



Borden Brook Spillway Bridge Repair Project
Granville, Massachusetts

REQUEST FOR DETERMINATION OF APPLICABILITY

City of Springfield
Water and Sewer Commission

January 2024

Tighe&Bond

S-2057-071
January 18, 2024

Granville Conservation Commission
PO Box 247
707 Main Road
Granville, Massachusetts 01034

Re: **Request for Determination of Applicability
Borden Reservoir Spillway Bridge Repair Project
Granville, Massachusetts**

Dear Members of the Commission:

On behalf of the Springfield Water and Sewer Commission (SWSC) Tighe & Bond is submitting the enclosed Request for Determination of Applicability (RDA) under the Massachusetts Wetlands Protection Act (MAWPA; M.G.L. c. 131 § 40) for activities associated with the Borden Brook Spillway Reservoir Bridge Repair Project on Borden Brook Perimeter Road in Granville between the Borden Brook Reservoir and Cobble Mountain Reservoir in Granville, Massachusetts.

This RDA is being filed to confirm that the repair of infrastructure ancillary, but critical, to the operation of the public water supply at Borden Brook Reservoir, is exempt from the requirements of the MAWPA. We respectfully request that the Granville Conservation Commission concur and issue a Negative Determination (Category 5) finding:

The area described in the Request is subject to protection under the Act. Since the work described therein meets the requirements for the following exemption, as specified in the Act and the regulations, no Notice of Intent is required.

Exemption(s):

M.G.L. c. 131 § 40, Paragraph 1 - No person shall remove, fill, dredge or alter...other than in the course of maintaining, repairing or replacing, but not substantially changing or enlarging an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, sewer, water, telephone, telegraph and other telecommunication services..

310 CMR 10.02(2)(a)(2) - activities conducted to maintain, repair or replace, but not substantially change or enlarge an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, water, sewer, telephone, telegraph and other communication services, provided said work utilizes the best practical measures to avoid or minimize impacts to wetland resource areas outside the footprint of said structure or facility. A project proponent claiming that work to remove, fill, dredge or alter an area specified in 310 CMR 10.02(1) does not require the filing of a Notice of Intent has the burden of establishing that the work is not subject to Regulation under M.G.L. c. 131, § 40.

WPA Form 1 is provided in Attachment A.

The following sections describe the history and function of the facility, as well as the project site, proposed activities, and other regulatory jurisdiction.



Public Water Supply

The water system in Springfield developed in phases in the mid-19th and early 20th centuries. Prior to that time, most of Springfield's water source came from private wells, local streams, or springs. Formation of the Springfield Aqueduct Company in 1848 facilitated the use of Van Horn Reservoir, which became the city's primary water source. As population in the city increased during the Civil War due to industrialization, the city began investigating new water supplies. Ludlow Reservoir was completed in 1875 and its 1.75-billion-gallon supply became the city's main water source for the next 35 years.

In the early 20th century, the continuing expansion of the city drove the development of a new water supply 20 miles to the west of the city in the Little River Watershed. In 1910 Borden Brook Reservoir became the main water supply for the city, with treatment taking place at the newly constructed West Parish Filters Water Treatment Plant in Westfield. The main water supply changed yet again in 1931, when construction of Cobble Mountain Reservoir was completed. Borden Brook feeds into Cobble Mountain Reservoir, and both reservoirs remain the main water supplies for the system today.

The system was operated by the Springfield Water Department until 1996, when SWSC was established under Chapter 40N of the Massachusetts General Laws. Today, SWSC operates, and maintains the drinking water supply that serves approximately 250,000 people in the lower Pioneer Valley.

Routine Inspection and Water Quality Monitoring

As part of routine reservoir operations, SWSC conducts routine bi-monthly water quality monitoring within Borden Brook Reservoir. The Borden Brook Spillway Bridge is essential for access around the perimeter of the reservoir, to the dam outlet operation house, and for redundancy in the event of a failure of the Sugar Creek Bridge (in the Town of Blandford).

Project Site

The Project Site is located at Borden Brook Perimeter Road over the Borden Brook Reservoir Spillway (Latitude: 42.129822, Longitude: -72.938808). The Borden Brook Reservoir Spillway Bridge is an existing single-span reinforced concrete closed spandrel wall arch structure that was constructed in 1909. The bridge is in overall fair to poor condition and requires repairs to continue serving in its existing capacity until it can be replaced. The Borden Brook Spillway Bridge has deteriorated over the years of use resulting in spalling, cracks, and overall decline of the structure. The project area is shown on the figure provided in Attachment B. Photographs of the Project Site are provided in Attachment C.

Wetland Resource Areas

The Borden Brook Spillway Bridge has the following jurisdictional wetland resource areas:

- Inland Bank (perennial stream, Borden Brook; Borden Brook Reservoir)
- Land Under Water Bodies and Waterways (Borden Brook, Borden Brook Reservoir)
- Riverfront Area (Borden Brook)

Land Under Water Bodies and Waterways (LUW) at the Project Site are within and tributary to a public surface water supply and, as such, are considered Outstanding Resource Waters (ORW). These areas are also subject to jurisdiction under the Clean Water Act as Waters of the United States (WOTUS).

