

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

Environmental Notification Form

For Office Use Only

EEA#: 15828

MEPA Analyst: Alex Stejsky

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: Bay State Thread Dam Removal Project		
Street Address: Rear 30 Fort Pleasant Avenue		
Municipality: Springfield	Watershed: Mill River	
Universal Transverse Mercator Coordinates: 18 T 700339.14m E 4662555.14m N	Latitude: 42.089397	Longitude: -72.577658
Estimated commencement date: 5/1/2019	Estimated completion date: 11/30/2019	
Project Type: Dam Removal	Status of project design: 90%complete	
Proponent: City of Springfield Department of Public Works		
Street Address: 70 Tapley Street		
Municipality: Springfield	State: MA	Zip Code: 01104
Name of Contact Person: Melissa Coady		
Firm/Agency: Tighe & Bond, Inc.	Street Address: 53 Southampton Road	
Municipality: Westfield	State: MA	Zip Code: 01085
Phone: 413-572-3224	Fax: 413-562-5317	E-mail: mpcoady@tighebond.com
<p>Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Alteration of an existing dam that causes any decrease in impoundment capacity (301 CMR 11.03(3)(a)(4)) 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:</p> <p>a Single EIR? (see 301 CMR 11.06(8)) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No a Special Review Procedure? (see 301CMR 11.09) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No a Waiver of mandatory EIR? (see 301 CMR 11.11) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No a Phase I Waiver? (see 301 CMR 11.11) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)</p> <p>Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?</p> <ul style="list-style-type: none"> • Alteration of an existing dam that causes any decrease in impoundment Capacity [301 CMR 11.03(3)(a)(4)] <p>Which State Agency Permits will the project require?</p> <ul style="list-style-type: none"> • 401 Water Quality Certification • Wetlands Protection Act Order of Conditions (if Superseded) <p>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.</p>		

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Mrs. Stodola

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	1.04		
New acres of land altered		0.12	
Acres of impervious area	0.20	0	0.20
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		12,500	
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 (feet)	0	0	0
TRANSPORTATION			
Vehicle trips per day	0	0	0
Parking spaces (maximum)	0	0	0
WASTEWATER			
Water Use (Gallons per day)	0	0	0
Water withdrawal (GPD)	0	0	0
Wastewater generation/treatment (GPD)	0	0	0
Length of water mains (miles)	0	0	0
Length of sewer mains (miles)	0	0	0
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA #) <input checked="" type="checkbox"/> No SUMMARY OF PREVIOUS FILING			
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:

The project site consists of the area occupied by the former Bay State Thread Dam (aka the Bay State Plumbing and Heating Pond Dam) on the Mill River in the South End of Springfield, the Mill River between the dam and the Mill River Conduit inlet, and existing access routes thereto, totaling approximately 1.04 acres of land. The dam is located in a parcel of land identified by the City of Springfield as “Rear 30 Fort Pleasant Avenue,” but is accessible from #25 Mill Street and a City-owned parcel on Main Street.

The dam creates a “run of river” impoundment totaling approximately 0.3 acres between the dam and the Fort Pleasant Avenue Bridge. Below the dam, the Mill River flows over a bedrock streambed for a distance of approximately 150 feet before entering the Mill River Conduit, a circa 1940 U.S. Army Corps of Engineers flood control project. The Mill River is constrained below the dam by a steep wooded slope to the south and vertical concrete flood control walls to the west and north.

The dam is considered a non-jurisdictional structure and classified as a Low (Class III) hazard in accordance with the current dam safety regulations (301 CMR 10.00). The dam is currently owned by James F. Zick, Jr. and Anne M. Zick of Longmeadow, Massachusetts. The City, in the interest of preserving the integrity of its flood protection system, has taken responsibility for conducting maintenance and inspections of the former Bay State Thread Dam.

Describe the proposed project and its programmatic and physical elements:

The project will include removal of the majority of the former Bay State Thread Dam by demolishing the majority of the spillway down to native bedrock. The left and right training walls will remain to protect the adjacent building (#25 Mill Street) to the north and the steep slope to the south as well as sections of the spillway that abut the training walls for stability purposes. The project also includes the removal of approximately 1,100 cubic yards (cy) of sediment (and other debris) that has accumulated behind the dam over time. To accommodate this work, water levels in the run-of-river impoundment will be lowered by means of mechanically removing debris that is partially blocking the dam’s arched gate, which has reportedly been in an open position since at least 1969, and gradually notching the spillway.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Alternative actions and alternative construction methods were assessed in planning the project. Alternative actions include:

*The No Action alternative, which will not meet the project goal of improving stream flow and continuity restoration, nor will it meet the City’s goal of reducing risks to the structural integrity of its flood protection system.

*Complete dam removal, which would result in insignificant additional benefit and potential adverse effects on the adjacent building (#25 Mill Street) and potential erosion and instability of the steep slope to the south, all at significant increased cost.

Alternative methods for construction access are limited due to the developed nature of the surrounding area, the proximity of the concrete flood control wall, and the tall and steep wooded slope to the south. Alternative access routes include:

***#25 Mill Street parking lot. The privately owned parcel of land at #25 Mill Street includes a paved parking lot that provides access to the Mill River immediately above the dam. Use of the parking lot would compromise the ability of the owner/occupant (New England Funeral and Cremation Center) to conduct business. Access to the dam from this vantage point would require the installation of a temporary ramp (or similar). Compromising the ability of the site occupant to conduct business for the duration of the project is not desirable to the City. This is the preferred access route.**

***City-owned parcel off Main Street. The City owns a narrow parcel of land that was acquired and established for access to the Mill River Conduit. The parcel allows limited access from the west off Main Street. A crane or similar piece of large construction equipment would be required to lower equipment to the bedrock streambed near the inlet to the Mill River Conduit. Equipment would then drive up the bedrock streambed to a position below the dam. The unknown construction of the dam renders this an extremely dangerous option, as the dam could fail during demolition of the spillway, putting the safety of workers at risk. Additional risk of damage to the concrete floodwall while lowering equipment to the streambed below is also a risk associated with this access alternative.**

*** Access from the south requires temporary (or permanent) easements from private property owners, and the construction of a stable access road for equipment to traverse the steep wooded slope to the dam from the south. The steep slopes (1.75H:1V) further complicate constructability of this access alternative. This alternative is costly due to the construction of a stable access road and post-construction site stabilization and restoration. This alternative also raises safety concerns due to the steepness of the slope.**

Stream channel establishment through the impoundment was also considered, though alternatives are limited due to the presence of a bedrock streambed both above and below the dam.

***Natural channel formation. The City's preferred alternative is to allow Mill River flows to follow a natural course over the bedrock stream channel once accumulated sediment and the dam are removed.**

***Stream channel formation. Mechanical manipulation, either by means of an excavator with a hoe-ram attachment (or similar) or blasting, of the streambed to create a channel for normal stream flows within the Mill River. The benefits of manipulating bedrock do not outweigh the challenges of either positioning equipment in the Mill River to do so, or the potential impacts to adjacent buildings and infrastructure during a controlled detonation of blasting material. Therefore, this alternative is essentially not feasible.**

Additional information is presented in the enclosed narrative.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The proposed work will function as an ecological restoration project to restore free stream flows in the project area of the Mill River. The work will not result in long-term adverse impacts. Construction-period mitigation measures include gradually notching the spillway to control the discharge of water from behind the dam.

If the project is proposed to be constructed in phases, please describe each phase:

The project will not be constructed in phases.
