Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project: Bridge Replacements

Hudson and Sudbury, Massachusetts

PREPARED FOR

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MAY 2020

May 27, 2020

Ref: 12970.00

Daniel Padien, Program Chief
MassDEP Waterways Regulation Program
1 Winter Street, 5th Floor
Boston, MA 02108

Re: Waterways License Applications
Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project

Dear Mr. Padien:

On behalf of NSTAR Electric d/b/a Eversource Energy ("Eversource") and the Massachusetts Department of Conservation and Recreation ("DCR"), VHB is pleased to submit the attached Waterways License Applications for repair, replacement, and/or rehabilitation of three existing dilapidated railroad bridges in conjunction with installation of an underground electric transmission line and construction of a portion of the Mass Central Rail Trail ("MCRT") within an inactive Massachusetts Bay Transportation Authority ("MBTA") railroad right-of-way in Hudson, Stow, Marlborough, and Sudbury, Massachusetts. The Project will serve the dual purpose of increasing the reliability of the regional electric transmission system and advancing state-wide multi-use trail network initiatives and is the direct result of a collaborative project-planning process among DCR, Eversource, and the MBTA. This coordinated effort combines two compatible uses within a single existing and under-utilized transportation corridor, with a proposed phased construction sequence to minimize cost, the overall construction schedule, and potential impact to wetlands and waterways.

In total, the Project is approximately 9.0 miles long and is located primarily in the towns of Sudbury and Hudson, with short sections in the Town of Stow and the City of Marlborough. The underground electric transmission component of the Project will resolve thermal overloads and low voltage conditions and will support the increased demand for electricity within this portion of the transmission system. The MCRT is a regional multi-use commuter trail that will advance state-wide trail network connections and is American Disabilities Act ("ADA") compliant and accessible by people of all abilities.

The portions of the project subject to M.G.L. Chapter 91 are two crossings of Hop Brook in Sudbury (Bridge #127 Transmittal #X285958 and Bridge #128 Transmittal #X285957) and one crossing of Fort Meadow Brook in Hudson (Bridge #130 Transmittal #X281935). The joint filing of these three applications by Eversource and DCR will allow MassDEP to evaluate and condition the proposed work activities accordingly.

As no prior license is known to exist for any of the aforementioned bridges, we understand the work requires three new licenses under M.G.L. Chapter 91 and the Massachusetts Waterways Regulations at 310 CMR 9.00. The work is proposed as water-dependent infrastructure crossings pursuant to 310 CMR 9.02 and 310 CMR 9.12 and complies with all applicable provisions of the Waterways Regulations.

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Eversource and DCR filed Notices of Intent with the Hudson, Stow, and Sudbury Conservation Commissions on January 2, February 3, and March 9, 2020, respectively. We respectfully request that the Department issue a Public Notice upon receipt of copies of the NOIs and publish this notice in *The Environmental Monitor* as the proposed work is part of the Sudbury-Hudson Transmission Reliability Project reviewed by the Secretary under EOEEA File No. 15703 and the Mass Central Rail Trail reviewed by the Secretary under EOEEA File No. 15123.

Please don't hesitate to call me at 508-513-2713 or contact me by email at vkimball@vhb.com if you have any questions about the project.

Sincerely,

Vivian Kimball

Project Manager

CC: Denise Bartone, Eversource
Paul Jahnige, DCR

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Attachment A
Chapter 91 Narrative

These applications, co-filed by NSTAR Electric d/b/a Eversource Energy ("Eversource") and the Massachusetts Department of Conservation and Recreation ("DCR") (together, "the Proponents"), are submitted pursuant to M.G.L. Chapter 91 and the Massachusetts Waterways Regulations (310 CMR 9.00) for the repair, replacement, and/or rehabilitation of three existing dilapidated railroad bridges in conjunction with installation of an underground electric transmission line and construction of a portion of the Mass Central Rail Trail ("MCRT") within an inactive Massachusetts Bay Transportation Authority ("MBTA") railroad right-of-way ("ROW") in Hudson, Stow, Marlborough, and Sudbury, Massachusetts (the "Project").

1.1 Introduction

The Project is the direct result of a collaborative project-planning process among DCR, Eversource, and the MBTA. This coordinated effort combines two compatible uses within a single existing and under-utilized transportation corridor, with a proposed phased construction sequence to minimize cost, the overall construction schedule, and potential impacts to wetlands and waterways.

Throughout the design phase of the Project, Eversource and DCR have coordinated closely and have jointly met with local municipalities as well as state regulatory agencies such as Massachusetts Department of Environmental Protection ("MassDEP") Wetlands Division, MassDEP Waterways (Chapter 91) Division, and the Natural Heritage &

Endangered Species Program, to discuss the details for the proposed MCRT and the underground transmission line. DCR and Eversource have developed a Memorandum of Understanding ("MOU") to memorialize agreements to design, permit, construct, operate, and maintain the Project, and have made a concerted effort to design the Project to avoid and minimize impacts to wetlands and waterways. These joint applications by Eversource and DCR will allow MassDEP to evaluate and condition the proposed work activities accordingly.

Proposed Project Overview

In total, the Project is approximately 9.0 miles long and is located primarily in the towns of Sudbury and Hudson, with short sections in the Town of Stow and the City of Marlborough (see Figure 1-1). The only portions of the Project subject to M.G.L. Chapter 91 are two crossings of Hop Brook in Sudbury and one crossing of Fort Meadow Brook in Hudson. See Attachments B, C, and D for figures illustrating the work areas in relation to Chapter 91 jurisdictional areas.

The Project was reviewed under the Massachusetts Environmental Policy Act ("MEPA"). On January 10, 2014, the Secretary of Energy and Environmental Affairs issued a Certificate on DCR's Expanded Environmental Notification Form (EOEEA File No. 15123) pursuant to MEPA and its regulations (310 CMR 11.00). On September 14, 2018, the Secretary issued a Certificate on Eversource's Final Environmental Impact Report (EOEEA File No. 15703).

The Project requires repair or replacement of three existing railroad bridges within Chapter 91 Jurisdiction (310 CMR 9.04(1)(e) - non-tidal rivers and streams). The DCR portion of the work at Fort Meadow Brook Bridge (Bridge 130) and the two Hop Brook Bridges (Bridges 128 and 127) is water-dependent as defined in 310 CMR 9.12(2)(a)4, as:

> *"parks, esplanades, boardwalks, and other pedestrian facilities that promote use and enjoyment of the water by the general public and are located at or near the water's edge…"*

Furthermore, the Eversource portion of the work on these proposed crossings is water-dependent as defined in 310 CMR 9.12(2)(a)16, and 310 CMR 9.12(2)(d), because it meets the definition of an Infrastructure Crossing Facility established by 310 CMR 9.02 as follows:

"an infrastructure crossing facility means any infrastructure facility which is a bridge, tunnel, pipeline, aqueduct, conduit, cable, or wire, including associated piers, bulkheads, culverts, or other vertical support structures, which is located over or under the water and which connects existing or new infrastructure facilities located on the opposite banks of the waterway…"

1.2 Chapter 91 Jurisdiction

The Project proposes work on three existing dilapidated and un-used railroad bridges over navigable portions of two non-tidal rivers and streams. These include:

- Bridge 130 over Fort Meadow Brook (Hudson)
- Bridge 128 over Hop Brook (Sudbury)
- Bridge 127 over Hop Brook (Sudbury)

These water courses are approximately 43 to 65 feet wide and easily accommodate small craft such as canoes and kayaks during part of the year. Assuming that public funds were spent for stream clearance, channel improvement, or flood control or prevention work either upstream or downstream of the Project, the water courses are presumed to be within a geographic area subject to jurisdiction pursuant to 310 CMR 9.04(1)(e).

The proposed Project includes the following activities within these navigable non-tidal rivers and streams:

- Maintenance, repair, rehabilitation and/or replacement of the existing dilapidated railroad bridges, generally within their existing footprints
- Installation of a new electric transmission line duct bank on the rehabilitated or replacement bridge structures
- Adaptive reuse of the rehabilitated or replacement structures to accommodate a shared-use path as part of the MCRT in accordance with the DCR's proposed design plans.

The proposed bridge structures require licenses in accordance with 310 CMR 9.05(1)(a), for "any construction, placement, excavation, addition, improvement, maintenance, repair, replacement, reconstruction, demolition or removal of any fill or structures, not previously authorized, or for which a previous grant or license is not presently valid".

The existing railroad crossings are water-dependent infrastructure crossing facilities as defined by 310 CMR 9.02. At Project completion, these structures will continue to be infrastructure crossings because they will still be bridges that will connect existing infrastructure on opposite banks of the waterbody for both transportation and electric utility services.

1.3 Existing Conditions

The approximately 80-foot-wide ROW of the former Central Massachusetts Railroad ("CMR"), later known as the Boston and Maine Railroad ("B&M") Central Massachusetts Branch, is owned in fee by the Commonwealth of Massachusetts under the care and control of the MBTA. The ROW has been inactive for several years, during which time the elevated rail bed and bridges have deteriorated.

Throughout the Project corridor, the MBTA ROW is previously developed consistent with its former use as a railroad ROW. In its present condition, the track structure occupies a footprint that is approximately 11 feet wide.

Bridges 130, 128, and 127 are all located within the MBTA ROW.

- Bridge 130 is located at the crossing of the railroad corridor over the Fort Meadow Brook in Hudson, where there is an existing abandoned timber railroad trestle.
- Bridge 128 is located at the crossing of the railroad corridor over the Hop Brook in Sudbury west of Dutton Road.
- Bridge 127 is located at the crossing of the railroad corridor over the Hop Brook in Sudbury east of Boston Post Road.

Detailed conditions of the existing bridges are described in Sections 1.3.1 through 1.3.3 below.

Hop Brook is a perennial waterway that flows from Hager Pond in Marlborough, east for approximately 7 miles, through Grist Mill Pond and Stearns Millpond in Sudbury, to the convergence with Landham Brook and Wash Brook approximately 0.3 miles (1,700 feet) west of Landham Road in Sudbury. Hop Brook flows through conservation land as well as densely developed town centers and several heavily populated residential neighborhoods.

The most recently issued Flood Insurance Rate Map ("FIRM") indicates that Hop Brook at both Bridge #128 and Bridge #127 is a FEMA-designated Zone AE with a Regulatory Floodway. The 100-year-floodplain at Bridge #128 is at 161 feet, North American Vertical Datum (NAVD 88)[1]. The 100-year-floodplain on the northern side of Bridge #127 is at 126.2 feet NAVD 88[2], dropping to 124 feet NAVD on the southern side of the Bridge[3].

Fort Meadow Brook is a major tributary of the Assabet River that flows south for approximately 2.5 miles through the Town of Hudson from the Stow/Hudson town line to the Fort Meadow Reservoir at the Hudson/Marlborough town line. Fort Meadow Brook flows through conservation land north of Main Street. As the Brook flows south, it also runs through several densely populated residential neighborhoods before discharging into the Fort Meadow Reservoir.

[1] Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Middlesex County (Community Panel# 25017C 0364F) Effective Date July 7, 2014

[2] Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Middlesex County (Community Panel# 25017C 0506F) Effective Date July 7, 2014

[3] Existing Conditions Plan for Abbreviated Notice of Resource Area Delineation- Sudbury MA. 2017. Sudbury-Hudson Transmission Reliability Project

The most recently issued FIRM indicates that Bridge #130 at the crossing of Fort Meadow Brook is within FEMA Zone AE 100-year-floodplain at an elevation of 182 feet (NAVD 88)[4].

1.3.1 Bridge #130: Fort Meadow Brook Bridge

Bridge #130 is a four-span timber trestle with timber stringers on timber pile bents. The structure is approximately fifty feet (50′) long. The ties are approximately twelve feet (12′) wide, and the vertical structure depth from the tops of the rails to the bottom of the stringers is approximately 2.3 feet. The structure is generally in poor condition. There is widespread heavy rot of the timber, most notably in the ties, the pile caps, and the tops of the stringers. The existing timber piles are in poor to fair condition with widespread moderate splitting and some areas with moderate to heavy rot. The west abutment wall and westernmost span has been washed out, and the west embankment is eroded. In summer 2019, there was a fire at the bridge and it is now largely burned and collapsed.

Bridge #130 Timber Trestle Elevation

[4] Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Middlesex County (Community Panel# 25017C 0344F) Effective Date July 7,2014

Bridge #130 Erosion at West Embankment (right)

1.3.2 Bridge #128: Hop Brook

Bridge #128 is a three-span continuous steel deck girder bridge supported on stone masonry abutments and two timber piers. The structure is approximately forty-four feet (44') long. The two steel girders are approximately 4.5 feet deep and spaced approximately 5.6 inches apart. The steel superstructure and granite abutments are in satisfactory condition, and the intermediate timber piers are in fair to satisfactory condition.

Bridge #128

1.3.3 Bridge #127: Hop Brook

Bridge #127 has similar construction to Bridge #128. Bridge #127 is approximately forty-eight feet (48') long. The stone masonry abutments were found to be in satisfactory condition, the steel was found to be in fair to satisfactory condition, and the piers were found to be in poor condition. The easterly pier had total section loss and was no longer providing effective bearing. In addition, the existing structure is partially submerged in the water, causing deterioration to the bridge.

Bridge #127

1.4 Purpose and Need

The Project will serve the dual purpose of increasing the reliability of the regional electric transmission system and advancing state-wide multi-use trail network initiatives. The underground electric transmission component of the Project will resolve thermal overloads and low voltage conditions and will support the increased demand for electricity within this portion of the transmission system.

In Massachusetts, regional trails are an important priority for increasing the number of commuters who bike and walk to work and for providing recreational opportunities. The MCRT is one of these regional commuter trails that is American Disabilities Act ("ADA") compliant and accessible by people of all abilities. When completed, the MCRT will connect over 20 communities and provide over 100 miles of walking and biking trails. DCR has included the construction of the Sudbury to Hudson portion of the MCRT in a long-range capital planning request for Fiscal Year 2021. The Massachusetts Department of Transportation ("MassDOT") Project Review Committee has also approved the MCRT for design as MassDOT Project #608995. DCR recently completed the Weston to Wayland portion of the MCRT in fall 2019.

1.5 Project Description

The Project involves the repair or replacement of one bridge over Fort Meadow Brook (Bridge #130) in Hudson and two bridges over Hop Brook (Bridges #128 and #127) in Sudbury along the MBTA-owned inactive railroad corridor.

Bridge design has advanced to 75%. Plans depicting the three bridge locations are provided in Attachments B (Bridge #130), C (Bridge #128), and D (Bridge #127). The following sections summarize the proposed work for each bridge location along the Project.

1.5.1 Fort Meadow Brook (Bridge 130)

The existing decaying bridge structure will be removed, and a replacement bridge will be built in the same location to support the MCRT. The new bridge will consist of a single span structure with new abutments to be constructed landward of the existing abutment locations. The low chord of the new bridge will be at the same elevation as the existing bridge's low chord, which is at elevation 180.4 feet NAVD88. The existing timber piers will be cut at the mudline and removed by hand. Steel sheeting will be installed around the bridge abutments to provide future scour protection during storm events and act as a retaining wall to minimize grading. The sheeting will also support temporary excavation to install the proposed abutments below ground. There will be no obstructions under the new bridge, which will be an improvement to navigability of the waterway from existing conditions.

1.5.2 Hop Brook (Bridge 128)

Although the existing superstructure is in satisfactory condition, it will not adequately support the rail trail and transmission line. The existing bridge deck will therefore be upgraded to support the rail trail and transmission line as well as construction vehicles, which will facilitate efficient construction sequencing and minimize construction duration. No foundation work will be necessary as part of the bridge rehabilitation because the existing stone abutments of this bridge are suitable for reuse.

1.5.3 Hop Brook (Bridge 127)

The existing, partially submerged bridge structure will be removed except for the existing stone abutments, and a new replacement bridge will be built in the same footprint to support the MCRT and transmission line. The low chord of the new bridge will be located more than 3 feet above the existing bridge's low chord, raising the underside of the bridge well above the 10-year flood elevation so that the bridge will no longer be partially submerged. The new bridge will be a single span structure with the new abutments located landward of the existing abutments, and the existing timber piers will be cut at the mudline and removed by hand. This bridge will be designed and built to support construction vehicles to expedite construction between Hop Brook and the Sudbury Substation. The removal of the existing piers and the increased height of the

span will have the benefit of increasing the hydraulic opening at the bridge, increasing navigability, providing additional clearance over the 2-year design storm event, and reducing the likelihood of trapping debris.

1.5.4 Construction Sequencing

Bridges #127 and #130

The following outlines the general sequence of construction activities proposed for the work at Bridges #127 and #130:

1. Initial survey
2. Vegetation removal and installation of erosion control measures
3. Grade the construction platform to subgrade
4. Install debris containment measures, crane mats, and associated erosion and sediment controls for removal of the existing bridge
5. Remove existing bridge piers and steel span
6. Install sheeting to facilitate excavation for new bridge abutment installation
7. Install new bridge abutments (landward of existing abutments)
8. Install new steel bridge sections including integrated duct system and temporary steel decking
9. Continue sheeting installation, removing crane mats as sheets are installed, working away from the bridges
10. Install jute mesh erosion control blankets, a native seed mix, and woody plantings to stabilize crane mat areas
11. Connect duct bank on the bridge to the duct bank in the construction platform
12. Final grading, installation of gravel base, and restoration of all disturbed areas
13. Remove temporary steel decking and install permanent wood decking
14. Installation of multi-use trail (paving, railings and fencing)
15. Remove erosion control measures following stabilization

Bridge #128

The following outlines the sequence of construction activities proposed for Bridge #128:

1. Initial survey
2. Vegetation removal and installation of erosion controls
3. Grade the construction platform to subgrade
4. Install debris containment measures, crane mats, and associated erosion and sediment controls for removal of the existing superstructure
5. Remove existing bridge span

6. Install sheet piling retaining walls
7. Install new bridge components including integrated duct system and temporary steel decking
8. Continue sheeting installation, removing crane mats as sheets are installed, working away from the bridges
9. Install jute mesh erosion control blankets, a native seed mix, and woody plantings to stabilize crane mat areas
10. Connect duct bank on the bridge to the duct bank in the construction platform
11. Final grading, installation of gravel base, and restoration of all disturbed areas
12. Remove temporary steel decking and install permanent wood decking
13. Installation of multi-use trail (paving, railings and fencing)
14. Remove erosion control measures following stabilization

The work at each of these bridge locations is depicted in detail in the attached full-size plans for each bridge (see Attachments B, C, and D).

1.6 Site History

The earliest substantive fill, dredging or construction at or adjacent to the Project Site appears to be the construction of the CMR. The CMR was chartered in 1869 to carry passenger and freight rail between Cambridge and Northampton, Massachusetts. The route from Cambridge to Hudson was completed on August 20, 1881, and operated until the track west of Waltham was taken out of service in 1980.

The original construction of the CMR pre-dated the issuance of Waterways Licenses for structures on non-tidal rivers and streams in 1939. The railroad was authorized by issuance of a charter in Chapter 260 of the Acts of 1869. Today the rail line is inactive, but the ROW is owned by the MBTA. The existing rail corridor, and the three bridges that were once actively maintained and utilized, have not been maintained for over 40 years. Both DCR and Eversource currently have lease agreements from the MBTA for the construction of the MCRT and the new transmission line along the MBTA ROW.

1.6.1 Bridge #130

The Fort Meadow Brook Railroad Bridge was constructed across the Fort Meadow Brook in Hudson in 1939.

1.6.2 Bridges #128 and #127

Central Massachusetts Railroad Bridges 128 and 127 were constructed across the Hop Brook in Sudbury in 1881. Both were rebuilt in 1908 to address insufficiencies in supporting train weight. Both bridges had wood-pile bents inserted beneath the existing plate girders rendering them 4 feet shorter than originally constructed.

1.7 Regulatory Compliance

This section describes the regulatory context, licensing approach and compliance with all applicable standards stipulated in the Massachusetts Waterways Regulations for the work at these three bridge locations.

1.7.1 Determination of Water Dependency

The work at each location is proposed as a water-dependent use project because it consists entirely of project elements meeting the regulatory criteria established by 310 CMR 9.12(2)(a)4 and 9.12(2)(a)16. Under at 310 CMR 9.12(2)(a)4 pedestrian facilities that promote use and enjoyment of the water by the general public and that are located at or near the water's edge, are water dependent uses. Under 310 CMR 9.12(2)(a)16, infrastructure facilities which cannot reasonably be located at an inland site as determined in accordance with 301 CMR 9.12(2)(d) are water dependent uses, and under 310 CMR 9.12(2)(d), an "infrastructure crossing facility" may be determined to be water-dependent through MEPA review.

Per the MassDEP comment letter on Eversource's FEIR, dated September 7, 2018 (see Attachment E), the Project meets the definition of an *Infrastructure Crossing Facility* as defined in 310 CMR 9.02. The bridges are located over water connecting existing infrastructure facilities located on the opposite banks of a waterway.

1.7.2 Compliance with Basic Requirements

Table 1.1 provides a list of the basic licensing requirements stipulated in 310 CMR 9.31(1), identifies which are applicable to the Project and provides a summary of compliance with each. A detailed description of the Project's compliance with selected criteria is provided below, as needed.

Table 1.1 Basic Permit Requirements [310 CMR 9.31(1)]

Regulation	Standard	Applicable	Compliance Summary
310 CMR 9.32	Categorical Restrictions on Fill	Y	All work within Chapter 91 jurisdiction is within a non-tidal river and outside of an ACEC or DPA, as categorically permitted by 310 CMR 9.32(1)(a)(1). No new fill is proposed as part of the Project. The project complies with this standard.
310 CMR 9.33	Environmental Protection Standard	Y	The Project will comply with all applicable Commonwealth environmental regulatory programs and standards. See Table 1.2, Project Permitting Summary, for additional environmental permitting requirements.
310 CMR 9.34	Conformance with Municipal Zoning and Harbor Plan	N	Not Applicable. The Project is not within a Municipal Harbor Planning Area and is not located on private tidelands or filled Commonwealth tidelands.

Regulation	Standard	Applicable	Compliance Summary
310 CMR 9.35(2)	Public Rights Applicable to All Waterways	Y	Navigability within the Hop Brook and Fort Meadow Brook at the Project Site will be maintained (at Bridges #130 and #128) or improved (by increasing the vertical clearance underneath Bridge #127).
310 CMR 9.35(3)	Public Rights Applicable to Tidelands and Great Ponds	N	Not Applicable. The Project is not within tidelands or a Great Pond.
310 CMR 9.35(4)	Compensation for Interference with Public Rights in Commonwealth Tidelands and Great Ponds	N	Not Applicable. The Project does not contain Commonwealth Tidelands and is not located within a Great Pond.
310 CMR 9.35(5)	Management of Areas Accessible to the Public	N	Not Applicable The Project is not within tidelands or a Great Pond.
310 CMR 9.36(2)	Private Access to Littoral or Riparian Property	Y	The Project will not in any way interfere with the rights of adjacent property owners to access their property from the waterway, or to approach the waterway from their property. The Project proposes to rehabilitate or replace existing structures, providing structurally sound and safe crossings while maintaining or improving navigability. The Project will not affect the capacity of any landowner to access their property.
310 CMR 9.36(3)	Disruption of Water-Dependent Use in Operation	Y	The existing bridges are water-dependent uses. The Project will enhance the capacity of each bridge to provide pedestrian and utility infrastructure crossings and will enhance the capacity of the bridge openings to convey flows of the Hop and Fort Meadow Brooks. Accordingly, the Project will not disrupt any existing water-dependent use and complies with this standard.

Regulation	Standard	Applicable	Compliance Summary
310 CMR 9.36(4)	Displacement of Previous Water-Dependent Use	Y	The Project will not displace any previous water-dependent use that has occurred at the site in the last five years. The only water-dependent uses that have occurred at the site in the last five (5) years is the very limited capacity of the existing bridges to provide ad-hoc pedestrian access across the water bodies. The Project will enhance the capacity of the bridges to support pedestrian access and will provide the added function of an electric utility crossing. The Project complies with this standard.
310 CMR 9.36(5)	Fill and/or Structures within a Designated Port Area.	N	Not Applicable. The Project is a not located within a Designated Port Area.
310 CMR 9.37	Engineering and Construction Standards	Y	The Project will be constructed in compliance with all applicable provisions of the Massachusetts State Building Code (780 CMR 744.00). The bridges will not pose an unreasonable threat to navigation, public health or safety, or adjacent buildings or structures if damaged or destroyed in a storm. Final plans will be certified by a Registered Professional Engineer. The bridges are located within a FEMA-designated Floodway and 100-year-floodplain; however, the Project does not involve the construction of any buildings or habitable structures. See Section 1.7.6 for additional details.
310 CMR 9.38	Use Standards for Recreational Boating Facilities	N	Not Applicable. The Project does not include any public or private boating facilities.
310 CMR 9.39	Standards for Marinas, Boatyards, and Boat Ramps	N	Not Applicable. The Project does not involve a public or private marina, boat yard or boat ramp.
310 CMR 9.40	Standards for Dredging and Dredged Material Disposal	N	Not Applicable. The Project does not propose dredging. Installation of new abutments is proposed landward of existing abutments.
The regulations at 310 CMR 9.31(2)(a) establish the presumption that water-dependent-use projects comply with the proper public purpose requirements. As the project meets the regulatory criteria for water-dependent-use projects established by 310 CMR 9.12, the regulations at 310 CMR 9.51 through 9.55 do not apply to the project.			

1.7.3 Proper Public Purpose Requirement

The waterways regulations at 310 CMR 9.31(2)(a) require a project to serve a proper public purpose which provides greater benefit than detriment to the rights of the public. While the regulation is specific to filled tidelands, which are not present at the site, the regulation at 310 CMR 9.31(2)(a) is clear that the Department shall presume this regulation is met if the project is a water-dependent use project. As demonstrated above, the Project is a water-dependent use as defined at 310 CMR 9.12 and is presumed to provide a proper public purpose.

1.7.4 Environmental Protection Standards

In accordance with 310 CMR 9.33, the Project requires additional local, state, and federal permits and approvals. In addition to the permit application contained herein, the Project will be required to obtain several additional permits and/or authorizations. Table 1.2 shows a summary of the local, state, and federal permits and approvals required for the completion of the proposed project, and a description of the required permits and approvals has been provided in the sections below. Copies of the Secretary of Energy and Environmental Affairs' Certificates on the Project, as well as the Massachusetts Wetlands Protection Act Notices of Intent, are included in Attachment E.

Table 1.2 Anticipated Permits and Approvals

Agency	Permit/Approval	Status
Federal		
U.S. Army Corps of Engineers	Section 404 Federal Clean Water Act—Massachusetts Programmatic General Permit (GP): Pre-Construction Notification Note: Section 7 and Section 106 consultations occur within this process	This application
U.S. Environmental Protection Agency	Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharge from Construction Activities	Projected filing 1-2 months prior to start of construction
State		
Energy Facilities Siting Board / Department of Public Utilities	M.G.L. c. 164, § 72, approval to construct; M.G.L. c. 40A, § 3, request for zoning exemptions; M.G.L. c. 164, §69J, EFSB approval	Decision received December 18, 2019
Massachusetts Environmental Policy Act	Environmental Impact Report (EIR) 301 CMR 11.00	DCR Certificate on EENF issued January 10, 2014 (EOEEA #15123) Eversource Certificate on the FEIR issued September 14, 2018 (EOEEA #15703)

Agency	Permit/Approval	Status
Massachusetts Department of Environmental Protection	Waterways (MGL Chapter 91) License	This application.
Natural Heritage Endangered Species Program	Project Review Checklist and Conservation and Management Permit under the Massachusetts Endangered Species Act (M.G.L. c. 131A) and Associated Regulations (321 CMR 10.00)	Eversource No-Take Determination issued October 19, 2018. DCR No-Take Determination issued May 17, 2019.
Massachusetts Department of Transportation	Highway Access Permit across Route 20 (M.G.L. c. 81, § 21 / M.G.L. c. 85, § 2)	Projected filing June 2020
Local		
Stow Conservation Commission	Massachusetts Wetlands Protection Act (310 CMR 10.00) and Town of Stow Wetland Bylaw	NOI filed February 3, 2020
Hudson Conservation Commission	Massachusetts Wetlands Protection Act (310 CMR 10.00)	NOI filed January 2, 2020
Hudson Board of Selectmen	Section 25 Earth Removal	Projected filing 1-2 months prior to start of construction
Hudson Board of Selectmen	Grants of Location and Street Opening Permits	Grants of Location received January 27, 2020 Street Opening Permit - Projected filing 1-2 months prior to start of construction
Hudson and Sudbury Tree Wardens	Public Shade Trees (M.G.L. c. 87) and Scenic Roads (M.G.L. c. 40, § 15C)	Projected filing 6 months prior to start of construction
Town of Sudbury Conservation Commission	Massachusetts Wetlands Protection Act (310 CMR 10.00) and Article XXII Sudbury Wetlands Administration Bylaw (Order of Resource Area Delineation and Orders of Conditions) Note: Order of Conditions to serve as Water Quality Certificate (314 CMR 9.00)	NOI filed March 9, 2020
Sudbury Earth Removal Board	Article V (A) Removal of Earth Bylaw (Earth Removal Permit)	Projected filing 1-2 months prior to start of construction
Sudbury Planning Board	Article V(F) Stormwater Management Bylaw	Projected filing May 2020
Sudbury Planning Board	Article VIII (B) Scenic Road Bylaw	Projected filing 6 months prior to start of construction
Sudbury Board of Selectmen	Grants of Location and Street Opening Permits	Grants of Location filed February 12, 2020 Street Opening Permit - Projected filing 1-2 months prior to start of construction

1.7.5 Standards to Preserve Water-Related Rights 310 CMR 9.35(2)

Standard:
This standard requires that a project that includes tidelands, great ponds, and other waterways that are accessible to the public under the requirements of 310 CMR 9.35(1) through (4) shall provide for long-term management of such areas. This regulation applies to non-tidal rivers and streams. The Project includes areas adjacent to non-tidal rivers and streams that are, in part, accessible to the public.

Compliance:
Public Rights Applicable to All Waterways

a. Navigation: The bridge openings will remain approximately the same as or better than existing conditions, resulting in equal or better ease of navigation than the existing bridges. The project will **not** extend into or over any existing channel in a manner that would alter the existing ability for free passage, impair any line of sight required for navigation, require the alteration of an established course of vessels, interfere with access to adjoining areas by extending substantially beyond the projection of existing structures adjacent to the site, generate water-borne traffic that would substantially interfere with other water-borne traffic in the area, alter tidal action or other currents so as to interfere with the ability to handle vessels, adversely affect the depth or width of an existing channel, or impair in any other substantial manner the ability of the public to pass freely upon the waterways and to engage in transport or loading/unloading activities.

b. Free Passage Over and Through Water: Replacement of the railroad bridges will not alter the public's access to free passage over and through the Hop and Fort Meadow Brooks, including the rights to float on, swim in, or otherwise move freely within the water column.

c. Access to Town Landings: The Project does not propose any interference with common landings, public easements, or other historic legal forms of public access from the land to the water on or adjacent to the project site.