The Borden Brook Spillway Bridge spans Borden Brook as it flows from the Reservoir over the spillway. Borden Brook is shown as perennial on the Blandford, Massachusetts Quadrangle (1987) and, as per 310 CMR 10.58(2)(a), shall be considered perennial.

Rare Species

Neither the Project Site nor surrounding area are mapped as Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) based on a review of the NHESP Atlas, 15th edition (August 2021).

Project Description

The scope of work entails repairing the existing structure to provide access to the gate house to use reservoir outlet valves, access, inspect, and maintain the dam if an emergency condition develops that requires repair, and maintain access around the Borden Brook Reservoir. SWSC Land Stewards and water operation staff use the road to access Commission watershed land. As such, the road is essential for SWSC watershed management as well as for drinking water quality monitoring and operation of the dam. The project will address overall structure failure by performing spall, scale, and crack repairs to the arch intrados, substructure, and spandrel walls. A lightweight deflection barrier will be placed between the existing rails anchored to the fill to provide a crash compliant barrier system. The rails will be extended beyond the bridge via direct drive to offer approach guards but will not expand the existing footprint of the structure.

Protective Measures

Erosion and sedimentation control measures will be installed prior to the start of construction as appropriate to define the limits of work and protect sensitive areas, and will be properly maintained until disturbed areas have been stabilized.

Regulatory Compliance

Massachusetts Wetlands Protection Act

As described herein, the access road and Borden Brook Spillway Bridge are critical infrastructure ancillary to the public drinking water supplies and, as such, the maintenance, repair, and/or replacement of these features meets the exemption criteria set forth in the first paragraph of the MAWPA.

Clean Water Act Section 401

Activities within Outstanding Resource Waters (ORW) are categorically required to obtain an Individual Water Quality Certification per 314 CMR 9.04(2), as are activities within WOTUS that are exempt from the MAWPA (as per 314 CMR 9.04(4)). The project will be submitted to the Massachusetts Department of Environmental Protection (MassDEP) for Section 401 review.

Clean Water Act Section 404

The discharge of any "dredged and/or fill material" (e.g., sandbag coffer dams for water control) within WOTUS is subject to Section 404 of the Clean Water Act as administered by the United States Army Corps of Engineers (Corps) under the General Permits for the Commonwealth of Massachusetts (MA GPs). The project will be submitted to the Corps under the MA GPs.

We look forward to having the opportunity to discuss this project with the Granville Conservation Commission and anticipate being included on the Commission's public hearing on February 15, 2024. We trust these materials are sufficient for the Commission to issue a

Negative Determination confirming that *"The area described in the Request is subject to protection under the Act. Since the work described therein meets the requirements for the following exemption, as specified in the Act and the regulations, no Notice of Intent is required."*

Should you have any questions regarding this application or require any additional information, please do not hesitate to contact me at (413) 572-3224 or via email at MPCoady@tighebond.com.

TIGHE & BOND, INC.



Melissa P. Coady
Senior Project Manager

Enclosures

Copy: MassDEP (WERO) Division of Wetlands and Waterways
James Laurila, Director of Water Operations, Springfield Water and Sewer Commission
Christina Jones, Deputy Director of Water Operations, Springfield Water and Sewer Commission
Darleen Buttrick, Director of Engineering, Springfield Water and Sewer Commission
Frank Zabaneh, Engineering Manager, Springfield Water and Sewer Commission
Nicole Sanford, Water Resources Manager, Springfield Water and Sewer Commission

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ATTACHMENT A



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Springfield Water and Sewer Commission
Name
1515 Granville Road
Mailing Address
Westfield
City/Town
413-310-3542
Phone Number
james.laurila@waterandsewer.org
E-Mail Address
Massachusetts
State
01085
Zip Code
Fax Number (if applicable)

2. Representative (if any):

Tighe & Bond, Inc.
Firm
Melissa Coady
Contact Name
53 Southampton Road
Mailing Address
Westfield
City/Town
413-572-3224
Phone Number
MPCoady@tighebond.com
E-Mail Address
MA
State
01028
Zip Code
413-562-5317
Fax Number (if applicable)

B. Determinations

1. I request the Granville Conservation Commission make the following determination(s). Check any that apply:

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description (cont.)

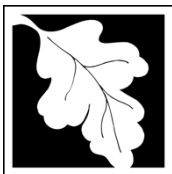
b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

M.G.L. Chapter 131, Section 40, Paragraph 1 and 310 CMR 10.02(2)(a)

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Springfield Water and Sewer Commission

Name

250 M Street Extension

Mailing Address

Agawam

City/Town

MA

State

01001

Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.


