

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

<i>For Office Use Only</i>	
EEA#: <u>14863</u>	
MEPA Analyst: <u>Nicholas ZAVOLAS</u>	

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Bridge Replacement (Bridge No. H-16-020) Old Windsor Road over Cady Brook, Hinsdale, MA		
Street Address: Old Windsor Road		
Municipality: Hinsdale, MA	Watershed: None	
Universal Transverse Mercator Coordinates:	Latitude: 42.481389	Longitude: 73.102778
Estimated commencement date: April 2012	Estimated completion date: Sept. 2012	
Project Type: Bridge Replacement	Status of project design: %complete	
Proponent: Gill Engineering Associates, Inc.		
Street Address: 200 Highland Avenue, 4 th Floor		
Municipality: Needham	State: MA	Zip Code: 02494
Name of Contact Person: Joseph P. Gill		
Firm/Agency: Town of Hinsdale	Street Address: 39 South Street	
Municipality: Hinsdale	State: MA	Zip Code: 01235
Phone: 413-655-2245	Fax: 413-655-8807	E-mail: hinsdalemass.selectmen@verizon.net

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

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you 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
(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
310 CMR 11.03(3) Wetlands, Waterways and Tidelands (b) 1.e.
Which State Agency Permits will the project require?
WPA Form 3 – Notice of Intent
401 Water Quality Certification for Fill and Excavation

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:
None

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	0.06 acres		
New acres of land altered		0.06 acres	
Acres of impervious area	0.04 acres	0	0.04 acres
Square feet of new bordering vegetated wetlands alteration		715 sf	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	NA	NA	NA
Number of housing units	NA	NA	NA
Maximum height (feet)	NA	NA	NA
TRANSPORTATION			
Vehicle trips per day	100	0	100
Parking spaces	0	0	0
WASTEWATER			
Water Use (Gallons per day)	NA	NA	NA
Water withdrawal (GPD)	NA	NA	NA
Wastewater generation/treatment (GPD)	NA	NA	NA
Length of water mains (miles)	NA	NA	NA
Length of sewer mains (miles)	NA	NA	NA
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site: _____

Bridge H-16-020 carries Old Windsor Road over Cady Brook in the Town of Hinsdale, Massachusetts. Cady Brook crosses under the featured structure at approximately 90 degrees (non-skewed) during low flows. Upstream it meanders to the south thus creating a skewed crossing during higher flows. The stream width varies from 10 feet to 20 feet upstream and 10 to 30 feet downstream.

The existing bridge was constructed in 1930 and is a 13.5 foot single span steel girder bridge with concrete deck supported by concrete abutments on spread footings. The approach roadway consists of two 11 foot lanes, no shoulders. The existing bridge clear span opening is 13 feet with a total waterway area of 85 square feet. The overflow bank consists of vegetation with trees; therefore, the stream has the potential for debris build up.

The bridge was recently closed due to damage caused by Tropical Storm Irene. The storm created a high water event which resulted in a portion of the south bridge approach embankment fill being washed away along with a portion of the material supporting the south abutment footing. This loss of bearing support resulted in the abutment cracking and settling approximately 4 inches.

An existing 10-inch water ductile iron pipe runs along the north edge of the stream bed and along the edge of the existing north abutment. The pipe is owned by the Town of Dalton and is presently inactive; however, it is their desire to maintain this pipe for future use.

An existing overhead electric line runs along the west edge of the bridge. It crosses the road to the south and to the residence to the north.

Describe the proposed project and its programmatic and physical elements: _____

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

The proposed replacement of the Old Windsor Road Bridge (H-16-020) over Cady Brook is a concrete arch consisting of a 24 foot clear span and a 7 foot rise while being supported by concrete spread footings. The proposed bridge will increase the hydraulic opening from existing thus resulting in less frequent road overtopping. In addition, increasing the span length allows for construction of proposed abutments behind the existing abutments which minimizes impacts to environmental resource areas. A combination of rock rip rap and steel sheet piling will be placed in front of the abutments and wing walls in order to minimize the reoccurrence of the bridge washing out similar to the event caused by Tropical Storm Irene. A portion of the concrete abutment footing will remain in place between the proposed sheet pile and the new concrete footing to aid in scour mitigation.

The proposed roadway section will be designed to match the existing roadway section. The roadway is 22 feet wide from curb to curb and carries two lanes of traffic. The design speed is 35 miles per hour and the ADT was conservatively set at 100 vehicles per day with 1% truck traffic. The horizontal alignment is on a tangent and the vertical profile is a -1.4% grade.

The proposed bridge replacement will require the following sequence of activities:

- Removal of existing bridge- removal will include the concrete deck, steel stringers, and portion of the concrete abutment. A portion of the concrete abutment footing will remain in place between the proposed sheet pile and the new concrete footing to aid in scour mitigation.
- Road embankment excavation- 511 cubic yards was estimated in order to construct the proposed abutment and wing walls. The perimeter of excavation directly adjacent to the stream and the surrounding overbanks (wet land areas) will be lined with hay bales along with sedimentation fence to prevent material washing into the stream.