

Commonwealth of Massachusetts  
Executive Office of Environmental Affairs ■ MEPA Office

**ENF**

Environmental  
Notification Form

For Office Use Only  
Executive Office of  
Environmental Affairs

EOEA No.: **13741**

MEPA Analyst: *Aisling Eglinton*

Phone: 617-626-1024

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: Bernardston Route 5 and 10 Resurfacing		
Street: Routes 5 and 10		
Municipality: Bernardston	Watershed: Connecticut	
Universal Transverse Mercator Coordinates: Project Begins: 4725262.691N/699838.675E Project Ends: 4733688.651N/698684.989E	Project Begins: 42° 39' 14" North 72° 33' 43" West Project Ends: 42° 43' 48" North 72° 34' 23" West	
Estimated commencement date: The Project has an Ad Date of 1-8-2008, 12 months have been allotted for construction	Estimated completion date: Spring 2009	
Approximate cost: \$3,000,000	Status of project design: 100% Complete	
Proponent: Massachusetts Highway Department		
Street: 10 Park Plaza		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Jessica Lavallee		
Firm/Agency: MassHighway	Street: 10 Park Plaza	
Municipality: Boston	State: MA	Zip Code: 02116
Phone: 617-973-7442	Fax: 617-973-8879	E-mail: Jessica.lavallee@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):

**The project is currently scheduled to receive 80% Federal Funds and 20% MassHighway Funds toward construction and is listed in the 2005-2009 State Transportation Improvement Program under**

**the 2008 Franklin Regional Metropolitan Planning Organization.**

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 issued on 4.28.2005, National Pollutant Discharge Elimination System, General Permit for Stormwater Discharges for Construction Activities, Categorical Exclusion Evaluation in accordance with the National Environmental Policy Act, and an Army Corps Of Engineers Programmatic General Permit 1 which was issued on 9.8.2005.**

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
<b>LAND</b>				<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 checked="" type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:
Total site acreage	28.1			
New acres of land altered		1.6		
Acres of impervious area	21.1	1.0	22.1	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration				
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	3,800	0	3,800	
Parking spaces	0	0	0	
<b>WATER/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	

**NPDES Stormwater Construction Permit from the EPA/ MA DEP**

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

There are some slope easement takings, and a permanent drainage easement in the vicinity of the Park at the intersection of Route 5 and 10. The Permanent Drainage Easement is 345 square feet, and the slope easement is 1,985 square feet. The total area is 4 acres, with total "takings" of 2,330 square feet. This amounts to 1.4% of the total parcel area. The Town Administrative Assistant has determined that the land to be taken for the temporary and permanent easements is considered "Park" land. MassHighway's Right of Way Section will review this project to determine whether legislative approval is required.

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

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

No farmland will be taken as part of the project.

**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

According to correspondence received from the Massachusetts Natural Heritage and Endangered Species program dated June 23, 2003(see attached letter).

**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

Based on the nature of the proposed work, it is the opinion of MassHighway's Cultural Resources Unit (CRU) staff that the Routes 5 and 10 resurfacing project in Bernardston will have no effect on any character defining elements of the State Register listed Bernardston Congregational Unitarian Church on Route 10/ Church Street or the Powers Institute Historic District on Route 10/ Church Street east of Route 10/South Street. Work on Route 10/Church Street in front of these State Registered listed properties is limited to resurfacing the existing paved roadway. Cushman Park, which is the only contributing property that also borders onto Route 10/ South Street in the State-Register-listed Powers Institute Historic District, will not be affected by the minor widening of South Street within the existing Highway Layout. Nor will Cushman Park be affected by the replacement and extension of an existing culvert beneath South Street just south of Church Street. The Massachusetts Historical Commission concurred with MHD's finding on 7.27.2005.

In compliance with Section 106 of the Natural Historic Preservation Act of 1966 as amended (36 CFR 800), MassHighway's Cultural Resource Unit (CRU) will coordinate project review with

the MA State Historic Preservation Officer (SHPO) for potential impacts on the National/State Registered-listed or National Register-eligible properties, districts or sites.

Source: MassHighway CRU Letter to MHC July 18, 2005 and stamped concurrence on 7.27.2005.

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

Yes (Specify \_\_\_\_\_)  No; No Structures are proposed to be demolished as part of this project.

**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.*)

**Project Limits:**

The Massachusetts Highway Department (MassHighway) proposes to reconstruct and improve approximately 5.9 miles of roadway involving U.S. Route 5, State Route 10 and a portion of the Burroughs Turnpike in the Town of Bernardston. The project limits are as follows:

- Route 5 from the Greenfield Town Line to the Vermont State Line;
- Route 10 from the intersection of Route 5, to a point 2,700 feet east to the bridge that traverses Route 10 over Interstate 91;
- The intersection of Route 5 and Burrows Turnpike will be realigned.

**Project Purpose & Existing Conditions**

The purpose of the project is to improve traffic flow and safety for vehicles, pedestrians and cyclists. Both Routes 5 and 10 are classified as Rural Major Collectors that provide access to Interstate 91 and are owned and maintained by MassHighway. The roadway carried approximately 3,800 vehicles per day (VPD) in 2003 and is anticipated to increase to 5,018 VPD in 2023. The existing roadway (including the shoulders) varies in width from 21 feet to 24 feet. Existing gravel shoulders throughout the project vary in width from one to two feet. The proposed widening roadway will begin approximately 200 feet north of the intersection of Routes 5 & 10 and West Mountain Road and will continue along Routes 5 & 10 to the intersection of Route 10. The widening portion of the project consists of two 12-foot travel lanes with 4-foot paved shoulders for a total roadway width of 32 feet.