1.7.6 Standards to Preserve Water-Related Rights 310 CMR 9.35(5)

(5) Management of Areas Accessible to the Public:
The regulatory standard covers hours of availability, scope of allowed activities, signage, and access to filled tidelands and great ponds and does not specifically apply to this project located on a non-tidal river or stream.

Compliance:
While this standard does not apply to non-tidal rivers and streams, the entire project will be accessible to the public. The project proposes to replace/rehabilitate three existing bridges within an inactive MBTA ROW. The Project will improve the public use or enjoyment of the Hop and Fort Meadow Brooks by providing safe public access to cross

the Brooks. The Project will not impact the protection of private property or natural resources (see Table 1.2 for additional environmental permitting).

a. No limitation on hours of availability or scope of allowed activity beyond the DCR dusk-to-dawn passive recreation guideline is proposed.

b. Not applicable: the Project does not involve public access facilities in accordance with 310 CMR 9.35(3)(b)2 or (4)(b).

c. No gates, fences, or other structures are proposed on any areas currently open to public access. The Project will increase openness to public access.

1.7.7 Standards to Protect Water-Dependent Uses 310 CMR 9.36 (2)-(4)

Standard:
The regulations at 310 CMR 9.36 establish standards intended to preserve the capacity of the waterway to support water-dependent uses.

9.36(2) Compliance:
Private Access to Littoral or Riparian Property: The Project complies with this standard because it does not interfere with any riparian property owner's existing rights to approach their property from the waterway, nor will it alter their ability to approach the waterway from said property.

9.36(3) Compliance:
No Disruption of Water-Dependent Uses in the Vicinity: The Project will not interfere with any water-dependent uses in the vicinity of the waterway.

9.36(4) Compliance:
No Displacement of Water-Dependent Uses on the Site within 5 Years: The Project will not displace any water-dependent use that occurred on these bridge sites within the past 5 years.

1.7.8 Engineering and Construction Standards 310 CMR 9.37 (1)-(4)

Standard:
The Waterways Regulations establish engineering and construction standards for a project in jurisdiction (310 CMR 9.37). The Project's location crossing Hop Brook and Fort Meadow Brook requires compliance with the individual performance standards contained in this section of the Waterways Regulations. As required by this regulation and others, the Project will be designed and built in accordance with the applicable local and state building codes and federal flood insurance requirements.

Compliance:

(1) The Project will be constructed consistent with the State Building Code (780 CMR 744.00) and will not pose an unreasonable threat to navigation, public health or safety, or adjacent buildings or structures if damaged or destroyed in a storm. Final plans will be certified by a Registered Professional Engineer.

(2) The site is within a FEMA-determined Zone AE 100-year flood zone and regulated floodway; however:

   a. the Project is not within a coastal high hazard area;

   b. the Project is a water-dependent use.

(3) The Project does not involve coastal or shoreline engineering structures.

(4) The transmission line conduit will not present a hazard to navigation or obstruction to fishing gear as in each location it will be located within the footprint of the bridge or attached to the side of the structure in a fiberglass enclosure.

1.8 Public Access and Navigability Design Considerations

The Project team engaged in coordination regarding public access and navigability design considerations with MassDEP during project development. At a coordination meeting on January 2, 2019, the Project team was asked by MassDEP to review the potential for canoe and kayak portage at Bridges 127, 128, and 130. The design and permitting team conducted a preliminary design assessment and feasibility review for all three bridges, which included a site visit to identify potential locations for portage on both the upstream and downstream sections of each bridge. A corresponding photo assessment (Figures 4-1 through 4-3 in Attachment E) and feasibility design review (Figures 5-1 through 5-3 in Attachment E) were analyzed for potential alternatives.

Typically, any newly constructed canoe and kayak portages would be required to meet the Americans with Disabilities Act ("ADA") standards in accordance with the Massachusetts Architectural Access Board ("MAAB") requirements for recreational facilities, as mandated in 521 CMR 19.00.

Compliance with ADA standards would require the portage pathways to be designed with a slope of less than 5% throughout and to a minimum of 48 inches clear width (521 CMR 19.9.3). To achieve a slope of less than 5%, the pathway would need to run along the edge of the rail embankment for a distance to connect from the water level to the finished grade of the MCRT. Due to the narrow footprint of the existing railbed, the design would also require retaining walls on both the uphill and downhill sides of the pathway, as shown on Figures 5-1 through 5-3 of Attachment E. The retaining wall located on the uphill side of the pathway would need to have a minimum buried depth of 4 feet, with 1 to 6 feet of wall (depending on the height of the slope) exposed, with railings as needed.

The retaining wall on the downhill side of the pathway would require, at a minimum, armoring of the slope with stone rip rap, and in some cases would require the same retaining wall design as the uphill portion of the pathway.

The conclusion of the preliminary design assessment and feasibility study for canoe and kayak portage at each bridge was that each potential portage location was not practicable due to the substantial alteration and fill of wetland resources that would be

required, and potential need for construction of new structures within the waterway, required to achieve it. For these reasons, accessible portage is not being proposed.

Providing accessible portage could result in the following additional impacts. Bridge-specific design considerations are presented in the sections that follow.

Table 1.3 Additional Portage Permanent Impacts (Not Including Construction Impacts)

Bridge ID	Approximate BVW Impacts	Approximate LUW Impacts
Bridge #130	±2,400 ft^2	±200 ft^2
Bridge #128	±300 ft^2	±500 ft^2
Bridge #127	±200 ft^2	±200 ft^2
TOTALS	±2,900 ft^2	±900 ft^2

BVW = Bordering Vegetated Wetlands
LUW = Land Under Water

1.8.1 Bridge 130

Although the top of the slope of the western side of Bridge 130 is located farther from wetland resources, therein potentially reducing wetland impact, the slopes are too steep for a 5% slope to be feasible. The eastern side of Bridge 130 was therefore identified as the potential location for portage, despite the following limitations.

- The slopes are gentler on the eastern bank than the west; however, both the northern and southern slopes of the eastern bank still have a 6-foot grade differential from the edge of water to the top of the slope.
- To ensure a slope of under 5%, the path would need to be 132 feet in length.
- An approximately 15-foot-long canoe/kayak take-out/launch would be needed to meet ADA standards.
- Neither the northern nor southern slopes of the eastern bank of the bridge are wide enough to accommodate a 4-foot-wide path without filling into the adjacent wetlands and waterway.

1.8.2 Bridge 128

The eastern side of Bridge 128 was selected as the potential option for portage due to gentler slopes and closer proximity of the top of the slope to the waterway (for canoe access) than the western side of the bridge. However, the eastern side of the bridge does pose the following limitations:

- Both the northern and southern slopes of the eastern bank have a 6-foot grade differential from the edge of water to the top of the slope.
- To provide a slope of less than 5%, the path would need to be approximately 132 feet in length.

- An approximately 15-foot-long canoe/kayak take-out/launch would be needed to meet ADA standards.
- Neither the northern nor southern sides of the eastern bank of the bridge are wide enough to accommodate a 4-foot-wide path without substantial filling of the adjacent wetlands and waterway.

1.8.3 Bridge 127

The eastern side of Bridge 127 was selected as the potential option for portage due to gentler slopes and more open vegetation than the western side of the bridge. However, the eastern side of the bridge still poses the following limitations:

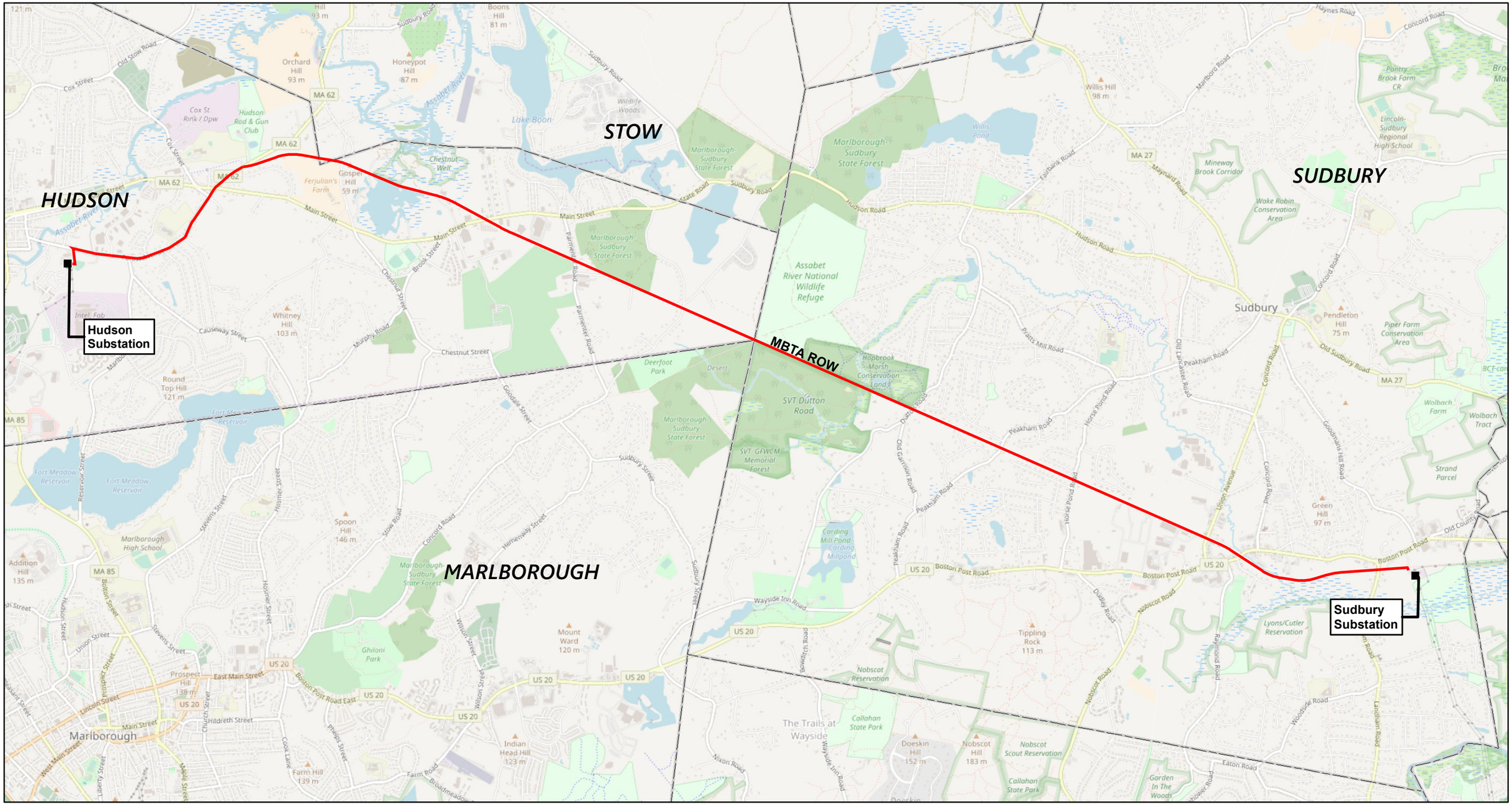
- Both the northern and southern slopes of the eastern bank have a 2-foot grade differential from the edge of water to the top of the slope.
- To ensure a slope of under 5%, the path would need to be 44 feet in length.
- An approximately 15-foot-long canoe/kayak take-out/launch would be needed to meet ADA standards.
- The two-foot grade differential and 4-foot-wide path requirement would require substantial filling of the adjacent wetlands and waterway for the proposed portage pathway to meet existing grade.

1.9 Summary

The Project will serve the dual public purpose of increasing the reliability of the regional electric transmission system and advancing state-wide multi-use trail network initiatives. The Project requires replacement/rehabilitation of three existing railroad river bridges subject to Chapter 91 Waterways Regulations (310 CMR 9.00). The Fort Meadow Brook Bridge (Bridge 130) and the two Hop Brook Bridges (Bridges 128 and 127) are water-dependent utility infrastructure crossings that also provide multi-use trail crossings promoting use and enjoyment of the water by the general public. The Project complies with all applicable Chapter 91 Standards.

The proponent respectfully requests three separate Waterways Licenses be issued for Bridges #130, 128, and 127, authorizing the work described herein.

\\WHBEDATA\gislib\NSTAR\SudburytoHudson\Figures\Various\Figure 1-1 Overview Map.mxd Date: 3/24/2020



NOTE: Not to scale. Alignments shown are for graphical purposes only.

Source: MassGIS, VHB

3/24/2020

N

0 3,000 6,000 Feet

EVERSOURCE ENERGY

dcr MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project

Figure 1-1: Overview Map

vhb

Attachment B – Bridge #130

Chapter 91 License Forms

- Bridge #130 Transmittal Form (Transmittal No. X 281935)
- Bridge #130 Waterways License Application

License Plans

Figures

- Figure 2-1 Bridge #130 Site Aerial Map
- Figure 3-1 Environmental Resources and FIRM Bridge #130

Bridge #130 Chapter 91 License Forms

- Bridge #130 Transmittal Form (Transmittal No. X 281935)
- Bridge #130 Waterways License Application

Enter your transmittal number → X 281935 (Transmittal Number)

Your unique Transmittal Number can be accessed online:
http://www.mass.gov/eea/agencies/massdep/service/approvals/transmittal-form-for-payment.html

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: MassDEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

BRB WW01c — 1. Permit Code: 4 to 7 character code from permit instructions
Water Dependent Extended Term — 2. Name of Permit Category
Infrastructure Crossing Facility, Public Boardwalk/Waterfront Park — 3. Type of Project or Activity

B. Applicant Information – Firm or Individual

Multiple, see attached — 1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. **Last Name** of Individual | 3. **First Name** of Individual | 4. MI

5. Street Address

6. City/Town | 7. State | 8. Zip Code | 9. Telephone # | 10. Ext. #

11. Contact Person | 12. e-mail address

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual

2. Street Address

3. City/Town | 4. State | 5. Zip Code | 6. Telephone # | 7. Ext. #

8. DEP Facility Number (if Known) | 9. Federal I.D. Number (if Known) | 10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

VHB, Inc. — 1. Name of Firm Or Individual
101 Walnut Street, P.O. Box 9151 — 2. Address
Watertown | MA | 02471 | 508-513-2713 | — 3. City/Town | 4. State | 5. Zip Code | 6. Telephone # | 7. Ext. #
Vivian Kimball — 8. Contact Person
9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☒ yes ☐ no
If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit: 15123, 15703 (EOEA File Number)

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

1. ☐ **Fee** Exempt (city, town or municipal housing authority)(state agency if fee is $100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

91334 — Check Number
$3,350 — Dollar Amount
5/12/20 — Date

Massachusetts Department of Environmental Protection
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Water-Dependent, Nonwater-Dependent, Amendment

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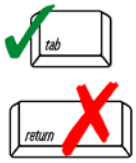
Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



For assistance in completing this application, please see the "Instructions".

A. Application Information (Check one)

NOTE: For Chapter 91 Simplified License application form and information see the Self Licensing Package for BRP WW06.

Name (Complete Application Sections)	Check One	Fee	Application #
WATER-DEPENDENT -			
General (A-H)	☐ Residential with ≤ 4 units	$215.00	BRP WW01a
	☐ Other	$330.00	BRP WW01b
	☒ Extended Term	$3,350.00	BRP WW01c
Amendment (A-H)	☐ Residential with ≤ 4 units	$100.00	BRP WW03a
	☐ Other	$125.00	BRP WW03b
NONWATER-DEPENDENT -			
Full (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW15a
	☐ Other	$2,005.00	BRP WW15b
	☐ Extended Term	$3,350.00	BRP WW15c
Partial (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW14a
	☐ Other	$2,005.00	BRP WW14b
	☐ Extended Term	$3,350.00	BRP WW14c
Municipal Harbor Plan (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW16a
	☐ Other	$2,005.00	BRP WW16b
	☐ Extended Term	$3,350.00	BRP WW16c
Joint MEPA/EIR (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW17a
	☐ Other	$2,005.00	BRP WW17b
	☐ Extended Term	$3,350.00	BRP WW17c
Amendment (A-H)	☐ Residential with ≤ 4 units	$530.00	BRP WW03c
	☐ Other	$1,000.00	BRP WW03d
	☐ Extended Term	$1,335.00	BRP WW03e

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B. Applicant Information Proposed Project/Use Information

1. Applicant:

Multiple- see attached Applicatant Information sheet
Name

E-mail Address

Mailing Address

Note: Please refer to the "Instructions"

City/Town | State | Zip Code

Telephone Number | Fax Number

2. Authorized Agent (if any):

Vivian Kimball
Name

vkimball@vhb.com
E-mail Address

101 Walnut Street
Mailing Address

Watertown | MA | 02471
City/Town | State | Zip Code

5085132713
Telephone Number

6179242286
Fax Number

C. Proposed Project/Use Information

1. Property Information (all information must be provided):

Massachusetts Bay Transportation Authority
Owner Name (if different from applicant)

Hudson: Bk 13156/Pg 34 Parcel 0016-0023
Tax Assessor's Map and Parcel Numbers | Latitude | Longitude

MBTA ROW | MA | 01749
Street Address and City/Town | State | Zip Code

2. Registered Land ☐ Yes ☒ No

3. Name of the water body where the project site is located:

Fort Meadow Brook

4. Description of the water body in which the project site is located (check all that apply):

Type	**Nature**	**Designation**
☒ Nontidal river/stream	☒ Natural	☐ Area of Critical Environmental Concern
☐ Flowed tidelands	☐ Enlarged/dammed	☐ Designated Port Area
☐ Filled tidelands	☐ Uncertain	☐ Ocean Sanctuary
☐ Great Pond		☐ Uncertain
☐ Uncertain		

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C. Proposed Project/Use Information (cont.)

Select use(s) from Project Type Table on pg. 2 of the "Instructions"

5. Proposed Use/Activity description

The use/activity is replacement of a deteriorated former railroad bridge over a non-tidal stream to carry a portion of the DCR Massachusetts Central Rail Trail and an infrastructure crossing for a new Eversource electric transmission line.

6. What is the estimated total cost of proposed work (including materials & labor)?

$1,200,000 (Bridge 130 only)

7. List the name & complete mailing address of each abutter (attach additional sheets, if necessary). An abutter is defined as the owner of land that shares a common boundary with the project site, as well as the owner of land that lies within 50' across a waterbody from the project.

See attached abutters list
Name | Address

Name | Address

Name | Address

D. Project Plans

1. I have attached plans for my project in accordance with the instructions contained in (check one):

☒ Appendix A (License plan) ☐ Appendix B (Permit plan)

2. Other State and Local Approvals/Certifications

☐ 401 Water Quality Certificate — Date of Issuance

☒ Wetlands — TBD — File Number

☐ Jurisdictional Determination — JD- — File Number

☒ MEPA — 15123, 15703 — File Number

☒ EOEA Secretary Certificate — 1/10/14, 9/14/18 — Date

☐ 21E Waste Site Cleanup — RTN Number

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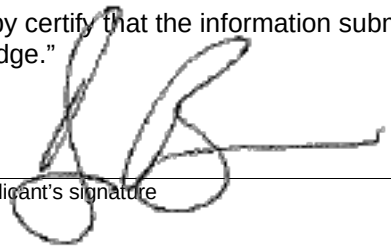
E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

“I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection.”

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge.”



Applicant’s signature — Date: 5/4/20

Property Owner’s signature (if different than applicant) — Date

Agent’s signature (if applicable) — Date

E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

"I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection."

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge."

Applicant's signature — Date

Property Owner's signature (if different than applicant) — Date 4/11/19

Priscilla Geigis, DCR Deputy Commissioner for Conservation and Resource Stewardship

Agent's signature (if applicable) — Date

E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

"I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection."

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge."

Applicant's signature	Date
Holly Palmgren, MBTA Property Owner's signature (if different than applicant)	3/20/19 Date
Agent's signature (if applicable)	Date

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F. Waterways Dredging Addendum

1. Provide a description of the dredging project

   ☐ Maintenance Dredging (include last dredge date & permit no.) ☐ Improvement Dredging

   N/A
   Purpose of Dredging

2. What is the volume (cubic yards) of material to be dredged?

3. What method will be used to dredge?

   ☐ Hydraulic ☐ Mechanical ☐ Other

4. Describe disposal method and provide disposal location (include separate disposal site location map)

5. Provide copy of grain size analysis. If grain size is compatible for beach nourishment purposes, the Department recommends that the dredged material be used as beach nourishment for public beaches. **Note:** In the event beach nourishment is proposed for private property, pursuant to 310 CMR 9.40(4)(a)1, public access easements below the existing high water mark shall be secured by applicant and submitted to the Department.

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G. Municipal Zoning Certificate

Name of Applicant

Project street address | Waterway | City/Town

Description of use or change in use:

Not Applicable

To be completed by municipal clerk or appropriate municipal official:

"I hereby certify that the project described above and more fully detailed in the applicant's waterways license application and plans is not in violation of local zoning ordinances and bylaws."

Printed Name of Municipal Official | Date

Signature of Municipal Official | Title | City/Town

Massachusetts Department of Environmental Protection
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X 281935
Transmittal No.

H. Municipal Planning Board Notification

Notice to Applicant:

Section H should be completed and submitted along with the original application material.

Multiple- see attached Applicant Information Sheet
Name of Applicant

MBTA ROW	Fort Meadow Brook	Hudson
Project street address	Waterway	City/Town

Description of use or change in use:

The use/activity is replacement of a degraded former railroad bridge over a non-tidal stream to carry a portion of the DCR Massachusetts Central Rail Trail and an infrastructure crossing for a new Eversource electric transmission line.

To be completed by municipal clerk or appropriate municipal official:

"I hereby certify that the project described above and more fully detailed in the applicant's waterways license application and plans have been submitted by the applicant to the municipal planning board."

Printed Name of Municipal Official		Date
Signature of Municipal Official	Title	City/Town

Note: Any comments, including but not limited to written comments, by the general public, applicant, municipality, and/or an interested party submitted after the close of the public comment period pertaining to this Application shall not be considered, and shall not constitute a basis for standing in any further appeal pursuant to 310 CMR 9.13(4) and/or 310 CMR 9.17.

Appendix A: License Plan Checklist

General View

- ☒ PE or RLS, as deemed appropriate by the Department, stamped and signed, in ink, each sheet within 8 1/2 inch by 11 inch border
- ☒ Format and dimensions conform to “Sample Plan” (attached)
- ☒ Minimum letter size is 1/8 of an inch if freehand lettering, 1/10 of an inch if letter guides are used
- ☒ Sheet number with total number in set on each sheet
- ☒ Title sheet contains the following in lower left: Plans accompanying Petition of [Applicant’s name, structures and/or fill or change in use, waterway and municipality]
- ☒ North arrow
- ☒ Scale is suitable to clearly show proposed structures and enough of shoreline, existing structures and roadways to define its exact location
- ☒ Scale is stated & shown by graphic bar scale on each sheet
- ☒ Initial plans may be printed on bond; final plans due before License issuance must be on 3mil Mylar.

Structures and Fill

- ☒ All Structures and Fill shown in full BLACK lines, clearly labeling which portions are existing, which are Proposed and indicating Existing Waterways Licenses
- ☒ *Cross Section Views* show MHW* and MLW* and structure finish elevations
- ☐ *Dredge or Fill*, actual cubic yardage must be stated and typical cross sections shown
- ☒ All Structures and Fill shown in full BLACK lines, clearly labeling which portions are existing, which are Proposed and indicating Existing Waterways Licenses
- ☒ *Cross Section Views* show MHW* and MLW* and structure finish elevations
- ☐ *Dredge or Fill*, actual cubic yardage must be stated and typical cross sections shown
- ☐ Actual dimensions of structures(s) and or fill and the distance which they extend beyond MHW* or OHW*
- ☒ Change in Use of any structures on site must be stated

* See 310 CMR 9.02, Waterways Regulations definitions of High Water Mark, Historic High Water Mark, Historic Low Water Mark, and Low Water Mark. *Note:* DEP may, at its discretion, accept appropriately scaled preliminary plans in lieu of the plans described above. In general, DEP will accept preliminary plans only for non-water dependent projects and projects covered by MEPA to address site design components such as visual access, landscaping & site coverage. *Anyone wishing to submit preliminary plans must obtain prior approval of the DEP Waterways Program* before

submitting them with their application.

Appendix A: License Plan Checklist (cont.)

Boundaries

- ☒ Property lines, full black lines, ————, along with abutters' names and addresses
- ☒ Mean High Water (MHW)* or Ordinary High Water (OHW)*, full black line ————
- ☒ Mean Low Water (MLW)*, black dotted line, (.....)
- ☒ Historic MHW* or OHW* (— — — —)
- ☒ Historic MLW* (..._..._..._)
- ☐ State Harbor Lines, black dot-dash line (– . – . – . –) with indication of Chapter & Act establishing them (Ch. , Acts of)
- ☒ Reference datum is National Geodetic Vertical Datum (NGVD) or (NAVD).
- ☒ Floodplain Boundaries according to most recent FEMA maps
- ☐ Proposed & Existing Easements described in metes & bounds

Water-Dependent Structures

- ☐ Distance from adjacent piers, ramps or floats (minimum distance of 25' from property line, where feasible)
- ☐ Distance from nearest opposite shoreline
- ☐ Distance from outside edge of any Navigable Channel
- ☐ Access stairs at MHW for lateral public passage, or 5 feet of clearance under structure at MHW.

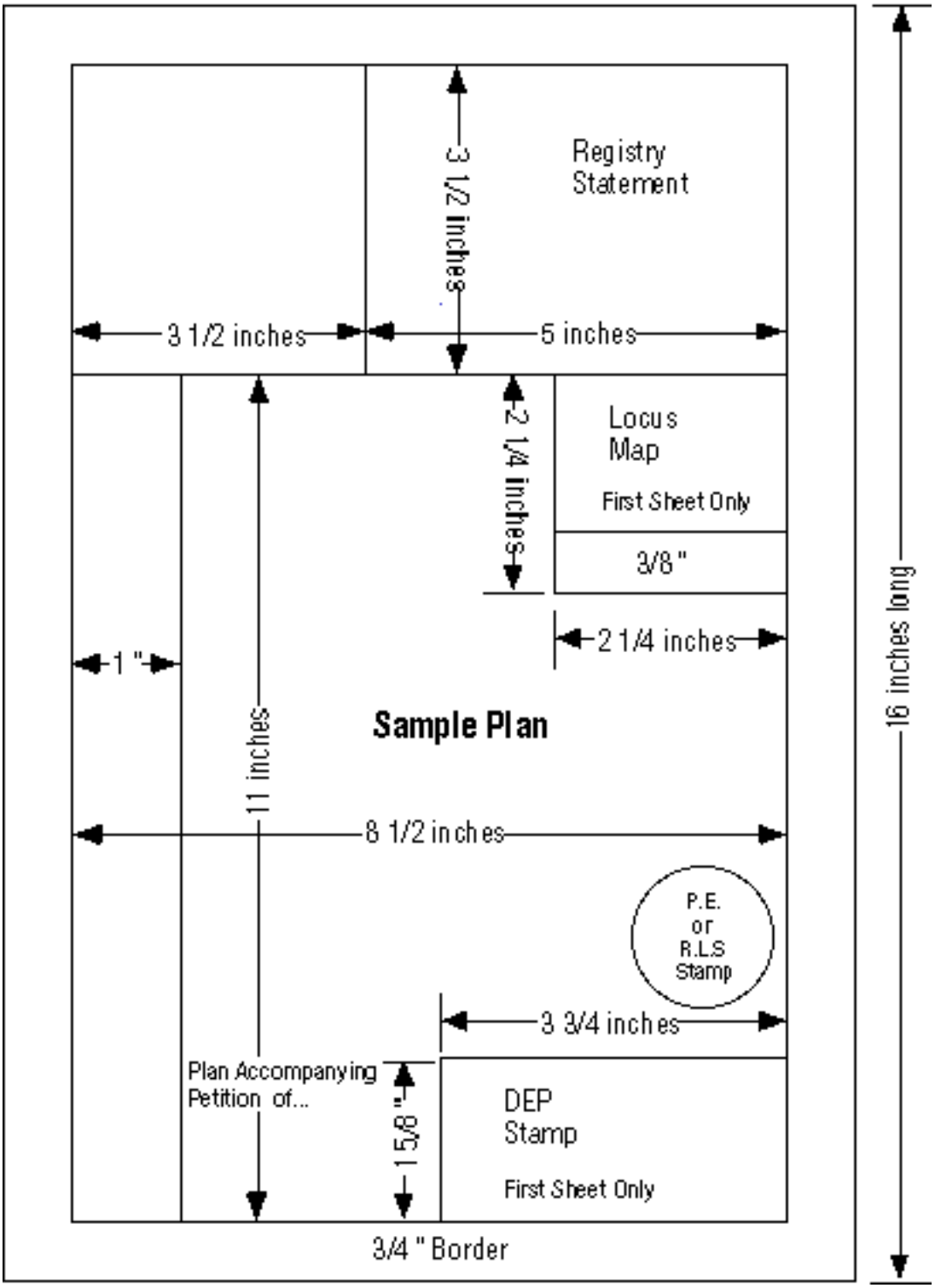
Non Water-Dependent Structures

- ☐ Depict extent of "Water-dependent Use Zone".

See Waterways Regulations at 310 CMR 9.51-9.53 for additional standards for non water-dependent use projects.

Note: Final Mylar project site plans will be required upon notice from the Department, prior to issuance of the Chapter 91 Waterways License.

Appendix A: License Plan Checklist Cont.



Appendix B: Dredging Permit Plan Checklist

For projects applying for dredging permits only, enclose drawings with the General Waterways Application that include the following information:

General View

☐ Submit one original of all drawings. Submit the fewest number of sheets necessary to adequately illustrate the project on 8-1/2 inch X 11 inch paper.

☐ A 1-inch margin should be left at the top edge of each drawing for purposes of reproduction and binding. A 1/2 inch margin is required in the three other edges.

☐ A complete title block on each drawing submitted should identify the project and contain: the name of the waterway; name of the applicant; number of the sheet and total number of sheets in the set; and the date the drawing was prepared.

☐ Use only dot shading, hatching, and dashed or dotted line to show or indicate particular features of the site on the drawings.

☐ If deemed appropriate by the Department, certification by the Registered Professional Engineer or Land Surveyor is included.

Plan View

☐ North Arrow

☐ Locus Map

☐ Standard engineering scale.

☐ Distances from channel lines and structures if appropriate.

☐ Mean high water and mean low water shorelines (see definitions of “High Water Mark” and “Low Water Mark” at 310 CMR 9.02, C. 91 Regulations).

