

**Commonwealth of Massachusetts**

**Executive Office of Environmental Affairs ■ MEPA Office**

**ENF Environmental Notification Form**

<i>For Office Use Only</i>	
<i>Executive Office of Environmental Affairs</i>	
EOEA No.:	<u>13608</u>
MEPA Analyst:	<u>Aisling Eglinton</u>
Phone:	<u>617-626-1024</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: Shirley – Townsend Road Reconstruction		
Street: Townsend Road		
Municipality: Shirley	Watershed: Nashua River	
Universal Transverse Mercator Coordinates: Beg: N4719202    End: N4719794 E282457            E282278	Latitude:    Beg: N927122    End: N927709	Longitude:            E187564            E187368
Estimated commencement date: Spring 2006	Estimated completion date: Fall 2007	
Approximate cost: \$2,450,000	Status of project design: 100 %complete	
Proponent: Town of Shirley/Massachusetts Highway Department		
Street: 10 Park Plaza, Room 4260		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Grace Arthur		
Firm/Agency: MassHighway	Street: 10 Park Plaza, Room 4260	
Municipality: Boston	State: MA	Zip Code: 02116
Phone: (617) 973-8251	Fax: (617) 973-8879	E-mail: <u>Grace.Arthur@state.ma.us</u>

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 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): FHWA 80%,  
MassHighway 20%

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify \_\_\_\_\_)  No

List Local or Federal Permits and Approvals: Town of Shirley Conservation Commission/Order of Conditions, date of issuance 2/22/02 (extended until 2/22/06); DEP Water Quality Certification 1/28/02 DEP #284-310; ACOE-PGP II, FHWA – CE checklist; Stormwater Pollution Prevention Plan & National

**Pollution Discharge & Elimination Systems Construction 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 checked="" 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
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" 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	22.2			
New acres of land altered		1.5		
Acres of impervious area	7.7	1.3	9.0	
Square feet of new bordering vegetated wetlands alteration		4,161 s. f.		
Square feet of new other wetland alteration		240 s. f. LUW 73,730 s. f. RFA (temp)		
Acres of new non-water dependent use of tidelands or waterways		N/A		
<b>STRUCTURES</b>				
Gross square footage	N/A	N/A	N/A	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
<b>TRANSPORTATION</b>				
Vehicle trips per day	2,050	0	2,050	
Parking spaces	N/A			
<b>WASTEWATER</b>				
Gallons/day (GPD) of water use	N/A	N/A	N/A	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/ treatment	N/A	N/A	N/A	
Length of water/sewer mains (in miles)	N/A	N/A	N/A	

**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

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 Squannassit ACEC)  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.)

**MassHighway in cooperation with the Town of Shirley is proposing to reconstruct 3,379 meters (2.1 mile) of Townsend Road beginning 280 meters (920 feet) south of its intersection with Route 225 and ending at the Townsend line in the Town of Shirley, Massachusetts. Townsend Road is a rural major collector with an average daily traffic (ADT) volume of 461 vehicles per day (vpd) northbound and 409 vpd southbound. There is currently no posted speed limit in the vicinity of the project.**

**The existing cross section of Townsend Road consists of two variable 3.8 meter (12.5 foot) to 4.5 meter (14.75 foot) lanes with no striped shoulders. There is no sidewalk or curbing along Townsend Road. There are no existing or proposed traffic signals within the limits of the project. The Townsend Road right of way consists of a 15.24 meter (50 foot) County Highway Layout, dated 1860. The land use in the vicinity of the project is residential/rural.**

**Currently Garrison Road serves as a by-pass road to allow drivers to avoid the intersection of Townsend Road and Groton Road when passing from the southern leg of Townsend Road to the eastern leg of Groton Road and vice versa. This bypass is a safety hazard to the functionality of the intersection of Townsend Road and Groton Road by causing unsafe yielding and merging where Garrison Road meets the other two roadways. The proposed improvements include eliminating the cut-through by removing a section of Garrison Road and replacing it with grass.**

Currently Spaulding Road meets Townsend Road at a sharp angle to form an awkward Y-intersection. It is difficult for vehicles traveling southbound on Townsend Road to turn right onto Spaulding Road and it is unsafe for vehicles turning left from Spaulding Road on to Townsend Road. The proposed improvements include changing the geometry of Spaulding Road to meet Townsend Road to form a T-intersection and increasing the turning radii. This will allow safer and more feasible movements through the intersection.