The remainder of the road, from the split of Routes 5 & 10 to the Vermont State line, will be cold planed and resurfaced. The current pavement is in poor condition and requires repair.

This project complies with the Governor's "Fix it First Policy", a policy that gives priority to the repair of existing bridges, roads and related infrastructure.

An Environmental Notification Form (ENF) has been filed for this project because the proposed project will result in widening of an existing roadway by four or more feet for one-half or more miles (301 CMR 11.03(6)(b)1.b).

**Proposed Improvements:**

Work on these roadways consists of cold planing and resurfacing, drainage structure and pipe repairs, as well as the installation of four-foot shoulders and HMA sidewalks to improve the existing clear zone, and improve safety for bicycle traffic as well as pedestrians. Portions of final roadway width will be 32

feet in width measured from the edge of pavement. The project also includes installing sub-drain, pavement markings, snow-plowable pavement markings, tree trimming, traffic controls, cleaning drainage structures and pipes, erosion/sedimentation control measures, realignment of water mains, installation of wheel chair ramps, installation of guardrail end treatments and other incidental items. The intersection of Route 5 and Burrows Turnpike will also be realigned to improve the safety of the intersection. There will be no turning lanes added as part of this project.

The Route 5 and Route 10 Reconstruction project is considered to be a redevelopment project under the Massachusetts Stormwater Management Policy (SMP). As defined by the policy, redevelopment projects include: "maintenance and improvement of existing roadways, including widening less than a single lane, adding shoulders... and repaving". In accordance with the policy, the project will comply with the stormwater management standards to the maximum extent practicable and stormwater management systems will be designed to improve existing conditions. The existing drainage consists of both a closed and country drainage system. Drainage improvements are required on the roadway to preserve the roadbed and MassHighway will utilize treatment devices to meet the SMP. All catch basins installed will have four-foot sumps.

### **Environmental Impacts:**

The proposed project will have only minor environmental impacts. The proposed roadway widening will result in the increase of approximately 1 acre of impervious surface. This is the result of the minor shoulder widening on the project. Other impacts will be minor and temporary such as construction and air quality impacts.

Approximately 52.2 linear feet of Bank area will be impacted. There are seven wetland resource areas that will have either temporary or permanent Bank impacts. The impacts are a direct result of efforts to prevent erosion of the banks, highway side slopes, and the existing waterways themselves. The work will also improve drainage.

Approximately 661.5 square feet of Bordering Vegetated Wetland (BVW) will be permanently impacted, and 161 square feet of BVW will be temporarily impacted during construction. To compensate for the 661.5 square feet of lost BVW, a wetland replacement area of approximately 1,000 square feet is proposed. The replacement area is located adjacent to an existing stream, near Deane Road at Station 10+80 (West). The wetland replacement will be constructed under the direction and guidance of the approved Botanist and in conformance with the Order of Conditions issued by the Bernardston Conservation Commission.

A single row of staked haybales shall be installed along the border of the existing wetland and the limit of wetland fill. This will serve as the limit of work.

Approximately 48.3 cubic yards of fill is proposed within the Bordering Land Subject to Flooding (BLSF), along the easterly and westerly slope of the highway, between approximately Station 10+47 and 10+80 (Near the intersection of Dean Road). This fill is necessary to make repairs to an existing headwall, as well as allow for the minor roadway widening required for bicycle and pedestrian accommodation. 50 cubic yards of storage compensation will be constructed as part of the wetland replication area.

There will be 478 square feet of Land Under Water impacts throughout the project limits. This work is necessary to improve drainage flow, prevent erosion at the outlet of the culverts, repair existing headwalls, as well as restore the flow capacities of the existing culverts. This work will not impair the four General Performance Standards for Land Under Water, as listed in 310 CMR 10.56(4)(a).

There are two public water supply wells outside of the project area. Well #1 (PWSID 1029000-01G) is located off of Greenfield Road, and is approximately 1,425 feet from the project. The Sugar House, Well #3, (PWSID 1029000-03G) is located approximately 975 feet to the east of the project

(see attached map). It is not expected that the project will have any adverse impact on either of the wells, since both wells, at their closest proximity to Route 5 and 10, are located in areas scheduled for cold planing and resurfacing. During drainage repairs, erosion and sediment controls will be in place prior to construction in order to prevent resource impacts. There are no culvert replacements scheduled for areas within the Zone 2.

During culvert and headwall work at Station 1+42, the stream flow will be temporarily diverted through a PVC pipe while work is taking place. It is not anticipated that any pumping will be required for this work.

**Alternatives:**

No Build Alternative: Under this alternative, no improvements would be constructed. This alternative was rejected because it would not improve the safety conditions of the existing road.

Cold Plane and Resurface Only: Under this alternative no improvements such as the addition of the four-foot shoulders, drainage improvements, and wheel chair ramps would be constructed. This would not afford additional safety factors for pedestrians, motorists or bicyclists.

Cold Plane and Resurface with Minor Widening: This option was chosen because it addresses all needed improvements. Drainage for the road will be enhanced by re-establishing the slope of the road as well as provide for the installation of additional catch basins to remove water from the roadway. Wheel Chair ramps will be installed on the reconstructed sidewalks to comply with the Americans with Disability Act (ADA). This will also provide for additional safety for pedestrian traffic. The installation of the four-foot shoulders will provide for a larger clear zone for automobile traffic, and provide a safer area for bicycle traffic. This alternative is also below the 2.5 meter desirable roadway shoulder width recommended for this roadway classification.