☐ Dimensions of area proposed to be dredged or excavated.

☐ Notation or indication of disposal site.

☐ Volume of proposed dredging or excavation.

☐ Ordinary high water, proposed drawdown level, and natural (historic) high water (for projects lowering waters of Great Ponds).

Section Views

☐ Existing bottom and bank profiles.

☐ Vertical and/or horizontal scales.

☐ Proposed and existing depths relative to an indicated datum.

☐ Elevation and details of control structure (for projects lowering waters of Great Ponds).

Appendix C: Application Completeness Checklist

Please answer all questions in the General Waterways Application form. If a question does not apply to your project write "not applicable" (n/a) in that block. Please print or type all information provided on the form. Use black ink (blue ink or pencil are not easily reproducible, therefore, neither will be accepted). If additional space is needed, attach extra 8-1/2" x 11" sheets of paper.

☒ **Proper Public Purpose:** For nonwater-dependent projects, a statement must be included that explains how the project serves a proper public purpose that provides greater benefit than detriment to public rights in tidelands or great ponds and the manner in which the project meets the applicable standards. If the project is a nonwater-dependent project located in the coastal zone, the statement should explain how the project complies with the standard governing consistency of the policies of the Massachusetts Coastal Zone Management Program, according to 310 CMR 9.54. If the project is located in an area covered by a Municipal Harbor Plan, the statement should describe how the project conforms to any applicable provisions of such plan pursuant to 310 CMR 9.34(2).

☒ **Plans:** Prepared in accordance with the applicable instructions contained in Appendix A-B of this application. For initial filing, meet the requirements of 310 CMR 9.11(3)(b)(3).

☒ **Applicant Certification:** All applications must be signed by “the landowner if other than the applicant. In lieu of the landowner’s signature, the applicant may provide other evidence of legal authority to submit an application for the project site.” If the project is entirely on land owned by the Commonwealth (e.g. most areas below the current low water mark in tidelands and below the historic high water mark of Great Ponds), you may simply state this in lieu of the “landowner’s signature”.

☐ **Municipal Zoning Certification:** If required, applicants must submit a completed and signed Section E of this application by the municipal clerk or appropriate municipal official or, for the initial filing, an explanation of why the form is not included with the initial application. If the project is a public service project subject to zoning but will not require any municipal approvals, submit a certification to that effect pursuant to 310 CMR 9.34(1).

☐ **Municipal Planning Board Notification:** Applicants must submit a copy of this application to the municipal planning board for the municipality where the project is located. Submittal of the complete application to DEP must include Section H signed by the municipal clerk, or appropriate municipal official for the town where the work is to be performed, except in the case of a proposed bridge, dam, or similar structure across a river, cove, or inlet, in which case it must be certified by every municipality into which the tidewater of said river, cove, or inlet extends.

☐ **Final Order of Conditions:** A copy of one of the following three documents is required with the filing of a General Waterways Application: (1) the Final Order of Conditions (with accompanying plan) under the Wetlands Protection Act; (2) a final Determination of Applicability under that Act stating that an Order of Conditions is not required for the project; or (3) the Notice of Intent for the initial filing (if the project does not trigger review under MEPA).

☒ **Massachusetts Environmental Protection Act (MEPA):** MGL 30, subsections 61-61A and 301 CMR 11.00, submit as appropriate: a copy of the Environmental Notification Form (ENF) and a Certificate of the Secretary of Environmental Affairs thereon, or a copy of the final Environmental Impact Report (EIR) and Certificate of the Secretary stating that it adequately and properly complies with MEPA; and any subsequent Notice of Project change and any determination issued thereon in accordance with MEPA. For the initial filing, only a copy of the ENF and the Certificate of the Secretary thereon must be submitted.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 281935
Transmittal No.

Note: If the project is subject to MEPA, the Chapter 91 Public Notice must also be submitted to MEPA for publication in the "Environmental Monitor". MEPA filing deadlines are the 15th and 30th of each month.

Appendix C: Application Completeness Checklist (cont.)

☐ **Water Quality Certificate:** if applicable, pursuant to 310 CMR 9.33, is included.

☐ **Other Approvals:** as applicable pursuant to 310 CMR 9.33 or, for the initial filing, a list of such approvals which must be obtained.

Projects involving dredging:

☐ The term "dredging" means the removal of materials including, but not limited to, rocks, bottom sediments, debris, sand, refuse, plant or animal matter, in any excavating, clearing, deepening, widening or lengthening, either permanently or temporarily, of any flowed tidelands, rivers, streams, ponds or other waters of the Commonwealth. Dredging includes improvement dredging, maintenance dredging, excavating and backfilling or other dredging and subsequent refilling. Included is a completed and signed copy of Part F of the application.

Filing your Completed General Waterways Application:

☒ **For all <u>Water-Dependent</u> applications** – submit a completed General Waterways Application and all required documentation with a *photocopy* of both payment check and DEP's *Transmittal Form for Permit Application & Payment* to the appropriate DEP Boston or regional office (please refer to Pg. 10 of the "Instructions" for the addresses of DEP Regional Offices).

☐ **For all <u>Non Water-Dependent</u> applications** – submit a completed General Waterways Application and all required documentation with a *photocopy* of both payment check and DEP's *Transmittal Form for Permit Application & Payment* to DEP's Boston office.

Department of Environmental Protection
Waterways Regulation Program
One Winter Street
Boston, MA 02108

☒ **Application Fee Payment for <u>ALL Waterways Applications</u>:** Send the appropriate Application fee* (please refer to Page 1 of the "Application"), in the form of a check or money order, along with DEP's *Transmittal Form for Permit Application & Payment*:

Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

* Under extreme circumstances, DEP grants extended time periods for payment of license and permit application fees. If you qualify, check the box entitles "Hardship Request" on the *Transmittal Form for Permit Application & Payment.* See 310 CMR 4.04(3)(c) to identify procedures for making a hardship request. Send hardship request and supporting documentation to the above address.

NOTE: You may be subject to a ***double*** **application fee** if your application for Chapter 91 authorization results from an enforcement action by the Department or another agency of the Commonwealth or its subdivisions, or if your application seeks authorization for an existing unauthorized structure or use.

Chapter 91 Waterways License Application 310 CMR 9.00
Section B. Applicant Information
Bridge #130
Transmittal #X281935

1. Applicants:

NSTAR Electric Company d/b/a Eversource Energy

Denise Bartone

Denise.bartone@eversource.com

247 Station Drive, Westwood, MA 02090

Phone: 781-441-8174

Massachusetts Department of Conservation and Recreation

Paul Jahnige

paul.jahnige@state.ma.us

251 Causeway Street, 9th Floor, Boston, MA 02114

Phone: 617-626-1250

List of abutting parcels 50 feet upstream and downstream of Bridge locations:

Bridge 130 (Hudson)

Parcel #	Owner
(0024-0002)	TOWN OF HUDSON TOWN HALL MAIN STREET (BK 14886 PG 0040)
(0033-0019)	TOWN OF HUDSON TOWN HALL MAIN STREET (BK 14886 PG 0040)

Verified with Joanne McIntyre Assessor of Hudson on 3/24/20.

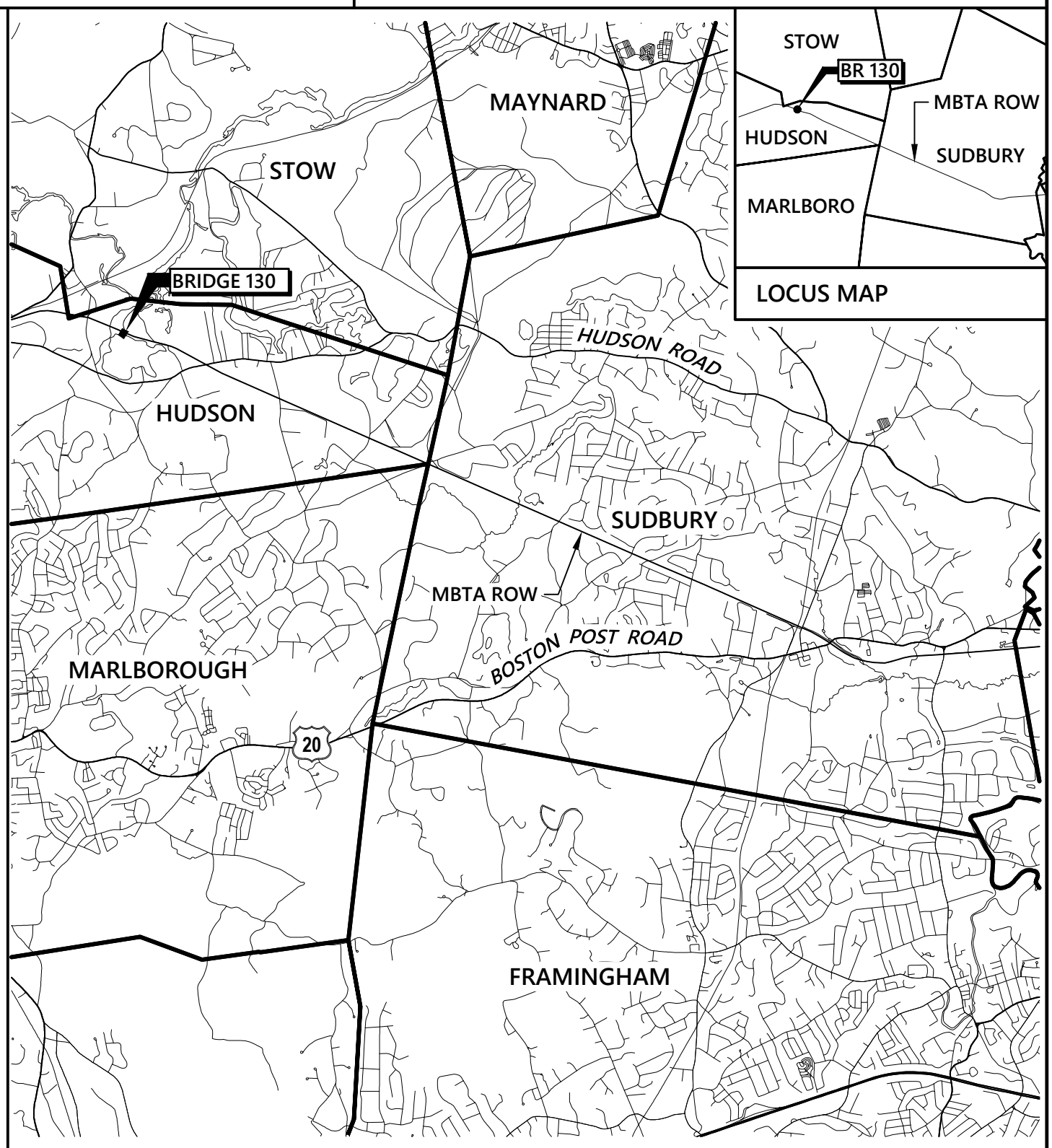
›

Bridge #130
(Transmittal No. 281935)
License Plans

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE



PLAN ACCOMPANYING PETITION OF DCR AND NSTAR ELECTRIC COMPANY TO REPLACE AND ADAPTIVELY REUSE EXISTING RAIL BRIDGE OVER THE WATERS OF FORT MEADOW BROOK IN HUDSON, MIDDLESEX COUNTY, MASSACHUSETTS.

NOTE: ALL ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.

N

0 1 MILE

SCALE: 1" = 1 MILE

PROJECT CONTEXT

SHEET 1 OF 4

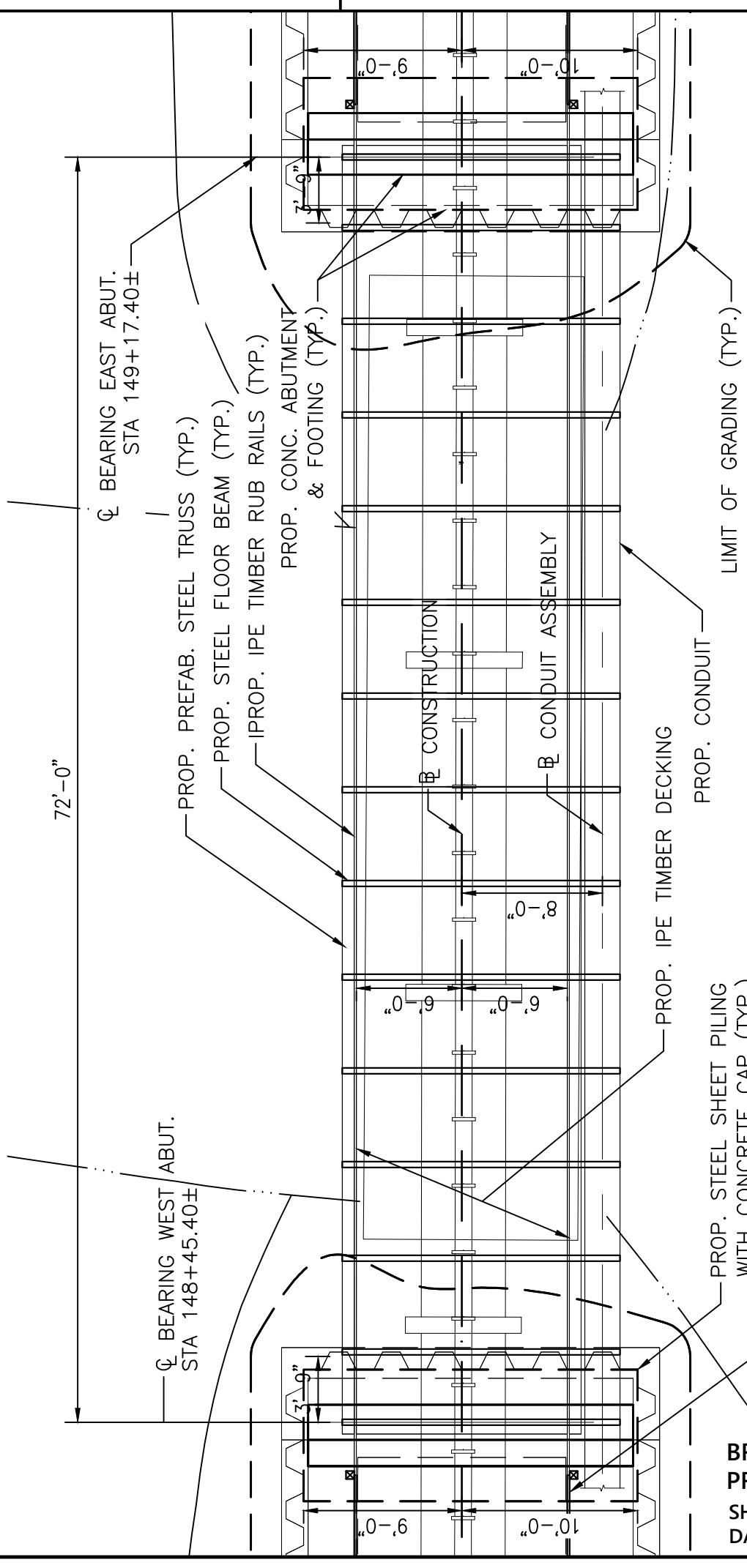
DATE: APRIL, 2020

\\vhb\gbl\proj\Worcester\12970.00 Sudbury-Hudson-EV\cad\ev\planset\Chapter 91\1297003_C91_2020-04-07.dwg

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

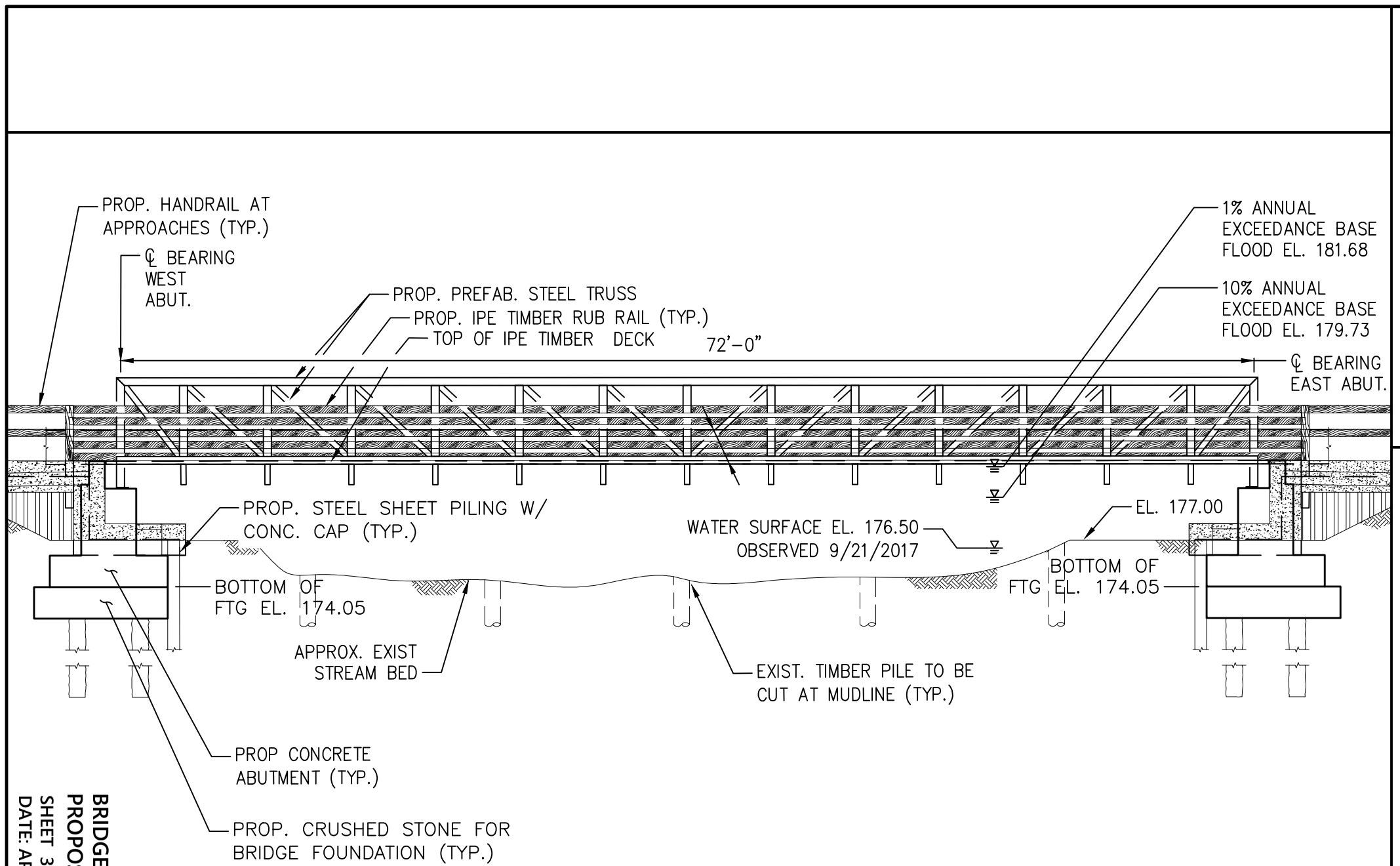
DATE



FORT MEADOW BROOK

BRIDGE 130
PROPOSED CONDITIONS
SHEET 2 OF 4
DATE: APRIL, 2020

\\vhb\gbl\proj\Worcester\12970.00 Sudbury-Hudson-EV\cad\ev\planset\Chapter 91\1297003_C91_2020-04-07.dwg



BRIDGE 130
PROPOSED ELEVATION
SHEET 3 OF 4
DATE: APRIL, 2020

NOTE: ALL ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.

0 4 8 FT.
SCALE: 1" = 8'

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

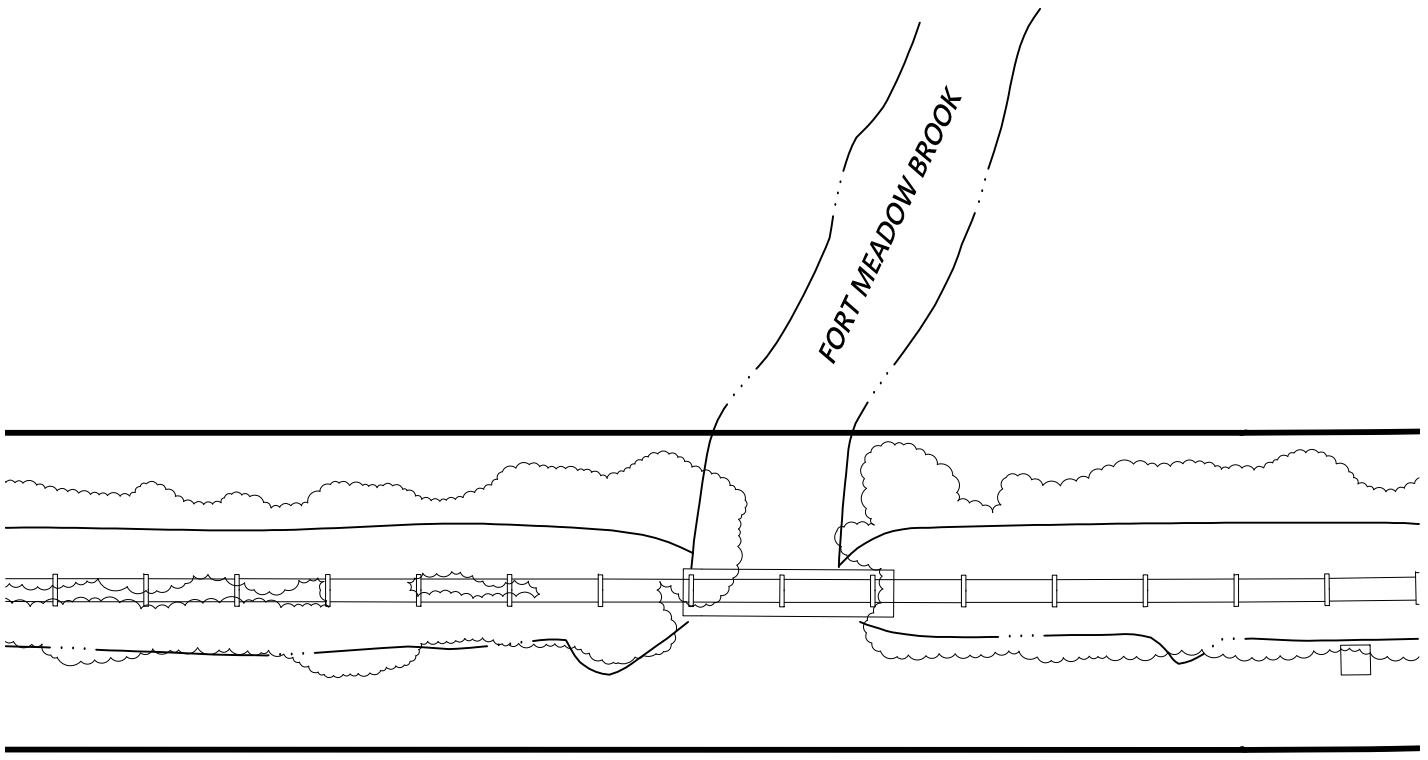
DATE

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE

N/F
TOWN OF HUDSON TOWN HALL
MAIN STREET
0024-0002
BK 14886 PG 0040



N/F
TOWN OF HUDSON TOWN HALL
MAIN STREET
0033-0019
BK 14886 PG 0040

N

0 25 50 FT.
SCALE: 1" = 50'

BRIDGE 130
ABUTTERS PLAN
SHEET 4 OF 4
DATE: APRIL, 2020

Bridge #130
(Transmittal No. 281935)
Figures

Figure 2-1 Fort Meadow Brook Crossing: Bridge #130

Proposed Transmission Line
Limit of Grading
Inactive MBTA ROW
Bordering Land Subject to Flooding
Delineated Bordering Vegetated Wetland Edge
Delineated Isolated Vegetated Wetland Edge
Approximate Wetland Edge
Delineated Top of Bank
Intermittent Stream
Perennial Stream
Bordering Vegetated Wetlands
Isolated Vegetated Wetlands
Land Under Water

0 100 200 Feet

N

EVERSOURCE ENERGY

dcr MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project

Bridge Replacements

Figure 3-1
Waterways License Application

vhb

Attachment C – Bridge #128

Chapter 91 License Forms

- Bridge #128 Transmittal Form (Transmittal No. X 285957)
- Bridge #128 Waterways License Application

License Plans

Figures

- Figure 2-2 Bridge #128 Site Aerial Map
- Figure 3-2 Environmental Resources and FIRM Bridge #128

Bridge #128 Chapter 91 License Forms

- Transmittal Form (Transmittal No. X 285957)
- Waterways License Application

Enter your transmittal number → X 285957 (Transmittal Number)

Your unique Transmittal Number can be accessed online:
http://www.mass.gov/eea/agencies/massdep/service/approvals/transmittal-form-for-payment.html

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: MassDEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

1. Permit Code: 4 to 7 character code from permit instructions	2. Name of Permit Category
BRB WW01c	Water Dependent Extended Term

3. Type of Project or Activity: Infrastructure Crossing Facility, Public Boardwalk/Waterfront Park

B. Applicant Information – Firm or Individual

1. Name of Firm - Or, if party needing this approval is an individual enter name below: Multiple, see attached

2. **Last Name** of Individual	3. **First Name** of Individual	4. MI

5. Street Address:

6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #

11. Contact Person	12. e-mail address

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual:

2. Street Address:

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #

8. DEP Facility Number (if Known)	9. Federal I.D. Number (if Known)	10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual: VHB, Inc.

2. Address: 101 Walnut Street, P.O. Box 9151

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Watertown	MA	02471	508-513-2713	

8. Contact Person	9. LSP Number (BWSC Permits only)
Vivian Kimball	

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☒ yes ☐ no
   If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit: 15123, 15703 (EOEA File Number)

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

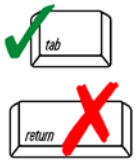
1. ☐ **Fee** Exempt (city, town or municipal housing authority)(state agency if fee is $100 or less).
   There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

Check Number	Dollar Amount	Date
91334	$3,350	5/12/20

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285957
Transmittal No.

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



For assistance in completing this application, please see the "Instructions".

A. Application Information (Check one)

NOTE: For Chapter 91 Simplified License application form and information see the Self Licensing Package for BRP WW06.

Name (Complete Application Sections)	Check One	Fee	Application #
WATER-DEPENDENT -			
General (A-H)	☐ Residential with ≤ 4 units	$215.00	BRP WW01a
	☐ Other	$330.00	BRP WW01b
	☒ Extended Term	$3,350.00	BRP WW01c
Amendment (A-H)	☐ Residential with ≤ 4 units	$100.00	BRP WW03a
	☐ Other	$125.00	BRP WW03b
NONWATER-DEPENDENT -			
Full (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW15a
	☐ Other	$2,005.00	BRP WW15b
	☐ Extended Term	$3,350.00	BRP WW15c
Partial (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW14a
	☐ Other	$2,005.00	BRP WW14b
	☐ Extended Term	$3,350.00	BRP WW14c
Municipal Harbor Plan (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW16a
	☐ Other	$2,005.00	BRP WW16b
	☐ Extended Term	$3,350.00	BRP WW16c
Joint MEPA/EIR (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW17a
	☐ Other	$2,005.00	BRP WW17b
	☐ Extended Term	$3,350.00	BRP WW17c
Amendment (A-H)	☐ Residential with ≤ 4 units	$530.00	BRP WW03c
	☐ Other	$1,000.00	BRP WW03d
	☐ Extended Term	$1,335.00	BRP WW03e

Massachusetts Department of Environmental Protection
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Transmittal No.

B. Applicant Information Proposed Project/Use Information

1. Applicant:

Multiple- see attached Applicatant Information sheet
Name

E-mail Address

Mailing Address

Note: Please refer to the "Instructions"

City/Town | State | Zip Code

Telephone Number | Fax Number

2. Authorized Agent (if any):

Vivian Kimball
Name

vkimball@vhb.com
E-mail Address

101 Walnut Street
Mailing Address

Watertown | MA | 02471
City/Town | State | Zip Code

5085132713
Telephone Number

6179242286
Fax Number

C. Proposed Project/Use Information

1. Property Information (all information must be provided):

Massachusetts Bay Transportation Authority
Owner Name (if different from applicant)

MapH03 Parcel 5000
Tax Assessor's Map and Parcel Numbers | Latitude | Longitude

MBTA ROW, Sudbury | MA | 01776
Street Address and City/Town | State | Zip Code

2. Registered Land ☐ Yes ☒ No

3. Name of the water body where the project site is located:

Hop Brook

4. Description of the water body in which the project site is located (check all that apply):

Type	**Nature**	**Designation**
☒ Nontidal river/stream	☒ Natural	☐ Area of Critical Environmental Concern
☐ Flowed tidelands	☐ Enlarged/dammed	☐ Designated Port Area
☐ Filled tidelands	☐ Uncertain	☐ Ocean Sanctuary
☐ Great Pond		☐ Uncertain
☐ Uncertain		

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
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C. Proposed Project/Use Information (cont.)

Select use(s) from Project Type Table on pg. 2 of the "Instructions"

5. Proposed Use/Activity description

The use/activity is replacement of a degraded former railroad bridge over a non-tidal stream to carry a portion of the DCR Massachusetts Central Rail Trail and an infrastructure crossing for a new Eversource electric transmission line.

6. What is the estimated total cost of proposed work (including materials & labor)?

$400,000 (bridge 128 only)

7. List the name & complete mailing address of each abutter (attach additional sheets, if necessary). An abutter is defined as the owner of land that shares a common boundary with the project site, as well as the owner of land that lies within 50' across a waterbody from the project.

See attached abutters list
Name | Address

Name | Address

Name | Address

D. Project Plans

1. I have attached plans for my project in accordance with the instructions contained in (check one):

☒ Appendix A (License plan) ☐ Appendix B (Permit plan)

2. Other State and Local Approvals/Certifications

☐ 401 Water Quality Certificate — Date of Issuance

☒ Wetlands — 301-1287 — File Number

☐ Jurisdictional Determination — JD- — File Number

☒ MEPA — 15123, 15703 — File Number

☒ EOEA Secretary Certificate — 1/10/14, 9/14/18 — Date

☐ 21E Waste Site Cleanup — RTN Number

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
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Water-Dependent, Nonwater-Dependent, Amendment

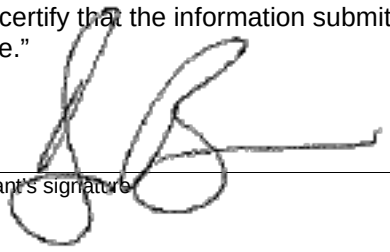
X 285957
Transmittal No.

E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

“I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection.”

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge.”



Applicant’s signature

5/4/20
Date

Property Owner’s signature (if different than applicant)

Date

Agent’s signature (if applicable)

Date

E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

"I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection."

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge."