The proposed work includes the following:

- Full Depth Reconstruction of Townsend Road from 289 meters (950 feet) south of Groton Road (Route 225) to the Townsend Town line.
- Reconstruction of 310 meters (1,020 feet) of Groton Road (Route 225) at its intersection with Townsend Road.
- Safety improvements and modification of Garrison Road between Townsend Road and Groton Road (Route 225) to eliminate direct travel from Garrison Road to Townsend Road.
- Reconstruction of 100 meters (330 feet) of Spaulding Road.
- Highway Guard Installation.
- Geometric and safety improvements at the intersection of Groton Road and Spaulding Road.
- Drainage installation and improvements.
- Pavement markings and signing throughout the project.
- Wetland Replication of 4,300 sf to accommodate 4,161 sf of wetlands impacted by roadway slopes and grading due to roadway widening.

The roadway will remain in its existing footprint with the exception of minor widening in certain locations. The proposed lane widths for Townsend Road will consist of two 3.25 meter (11 foot) travel lanes and two 1.25 meter (4 foot) shoulders. A fee taking at the intersection of Spaulding Road and Townsend Road will be necessary in order to realign the intersection. 26 small permanent drainage easements will be necessary at all inlets and outlets where existing culverts are being replaced and upgraded along Townsend Road.

Drainage improvements include replacing existing catch basins and drainage pipes. Existing outfalls shall be maintained. All existing culverts shall be replaced and updated. Townsend Road utilizes an open drainage system where the majority of the runoff flows directly off the shoulder in to the surrounding land, ditches and cross culverts. As a redevelopment project, the design will meet the Stormwater Management Standards to the maximum extent practicable. In order to comply with the Standards, deep sump catch basins and stone for pipe ends have been proposed to assist in the removal of total suspended solids. In addition, vegetated swales and silt retention areas have been included in the design where right-of-way allows. With the proposed design, the existing drainage characteristics throughout the project shall be maintained.

At the request of the MNHESP, all work in and near Trap Swamp Brook and Pumpkin Brook shall take place between November 1 and April 15<sup>th</sup>. In addition, the existing culverts will be replaced as three sided structures to maintain the natural streambed and

so as not to impede upstream fish movement.

A portion of the project is located within the Squannassit Area of Critical Environmental Concern (ACEC) – 301 CMR 11.03 (11)(b). Townsend Road is within the ACEC for a stretch of approximately 750 meters (2,460 feet) from Trap Swamp Brook to Spaulding Road. South of Trap Swamp Brook the ACEC borders Townsend Road on the west for approximately 1,400 meters (4,590 feet), and North of Spaulding Road the ACEC borders Townsend Road on the east for approximately 1,200 meters (3,940 feet). A portion of the project is located within Outstanding Resource Waters (ORW).

The project involves the cutting of five or more living public shade trees of 14 or more inches in diameter at breast height (301 CMR 11.03 (6)(b) 2.b.) and the widening of an existing roadway by four or more feet for one-half or more miles (301 CMR 11.03 (6)(b) 1.b.). Nearly the entire length of Townsend Road is heavily forested. Therefore, selective removal of trees from adjacent to the road serves as a responsible forest management practice by culling out stressed, damaged, unsafe, or otherwise overcrowded trees. Selective culling serves to strengthen the trees left remaining by removing salt damaged, and pest infested low-quality stock that would otherwise compromise a larger component of the forest stock.

The proposed width of roadway is the minimum required by the MassHighway design manual. This includes the minimum lane widths, shoulder widths and bicycle accommodations for this roadway classification. Other alternatives were originally proposed, however those alternatives all required a wider cross section which would dramatically affect the surrounding wetlands along Townsend Road. The current proposed roadway design shall yield the least amount of environmental impacts of all the alternatives considered.