Signature of Applicant

1/17/2024

Date

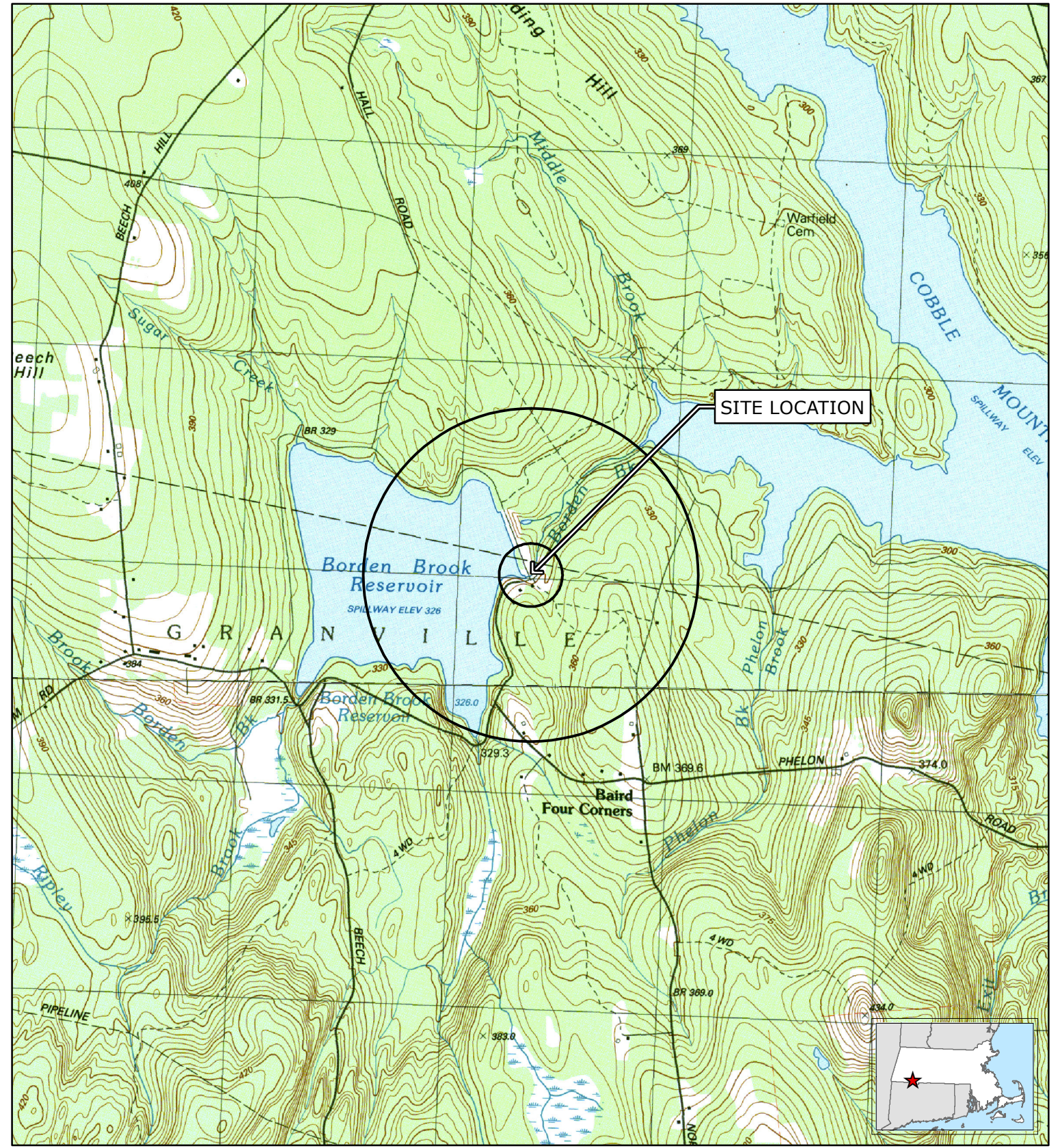

Signature of Representative (if any)

1/18/2024

Date

Tighe&Bond

ATTACHMENT B



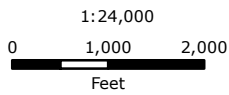
SITE LOCATION

**FIGURE 1
SITE LOCATION**

Borden Brook Reservoir Spillway
 Bridge Repair Project
 Borden Brook Road
 Granville, Massachusetts



Based on USGS Topographic Map for
 Blandford, MA Revised 1987.
 Contour Interval Equals 6m.
 West Granville, MA Revised 1987.
 Contour Interval Equals 3m.
 Circles indicate 500-foot and half-mile radii



January 2024

Tighe&Bond

ATTACHMENT C

Photographic Log

Client: Springfield Water & Sewer Commission

Job Number: 28-2057-071

Site: Borden Brook Spillway Bridge Repair Project

Photograph No.: 1	Date: 11/17/2023	Direction Taken: West
Description: View of the Borden Brook Spillway Bridge from downstream.		
		

Photograph No.: 2	Date: 11/17/2023	Direction Taken: Northeast
Description: View downstream of Borden Brook.		
		

Photographic Log

Client: Springfield Water & Sewer Commission

Job Number: 28-2057-071

Site: Borden Brook Spillway Bridge Repair Project

Photograph No.: 3	Date: 11/17/2023	Direction Taken: Northwest
Description: View of Borden Brook Reservoir immediately upstream of the Spillway Bridge.		
		