Applicant's signature — Date

Property Owner's signature (if different than applicant) — Date 4/11/19

Priscilla Geigis, DCR Deputy Commissioner for Conservation and Resource Stewardship

Agent's signature (if applicable) — Date

E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

"I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection."

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge."

Applicant's signature	Date
Holly Palmgren, MBTA Property Owner's signature (if different than applicant)	3/20/19 Date
Agent's signature (if applicable)	Date

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
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X 285957
Transmittal No.

F. Waterways Dredging Addendum

1. Provide a description of the dredging project

   ☐ Maintenance Dredging (include last dredge date & permit no.) ☐ Improvement Dredging

   N/A
   Purpose of Dredging

2. What is the volume (cubic yards) of material to be dredged?

3. What method will be used to dredge?

   ☐ Hydraulic ☐ Mechanical ☐ Other

4. Describe disposal method and provide disposal location (include separate disposal site location map)

5. Provide copy of grain size analysis. If grain size is compatible for beach nourishment purposes, the Department recommends that the dredged material be used as beach nourishment for public beaches. **Note:** In the event beach nourishment is proposed for private property, pursuant to 310 CMR 9.40(4)(a)1, public access easements below the existing high water mark shall be secured by applicant and submitted to the Department.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285957
Transmittal No.

G. Municipal Zoning Certificate

Name of Applicant

Project street address | Waterway | City/Town

Description of use or change in use:

Not Applicable

To be completed by municipal clerk or appropriate municipal official:

"I hereby certify that the project described above and more fully detailed in the applicant's waterways license application and plans is not in violation of local zoning ordinances and bylaws."

Printed Name of Municipal Official | Date

Signature of Municipal Official | Title | City/Town

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285957
Transmittal No.

H. Municipal Planning Board Notification

Notice to Applicant:

Section H should be completed and submitted along with the original application material.

Multiple- see attached Applicant Information Sheet
Name of Applicant

MBTA ROW	Hop Brook	Sudbury
Project street address	Waterway	City/Town

Description of use or change in use:

The use/activity is replacement of a degraded former railroad bridge over a non-tidal stream to carry a portion of the DCR Massachusetts Central Rail Trail and an infrastructure crossing for a new Eversource electric transmission line.

To be completed by municipal clerk or appropriate municipal official:

"I hereby certify that the project described above and more fully detailed in the applicant's waterways license application and plans have been submitted by the applicant to the municipal planning board."

Printed Name of Municipal Official		Date
Signature of Municipal Official	Title	City/Town

Note: Any comments, including but not limited to written comments, by the general public, applicant, municipality, and/or an interested party submitted after the close of the public comment period pertaining to this Application shall not be considered, and shall not constitute a basis for standing in any further appeal pursuant to 310 CMR 9.13(4) and/or 310 CMR 9.17.

Appendix A: License Plan Checklist

General View

- ☒ PE or RLS, as deemed appropriate by the Department, stamped and signed, in ink, each sheet within 8 1/2 inch by 11 inch border
- ☒ Format and dimensions conform to "Sample Plan" (attached)
- ☒ Minimum letter size is 1/8 of an inch if freehand lettering, 1/10 of an inch if letter guides are used
- ☒ Sheet number with total number in set on each sheet
- ☒ Title sheet contains the following in lower left: Plans accompanying Petition of [Applicant's name, structures and/or fill or change in use, waterway and municipality]
- ☒ North arrow
- ☒ Scale is suitable to clearly show proposed structures and enough of shoreline, existing structures and roadways to define its exact location
- ☒ Scale is stated & shown by graphic bar scale on each sheet
- ☒ Initial plans may be printed on bond; final plans due before License issuance must be on 3mil Mylar.

Structures and Fill

- ☒ All Structures and Fill shown in full BLACK lines, clearly labeling which portions are existing, which are Proposed and indicating Existing Waterways Licenses
- ☒ *Cross Section Views* show MHW* and MLW* and structure finish elevations
- ☐ *Dredge or Fill*, actual cubic yardage must be stated and typical cross sections shown
- ☒ All Structures and Fill shown in full BLACK lines, clearly labeling which portions are existing, which are Proposed and indicating Existing Waterways Licenses
- ☒ *Cross Section Views* show MHW* and MLW* and structure finish elevations
- ☐ *Dredge or Fill*, actual cubic yardage must be stated and typical cross sections shown
- ☐ Actual dimensions of structures(s) and or fill and the distance which they extend beyond MHW* or OHW*
- ☒ Change in Use of any structures on site must be stated

* See 310 CMR 9.02, Waterways Regulations definitions of High Water Mark, Historic High Water Mark, Historic Low Water Mark, and Low Water Mark. *Note:* DEP may, at its discretion, accept appropriately scaled preliminary plans in lieu of the plans described above. In general, DEP will accept preliminary plans only for non-water dependent projects and projects covered by MEPA to address site design components such as visual access, landscaping & site coverage. *Anyone wishing to submit preliminary plans must obtain prior approval of the DEP Waterways Program* before

submitting them with their application.

Appendix A: License Plan Checklist (cont.)

Boundaries

- ☒ Property lines, full black lines, ————, along with abutters' names and addresses
- ☒ Mean High Water (MHW)* or Ordinary High Water (OHW)*, full black line ————
- ☒ Mean Low Water (MLW)*, black dotted line, (.....)
- ☒ Historic MHW* or OHW* (— — — —)
- ☒ Historic MLW* (..._..._..._)
- ☐ State Harbor Lines, black dot-dash line (– . – . – . –) with indication of Chapter & Act establishing them (Ch. , Acts of)
- ☒ Reference datum is National Geodetic Vertical Datum (NGVD) or (NAVD).
- ☒ Floodplain Boundaries according to most recent FEMA maps
- ☐ Proposed & Existing Easements described in metes & bounds

Water-Dependent Structures

- ☐ Distance from adjacent piers, ramps or floats (minimum distance of 25' from property line, where feasible)
- ☐ Distance from nearest opposite shoreline
- ☐ Distance from outside edge of any Navigable Channel
- ☐ Access stairs at MHW for lateral public passage, or 5 feet of clearance under structure at MHW.

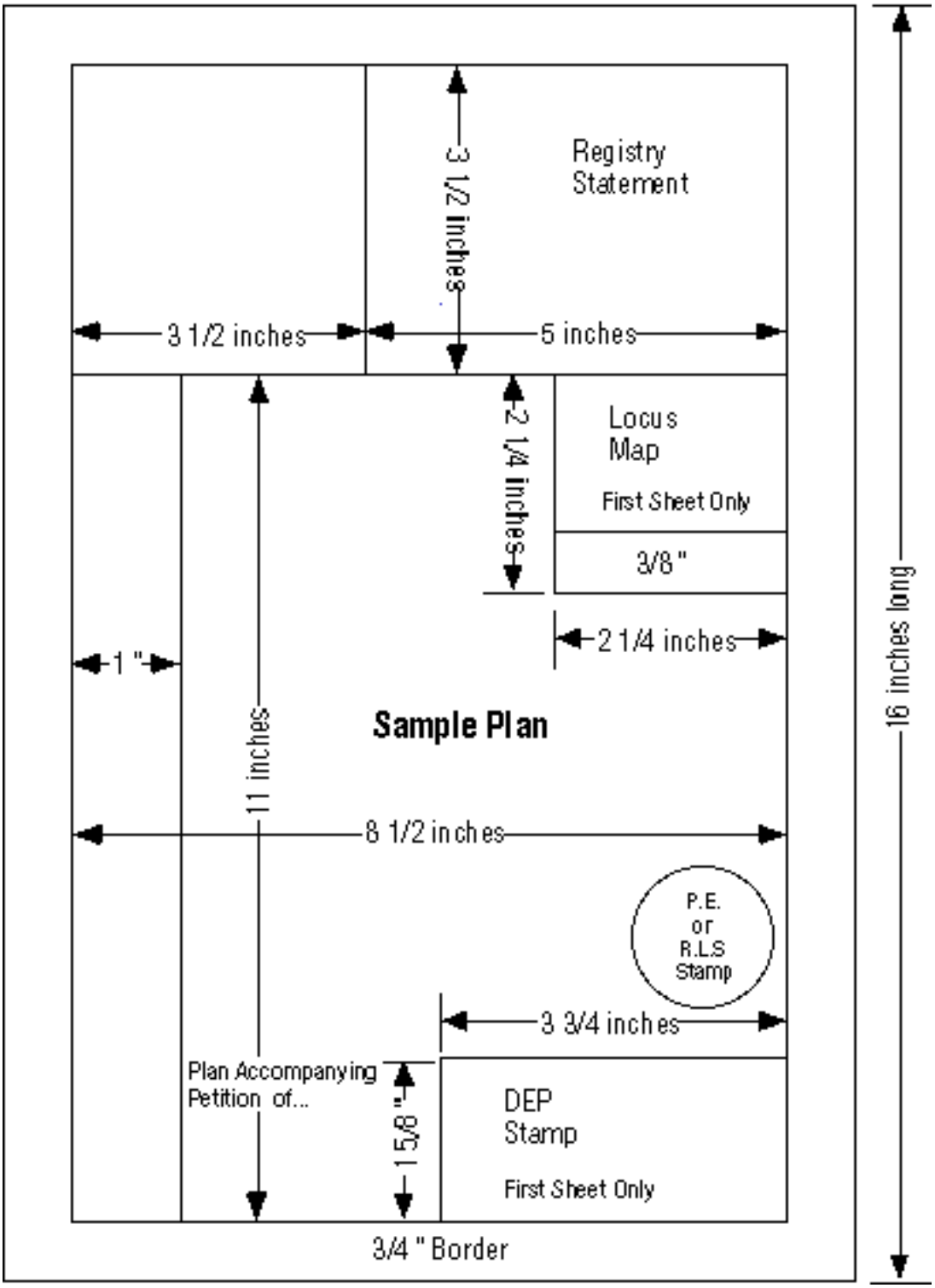
Non Water-Dependent Structures

- ☐ Depict extent of "Water-dependent Use Zone".

See Waterways Regulations at 310 CMR 9.51-9.53 for additional standards for non water-dependent use projects.

Note: Final Mylar project site plans will be required upon notice from the Department, prior to issuance of the Chapter 91 Waterways License.

Appendix A: License Plan Checklist Cont.



Appendix B: Dredging Permit Plan Checklist

For projects applying for dredging permits only, enclose drawings with the General Waterways Application that include the following information:

General View

☐ Submit one original of all drawings. Submit the fewest number of sheets necessary to adequately illustrate the project on 8-1/2 inch X 11 inch paper.

☐ A 1-inch margin should be left at the top edge of each drawing for purposes of reproduction and binding. A 1/2 inch margin is required in the three other edges.

☐ A complete title block on each drawing submitted should identify the project and contain: the name of the waterway; name of the applicant; number of the sheet and total number of sheets in the set; and the date the drawing was prepared.

☐ Use only dot shading, hatching, and dashed or dotted line to show or indicate particular features of the site on the drawings.

☐ If deemed appropriate by the Department, certification by the Registered Professional Engineer or Land Surveyor is included.

Plan View

☐ North Arrow

☐ Locus Map

☐ Standard engineering scale.

☐ Distances from channel lines and structures if appropriate.

☐ Mean high water and mean low water shorelines (see definitions of “High Water Mark” and “Low Water Mark” at 310 CMR 9.02, C. 91 Regulations).

☐ Dimensions of area proposed to be dredged or excavated.

☐ Notation or indication of disposal site.

☐ Volume of proposed dredging or excavation.

☐ Ordinary high water, proposed drawdown level, and natural (historic) high water (for projects lowering waters of Great Ponds).

Section Views

☐ Existing bottom and bank profiles.

☐ Vertical and/or horizontal scales.

☐ Proposed and existing depths relative to an indicated datum.

☐ Elevation and details of control structure (for projects lowering waters of Great Ponds).

Appendix C: Application Completeness Checklist

Please answer all questions in the General Waterways Application form. If a question does not apply to your project write "not applicable" (n/a) in that block. Please print or type all information provided on the form. Use black ink (blue ink or pencil are not easily reproducible, therefore, neither will be accepted). If additional space is needed, attach extra 8-1/2" x 11" sheets of paper.

☒ **Proper Public Purpose:** For nonwater-dependent projects, a statement must be included that explains how the project serves a proper public purpose that provides greater benefit than detriment to public rights in tidelands or great ponds and the manner in which the project meets the applicable standards. If the project is a nonwater-dependent project located in the coastal zone, the statement should explain how the project complies with the standard governing consistency of the policies of the Massachusetts Coastal Zone Management Program, according to 310 CMR 9.54. If the project is located in an area covered by a Municipal Harbor Plan, the statement should describe how the project conforms to any applicable provisions of such plan pursuant to 310 CMR 9.34(2).

☒ **Plans:** Prepared in accordance with the applicable instructions contained in Appendix A-B of this application. For initial filing, meet the requirements of 310 CMR 9.11(3)(b)(3).

☒ **Applicant Certification:** All applications must be signed by “the landowner if other than the applicant. In lieu of the landowner’s signature, the applicant may provide other evidence of legal authority to submit an application for the project site.” If the project is entirely on land owned by the Commonwealth (e.g. most areas below the current low water mark in tidelands and below the historic high water mark of Great Ponds), you may simply state this in lieu of the “landowner’s signature”.

☐ **Municipal Zoning Certification:** If required, applicants must submit a completed and signed Section E of this application by the municipal clerk or appropriate municipal official or, for the initial filing, an explanation of why the form is not included with the initial application. If the project is a public service project subject to zoning but will not require any municipal approvals, submit a certification to that effect pursuant to 310 CMR 9.34(1).

☐ **Municipal Planning Board Notification:** Applicants must submit a copy of this application to the municipal planning board for the municipality where the project is located. Submittal of the complete application to DEP must include Section H signed by the municipal clerk, or appropriate municipal official for the town where the work is to be performed, except in the case of a proposed bridge, dam, or similar structure across a river, cove, or inlet, in which case it must be certified by every municipality into which the tidewater of said river, cove, or inlet extends.

☐ **Final Order of Conditions:** A copy of one of the following three documents is required with the filing of a General Waterways Application: (1) the Final Order of Conditions (with accompanying plan) under the Wetlands Protection Act; (2) a final Determination of Applicability under that Act stating that an Order of Conditions is not required for the project; or (3) the Notice of Intent for the initial filing (if the project does not trigger review under MEPA).

☒ **Massachusetts Environmental Protection Act (MEPA):** MGL 30, subsections 61-61A and 301 CMR 11.00, submit as appropriate: a copy of the Environmental Notification Form (ENF) and a Certificate of the Secretary of Environmental Affairs thereon, or a copy of the final Environmental Impact Report (EIR) and Certificate of the Secretary stating that it adequately and properly complies with MEPA; and any subsequent Notice of Project change and any determination issued thereon in accordance with MEPA. For the initial filing, only a copy of the ENF and the Certificate of the Secretary thereon must be submitted.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285957
Transmittal No.

Note: If the project is subject to MEPA, the Chapter 91 Public Notice must also be submitted to MEPA for publication in the "Environmental Monitor". MEPA filing deadlines are the 15th and 30th of each month.

Appendix C: Application Completeness Checklist (cont.)

☐ **Water Quality Certificate:** if applicable, pursuant to 310 CMR 9.33, is included.

☐ **Other Approvals:** as applicable pursuant to 310 CMR 9.33 or, for the initial filing, a list of such approvals which must be obtained.

Projects involving dredging:

☐ The term "dredging" means the removal of materials including, but not limited to, rocks, bottom sediments, debris, sand, refuse, plant or animal matter, in any excavating, clearing, deepening, widening or lengthening, either permanently or temporarily, of any flowed tidelands, rivers, streams, ponds or other waters of the Commonwealth. Dredging includes improvement dredging, maintenance dredging, excavating and backfilling or other dredging and subsequent refilling. Included is a completed and signed copy of Part F of the application.

Filing your Completed General Waterways Application:

☒ **For all <u>Water-Dependent</u> applications** – submit a completed General Waterways Application and all required documentation with a *photocopy* of both payment check and DEP's *Transmittal Form for Permit Application & Payment* to the appropriate DEP Boston or regional office (please refer to Pg. 10 of the "Instructions" for the addresses of DEP Regional Offices).

☐ **For all <u>Non Water-Dependent</u> applications** – submit a completed General Waterways Application and all required documentation with a *photocopy* of both payment check and DEP's *Transmittal Form for Permit Application & Payment* to DEP's Boston office.

Department of Environmental Protection
Waterways Regulation Program
One Winter Street
Boston, MA 02108

☒ **Application Fee Payment for <u>ALL Waterways Applications</u>:** Send the appropriate Application fee* (please refer to Page 1 of the "Application"), in the form of a check or money order, along with DEP's *Transmittal Form for Permit Application & Payment*:

Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

* Under extreme circumstances, DEP grants extended time periods for payment of license and permit application fees. If you qualify, check the box entitles "Hardship Request" on the *Transmittal Form for Permit Application & Payment.* See 310 CMR 4.04(3)(c) to identify procedures for making a hardship request. Send hardship request and supporting documentation to the above address.

NOTE: You may be subject to a ***double*** **application fee** if your application for Chapter 91 authorization results from an enforcement action by the Department or another agency of the Commonwealth or its subdivisions, or if your application seeks authorization for an existing unauthorized structure or use.

Chapter 91 Waterways License Application 310 CMR 9.00
Section B. Applicant Information
Bridge #128
Transmittal #X285957

1. Applicants:

NSTAR Electric Company d/b/a Eversource Energy

Denise Bartone

Denise.bartone@eversource.com

247 Station Drive, Westwood, MA 02090

Phone: 781-441-8174

Massachusetts Department of Conservation and Recreation

Paul Jahnige

paul.jahnige@state.ma.us

251 Causeway Street, 9th Floor, Boston, MA 02114

Phone: 617-626-1250

List of abutting parcels 50 feet upstream and downstream of Bridge location:

Bridge 128 (Sudbury)

Parcel #	Owner
(H04-0009)	TOWN OF SUDBURY 325 DUTTON ROAD (BK 11608 PG 127) (Hop Brook Marsh Conservation Land)
(J03-0001)	SUDBURY VALLEY TRUSTEES, INC. 0 DUTTON ROAD (BK 30259 PG 117) (Memorial Forest)

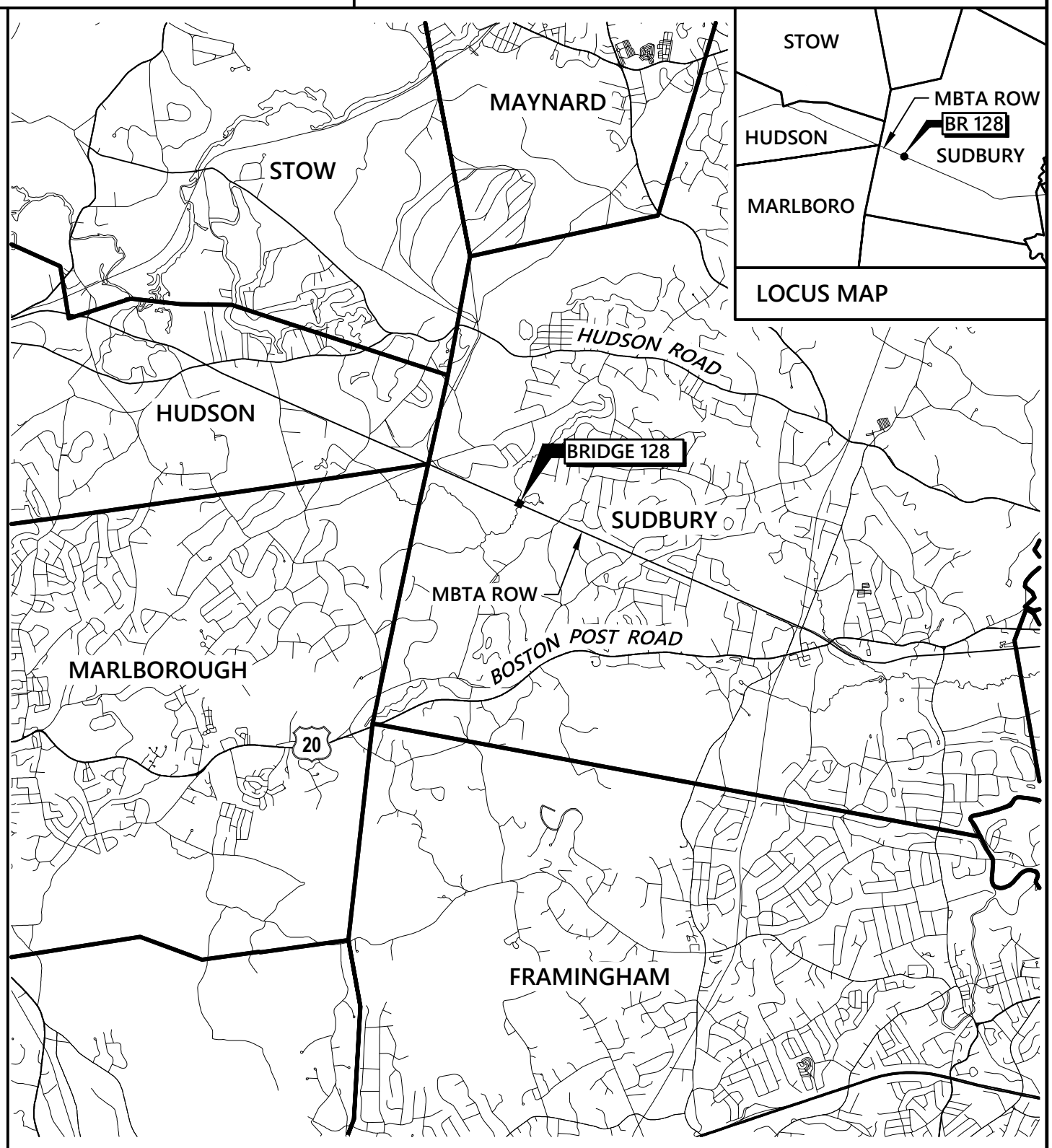
Verified with Cynthia Gerry Director of Assessing Sudbury on 3/25/2020.

Bridge #128
(Transmittal No. 285957)
License Plans

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE



PLAN ACCOMPANYING PETITION OF DCR AND NSTAR ELECTRIC COMPANY TO REPLACE AND ADAPTIVELY REUSE EXISTING RAIL BRIDGE OVER THE WATERS OF HOP BROOK IN SUDBURY, MIDDLESEX COUNTY, MASSACHUSETTS.

NOTE: ALL ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.

N

0 1 MILE

SCALE: 1" = 1 MILE

PROJECT CONTEXT

SHEET 1 OF 4

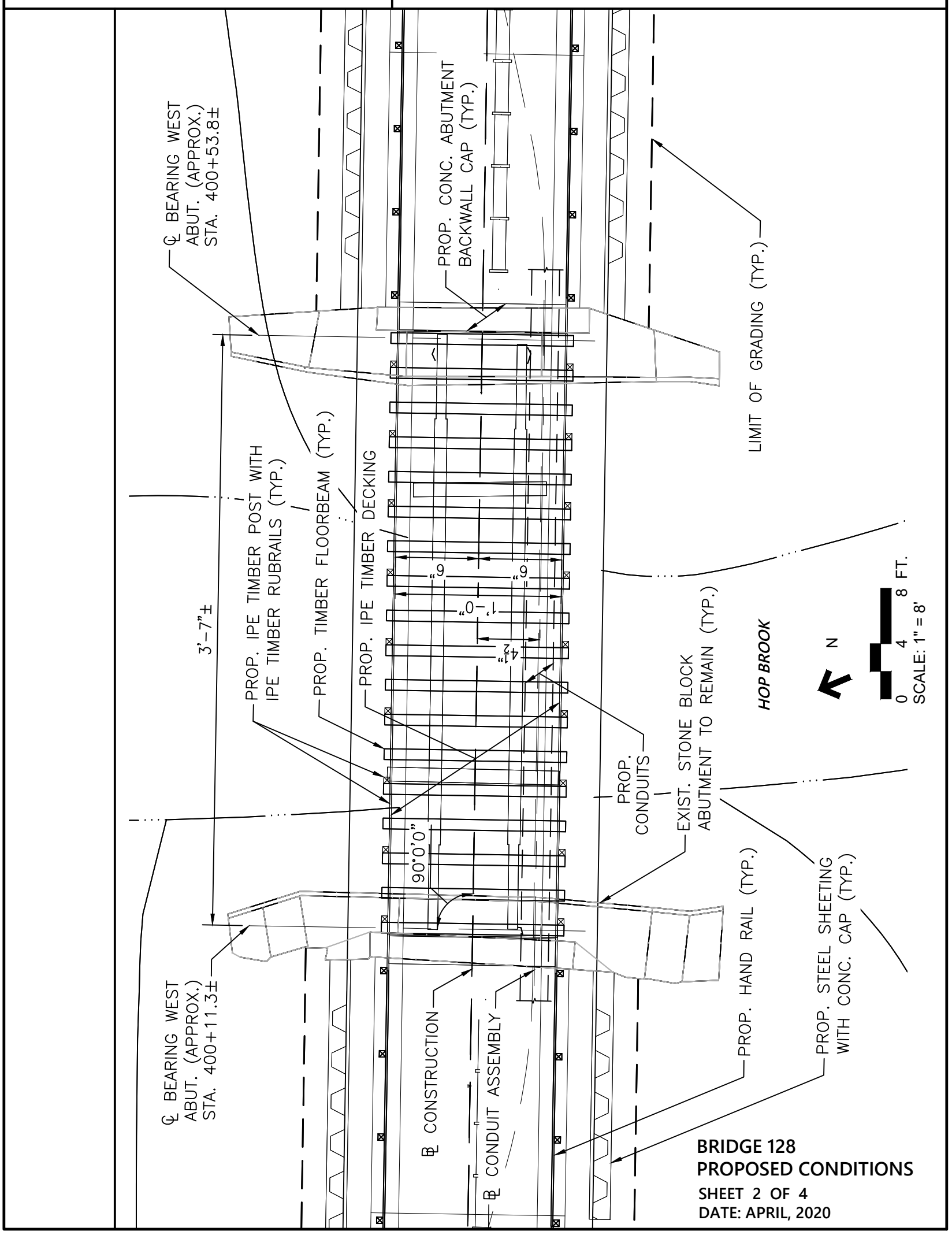
DATE: APRIL, 2020

\\vhb\gbl\proj\Worcester\12970.00 Sudbury-Hudson-EV\cad\ev\planset\Chapter 91\1297003_C91_2020-04-07.dwg

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE

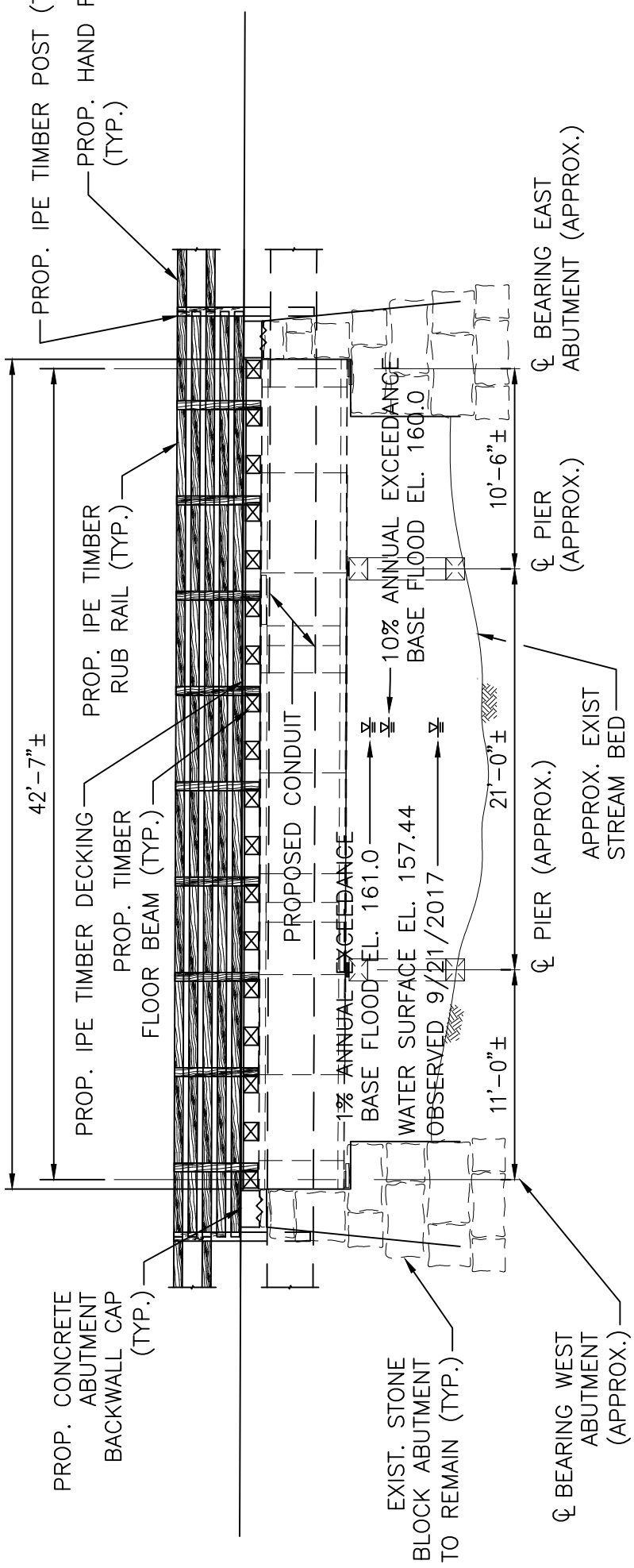


BRIDGE 128
PROPOSED CONDITIONS
SHEET 2 OF 4
DATE: APRIL, 2020

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE



NOTE: ALL ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.

