservation Commission issued an Order of Conditions for the project on June 22, 2006 (DEP File No. 220-1001).

The Natural Heritage and Endangered Species Program (File No. 06-19908) has reviewed the project and determined that portions of the project occur within the habitat of the Eastern Box Turtle. In a letter dated June 2, 2006 the Natural Heritage and Endangered Species Program determined that the project will not result in an adverse effect to the actual resource areas and a "take" of the turtle will be avoided if no work occurs during the month of June within the Habitat areas, as this avoids the peak movement period for this species. The letter is included as an attachment to the Environmental Notification Form.

A review by MassHighway's Cultural Resources Unit (CRU) staff of the project plans, State and National Registers of Historic Places, and information compiled from the Massachusetts Historical Commission's (MHC) statewide inventory and site files has revealed that the project is within or adjacent to the National Register-listed Muttock Historic and Archaeological District and adjacent to the National Register-eligible "The Green" District. In addition, all four intersections are in the vicinity of recorded prehistoric and historic archaeological sites. CRU staff will evaluate project impacts to National Register-listed and -eligible properties in the project's area of potential effect and will coordinate review with MHC under the terms of the amended Section 106 Programmatic Agreement.

Oliver's Mill Park, a Section 4(f) of the DOT Act protected resource, will not be impacted by the project. No temporary or permanent easements or permanent land takings are required which would impact the recreational use of the park.

MEPA Review and Other Permitting Requirements: This project requires an Environmental Notification Form under the Massachusetts Environmental Policy Act (MEPA) pursuant to 301 CMR 11.03 (6) (b)1.b. The project includes the widening of an existing roadway by four or more feet for one-half or more miles. This project also requires a National Pollutant Discharge Elimination System Construction General Permit for stormwater discharges for construction activities which will be filed 72 hours prior to the start of construction. The contractor will be required to prepare a Stormwater Pollution Prevention Plan to control stormwater and prevent the movement of sediment from the construction site. This project also requires a Categorical Exclusion Determination in accordance with the National Environmental Policy Act (NEPA), review under Section 106 of the National Historic Preservation Act, an U.S. Army Corps of Engineers non-reporting Programmatic General Permit Category I, and an Order of Conditions under the Massachusetts Wetlands Protection Act which was previously issued by the Middleborough Conservation Commission on June 22, 2006.