0 4 8 FT.
SCALE: 1" = 8'

BRIDGE 128
PROPOSED ELEVATION
SHEET 3 OF 4
DATE: APRIL, 2020

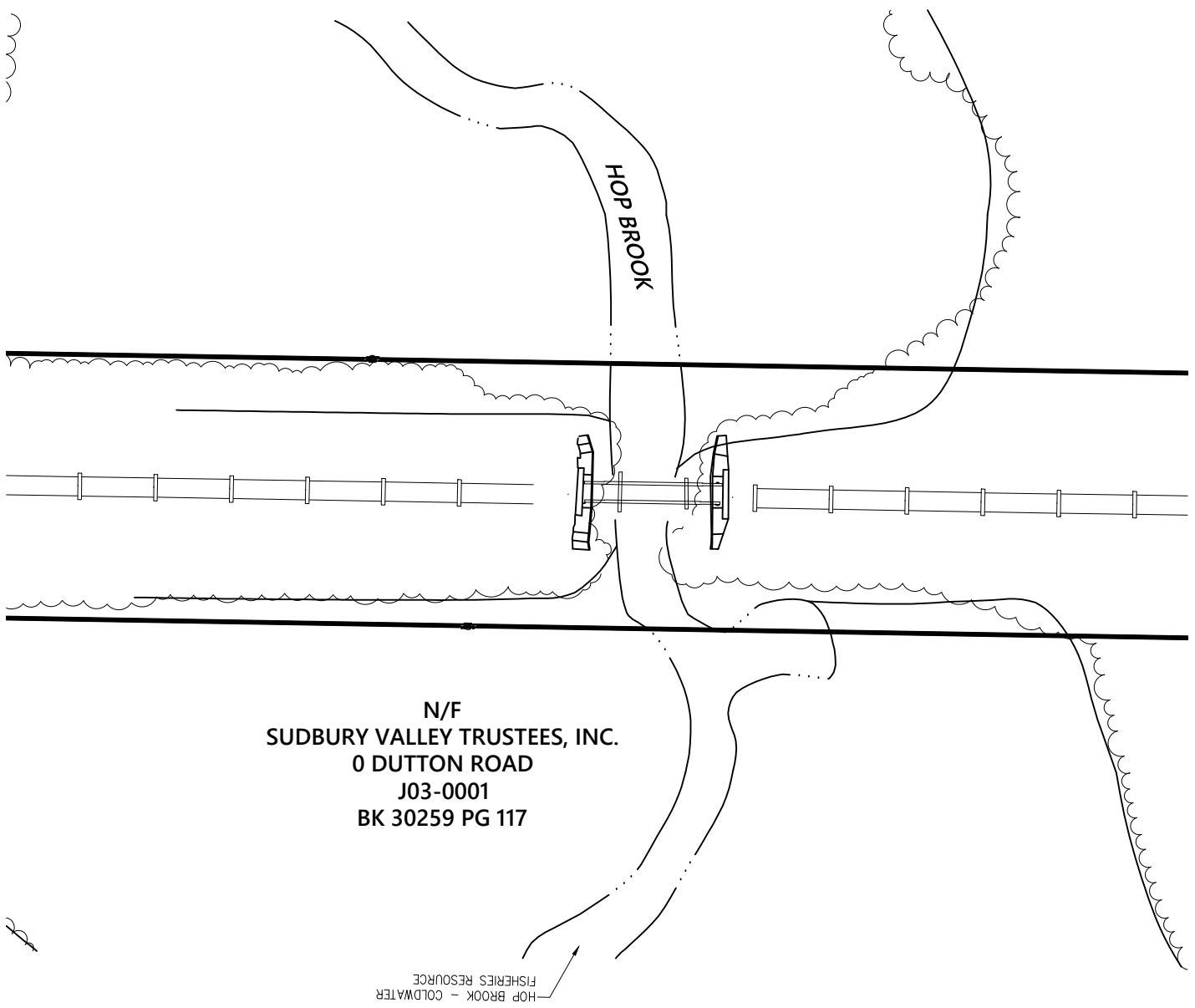
\\vhb\gbl\proj\Worcester\12970.00 Sudbury-Hudson-EV\cad\ev\planset\Chapter 91\1297003_C91_2020-04-07.dwg

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE

N/F
TOWN OF SUDBURY
325 DUTTON ROAD
H04-0009
BK 11608 PG 127



N/F
SUDBURY VALLEY TRUSTEES, INC.
0 DUTTON ROAD
J03-0001
BK 30259 PG 117

N

0 25 50 FT.
SCALE: 1" = 50'

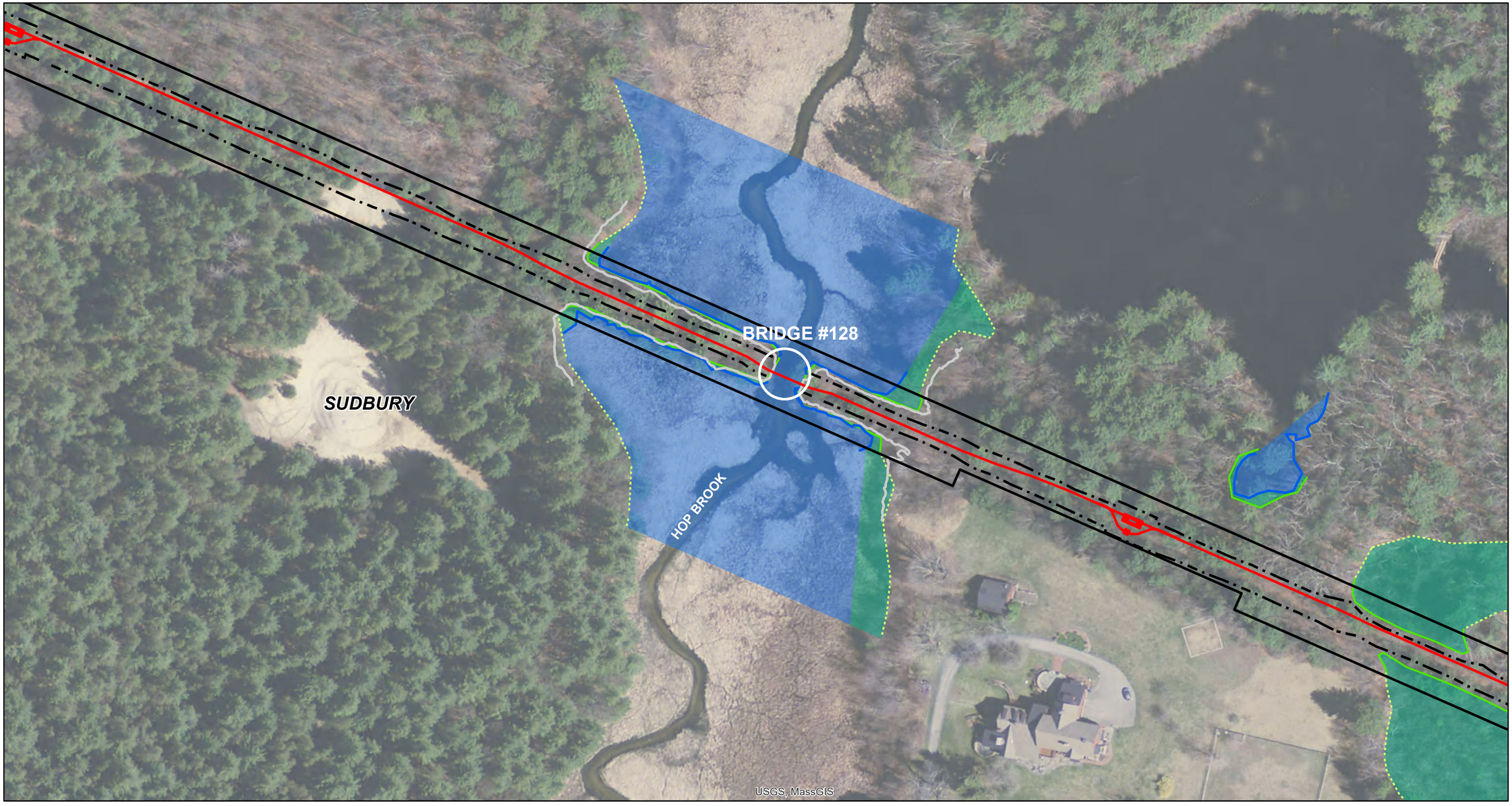
BRIDGE 128
ABUTTERS PLAN
SHEET 4 OF 4
DATE: APRIL, 2020

\\vhb\gbl\proj\Worcester\12970.00 Sudbury-Hudson-EV\cad\ev\planset\Chapter 91\1297003_C91_2020-04-07.dwg

Bridge #128
(Transmittal No. 285957)
Figures

- Figure 2-2 Bridge #128 Site Aerial Map
- Figure 3-2 Environmental Resources and FIRM Bridge #128

Figure 2-2 Hop Brook Crossing 1: Bridge #128



- Proposed Transmission Line
- Limit of Grading
- Inactive MBTA ROW
- Bordering Land Subject to Flooding
- Delineated Bordering Vegetated Wetland Edge
- Delineated Isolated Vegetated Wetland Edge
- Approximate Wetland Edge
- Delineated Top of Bank
- Intermittent Stream
- Perennial Stream
- Bordering Vegetated Wetlands
- Isolated Vegetated Wetlands
- Land Under Water

0 100 200 Feet

N

EVERSOURCE ENERGY

dcr MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project

Bridge Replacements

Figure 3-2
Waterways License Application

vhb

Attachment D – Bridge #127

Chapter 91 License Forms

- Bridge #127 Transmittal Form (Transmittal No. X 285958)
- Bridge #127 Waterways License Application

License Plans

Figures

- Figure 2-3 Bridge #127 Site Aerial Map
- Figure 3-3 Environmental Resources and FIRM Bridge #127

Bridge #127 Chapter 91 License Forms

- Transmittal Form (Transmittal No. X 285958)
- Waterways License Application

Enter your transmittal number → X 285958 (Transmittal Number)

Your unique Transmittal Number can be accessed online:
http://www.mass.gov/eea/agencies/massdep/service/approvals/transmittal-form-for-payment.html

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: MassDEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

1. Permit Code: 4 to 7 character code from permit instructions	2. Name of Permit Category
BRB WW01c	Water Dependent Extended Term

3. Type of Project or Activity: Infrastructure Crossing Facility, Public Boardwalk/Waterfront Park

B. Applicant Information – Firm or Individual

1. Name of Firm - Or, if party needing this approval is an individual enter name below: Multiple, see attached

2. **Last Name** of Individual	3. **First Name** of Individual	4. MI

5. Street Address:

6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #

11. Contact Person	12. e-mail address

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual:

2. Street Address:

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #

8. DEP Facility Number (if Known)	9. Federal I.D. Number (if Known)	10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual: VHB, Inc.

2. Address: 101 Walnut Street, P.O. Box 9151

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Watertown	MA	02471	508-513-2713	

8. Contact Person	9. LSP Number (BWSC Permits only)
Vivian Kimball	

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☒ yes ☐ no
   If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit: 15123, 15703 (EOEA File Number)

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

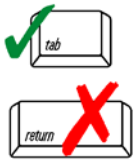
1. ☐ **Fee** Exempt (city, town or municipal housing authority)(state agency if fee is $100 or less).
   There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

Check Number	Dollar Amount	Date
91334	$3,350	5/12/20

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285958
Transmittal No.

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



For assistance in completing this application, please see the "Instructions".

A. Application Information (Check one)

NOTE: For Chapter 91 Simplified License application form and information see the Self Licensing Package for BRP WW06.

Name (Complete Application Sections)	Check One	Fee	Application #
WATER-DEPENDENT -			
General (A-H)	☐ Residential with ≤ 4 units	$215.00	BRP WW01a
	☐ Other	$330.00	BRP WW01b
	☒ Extended Term	$3,350.00	BRP WW01c
Amendment (A-H)	☐ Residential with ≤ 4 units	$100.00	BRP WW03a
	☐ Other	$125.00	BRP WW03b
NONWATER-DEPENDENT -			
Full (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW15a
	☐ Other	$2,005.00	BRP WW15b
	☐ Extended Term	$3,350.00	BRP WW15c
Partial (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW14a
	☐ Other	$2,005.00	BRP WW14b
	☐ Extended Term	$3,350.00	BRP WW14c
Municipal Harbor Plan (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW16a
	☐ Other	$2,005.00	BRP WW16b
	☐ Extended Term	$3,350.00	BRP WW16c
Joint MEPA/EIR (A-H)	☐ Residential with ≤ 4 units	$665.00	BRP WW17a
	☐ Other	$2,005.00	BRP WW17b
	☐ Extended Term	$3,350.00	BRP WW17c
Amendment (A-H)	☐ Residential with ≤ 4 units	$530.00	BRP WW03c
	☐ Other	$1,000.00	BRP WW03d
	☐ Extended Term	$1,335.00	BRP WW03e

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285958
Transmittal No.

B. Applicant Information Proposed Project/Use Information

1. Applicant:

Multiple- see attached Applicatant Information sheet
Name

E-mail Address

Mailing Address

Note: Please refer to the "Instructions"

City/Town | State | Zip Code

Telephone Number | Fax Number

2. Authorized Agent (if any):

Vivian Kimball
Name

vkimball@vhb.com
E-mail Address

101 Walnut Street
Mailing Address

Watertown | MA | 02471
City/Town | State | Zip Code

5085132713
Telephone Number

6179242286
Fax Number

C. Proposed Project/Use Information

1. Property Information (all information must be provided):

Massachusetts Bay Transportation Authority
Owner Name (if different from applicant)

Map K09 Parcel 5000
Tax Assessor's Map and Parcel Numbers | Latitude | Longitude

MBTA ROW, Sudbury | MA | 01776
Street Address and City/Town | State | Zip Code

2. Registered Land ☐ Yes ☒ No

3. Name of the water body where the project site is located:

Hop Brook

4. Description of the water body in which the project site is located (check all that apply):

Type	**Nature**	**Designation**
☒ Nontidal river/stream	☒ Natural	☐ Area of Critical Environmental Concern
☐ Flowed tidelands	☐ Enlarged/dammed	☐ Designated Port Area
☐ Filled tidelands	☐ Uncertain	☐ Ocean Sanctuary
☐ Great Pond		☐ Uncertain
☐ Uncertain		

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285958
Transmittal No.

C. Proposed Project/Use Information (cont.)

Select use(s) from Project Type Table on pg. 2 of the "Instructions"

5. Proposed Use/Activity description

The use/activity is replacement of a degraded former railroad bridge over a non-tidal stream to carry a portion of the DCR Massachusetts Central Rail Trail and an infrastructure crossing for a new Eversource electric transmission line.

6. What is the estimated total cost of proposed work (including materials & labor)?

$1,000,000 (bridge 127 only)

7. List the name & complete mailing address of each abutter (attach additional sheets, if necessary). An abutter is defined as the owner of land that shares a common boundary with the project site, as well as the owner of land that lies within 50' across a waterbody from the project.

Name	Address
See attached abutters list	

D. Project Plans

1. I have attached plans for my project in accordance with the instructions contained in (check one):

☒ Appendix A (License plan) ☐ Appendix B (Permit plan)

2. Other State and Local Approvals/Certifications

☐ 401 Water Quality Certificate	Date of Issuance
☒ Wetlands	301-1287 File Number
☐ Jurisdictional Determination	JD- File Number
☒ MEPA	15123, 15703 File Number
☒ EOEA Secretary Certificate	1/10/14, 9/14/18 Date
☐ 21E Waste Site Cleanup	RTN Number

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

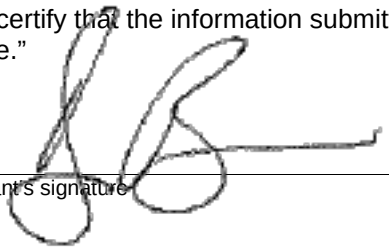
X 285958
Transmittal No.

E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

“I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection.”

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge.”



Applicant’s signature — Date: 5/4/20

Property Owner’s signature (if different than applicant) — Date

Agent’s signature (if applicable) — Date

E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

"I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection."

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge."

Applicant's signature — Date

Property Owner's signature (if different than applicant) — Date 4/11/19

Priscilla Geigis, DCR Deputy Commissioner for Conservation and Resource Stewardship

Agent's signature (if applicable) — Date

E. Certification

All applicants, property owners and authorized agents must sign this page. All future application correspondence may be signed by the authorized agent alone.

"I hereby make application for a permit or license to authorize the activities I have described herein. Upon my signature, I agree to allow the duly authorized representatives of the Massachusetts Department of Environmental Protection and the Massachusetts Coastal Zone Management Program to enter upon the premises of the project site at reasonable times for the purpose of inspection."

"I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge."

Applicant's signature	Date
Holly Palmgren, MBTA Property Owner's signature (if different than applicant)	3/20/19 Date
Agent's signature (if applicable)	Date

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285958
Transmittal No.

F. Waterways Dredging Addendum

1. Provide a description of the dredging project

   ☐ Maintenance Dredging (include last dredge date & permit no.) ☐ Improvement Dredging

   N/A
   Purpose of Dredging

2. What is the volume (cubic yards) of material to be dredged?

   _____

3. What method will be used to dredge?

   ☐ Hydraulic ☐ Mechanical ☐ Other

4. Describe disposal method and provide disposal location (include separate disposal site location map)

   _____

   _____

5. Provide copy of grain size analysis. If grain size is compatible for beach nourishment purposes, the Department recommends that the dredged material be used as beach nourishment for public beaches. **Note:** In the event beach nourishment is proposed for private property, pursuant to 310 CMR 9.40(4)(a)1, public access easements below the existing high water mark shall be secured by applicant and submitted to the Department.

Massachusetts Department of Environmental Protection
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G. Municipal Zoning Certificate

Name of Applicant

Project street address | Waterway | City/Town

Description of use or change in use:

Not Applicable

To be completed by municipal clerk or appropriate municipal official:

"I hereby certify that the project described above and more fully detailed in the applicant's waterways license application and plans is not in violation of local zoning ordinances and bylaws."

Printed Name of Municipal Official | Date

Signature of Municipal Official | Title | City/Town

Massachusetts Department of Environmental Protection
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H. Municipal Planning Board Notification

Notice to Applicant:

Section H should be completed and submitted along with the original application material.

Multiple- see attached Applicant Information Sheet
Name of Applicant

MBTA ROW	Hop Brook	Sudbury
Project street address	Waterway	City/Town

Description of use or change in use:

The use/activity is replacement of a degraded former railroad bridge over a non-tidal stream to carry a portion of the DCR Massachusetts Central Rail Trail and an infrastructure crossing for a new Eversource electric transmission line.

To be completed by municipal clerk or appropriate municipal official:

"I hereby certify that the project described above and more fully detailed in the applicant's waterways license application and plans have been submitted by the applicant to the municipal planning board."

Printed Name of Municipal Official — Date

Signature of Municipal Official — Title — City/Town

Note: Any comments, including but not limited to written comments, by the general public, applicant, municipality, and/or an interested party submitted after the close of the public comment period pertaining to this Application shall not be considered, and shall not constitute a basis for standing in any further appeal pursuant to 310 CMR 9.13(4) and/or 310 CMR 9.17.

Appendix A: License Plan Checklist

General View

- ☒ PE or RLS, as deemed appropriate by the Department, stamped and signed, in ink, each sheet within 8 1/2 inch by 11 inch border
- ☒ Format and dimensions conform to "Sample Plan" (attached)
- ☒ Minimum letter size is 1/8 of an inch if freehand lettering, 1/10 of an inch if letter guides are used
- ☒ Sheet number with total number in set on each sheet
- ☒ Title sheet contains the following in lower left: Plans accompanying Petition of [Applicant's name, structures and/or fill or change in use, waterway and municipality]
- ☒ North arrow
- ☒ Scale is suitable to clearly show proposed structures and enough of shoreline, existing structures and roadways to define its exact location
- ☒ Scale is stated & shown by graphic bar scale on each sheet
- ☒ Initial plans may be printed on bond; final plans due before License issuance must be on 3mil Mylar.

Structures and Fill

- ☒ All Structures and Fill shown in full BLACK lines, clearly labeling which portions are existing, which are Proposed and indicating Existing Waterways Licenses
- ☒ *Cross Section Views* show MHW* and MLW* and structure finish elevations
- ☐ *Dredge or Fill*, actual cubic yardage must be stated and typical cross sections shown
- ☒ All Structures and Fill shown in full BLACK lines, clearly labeling which portions are existing, which are Proposed and indicating Existing Waterways Licenses
- ☒ *Cross Section Views* show MHW* and MLW* and structure finish elevations
- ☐ *Dredge or Fill*, actual cubic yardage must be stated and typical cross sections shown
- ☐ Actual dimensions of structures(s) and or fill and the distance which they extend beyond MHW* or OHW*
- ☒ Change in Use of any structures on site must be stated

* See 310 CMR 9.02, Waterways Regulations definitions of High Water Mark, Historic High Water Mark, Historic Low Water Mark, and Low Water Mark. *Note:* DEP may, at its discretion, accept appropriately scaled preliminary plans in lieu of the plans described above. In general, DEP will accept preliminary plans only for non-water dependent projects and projects covered by MEPA to address site design components such as visual access, landscaping & site coverage. *Anyone wishing to submit preliminary plans must obtain prior approval of the DEP Waterways Program* before

submitting them with their application.

Appendix A: License Plan Checklist (cont.)

Boundaries

- ☒ Property lines, full black lines, ————, along with abutters' names and addresses
- ☒ Mean High Water (MHW)* or Ordinary High Water (OHW)*, full black line ————
- ☒ Mean Low Water (MLW)*, black dotted line, (.....)
- ☒ Historic MHW* or OHW* (— — — —)
- ☒ Historic MLW* (..._..._..._)
- ☐ State Harbor Lines, black dot-dash line (– . – . – . –) with indication of Chapter & Act establishing them (Ch. , Acts of)
- ☒ Reference datum is National Geodetic Vertical Datum (NGVD) or (NAVD).
- ☒ Floodplain Boundaries according to most recent FEMA maps
- ☐ Proposed & Existing Easements described in metes & bounds

Water-Dependent Structures

- ☐ Distance from adjacent piers, ramps or floats (minimum distance of 25' from property line, where feasible)
- ☐ Distance from nearest opposite shoreline
- ☐ Distance from outside edge of any Navigable Channel
- ☐ Access stairs at MHW for lateral public passage, or 5 feet of clearance under structure at MHW.

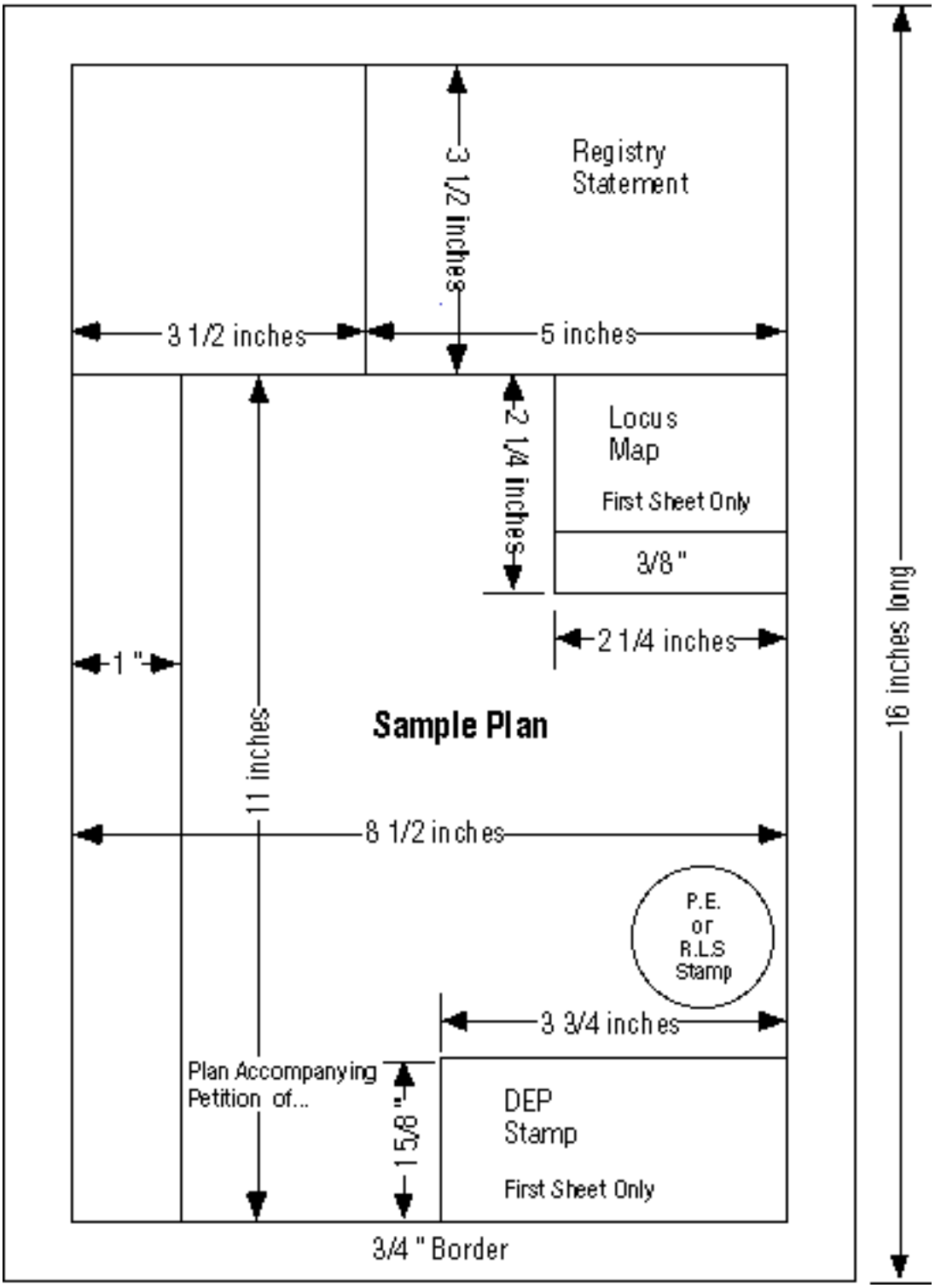
Non Water-Dependent Structures

- ☐ Depict extent of "Water-dependent Use Zone".

See Waterways Regulations at 310 CMR 9.51-9.53 for additional standards for non water-dependent use projects.

Note: Final Mylar project site plans will be required upon notice from the Department, prior to issuance of the Chapter 91 Waterways License.

Appendix A: License Plan Checklist Cont.



Appendix B: Dredging Permit Plan Checklist

For projects applying for dredging permits only, enclose drawings with the General Waterways Application that include the following information:

General View

☐ Submit one original of all drawings. Submit the fewest number of sheets necessary to adequately illustrate the project on 8-1/2 inch X 11 inch paper.

☐ A 1-inch margin should be left at the top edge of each drawing for purposes of reproduction and binding. A 1/2 inch margin is required in the three other edges.

☐ A complete title block on each drawing submitted should identify the project and contain: the name of the waterway; name of the applicant; number of the sheet and total number of sheets in the set; and the date the drawing was prepared.

☐ Use only dot shading, hatching, and dashed or dotted line to show or indicate particular features of the site on the drawings.

☐ If deemed appropriate by the Department, certification by the Registered Professional Engineer or Land Surveyor is included.

Plan View

☐ North Arrow

☐ Locus Map

☐ Standard engineering scale.

☐ Distances from channel lines and structures if appropriate.

☐ Mean high water and mean low water shorelines (see definitions of “High Water Mark” and “Low Water Mark” at 310 CMR 9.02, C. 91 Regulations).

☐ Dimensions of area proposed to be dredged or excavated.

☐ Notation or indication of disposal site.

☐ Volume of proposed dredging or excavation.

☐ Ordinary high water, proposed drawdown level, and natural (historic) high water (for projects lowering waters of Great Ponds).

Section Views

☐ Existing bottom and bank profiles.

☐ Vertical and/or horizontal scales.

☐ Proposed and existing depths relative to an indicated datum.

☐ Elevation and details of control structure (for projects lowering waters of Great Ponds).

Appendix C: Application Completeness Checklist

Please answer all questions in the General Waterways Application form. If a question does not apply to your project write "not applicable" (n/a) in that block. Please print or type all information provided on the form. Use black ink (blue ink or pencil are not easily reproducible, therefore, neither will be accepted). If additional space is needed, attach extra 8-1/2" x 11" sheets of paper.

☒ **Proper Public Purpose:** For nonwater-dependent projects, a statement must be included that explains how the project serves a proper public purpose that provides greater benefit than detriment to public rights in tidelands or great ponds and the manner in which the project meets the applicable standards. If the project is a nonwater-dependent project located in the coastal zone, the statement should explain how the project complies with the standard governing consistency of the policies of the Massachusetts Coastal Zone Management Program, according to 310 CMR 9.54. If the project is located in an area covered by a Municipal Harbor Plan, the statement should describe how the project conforms to any applicable provisions of such plan pursuant to 310 CMR 9.34(2).

☒ **Plans:** Prepared in accordance with the applicable instructions contained in Appendix A-B of this application. For initial filing, meet the requirements of 310 CMR 9.11(3)(b)(3).

☒ **Applicant Certification:** All applications must be signed by “the landowner if other than the applicant. In lieu of the landowner’s signature, the applicant may provide other evidence of legal authority to submit an application for the project site.” If the project is entirely on land owned by the Commonwealth (e.g. most areas below the current low water mark in tidelands and below the historic high water mark of Great Ponds), you may simply state this in lieu of the “landowner’s signature”.

☐ **Municipal Zoning Certification:** If required, applicants must submit a completed and signed Section E of this application by the municipal clerk or appropriate municipal official or, for the initial filing, an explanation of why the form is not included with the initial application. If the project is a public service project subject to zoning but will not require any municipal approvals, submit a certification to that effect pursuant to 310 CMR 9.34(1).

☐ **Municipal Planning Board Notification:** Applicants must submit a copy of this application to the municipal planning board for the municipality where the project is located. Submittal of the complete application to DEP must include Section H signed by the municipal clerk, or appropriate municipal official for the town where the work is to be performed, except in the case of a proposed bridge, dam, or similar structure across a river, cove, or inlet, in which case it must be certified by every municipality into which the tidewater of said river, cove, or inlet extends.

☐ **Final Order of Conditions:** A copy of one of the following three documents is required with the filing of a General Waterways Application: (1) the Final Order of Conditions (with accompanying plan) under the Wetlands Protection Act; (2) a final Determination of Applicability under that Act stating that an Order of Conditions is not required for the project; or (3) the Notice of Intent for the initial filing (if the project does not trigger review under MEPA).

☒ **Massachusetts Environmental Protection Act (MEPA):** MGL 30, subsections 61-61A and 301 CMR 11.00, submit as appropriate: a copy of the Environmental Notification Form (ENF) and a Certificate of the Secretary of Environmental Affairs thereon, or a copy of the final Environmental Impact Report (EIR) and Certificate of the Secretary stating that it adequately and properly complies with MEPA; and any subsequent Notice of Project change and any determination issued thereon in accordance with MEPA. For the initial filing, only a copy of the ENF and the Certificate of the Secretary thereon must be submitted.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Waterways Regulation Program
Chapter 91 Waterways License Application - 310 CMR 9.00
Water-Dependent, Nonwater-Dependent, Amendment

X 285958
Transmittal No.

Note: If the project is subject to MEPA, the Chapter 91 Public Notice must also be submitted to MEPA for publication in the "Environmental Monitor". MEPA filing deadlines are the 15th and 30th of each month.

Appendix C: Application Completeness Checklist (cont.)

☐ **Water Quality Certificate:** if applicable, pursuant to 310 CMR 9.33, is included.

☐ **Other Approvals:** as applicable pursuant to 310 CMR 9.33 or, for the initial filing, a list of such approvals which must be obtained.

Projects involving dredging:

☐ The term "dredging" means the removal of materials including, but not limited to, rocks, bottom sediments, debris, sand, refuse, plant or animal matter, in any excavating, clearing, deepening, widening or lengthening, either permanently or temporarily, of any flowed tidelands, rivers, streams, ponds or other waters of the Commonwealth. Dredging includes improvement dredging, maintenance dredging, excavating and backfilling or other dredging and subsequent refilling. Included is a completed and signed copy of Part F of the application.

Filing your Completed General Waterways Application:

☒ **For all <u>Water-Dependent</u> applications** – submit a completed General Waterways Application and all required documentation with a *photocopy* of both payment check and DEP's *Transmittal Form for Permit Application & Payment* to the appropriate DEP Boston or regional office (please refer to Pg. 10 of the "Instructions" for the addresses of DEP Regional Offices).

☐ **For all <u>Non Water-Dependent</u> applications** – submit a completed General Waterways Application and all required documentation with a *photocopy* of both payment check and DEP's *Transmittal Form for Permit Application & Payment* to DEP's Boston office.

Department of Environmental Protection
Waterways Regulation Program
One Winter Street
Boston, MA 02108

☒ **Application Fee Payment for <u>ALL Waterways Applications</u>:** Send the appropriate Application fee* (please refer to Page 1 of the "Application"), in the form of a check or money order, along with DEP's *Transmittal Form for Permit Application & Payment*:

Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

* Under extreme circumstances, DEP grants extended time periods for payment of license and permit application fees. If you qualify, check the box entitles "Hardship Request" on the *Transmittal Form for Permit Application & Payment.* See 310 CMR 4.04(3)(c) to identify procedures for making a hardship request. Send hardship request and supporting documentation to the above address.

NOTE: You may be subject to a ***double*** **application fee** if your application for Chapter 91 authorization results from an enforcement action by the Department or another agency of the Commonwealth or its subdivisions, or if your application seeks authorization for an existing unauthorized structure or use.

Chapter 91 Waterways License Application 310 CMR 9.00
Section B. Applicant Information
Bridge #127
Transmittal #X285958

1. Applicants:

NSTAR Electric Company d/b/a Eversource Energy

Denise Bartone

Denise.bartone@eversource.com

247 Station Drive, Westwood, MA 02090

Phone: 781-441-8174

Massachusetts Department of Conservation and Recreation

Paul Jahnige

paul.jahnige@state.ma.us

251 Causeway Street, 9th Floor, Boston, MA 02114

Phone: 617-626-1250

List of abutting parcels 50 feet upstream and downstream of Bridge location:

Bridge 127 (Sudbury)

Parcel #	Owner
K08-0020-0-102	RAPA DENNIS MD & 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-103	WADSWORTH PAMELA R & CHARLES K 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-201	LAMKIN ROBERT B & JOAN R 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-202	BURKLEY ELAINE J 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-203	PARRISH R WAYNE & CAROLE B 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-301	TABLOSKI THEODORE F & PATRICIA A 35 MAPLE AVE UNIT 301 SUDBURY, MA 01776
K08-0020-0-302	BRADY CORNELIUS W & MARGARET 35 MAPLE AVE UNIT 302 SUDBURY, MA 01776
K08-0020-0-303	VANWOERKOM JACK A & 46 CONCORD RD WESTON, MA 02493
K08-0020-0-401	REED JOHN J 6430 GULF DR HOLMES BEACH , FL 34217-1690
K08-0020-0-402	KATZ PHILIP 35 MAPLE AVE SUDBURY, MA 01776

K08-0020-0-501	REVIS SUSAN M & ANTONY 35 MAPLE AVE UNIT 501 SUDBURY, MA 01776
K08-0020-0-502	SYNNOTT MARK B & CHERYL E 35 MAPLE AVE UNIT 502 SUDBURY, MA 01776
K08-0020-0-503	DROPKIN GOLDIE 35 MAPLE AVE UNIT 503 SUDBURY, MA 01776
K08-0020-0-601	PERLMAN NOAH & LAUREN 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-602	GOODMAN LEON & LEONA 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-701	AARONSON BURTON C & MAXINE 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-702	CONLIN JEFFREY L 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-703	VARGO MARK W & KAREN M 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-801	LUBAR EDWARD & PHYLLIS TRS 35 MAPLE AVE UNIT 801 SUDBURY, MA 01776
K08-0020-0-802	NORINA BOYLE 35 MAPLE AVE UNIT 802 SUDBURY, MA 01776
K08-0020-0-901	HULIHAN MAILE 35 MAPLE AVE SUDBURY, MA 01776
K08-0020-0-902	FLORU DAN & MARIETTA 35 MAPLE AVE SUDBURY, MA 01776

K09-0059-0-1	THOMPSON ROBERT J 5 APPLESEED DR WESTBOROUGH, MA 01581
K09-0059-0-2	CHALAH ANAS & CARLA 6 BIGELOW DR SUDBURY, MA 01776
K09-0059-0-2A1	ANDERSON ROBERT M TRS 321 BOSTON POST RD SUDBURY, MA 01776
K09-0059-0-3A1	POYDAR HENRY R TRS 76 BIRCHWOOD LN LINCOLN, MA 01773
K09-0059-0-4A1	RPG PROPERTIES LLC 321 BOSTON POST RD SUDBURY, MA 01776
K09-0059-0-2B1	ANDERSON ROBERT M TRS 321 BOSTON POST RD SUDBURY, MA 01776
K09-0059-0-3B1	POYDAR HENRY R TRS 76 BIRCHWOOD LN LINCOLN, MA 01773
K09-0059-0-4B1	RPG PROPERTIES LLC 321 BOSTON POST RD SUDBURY, MA 01776
K09-0059-0-3C1	PEDULLA BARBARA M 321 BOSTON POST RD UNIT 3C SUDBURY, MA 01776
K09-0059-0-4C1	NICKERSON GLENDON B & GLENDON 321 BOSTON POST RD SUITE 4C SUDBURY, MA 01776
K09-0059-0-3D1	PRCC LLC 321 BOSTON POST RD UNIT 3D SUDBURY, MA 01776
K09-0059-0-1A3	SALVIA PETER M & SUSAN W 45 BISHOP LANE SUDBURY, MA 01776

K09-0059-0-2A3	STONE LAURA & RICHARD 323 2A BOSTON POST RD SUDBURY, MA 0177
K09-0059-0-3A3	323 BOSTON POST ROAD REALTY LL 323 BOSTON POST RD STE 3A SUDBURY, MA 01776
K09-0059-0-4A3	RONG QING DU 323 BOSTON POST RD 4A SUDBURY, MA 01776
K09-0059-0-1B3	SALVIA PETER M & SUSAN W 45 BISHOP LANE SUDBURY, MA 01776
K09-0059-0-2B3	HELWIG MARK W & RUTHIE 18 NADINE RD FRAMINGHAM, MA 01701
K09-0059-0-3B3	323 BOSTON POST ROAD REALTY LL 323 BOSTON POST RD STE 3A SUDBURY, MA 01776
K09-0059-0-4B3	RONG QING DU 323 BOSTON POST RD 4A SUDBURY, MA 01776
K09-0059-0-1C3	GERBE THOMAS 323 BOSTON POST RD UNIT 1C SUDBURY, MA 01776
K09-0059-0-2C3	HELWIG MARK W & RUTHIE 18 NADINE RD FRAMINGHAM, MA 01701
K09-0059-0-3C3	LOPILATO PAUL V & 323 BOSTON POST RD UNIT 3C SUDBURY, MA 01776
K09-0059-0-4C3	SUITE 4C LLC 323 BOSTON POST RD 4C SUDBURY, MA 01776
K09-0059-0-2D3	HELWIG MARK W & RUTHIE 18 NADINE RD FRAMINGHAM, MA 01701

K09-0059-0-3D3	LOPILATO PAUL V & 323 BOSTON POST RD UNIT 3D SUDBURY, MA 01776
K09-0059-0-15	O`CONNOR REALTY GROUP LLC 325 BOSTON POST RD UNIT 1 SUDBURY, MA 01776
K09-0059-0-25	SLB PUBLISHING LLC 42 FAIRVIEW RD WESTON, MA 02493
K09-0059-0-35	ARCH PROPERTY GROUP LLC 3 BROOKSIDE FARM LN SUDBURY, MA 01776
K09-0059-0-45	MCGLYNN PARTNERS LLC 325 BOSTON POST ROAD SUDBURY, MA 01776
K09-0057-0-1A	SPENCER THOMAS W JR 327A BOSTON POST RD SUDBURY, MA 01776
K09-0057-0-1B	PEDO REALTY LLC 45 MEADOWBROOK CIR SUDBURY, MA 01776
K09-0057-0-1C	STRAUS MERRIL & ELLEN 327 BOSTON POST RD SUITE C SUDBURY, MA 01776
K09-0057-0-1D	YAFFE PETER E & STEINBERG 327 BOSTON POST RD SUDBURY, MA 01776
K09-0057-0-1E	JAFAROV VUGAR 18 PINEWOOD AVE SUDBURY, MA 01776
K09-0057-0-1F	CTA REAL ESTATE HOLDINGS LLC 327 F BOSTON POST RD SUDBURY, MA 01776
K09-0057-0-11A	CONVENIENT HOMECARE SERVICES INC 689 MAIN ST WALTHAM , MA 02451

K09-0057-0-11B	SHANNON PRODUCTS CORP 329 BOSTON POST RD, UNIT 2B SUDBURY, MA 01776
K09-0057-0-11C	CTA REAL ESTATE HOLDINGS LLC 327 F BOSTON POST RD SUDBURY, MA 01776
K09-0057-0-11D	CTA REAL ESTATE HOLDINGS LLC 327 F BOSTON POST RD SUDBURY, MA 01776
K08-0029	SUDBURY VALLEY TRUSTEES INC. 0 BOSTON POST ROAD (BK 14360 PG 552)
K09-0069	MASS BAY TRANSPORTATION AUTH 0 MAPLE AVE (BK 11317 PG 113)

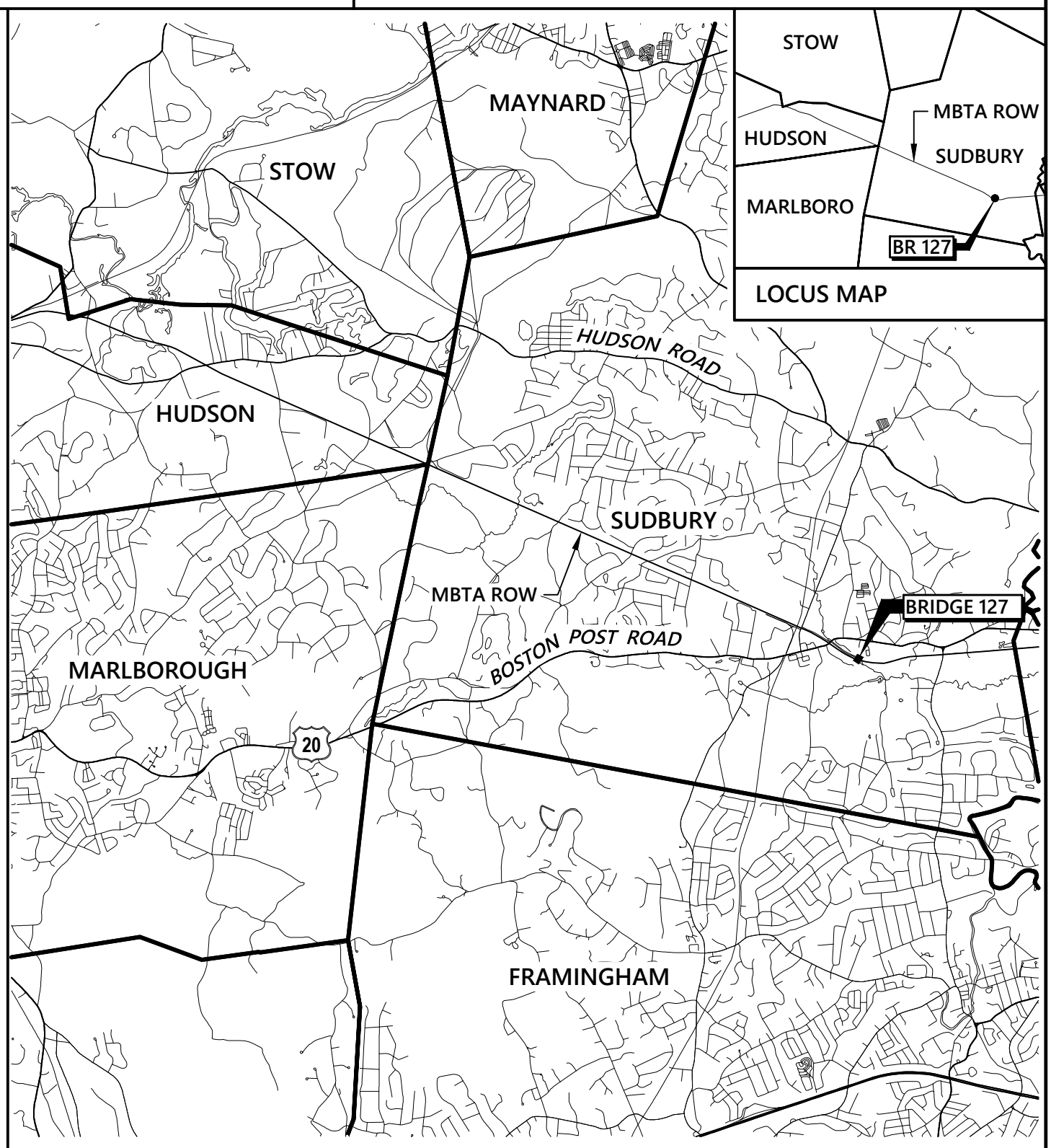
Verified with Cynthia Gerry Director of Assessing Sudbury on 3/25/2020.

Bridge #127
(Transmittal No. 285958)
License Plans

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE



LOCUS MAP

PLAN ACCOMPANYING PETITION OF DCR AND NSTAR ELECTRIC COMPANY TO REPLACE AND ADAPTIVELY REUSE EXISTING RAIL BRIDGE OVER THE WATERS OF HOP BROOK IN SUDBURY, MIDDLESEX COUNTY, MASSACHUSETTS.

NOTE: ALL ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.

N

0 1 MILE

SCALE: 1" = 1 MILE

PROJECT CONTEXT

SHEET 1 OF 4

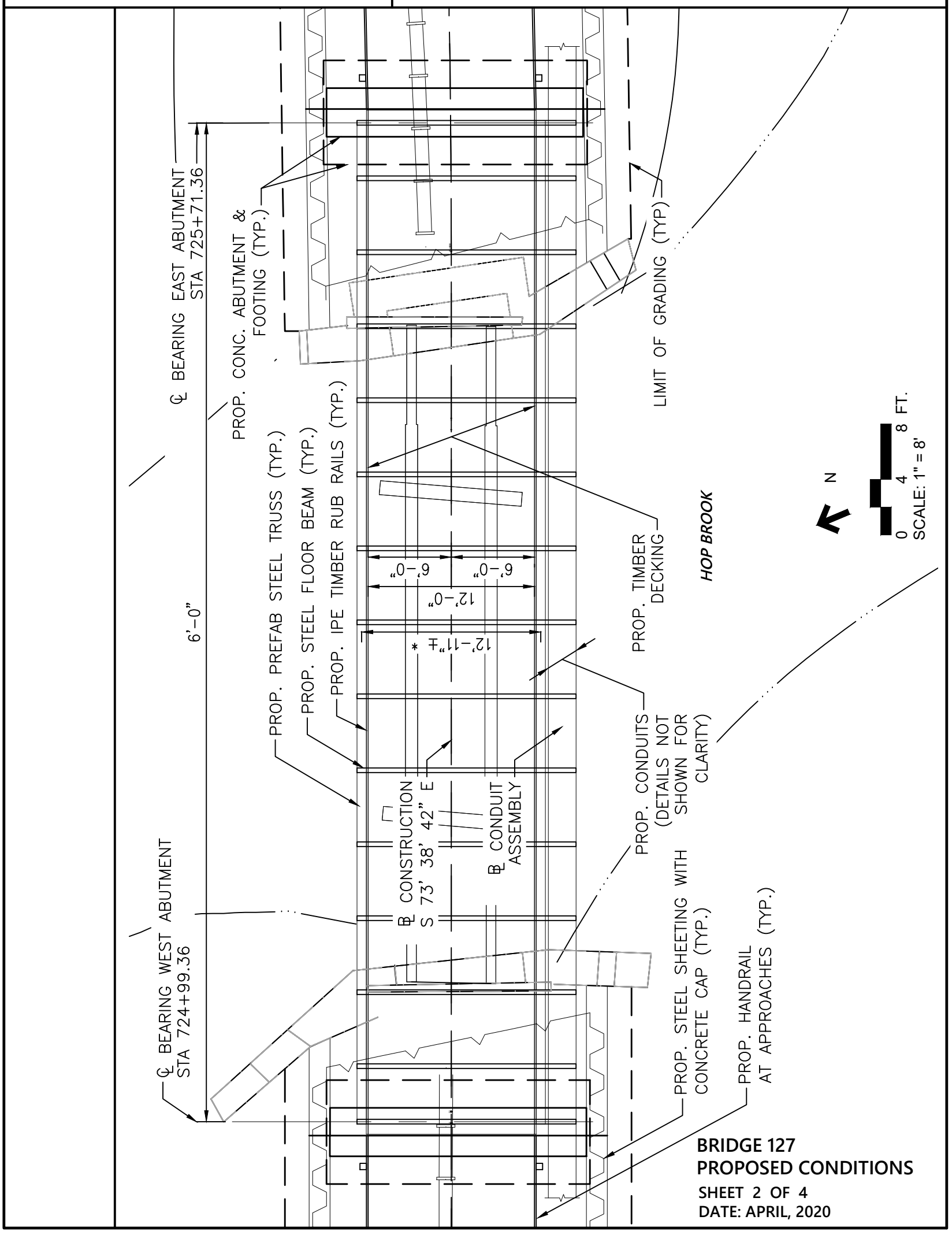
DATE: APRIL, 2020

\\vhb\gbl\proj\Worcester\12970.00 Sudbury-Hudson-EV\cad\ev\planset\Chapter 91\1297003_C91_2020-04-07.dwg

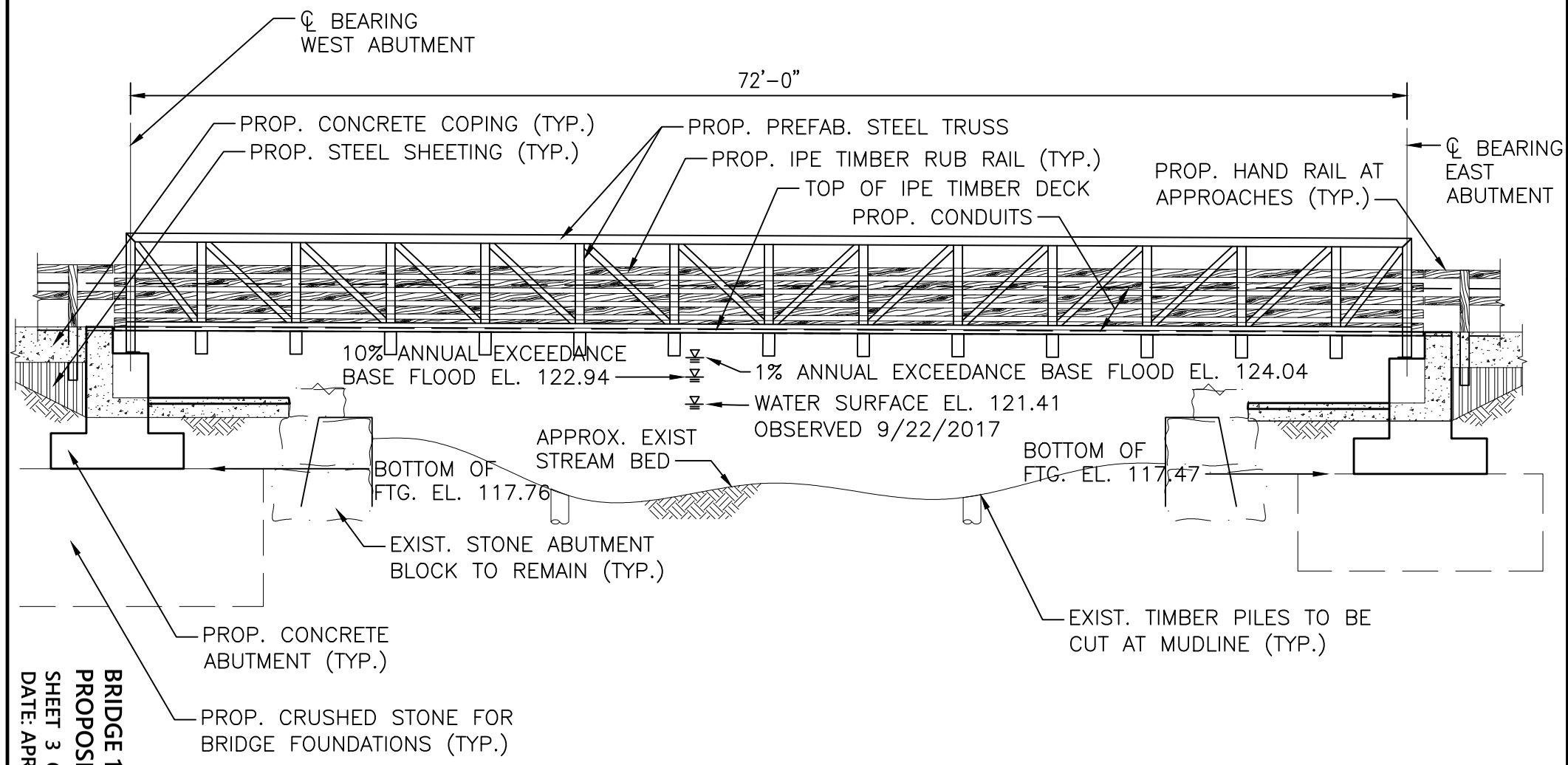
I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE



BRIDGE 127
PROPOSED CONDITIONS
SHEET 2 OF 4
DATE: APRIL, 2020



BRIDGE 127
PROPOSED ELEVATION
SHEET 3 OF 4
DATE: APRIL, 2020

NOTE: ALL ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.

0 4 8 FT.
SCALE: 1" = 8'

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

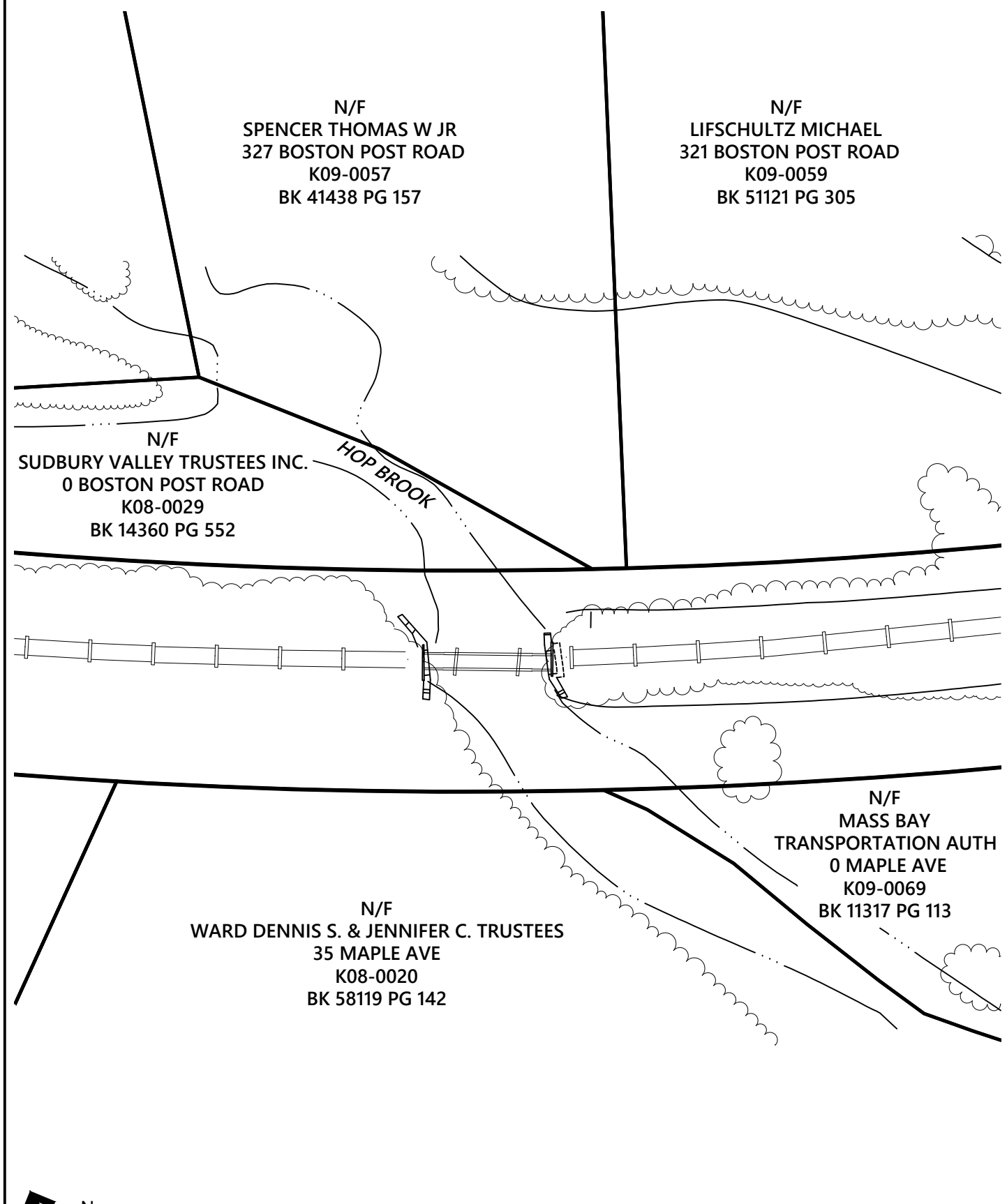
SIGNATURE

DATE

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SIGNATURE

DATE



N

0 25 50 FT.

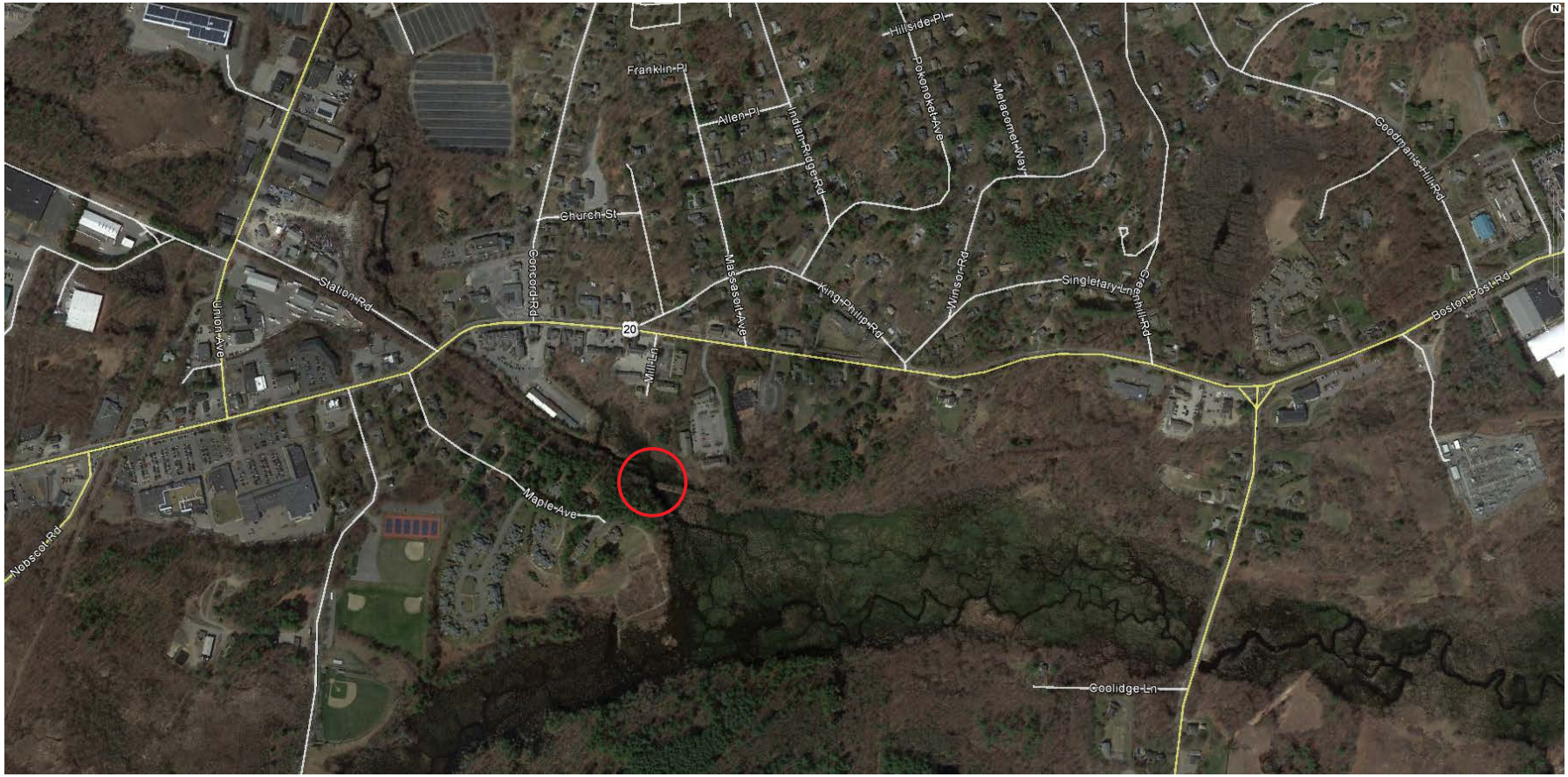
SCALE: 1" = 50'

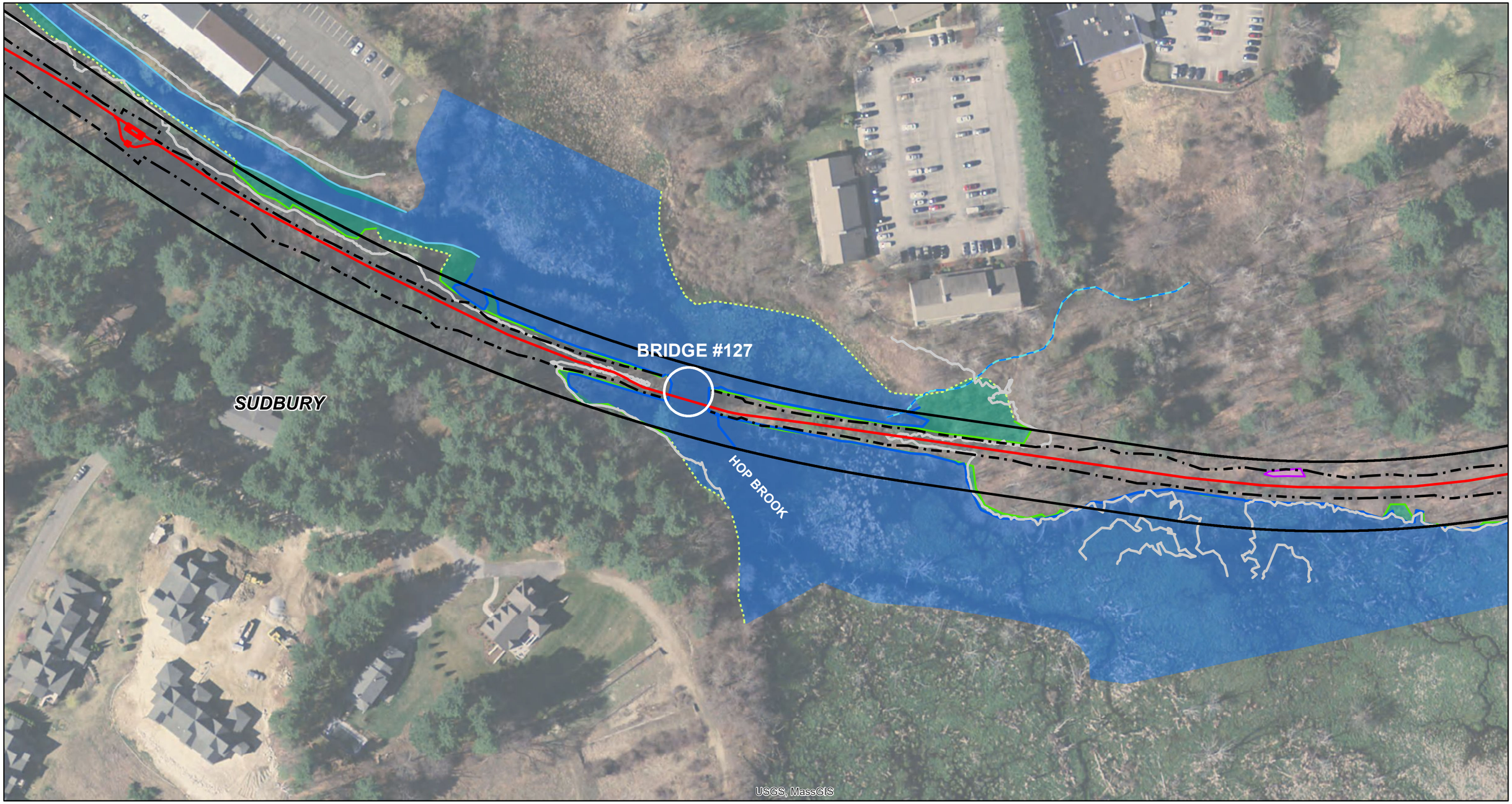
BRIDGE 127
ABUTTERS PLAN

SHEET 4 OF 4
DATE: APRIL, 2020

Bridge #127
(Transmittal No. 285958)
Figures

Figure 2-3 Hop Brook Crossing 2: Bridge #127





Proposed Transmission Line
Limit of Grading
Inactive MBTA ROW
Bordering Land Subject to Flooding
Delineated Bordering Vegetated Wetland Edge
Delineated Isolated Vegetated Wetland Edge
Approximate Wetland Edge
Delineated Top of Bank
Intermittent Stream
Perennial Stream
Bordering Vegetated Wetlands
Isolated Vegetated Wetlands
Land Under Water

0 100 200 Feet

N

EVERSOURCE ENERGY dcr MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project

Bridge Replacements

Figure 3-3
Waterways License Application

vhb

Attachment E – Supporting Documentation

- MEPA Certificates
- Notices of Intent *(under separate cover)*
- Portage Assessment

MEPA Certificates

- EOEA Number 15123: Certificate of the Secretary of Energy and Environmental Affairs on the Expanded Environmental Notification Form for the Mass Central Rail Trail – Wayside Branch
- EEA Number 15703: Certificate of the Secretary of Energy and Environmental Affairs on the Final Environmental Impact Report for the Sudbury-Hudson Transmission Reliability Project

The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
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January 10, 2014

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
EXPANDED ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Mass Central Rail Trail – Wayside Branch
PROJECT MUNICIPALITY	: Berlin, Bolton, Hudson, Stow, Sudbury, Waltham, Wayland, and Weston
PROJECT WATERSHED	: Charles, Sudbury, and Assabet Rivers
EOEA NUMBER	: 15123
PROJECT PROPONENT	: Massachusetts Department of Conservation and Recreation
DATE NOTICED IN MONITOR	: November 20, 2013

Pursuant to the Massachusetts Environmental Policy Act (MEPA, M.G. L. c. 30, ss. 61-62I) and Sections 11.06 and 11.11 of the MEPA regulations (301 CMR 11.00), I have reviewed this project and hereby determine that it **does not require** further MEPA review. In a separate Draft Record of Decision (DROD) also issued today, I have proposed to grant a Waiver from the requirement to prepare a mandatory Environmental Impact Report (EIR) for the project. This Certificate sets forth the issues that must be addressed by the Massachusetts Department of Conservation and Recreation (DCR) during permitting and discusses recommendations that were submitted on the project during the MEPA review period.

Project Description

As described in the Expanded Environmental Notification Form (EENF), the proposed project consists of the construction of the Mass Central Rail Trail – Wayside Branch (MCRT-WB) through the municipalities of Berlin, Bolton, Hudson, Stow, Sudbury, Wayland, Weston, and Waltham. It will consist of a 23-mile long shared-use path, 10 feet wide with two-foot vegetated shoulders. It will be constructed within a 19-foot wide corridor within the existing 50- to 100-foot wide former Massachusetts Central Railroad right-of-way (ROW) owned by the Massachusetts Bay Transportation Authority (MBTA). DCR has secured a lease with the MBTA along the ROW that allows it to construct, manage and maintain a rail trail within a 19-foot delineated corridor and develop additional amenities outside of this corridor provided they do not conflict with other MBTA uses.

The project is a priority for DCR and will contribute to the development of an extensive multi-use pathway traversing the state from west to east, specifically connecting Northampton (where the current Norwottuck Rail Trail is heavily used) to Boston. Portions of the MCRT in the central part of the corridor, between Oakham and Sterling, have already been constructed. DCR delineated the corridor within the existing ROW and received approval from the MBTA for its use for the project. This corridor largely follows and is centered on the existing single wide track, ties and ballast. Construction phasing of the various segments of the project is dependent on several factors, such as design, resolution of encroachment issues, environmental permitting, and availability of funds. Once completed, the project will be managed by DCR and maintained by either DCR, municipalities through which it crosses, or through a cooperative agreement between DCR and the municipalities.

Project Site

The project will be located within the former Massachusetts Central Railroad ROW, a passenger and freight service rail line originally extending from Boston to Northampton. The EENF describes the project alignment in each municipality.

Berlin (2.3 miles) – Beginning at Coburn Road, approximately 182 feet north of the Coburn Road/West Street intersection, extending east along the existing ROW track alignment to the Berlin/Hudson town line. The Berlin segment crosses two roads at-grade (Highland Street, and Sawyer Hill Road) and under Interstate 495 (I-495).

Bolton (100 feet) – The path crosses over the Berlin/Bolton town line for a very brief distance before crossing into Hudson. The Bolton segment crosses one road at-grade (Stone Road).

Hudson (6.9 miles) – From the Bolton/Hudson town line, extending east to the Hudson/Sudbury town line. The Hudson segment crosses 17 roads at-grade, over, or under the existing roadway. The at-grade crossing streets are: Central Street (at two locations), Cottage Street, Warner Street, Lincoln Street, Felton Street, Pope Street, Church Street, Manning Street, Priest Street, Cox Street, Main Street, Parmenter Road, and White Pond Road. The path will travel under High Street and Chestnut Street (via a box culvert underpass), and will travel over Wilkins Street and Tower Street (via a replacement bridge). The project will intersect the existing Town of Hudson segment of the Assabet River Rail Trail east of Wilkins Street.

Stow (327 feet) – The path crosses over the Hudson/Stow town line for a very brief distance before crossing back into Hudson east of Wilkins Street.

Sudbury (4.6 miles) – From the Hudson/Sudbury town line, extending east to the Sudbury/Wayland town line. The Sudbury segment crosses five roads at-grade (Dutton Road, Peakham Road, Horse Pond Road, Union Avenue, and Boston Post Road). The path will travel under (via an underpass) Landham Road.

Wayland (3.0 miles) – From the Sudbury/Wayland town line, extending east to the Wayland/Weston town line. The Wayland segment crosses six roads at-grade (Boston Post Road, Old Sudbury Road, Concord Road, Millbrook Road, Glen Road, and Plain Road).

Weston (3.0 miles) – From the Wayland/Weston town line, extending east to the Weston/Waltham town line. The Weston segment crosses Gun Club Lane at-grade, and will cross under three roads via underpasses (Concord Road, Conant Road and Church Street).

Waltham (3.0 miles) – From the Weston/Waltham town line, extending east to the end point at the intersection of Beaver Street and Waverley Oaks Road (Route 60). The Waltham segment crosses eight roads: seven at-grade, and one (I-95) along an overpass (Jones Road, Interstate 95, Stow Street, Main Street, Hillside Road, Prospect Hill Road, Hammond Street, Bacon Street, Lexington Street, Lyman Street, and Linden Street).

The rail trail will be constructed as an off-road multi-use path. As with other multi-use paths in Massachusetts, the project will have trail heads at adjacent intersecting streets and will use existing parking facilities along its corridor to the greatest extent feasible.

Environmental Impacts

Potential environmental impacts associated with the project include the creation of approximately 28 acres of new impervious surface area, the likely removal of trees of 14-inch or more diameter at breast height (DBH), and permanent and temporary wetlands impacts that include the alteration of 4,150 square feet (sf) of Bordering Vegetated Wetlands (BVW), 475,504 sf of Bordering Land Subject to Flooding (BLSF), 466,599 sf of Riverfront Area, and 2,140 linear feet (lf) of Bank. The project requires the temporary alteration of Land Under Water and Waterways (LUWW), although the EENF does not disclose the amount at this conceptual stage of project design. The project corridor contains mapped habitat for rare or endangered species and is within and near numerous National Register Historic Districts, individually listed National Register properties, and inventoried historic properties. Construction impacts will include the removal of the existing railroad ties and rails, rehabilitation or replacement of 11 bridges, paving, grading, landscaping, and installation of new stormwater drainage system.

MEPA Jurisdiction and Permitting

The project is subject to MEPA review and requires the preparation of a mandatory EIR pursuant to 301 CMR 11.03(1)(a)(2) and 11.03(3)(a)(1)(b) because it requires State Agency Actions and will result in the creation of ten or more acres of new impervious area and will alter more than ten acres of other wetlands. The project also exceeds the ENF threshold at 301 CMR 11.03(3)(b)(1)(b)(2) because it will alter 500 or more lf of inland bank. Additionally, the project will likely exceed the ENF threshold at 301 CMR 11.03(6)(b)(2)(b) because it will require the cutting of five or more living public shade trees of 14 or more inches DBH. The project will require a Chapter 91 (c.91) Waterways License from the Massachusetts Department of Environmental Protection (MassDEP), an Access Permit from the Massachusetts Department of Transportation (MassDOT), Section 106 review by the Massachusetts Historical Commission (MHC), and review under the Massachusetts Endangered Species Act (MESA) by the Natural Heritage and Endangered Species Program (NHESP). The project is also subject to the MEPA Greenhouse Gas Emissions Policy and Protocol (GHG Policy).

The project also requires: Orders of Conditions from each of the eight municipal Conservation Commissions (and, on appeal only, Superseding Orders of Conditions (SOCs) from MassDEP), a National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP) from the United States Environmental Protection Agency (EPA), and an individual Section 404 Permit from the United States Army Corps of Engineers (ACOE).

The project will be undertaken by DCR, a State Agency. Therefore, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Waiver Request

In accordance with Section 11.05(7) of the MEPA regulations, DCR has submitted an EENF with a request that I grant a Waiver of the Mandatory EIR requirement. The EENF and additional information provided by DCR to the MEPA Office identifies the project's consistency with the criteria for a Waiver. The EENF was subject to an extended public comment period pursuant to Section 11.06(1) of the MEPA regulations. DCR requested a second extension which extended the comment period an additional 11 days.

I have received many comments which indicate strong support for a Waiver. While I acknowledge the comments from the Sudbury and Wayland Conservation Commissions that outline concerns regarding wetlands, stormwater and water quality, I am confident that these issues can be resolved during the state and local permitting processes. These processes provide additional avenues for public review and comment. I note that State Agencies did not identify alternatives that should be analyzed in an EIR.

I have reviewed the EENF and the Waiver request and I hereby find that the project meets the standards for a Waiver. These findings are addressed in the DROD which will be published in the January 22, 2014 edition of the Environmental Monitor. DCR submitted a letter of clarification to the MEPA Office on January 8, 2014 that responds to concerns identified in comment letter.[1]

Project Alternatives

The EENF provides an analysis of the No-Build Alternative and the Preferred Alternative. The No-Build Alternative assumes that the project will not be developed and the existing MBTA-owned ROW will continue to be used as an informal trail that is not designed consistent with the Americans with Disability Act (ADA). The No-Build Alternative will not impact any environmental resources, however, it will not further state, regional, and local trail initiatives and connections, promote public health and exercise, increase recreational opportunities, provide an alternative transportation option, and improve air quality. In addition, the No-Build Alternative will not discourage unwanted activities such as dumping, all terrain vehicle (ATV) use, and encroachment of the ROW.

[1] Massachusetts Department of Conservation and Recreation Letter of Clarification submitted to the MEPA Office on January 8, 2014

According to the EENF, the Preferred Alternative is based on: connection to other trails as part of a more extensive trail network, the available space throughout the ROW, environmental resources, accessibility, and roadway crossings. The general location of the project corridor (from Berlin to Waltham) was chosen due to its potential for connections to other trails in the region, the absence of a trail traversing west to east in this vicinity, and the role the MCRT plays as a segment to enhance the statewide trail networks such as the Bay State Greenway network, East Coast Greenway System, and the overall cross-state rail trail vision.

For the majority of its alignment, the project will follow the original Massachusetts Central Railroad ROW. Since the cessation of railroad activities in the 1980s, wetlands and other environmental resources have developed in the ROW. Also, encroachments by abutters and leased development have occurred throughout the corridor. The EENF indicates that throughout the development of the Preferred Alternative, these obstructions and conflicts have been considered and environmental resources were avoided to the maximum extent possible. Wetland resource areas were avoided to the extent practicable. Access points along the proposed trail and safe roadway crossings were also considered for the development of the Preferred Alternative.

DCR identified three road crossings that may require deviations from the current alignment or use of additional ROW in Wayland at Routes 20 and 27/126; and in Waltham at Stowe Street/Route 117. The Town of Wayland has already addressed problematic crossings and developed safe bicycle and pedestrian crossings. Just east of the I-95 bridge in Waltham, a bank parking lot has been constructed entirely in the ROW (permitted by the MBTA), but the bank is obligated in its easement to allow the project to be developed through this area. The proponent of the former Polaroid Site in Waltham (1265 Main Street LLC), has satisfied the commitment identified in its Section 61 Findings (EEA#13952 Certificate on the Final EIR) to develop bicycle and pedestrian accommodations from its site entrance on Route 117 across Route 95/128 to Green Street. The proponent of the former Polaroid site intends to work with DCR to coordinate long-term development plans, alternatives, and potential off-site mitigation measures, as they relate to the project. Potential alternatives may include use of the existing ROW and railroad bridge over I-95, or working with private developers and MassDOT to add a multi-use pathway along Green Street and the Route 117 bridge to connect to the existing pathway at the Polaroid site entrance. DCR will continue to work with the bank, 1265 Main Street LLC, and MassDOT to evaluate, design and develop project connections through this area.

As described elsewhere in this Certificate, the project requires compliance with the Wetlands Protection Act (WPA) and c.91 regulations. I note that the WPA and c.91 review processes require an alternatives analysis that considers additional practicable alternatives to avoid, minimize, and mitigate impacts to wetland resource areas. I note that the project is being proposed along an existing rail corridor to provide recreational benefits and alternatives to driving. DCR indicates that it has considered practical alternatives within its project purpose. To the extent that additional analysis of alternatives is necessary to further reduce impacts, it can be addressed during permitting.

Wetlands

The project requires review by the eight Conservation Commissions with jurisdiction along the corridor for consistency with the WPA and its implementing regulations (310 CMR 10.00). The EENF describes the methodology used to estimate wetland impacts associated with the project based on a 19-foot corridor superimposed on the ROW. Wetlands impacts associated with the project include the alteration of 4,150 sf of BVW, 16.7 acres of wetlands including areas of BLSF overlapping Riverfront Area, and 2,140 lf of Bank. The EENF identifies wetland impacts by municipality. The largest impacts to BVW and Riverfront Area will occur in Hudson (1,164 sf and 148,495 sf (3.4 acres), respectively), and the largest impacts to BLSF will occur in Wayland (190,011 sf (4.3 acres). The EENF indicates that the corridor may be shifted in order to avoid potential environmental impacts. According to DCR's letter of clarification, as part of the Notice of Intent (NOI) filings, base mapping, resource area delineation, trail and bridge design will be completed to a level that supports more accurate assessment of impacts (if any) to BWV, BLSF, and Riverfront.

The EENF indicates that that project does not require a 401 Water Quality Certification (WQC) because it will alter less than 5,000 sf of BVW. Comments from MassDEP Northeast Regional Office (NERO) indicate that if there are any BVW impacts within Outstanding Resource Waters (ORW) or the total permanent or temporary impacts to BVW or LUWW exceed 5,000 sf, then a 401 WQC will be required. As described in greater detail below, DCR's letter of clarification maintains that a 401 WQC is not required. Wetlands replication and mitigation will be developed consistent with the BVW performance standards in 310 CMR 10.55(4) and the MassDEP Massachusetts Inland Wetland Replication Guidelines, March 2002.

Riverfront Area within the project corridor consists of previously-developed railroad embankment that is altered with rails and ties, other developed area and roadways, and some areas of wetland and upland vegetation. The project alignment will impact Riverfront Area resulting from path construction, grading, vegetation clearing and landscaping. The EENF indicates that the portions of the project that are in Riverfront Area alone are proposed as a limited project (310 CMR 40.53(6)). I refer DCR to MassDEP NERO's comments regarding compliance with limited project provisions.

According to the EENF, the elevated railroad embankment may indicate that the corridor is above the 100-year floodplain elevation. If subsequent analysis demonstrates flood elevations to be higher than presumed, the embankment will be kept at its current elevation to minimize any potential impacts to the 100-year floodplain and retain current floodplain storage. In addition, the affected area consists of former railroad track and ballast material, and does not provide important wildlife habitat.

DCR's letter of clarification indicates that it will work with local Conservation Commissions, MBTA and MHC to develop appropriate specifications for access and laydown areas, limits of work, and will identify sensitive areas where construction laydown and staging will not be allowed. DCR should ensure that it includes additional, if any, resource area impacts due to the construction access and staging.

While I acknowledge the issues raised by the Sudbury and Wayland Conservation Commissions, I believe that they can be addressed in the permitting processes. DCR has committed to work with various municipal boards and commissions and other key stakeholders to design the project to avoid or minimize resource area impacts and reasonably mitigate any unavoidable impacts.

Stormwater and Drainage

According to the EENF, the project will result in the creation of 28 acres of new impervious area. All stormwater design will meet the MassDEP's Stormwater guidelines to the greatest extent possible. The stormwater design for the trail will vary, depending on surrounding land uses. In more urban settings, a closed drainage system consisting of deep sump catch basins, manholes, and pipes may be used to collect stormwater from the trail and surrounding lands that may cause additional runoff and runoff sheeting along the trail or potential flooding of adjacent properties. Where applicable, the drainage will be connected to existing town or state-owned drainage systems. In more rural or undeveloped areas, country drainage will be used rather than piped drainage systems. DCR's letter of clarification indicates that the trail design will include an open stormwater system, with the use of water quality swales with checkdams adjacent to the trail in locations where warranted. Stormwater will generally be shed off the trail directly onto the adjacent vegetated shoulder and areas. A variety of native landscaping materials will be implemented into the design at road crossings, trailheads, and areas with steep embankment slopes that exceed a 3:1 slope. Shrubs will be planted at the tops of embankments, overlook areas, and stream crossings outside of the trail clear zone, to treat stormwater runoff.

I refer DCR to the comments and guidance provided by MassDEP NERO to ensure the project is designed in compliance with the Stormwater Management standards. The comments also note DCR's commitment to meet the standards in its NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer (MS4s – Permit No. MAR 43001). While I acknowledge MassDEP NERO's concerns regarding the lack of a complete evaluation of the stormwater management system and a demonstration of compliance with applicable stormwater standards in the EENF, I am confident that DCR will incorporate a high level of stormwater management along the corridor. Specifically, stormwater must be appropriately managed in sensitive environmental areas such as ORWs, vernal pools, and rare and endangered species habitat. DCR's letter of clarification indicates that because pollutants associated with vehicles, sanding, de-icing and other treatment for winter use will not be present along the corridor, the project will not result in a discharge of pollutants in stormwater. As a condition of the DROD, I am requiring DCR to provide supplemental stormwater information to MEPA and commenters by February 5, 2014.

I strongly encourage DCR to incorporate commitments to sustainable design elements such as solar powered lighting and signage. Because the project is at a conceptual design stage, there are ample opportunities to incorporate renewable energy technology, energy efficiency and Low Impact Development (LID) techniques into the site design. LID techniques incorporate stormwater best management practices (BMPs) and can reduce impacts to land and water resources by conserving natural systems and hydrologic functions. The primary tools of LID are landscaping features and naturally vegetated areas such as bioretention/raingardens, which

encourage detention, infiltration and filtration of stormwater on-site. DCR should consider measures to reduce the amount of new impervious area through the use of porous paving materials on some portions of the trail.

Bridge Rehabilitation

DCR prepared a study, the Mass Central Rail Trail Evaluation of Existing Bridges, Wayside Branch – Waltham to Berlin (2013), to determine the structural integrity of 10 existing bridges along the project corridor. Based on this evaluation, the bridges were recommended for rehabilitation or replacement. The EENF describes proposed bridge rehabilitation. The EENF indicates that five timber bridges were recommended for rehabilitation or replacement.

MassDEP NERO comments indicate that floodway and floodway encroachment, and hydraulic impacts within wetland resource areas were not considered in the EENF. DCR's letter of clarification indicates that while bridge designs have not yet been developed, the general approach for bridges over water is to replace the superstructure with a 14-foot wide deck, retaining the existing timber pilings. In some cases, individual pilings will require removal and new pilings will be driven. DCR claims that driving pilings does not constitute "fill" with respect to Sections 404 or 401 of the federal Clean Water Act and does not require Water Quality Certification. If the bridge pilings are severely deteriorated, a new bridge may be required with a clear span across the waterway. The bridges would also all require reconstruction of the backwall and wingwall of the abutments to support the new superstructure. New abutments will be set back from the edge of water and this reconstruction will not affect Bank or LUWW. During bridge design, DCR should consider the impacts of the bridges within the 100-year floodplain and regulatory floodway to address potential deficiencies and remove hydraulic restrictions.

I strongly encourage DCR to consult with MassDEP to identify mitigation measures for adverse impacts resulting from bridge-related construction activities. MassDEP NERO advises DCR that replaced stream crossings should be designed to conform to the Massachusetts Stream Crossing Standards.

Chapter 91

According to the EENF, a c.91 Waterways License is required for the rehabilitation and reuse of bridges located over navigable waters. Potential navigable waters the project will cross include: Hogg Brook in Berlin/Hudson; Assabet River and Fort Meadow Brook in Hudson; Hop Brook, Wash Brook, and Dudley Brook in Sudbury; Sudbury River, Mill Brook, and Hayward Brook in Wayland; Cherry Brook and Stony Brook in Weston; Chester Brook and Beaver Brook in Waltham. These waterways are either bridged or conveyed in a culvert beneath the existing railroad embankment. Waterways regulations (310 CMR 9.04 and 9.05) require a c.91 license for any maintenance or repair of structures, and any change in use of structures in non-tidal navigable rivers or streams. Several of the navigable river and stream crossings will require c.91 Licenses, in particular, the Sudbury and Assabet River crossings for reuse and change of use from a railroad bridge to a public rail trail use.

Public Shade Tree Removal

The project will include removal of trees that are more than 14 inches in diameter at breast height (DBH), as well as the selective removal of trees at bridge and culvert locations, and other areas along the project corridor. DCR should explore options to retain as many healthy trees as practicable. DCR should work with the MBTA and the municipalities to evaluate additional tree protection using tree wells and other protective measures. I encourage DCR to minimize vegetation removal and, where feasible, to replace trees on-site. Where mitigation on-site is not feasible, DCR should consult with the Conservation Commissions to identify other areas where tree planting may be beneficial, and identify appropriate mitigation for vegetation removal in resource areas. DCR should continue to modify the project design where feasible to maintain as many mature healthy trees as possible along the route.

DCR indicates that a Vegetation Management Plan (VMP) will be developed and implemented. The VMP should include a maintenance and monitoring plan to ensure that tree planting efforts are successful. I expect that issues relating to vegetation removal in wetlands resource area, as well as replanting and other mitigation measures will be addressed during local review and permitting by the Conservation Commissions. The VMP will discuss the control of invasive species. DCR will use only native species for revegatation and enhancement.

Rare Species

As described in the EENF, according to the most recent addition of the Massachusetts NHESP atlas (2008), segments of the project corridor are located within three areas of *Priority* and *Estimated Habitat* for eight state-listed rare species. The state-listed species known to occur in the vicinity of the project corridor include the Blandings Turtle (Threatened), Wood Turtle (Special Concern), Eastern Box Turtle (Special Concern), Blue-Spotted Salamander (Special Concern), American Bittern (Endangered bird), Common Moorhen (bird of Special Concern), Least Bittern (Endangered bird), and Pied-Billed Grebe (Endangered bird). The rare species and their habitats are regulated pursuant to the implementing regulations of MESA (MGL c131A, 321 CMR 10.00).

The EENF indicates that the project is not anticipated to affect the habitat of the four bird species, that occupy deep-water marshes and open water habitats, as the project will not alter these wetland types. The former railroad ROW has the potential to provide nesting habitat for the three listed turtle species. DCR will continue to coordinate with NHESP to avoid and minimize impacts to these habitats, and mitigate any potential unavoidable impacts during construction and operation of the project.

Comments from NHESP indicate that the project will require review for compliance with MESA and its implementing regulations (321 CMR 10.14 and 10.18) and/or the rare species provisions of the WPA regulations (310 CMR 10.37 and 10.59) for activities that are not otherwise exempt. While NHESP supports the removal and proper disposal of the existing rail road tracks and ties, it notes that the effects of increased human use, impervious surface, and potential clearing/grading of rare species habitats should also be considered during the planning process and avoided and minimized to the greatest extent possible. As a condition of the Waiver,

DCR will provide an assessment of potential impacts to state-listed species in filings for review pursuant to MESA, will initiate pre-filing consultations with NHESP as soon as possible in order to inform this assessment.

Greenhouse Gas (GHG) Emissions

The project is subject to the MEPA GHG Policy (revised May 5, 2010) because it exceeds thresholds for a mandatory EIR. The Policy contains a de minimus exemption for projects that will produce minimal amounts of GHG emissions. This is a rail trail project promoting bicycle and pedestrian uses. It does not include construction of buildings nor will it generate a significant number of vehicle trips. GHG emissions are associated primarily with the construction period of the project. Because it does not appear that this project will create a significant source of emissions, I am declining to require a quantitative GHG analysis and mitigation plan. However, I encourage DCR to incorporate measures to avoid and minimize GHG emissions (and other air pollutants) during the construction period such as limiting idling and using bio-fuels in off-road construction equipment.

Water Resources

According to comments from MassDEP NERO, the project will cross Cherry Brook in Weston and Stony Brook in Weston/Waltham which are both designated as Class A ORWs because they are tributaries to the active public water supplies of Stony Brook Reservoir and Cambridge Reservoir. The project also passes through the Zone A associated with both surface waters. DCR should ensure the project is designed to protect public water supplies and ORWs including vernal pools. Because DCR is applying for coverage under the NPDES CGP, it also requires compliance with Massachusetts' statutory and regulatory provisions that protect and control pollutant discharges to ORWs. Comments from MassDEP indicate that it must determine whether the activities taking place during construction near Cherry and Stony Brooks have adequate stormwater pollution prevention measures and controls that will avoid or minimize stormwater discharge of pollutants to the protected resources. DCR is required to submit an application of BRP WM 09 – Approval of NPDES Stormwater Pollution Prevention Plan (SWPPP) for Construction or Industrial General Permits Discharging to ORWs to MassDEP. The review of this information will assist MassDEP in determining whether additional stormwater measures will be required to protect ORWs during construction.

According to the EENF, the project will cross five impaired waterbodies listed in MassDEP's 2012 Integrated List of Waters as Category 5, which are waters where a total maximum daily load (TMDL) has been developed for listed pollutants. Phosphorus is a pollutant of concern for four of the five waterbodies including the Assabet River, Hop Brook, Hop Brook/Wash Brook, and Beaver Brook. MassDEP advises DCR to include in its SWPPP the CGP requirements for discharges of stormwater to sediment or nutrient-impaired waters.

According to comments from the MWRA, Section 8 (m) of Chapter 372 of the Acts of 1984, MWRA's Enabling Legislation, allows it to issue permits to build, construct, excavate, or cross within or near an easement or other property interest held by the MWRA. The project likely requires a Section 8 (m) Permit from the MWRA because it will cross its water line

Section W10 at Beaver Street and Linden Street in Waltham. I encourage DCR to consult with MWRA for permitting assistance early in the design process. I refer DCR to MWRA's comment letter for more permitting information on the MWRA Aqueducts Program, which is a new policy authorizing public access along certain ROW at four inactive water supply aqueducts including the Sudbury, Weston, Cochituate, and Wachusett Aqueducts.

Transportation

The project requires an Access Permit from MassDOT because it will cross state highways including Route 20, I-495, and I-95. The project will cross over 40 roadways and the Assabet River Rail Trail. The EENF describes potential improvements for the roadway crossings. DCR should work with the eight municipalities and the Metropolitan Area Planning Council (MAPC) to design these improvements and investigate additional mitigation. No parking is proposed; however, parking areas adjacent to the corridor are identified.

Historic and Archaeological Resources

According to the EENF, a cultural resources assessment (*Proposed Mass Central Rail Trail: Cultural Resources Assessment*) was performed in order to assess historic and archaeological resources within 0.25 miles of the MCRT corridor (the Area of Potential Affect (APE)). The assessment identified seven individual resources listed in the State and National Registers of Historic Places (except where noted) including: the Goodale Homestead in Hudson; the Boston and Maine (B&M) Railroad Section Tool House in Sudbury (only State Register-listed); the First Free Public Library Marker, the Wayland Railroad Station, and the Central Massachusetts Railroad Freight House (only State Register-listed) in Wayland; and the Theodore Lyman House, Vale Estate and the Linden Street Railroad Bridge in Waltham. The assessment identified 23 resources in the Inventory of Historic and Archaeological Assets of the Commonwealth including ten previously inventoried railroad bridges that will be reused by the project. Potential impacts to State Register-listed individual properties and inventoried resources are anticipated to be minimal as the construction of the project will not physically alter the resources, with the exception of the 11 bridges that are recommended for rehabilitation based on their deteriorated condition.

The assessment identified six districts listed in the State and National Registers (except where noted) including: the Wayside Inn Historic District, the Peakham-Southwest District (local historic district and State-Register listed), and the George Pitts Tavern Historic District (local historic district and State-Register listed) in Sudbury; the Wayland Center Historic District and the Wayland Center Local Historic District (local district and State-Register listed) in Wayland; and the Boston Post Road Historic District in Weston. Construction of the project is not expected to alter the historic character of the historic districts. The project will serve to educate the public about these historic districts such as the use of interpretive signage, as they are potential destinations and access points for the shared-use path.

The assessment identified 16 previously reported archaeological sites within 0.25 miles of the centerline of the ROW. DCR prepared a preliminary determination of additional areas of sensitivity for both ancient Native American and historic period archaeological sites adjacent to

the corridor. Construction of the project will not affect any identified areas of archaeological sensitivity due to the shallow depth of construction entirely within the old railroad ballast and subgrade areas.

The comment letter submitted by MHC on the EENF requested additional information to allow MHC to comment on the APE, eligibility opinions, and to determine what effect, if any, the proposed project may have on any significant historic or archaeological resources to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) and M.G.L. c.9, Sections 26-27C (950 CMR 71.00). The MHC comment letter also provided comment and guidance to assist DCR with MHC review including the consideration of additional resources in the project APE, compliance with the Secretary of the Interior's Standards and Guidelines for Rehabilitation as it relates to the repair/rehabilitation of significant bridges, and extant railroad-related historic archaeological resources. DCR should consult with MHC early during project design to ensure that the project does not result in adverse impacts to state-listed historic and archeological resources. Additional information should be sent concurrently to MHC, ACOE, the local historical commissions, and the local historic district commissions. DCR should coordinate with MHC to respond to its request for an archaeological reconnaissance survey and associated survey parameters as outlined in the EENF comment letter. The results of surveys and other related data should be provided in a manner consistent with the MHC comment letter.

I acknowledge comments from the Wayland Historical Commission and the Wayland Historic District Commission that outline concerns regarding the historical significance of the rails within each railroad center (historical districts). I expect DCR will consider their requests to preserve certain railroad components such as rails (e.g. side rails) and other track features, and to ensure the protection of individual items directly adjacent to the rails during project construction.

Construction Period

The project must comply with MassDEP Solid Waste and Air Pollution Control regulations, pursuant to M.G.L. c.40, s.54 during construction and demolition. All construction and demolition activities should be undertaken in compliance with the conditions of all State and local permits. DCR should evaluate construction period impacts, including erosion and sedimentation, air quality and solid waste disposal, and strive to minimize construction impacts (including but not limited to land disturbance, noise, dust, odor nuisance, vehicle emissions, construction and demolition debris, and construction-related traffic) and consider feasible measures that can be implemented to eliminate or minimize these impacts. The project requires the preparation of a SWPPP in accordance with the NPDES CGP to control erosion and sedimentation during the construction period.

DCR should seek guidance from MassDEP on how to limit the impacts of demolition and construction activities through waste management and recycling efforts. I strongly encourage DCR to consult with MassDEP and review its recommendations and adopt practices to the maximum extent practicable. The former railroad ties and rails along the majority of the alignment will be removed before trail construction. The existing steel rail will be recovered and

recycled. The ties are impregnated with creosote and cannot be recycled and will be properly disposed.

DCR construction specifications will stipulate the use the ultra-low sulfur fuel in construction equipment with necessary engine modifications in accordance with the MassCleanDiesel Program. DCR is advised that if oil and/or hazardous material are identified during the implementation of this project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) must be made to MassDEP, if necessary.

Conclusion

Based on a review of the information provided by DCR and after consultation with the relevant public agencies, I find that the potential impacts of this project do not warrant further MEPA review. Outstanding issues may be addressed during permitting.

I have also issued today a DROD proposing to grant a Waiver from the requirement to prepare an EIR for the project. The DROD will be published in the next edition of the Environmental Monitor on January 22, 2014 in accordance with 301 CMR 11.15(2), which begins the public comment period. The public comment period lasts for 14 days and will end on February 5, 2014. Based on written comments received concerning the DROD, I shall issue a Final Record of Decision or a Scope within seven days after the close of the public comment period, in accordance with 301 CMR 11.15(6). If the Waiver is not approved, based on comments received on the DROD, then this Certificate will be re-issued with a Scope for an EIR.

January 10, 2014
Date

per Richard K. Sullivan, Jr.

Comments Received

12/06/2013	Massachusetts Natural Heritage and Endangered Species Program
12/06/2013	Massachusetts Historical Commission
12/13/2013	Massachusetts Department of Environmental Protection – CERO
12/31/2013	Massachusetts Department of Environmental Protection – NERO
12/20/2013	Massachusetts Water Resources Authority
12/31/2013	Metropolitan Area Planning Council
12/27/2013	Bolton Conservation Commission
12/06/2013	Stow Conservation Commission
12/17/2013	Sudbury Conservation Commission
12/17/2013	Wayland Board of Selectmen (submitted from three separate commenters)
12/26/2013	Wayland Historic District Commission
12/30/2013	Wayland Historical Commission
12/30/2013	Wayland Conservation Commission
12/27/2013	Weston Conservation Commission
12/13/2013	Larry Kiernan, Wayland Representative – Mass Central Rail Trail Coalition
12/18/2013	WalkBoston

12/27/2013	Mass Centrail Rail Trail Coalition
12/31/2013	Friends of the Community Path
12/05/2013	Eli Horowitz
12/18/2013	Lydia Rogers
12/19/2013	Leonard Simon (1)
12/28/2013	Linda Segal
12/31/2013	Alice Boelter
12/31/2013	Richard Williamson
01/07/2014	Leonard Simon (2)
01/09/2014	Massachusetts Department of Conservation Letter of Clarification

RKS/PPP/ppp

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September 14, 2018

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Sudbury-Hudson Transmission Reliability Project
PROJECT MUNICIPALITY	: Hudson, Marlborough, Stow, and Sudbury
PROJECT WATERSHED	: Sudbury, Assabet, and Concord (SuAsCo)
EEA NUMBER	: 15703
PROJECT PROPONENT	: NSTAR Electric Company d/b/a Eversource Energy
DATE NOTICED IN MONITOR	: August 8, 2018

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I have reviewed the Final Environmental Impact Report (FEIR) and hereby determine that it **adequately and properly complies** with MEPA and its implementing regulations. The project may proceed to permitting.

The FEIR and prior review documents have provided a detailed project description, analysis of alternatives, identified environmental impacts, and proposed measures to avoid, minimize and mitigate Damage to the Environment. The project Proponent has revised the design of the Preferred Alternative to further reduce environmental impacts.

Comments from State Agencies identify aspects and issues of the project that require additional analysis during permitting. Comments from State Agencies do not request additional MEPA review. State Agencies and local Conservation Commissions have sufficient regulatory

authority to address outstanding issues that are identified in this Certificate and these processes will provide additional opportunities for public review and comment.

The project will proceed through review by the Massachusetts Energy Facility Siting Board (EFSB) which will determine whether the project, which is proposed to provide reliability of the electrical system, is necessary, serves the public convenience and is consistent with public interest. EFSB will also determine whether the project will provide a reliable energy supply, with a minimum impact on the environment, at the lowest possible cost.

If subsequent review and permitting results in a material change to the project, that would increase environmental impacts compared to those identified in the FEIR, prior to the taking of all Agency Actions, the project may be required to file a Notice of Project Change (NPC).

Project Description

As described in the Draft EIR (DEIR) and FEIR, the project includes the construction of a 9-mile, 115-kilovolt (kV) underground transmission line extending from the Eversource substation on Boston Post Road (Route 20) in Sudbury (the "Sudbury Substation") to Hudson Light & Power Department's substation at Forest Avenue in Hudson (the "Hudson Substation") and upgrades to both substations. The project will be installed primarily along an inactive railroad right-of-way (ROW) owned by the Massachusetts Bay Transportation Authority (MBTA). The Department of Conservation and Recreation (DCR) maintains a lease over a 6.7-mile portion of the ROW corridor to develop a portion of the Massachusetts Central Rail Trail (MCRT).[1]

The project will generally include clearing and maintenance of a 22- to 30-foot (ft) wide corridor along the ROW to construct a 18- to 22-ft wide construction platform generally comprised of a 14-ft wide gravel access road, 4-ft wide duct bank within the footprint of or offset from the access road by 1 ft, splice vaults, and 3 ft of additional construction area to facilitate installation of the duct bank. The FEIR indicated that splice vault locations will be located partially underneath the access road with manhole covers adjacent to the road and in the shoulder. At each splice vault location, the limits of clearing will be expanded to a total width of 40 ft for a length of 50 ft to accommodate temporary work pads for installation of the vault. Following construction, a 22- to 30-ft wide corridor will be maintained; of which 14 ft will be comprised of a gravel access road, and the remainder will be revegetated with native plant species. The 14-ft wide gravel access road will serve as the base for subsequent construction of the MCRT by DCR.

The project will repair/rehabilitate a bridge over Hop Brook (Bridge #128) in Sudbury and will replace bridges over Hop Brook (Bridge #127) in Sudbury and Fort Meadow Brook (Bridge #130) in Hudson. At culverts and drainage pipes, the Proponent will retain existing structures and install the transmission line above or below as necessary using traditional open trench construction methods.

[1] The MCRT is a 23-mile long shared use path through the municipalities of Berlin, Bolton, Hudson, Stow, Sudbury, Wayland, Weston, and Waltham. The MCRT (EEA#15123) completed MEPA review in 2014.

The project is proposed to relieve potential overloads on elements of the area transmission system and maintain reliable electric service to customers of this system. Under certain operating conditions, supply to approximately 80,000 customers in the greater Marlborough area cannot be maintained and could create thermal overloads. The Proponent is required to maintain its transmission system consistent with the reliability standards and criteria developed by the North American Electric Reliability Corporation (NERC), the Northeast Power Coordinating Council (NPCC), and the New England Independent System Operator (ISO-NE). The project is one of approximately 40 independent transmission projects recommended by the ISO-NE Greater Boston Working Group to address identified reliability needs affecting the electric transmission system that serves the New Hampshire – Massachusetts region, and the Greater Boston area in particular. The project will specifically address reliability within the Marlborough Subarea of Sub-Area D.

Project Site

The majority of the project corridor follows the approximately 82.5-ft wide MBTA ROW. The project corridor originates at the Sudbury Substation and travels northwest along the MBTA ROW, extending through short sections of Marlborough and Stow before entering Hudson, where it exits the MBTA ROW and travels underground within public roadways for 1.3 miles to terminate at the Hudson Substation. The ROW was formerly the Massachusetts Central Railroad corridor which was used for passenger and/or freight service until approximately 1970. Portions of the ROW contain remnants of the single track railroad (ballast, tracks, and ties) and sections of the ROW are used by residents for passive recreation. The ROW traverses through or near developed and undeveloped areas, including conservation and open space held and/or managed by the Town of Sudbury, City of Marlborough, Sudbury Valley Trustees (SVT), and the U.S. Fish and Wildlife Service. These areas include: the Assabet River National Wildlife Refuge, Great Meadows National Wildlife Refuge, Marlborough-Sudbury State Forest, Memorial Forest, Hop Brook Conservation Land, and Marlborough Desert Conservation Area.

A portion of the project corridor is located in Priority and Estimated Habitat as mapped by the Division of Fisheries and Wildlife's (DFW) Natural Heritage and Endangered Species Program (NHESP) in the 14th Edition of the MA Natural Heritage Atlas. The project corridor is located within a half-mile radius of 16 Certified Vernal Pools/Outstanding Resource Waters (ORW). The project corridor will cross Fort Meadow Brook, Hop Brook (a designated coldwater fishery resource), Dudley Brook, and several other unnamed streams. It will also traverse the following wetland resource areas: Bank, Bordering Vegetated Wetlands (BVW), Bordering Land Subject to Flooding (BLSF), Isolated Land Subject to Flooding (ILSF), Isolated Vegetated Wetlands (IVW), and Riverfront Area. Portions of the project corridor are located within the Zone II Wellhead Protection Areas for municipal public water supply wells in the Towns of Hudson and Sudbury. The project corridor is located within and adjacent to historic and archaeological resources identified in the Massachusetts Historical Commission's (MHC) *Inventory of Historic Assets of the Commonwealth* (the Inventory) and/or the State and/or National Registers of Historic Places.

Environmental Impacts and Mitigation

The FEIR indicated that the project has been revised to reduce grading and impacts to wetland resource areas, rare species habitat, and land alteration since the DEIR was filed. The project will alter 23.93 acres of land, comprised in part of a discontinued railroad ROW and existing roadways. The addition of equipment at the Hudson Substation may result in a slight increase in impervious area. Approximately 4 acres of work will occur within mapped rare species habitat. As presented in the FEIR, the project will impact the following wetland resource areas: BVW (2,233 square feet (sf) temporary/284 sf permanent), IVW (951 sf permanent), LUW (1,139 sf temporary/59 sf permanent), Inland Bank (232 lf temporary/55 lf permanent), BLSF (4,978 sf temporary/29,335 sf permanent), ILSF (754 sf permanent), and Riverfront Area (6,776 sf temporary, and 311,680 sf permanent). The project will provide a net increase in flood storage (640.4 cubic yards (cy) in BLSF and 99 cy in ILSF).

As described in the FEIR, wetland impacts will be avoided, minimized, or mitigated by reducing the width of clearing (from 30 to 22 ft) and the construction platform (from 22 to 18 ft) in some areas; limiting tree clearing to the limits of grading; locating the access road and duct bank outside of resource areas where feasible; providing wetland replication at a ratio of 2:1 to mitigate permanent impacts to BVW and IVW; and designing the project to provide a net increase in flood storage. The Proponent clarified that the width of the clearing has been reduced to less than 30 ft for approximately 6.8 total miles and the width of the construction platform has been reduced to 18 ft for a total of 1.16 miles along the 7.5 mile ROW corridor.[2] The Proponent will prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with its National Pollutant Discharge Elimination System Construction General Permit (NPDES CGP). Erosion control measures (ECMs) and best management practices (BMPs) will be implemented to minimize and mitigate potential stormwater runoff impacts within the project corridor and wetland resource areas. As described in the FEIR, impacts to rare species and their habitat will be minimized through development of species-specific protection plans, implementation of time-of-year (TOY) restrictions, and wildlife surveys as required by NHESP. The FEIR indicated impacts to historic and archaeological resources will be addressed through review under Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (36 CFR 800).

Jurisdiction and Permitting

The project is undergoing MEPA review and requires an ENF pursuant to Sections 11.03(3)(b)(1)(f) and 11.03(7)(b)(4) of the MEPA regulations because it requires State Agency Actions and will result in the alteration of greater than ½ acre of any other wetlands, and it will result in the construction of an electric transmission line with a Capacity of 69 or more kV, provided that the transmission lines are one or more miles in length along New, unused or abandoned ROW, respectively. Project revisions since the DEIR was filed have reduced land alteration and BVW impacts such that the project no longer exceeds the ENF thresholds at 301 CMR 11.03(1)(b)(1) and 301 CMR 11.03(3)(b)(1)(d).

The project will require three Chapter 91 (c. 91) Licenses from the Massachusetts Department of Environmental Protection (MassDEP) (for the bridge crossings); a State Highway

[2] Email from Vivian Kimball (VHB) to Page Czepiga (MEPA Office) sent 9/13/18.

Access Permit (for work across Route 20) and Structural Adequacy Review pursuant to MGL c. 85 § 35 (for underpass at Chestnut Street) from the Massachusetts Department of Transportation (MassDOT); and a consolidated Petition to Construct (M.G.L. c 164, § 69H, 69J and 72) and Zoning Exemptions (M.G.L. c. 40A, §3) from the EFSB and the Department of Public Utilities (DPU).[3] The Project requires a Land Transfer from the MBTA in the form of an easement which will convey an interest in the property. The Proponent will execute a Memorandum of Understanding (MOU) with DCR to address the permitting and construction of the aspects of the Project related to the MCRT. The project is subject to the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol. BVW impacts have been reduced such that the project no longer requires an individual 401 Water Quality Certification (WQC) from MassDEP.

The project will require Orders of Conditions (OOC) from the Hudson, Stow, and Sudbury Conservation Commissions; or in the case of an appeal, Superseding Order(s) of Conditions from MassDEP. The project will require consultation with the MHC in accordance with Section 106 of the NHPA (as amended) and MGL c. 9 § 26-27C (950 CMR 70-71), submittal of a Self-Verification or Pre-Construction Notification (PCN) to the U. S. Army Corps of Engineers (ACOE) under the General Permits for Massachusetts in accordance with Section 404 of the Federal Clean Water Act (CWA), and a National Pollutant Discharge Elimination System Construction General Permit (NPDES CGP) from the United States Environmental Protection Agency (EPA).

Because the project requires a Land Transfer from the MBTA and numerous Permits, several of which confer broad scope jurisdiction, subject matter jurisdiction is functionally equivalent to full scope jurisdiction in accordance with 301 CMR 11.01(2)(a)(3). Therefore, MEPA jurisdiction for this project extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Review of the FEIR

The FEIR described the project and changes since the filing of the DEIR, identified existing conditions, and described potential environmental impacts and mitigation measures. The FEIR included supporting narrative and graphics in response to the Scope issued in the Certificate on the DEIR. It provided a brief description of applicable statutory and regulatory standards and requirements, and described how the project will meet those standards. It included a list of required State Permits, Financial Assistance, or other State approvals and provided an update on the status of each of these pending actions. The FEIR indicated that the Proponent and DCR will file joint Permit applications with MassDEP, NHESP, and the local Conservation Commissions that will address the transmission project and the MCRT. Since the DEIR was filed, MassDOT has approved the MCRT design (MassDOT Project #608995). According to the FEIR, DCR intends to construct the Sudbury to Hudson portion of the MCRT in Fiscal Year 2021, following completion of the transmission line by the Proponent.

As described in the FEIR, the Proponent has advanced project plans to the 75% design level, completed additional stormwater analysis, completed structural assessments of the bridge crossings and refined proposed bridge designs. There are no changes to the work proposed at

[3] Consolidated docket number EFSB 17-02/D.P.U. 17-82/17-83

Bridges #128 and #130. Work at Bridge #127 has changed since the DEIR was filed; it includes reconstruction of the bridge span and new abutments. The FEIR indicated that substation improvements and transmission line corridor route have not changed since the DEIR was filed. The design of the transmission line has been revised to further reduce environmental impacts. The majority of these reductions are associated with design changes that limit tree clearing to the limits of proposed grading. This change (and other design revisions described below) have reduced total land alteration and decreased impacts to rare species habitat, BVW, and BLSF since the DEIR was filed.

Alternatives Analysis

To provide context for the project design, the Scope for the FEIR required the Proponent to identify the applicable standards set by the DPU or other applicable regulatory agency that govern the minimum distances between structures, transmission lines, and related equipment, vegetation management requirements, and other design criteria. The Scope also required the Proponent to identify and to further analyze construction methodologies and site design measures to reduce the impacts of the project, with an emphasis on reducing impacts to land alteration and wetland resource areas. The Scope did not require additional analysis of transmission line alternatives.

The DEIR did include an analysis of transmission line alternatives to meet the identified need within the regional electric transmission system, including: a No-Build Alternative; Non-Transmission Alternatives (NTAs); Alternative Transmission Solution (ATS); Routing and Design Alternatives within the MBTA ROW and within different roadways (including the Noticed Variation and Noticed Alternative); and the Preferred Alternative. The DEIR compared the environmental impacts, abutting land uses and cost of each alternative.

The Noticed Alternative Route consists of 10.3 miles of transmission line located entirely underground within public roads in the Towns of Sudbury, Stow, and Hudson. The DEIR demonstrated that the Noticed Alternative would reduce tree clearing, wetland, rare species, and coldwater fishery resource impacts compared to the Preferred Alternative. It also indicated that the Noticed Alternative would have greater construction period impacts, including traffic, to residents and commercial/industrial land uses, and would cost an additional $19.4 million compared to the Preferred Alternative.

The Noticed Variation follows the same route as the Preferred Alternative but consists of a combination of overhead (7.6 miles) and underground (1.3 miles) transmission line. The Noticed Variation would require increased wetland impacts and tree clearing compared to the Preferred Alternative and it would cost $46.8 million less to construct compared to the Preferred Alternative. The DEIR indicated that the Preferred Alternative was selected to achieve the best balance between cost and environmental impact while meeting the project's need.

I have received several comment letters from legislators, municipal representatives, environmental advocacy groups, and residents which identify concerns regarding wetland resource and rare species impacts, soil and drinking water supply contamination, and impacts to historic/cultural resources. Many of these comment letters request additional consideration of the

Noticed Alternative to avoid these impacts. I acknowledge and appreciate these concerns; however, the Scope for the FEIR did not require additional analysis of project alternatives and the purpose of MEPA review is to evaluate the environmental impacts of a proposed project in light of the Proponent's objectives. Identification of a project's purpose and need provides context for MEPA review and the alternatives analysis. MEPA requires that the Proponent identify environmental impacts, consider and analyze alternatives that could reduce environmental impacts and evaluate and adopt measures to avoid, minimize and mitigate Damage to the Environment. It does not prescribe to a Proponent what, where, or how a project should be designed or built.

The FEIR evaluated the following: additional reductions in roadway width and clearing, locating the majority of the duct bank within the footprint of the access road, jack-and-bore and/or horizontal directional drilling (HDD) at stream/culvert crossings, and use of smaller construction equipment to limit construction access clearing. In locations where the width of the construction platform is reduced to 18 ft to avoid impacts to wetlands and historic resources, the duct bank will be located within the footprint of the access road. According to the FEIR, locating the duct bank under the access road for the entire project length would increase construction duration and cost and increase the difficulty of performing maintenance on the transmission line. The FEIR indicated that the stream crossings at Hop Brook and Fort Meadow Brook do not have ideal site characteristics for jack-and-bore installation. In addition, it indicated this method is not appropriate for the smaller culvert crossings because it would increase environmental impacts compared to the work that was already proposed at these locations (replacement of drainage pipe #127A and removal of obstructions at other drainage pipes). The Proponent developed preliminary HDD alignments to evaluate the feasibility of using this method for the large waterway crossings on the project (Bridges #130, #128, and #127). The FEIR indicated that an HDD installation at these crossings could reduce impacts to BVW by 220 sf and would result in a net increase of 0.47 acres of clearing. The FEIR indicated that bridge rehabilitation and reconstruction remains the Preferred Alternative for these three crossings and noted that this work is a necessary component of the MCRT. According to the FEIR, smaller construction equipment is not available, with the exception of an excavator, and use of a smaller excavator would not reduce land alteration or clearing because the minimum limits are based on the clearance requirements of the largest piece of equipment.

The FEIR identified specific locations where the 22-ft wide construction platform was reduced to 18 ft to minimize grading and reduce impacts to land alteration, wetland resources, and historic resources. As described in the FEIR, a 22-ft construction platform is the minimum width necessary to maintain two-way construction vehicle traffic which will facilitate installation of 125 to 150 ft of the transmission line each day. According to the FEIR, in locations where the 18-ft wide construction platform will be used, a maximum of two crews can be deployed with each one accessing from opposite ends of the corridor. The FEIR indicated this will reduce installation of the transmission line to 35 to 50 ft each day. The FEIR indicated that the 22-ft construction platform will reduce construction duration, construction costs, impacts to abutting residents, facilitate emergency vehicle access, and allow construction vehicles to be staged alongside the excavated trench.

Land Alteration

According to the FEIR, the project will alter 23.93 acres of land, which represents a 4.03 acre reduction since the DEIR was filed. Based on this, the project no longer exceeds the ENF threshold for land alteration at 301 CMR 11.03(1)(b)(1). The FEIR characterized the existing and proposed vegetative cover within the project corridor. The FEIR indicated that predominant vegetation along the corridor is comprised of moderately dense young trees, saplings, shrubs, and herbs. According to the FEIR, the project was designed to utilize, to the extent possible, the existing rail and ballast areas where existing paths currently exist.

The FEIR identified additional site design measures that were incorporated into the Preferred Alternative to further reduce environmental impacts and land alteration. These include the use of retaining walls and permanent turf reinforcement matting; use of permanent sheet piles; allowing slopes of up to 6:1 within the construction platform to reduce grading; locating manholes outside of wetland resource areas and maximizing their spacing; installation of new bridge abutments landward of existing abutments (to avoid impacts that would be associated with removal); maintaining existing grade of Bridges #130 (Fort Meadow Brook) and #128 (Hop Brook) to avoid impacts to adjacent wetlands that would result from increasing the grade of the bridge approaches; avoiding disturbance of drainage pipe #125b to avoid potential impacts to the hydrology of the adjacent vernal pool; and shifting the project alignment vertically and horizontally to minimize limits of grading and impacts to adjacent environmental resources. The FEIR also identified applicable standards and requirements for vegetation management and the construction and design of the transmission line, access road, and rail trail and described their impact on project design and the limits of work.

The FEIR included a copy of the draft MOU between the Proponent and DCR which identified responsibility for maintenance activities. Upon completion of the transmission line project, DCR will pave a 10-ft wide section of the gravel access road and will loam and seed the remaining 2-ft wide shoulders on either side of the path. DCR will be responsible for vegetation management and maintenance of the path, bridges, box culvert at Chestnut Street, bridge decking, and railings. The FEIR indicated that DCR intends to construct the rail trail within one year of completion of the transmission line project. If construction or maintenance of the rail trail by DCR is delayed more than four years, the Proponent will assume vegetation management responsibilities over the area of the duct bank in accordance with their Vegetation Management Plan and 220 CMR 22.00 (Notification of Vegetation Maintenance Activities for Transmission Rights-Of-Way). The FEIR described the primary method (mechanical), area, and frequency of vegetation management activities. Targeted use of herbicides will be limited to control infestations of invasive species and will comply with 33 CMR 11.00 (Rights of Way Management) which establish a regulatory process to minimize the use of, and potential impacts from herbicides and specifically limits the herbicides that can be used in and near "Sensitive Areas", including water supplies, state-listed species habitat, and wetlands. These regulations limit the type, frequency, and method of herbicide use within riverfront area and within 100 ft of a wetland or Certified Vernal Pool and do not allow any herbicide use within 10 ft of any wetland, Certified Vernal Pool, or rivers.

Construction access and laydown/staging areas will be identified by the contractor. The FEIR clarified that the Proponent will require contractors to locate these areas in previously disturbed locations that will not require additional clearing or impacts to wetlands or rare species habitat. As requested in the Scope, the FEIR described why the amount of land alteration identified in the ENF (26.7 acres) increased in the DEIR (27.96 acres). More detailed engineering identified the need for additional grading to accommodate swales and vertical slope limitations for the rail trail. As noted above, project revisions have reduced the amount of land clearing by 4.03 acres since the DEIR was filed. The FEIR clarified that the project will not require blasting.

Wetlands

The project will require an Order of Conditions from the Hudson, Stow, and Sudbury Conservation Commissions which will review the project to determine its consistency with the Wetlands Protection Act (WPA), the Wetlands Regulations (310 CMR 10.00), and associated performance standards, including the Stormwater Management Standards (SMS). The Proponent and DCR will jointly submit Notice of Intent (NOI) applications for construction of the project and subsequent MCRT. The site plans and impact calculations identified in the FEIR are based on the most recent wetland delineation data. The Hudson and Sudbury Conservation Commissions issued Orders of Resource Area Delineation (ORAD) which approved the delineation on February 5, 2018 and August 27, 2018, respectively.[4] The FEIR indicated that wildlife habitat evaluations are being conducted in accordance with MassDEP's *Wildlife Habitat Protection Guidance for Inland Wetlands*. The results of this evaluation will be used to identify key habitat features and additional avoidance and mitigation measures.

The FEIR indicated that both the transmission line and MCRT qualify as limited projects under the WPA pursuant to CMR 10.53(3)(d) and 310 CMR 10.53(6), respectively. The FEIR described and quantified wetland impacts by resource area and identified the reasons for any change in impacts compared to the DEIR. Impacts to BVW have been reduced since the DEIR was filed and the project no longer requires an individual 401 WQC or exceeds the ENF threshold for BVW impacts at 301 CMR 11.03(3)(b)(1)(d). As presented in the FEIR, the project will impact the following wetland resource areas: BVW (2,517 sf), IVW (951 sf), LUW (1,198 sf), Inland Bank (287 lf), BLSF (34,314 sf), ILSF (754 sf), and Riverfront Area (318,456 sf). Impacts to Riverfront Area may be conservative as they consider all streams as perennial. Permanent wetland impacts are associated with grading and fill, construction of a headwall and scour protection at an existing drainage pipe (#127B), and replacement of an existing drainage pipe (#127A). Temporary wetland impacts are associated with installation of sheeting to construct bridge abutments, use of timber mats to facilitate equipment access, and post-construction maintenance of the ROW.

The FEIR generally described the wetland mitigation program and indicated that it is designed to meet ACOE, MassDEP, and local bylaw requirements and performance standards. Areas that are temporarily disturbed will be revegetated and restored in place. The project will

[4]The Proponent has indicated that impacts to BLSF have likely decreased as a result of minor changes to the BLSF delineation that occurred during the ORAD process. The impact calculations presented in the FEIR are conservative as they do not reflect this reduction.

mitigate BVW and IVW loss at a 2:1 ratio. The FEIR included plans that identified potential locations for wetland replication areas (15 areas, 11,031 total sf), described its design, and generally described the proposed wetland and invasive species monitoring program. Project plans provided with the FEIR identified areas of fill along the corridor and included cross sections which quantified the amount of cut and fill at each elevation. According to the FEIR, the project has been designed to provide a net increase in flood storage within BLSF of 640.4 cy. The project will require grading within ILSF, however this work will not involve fill and will result in a net increase in flood storage within ILSF of 99 cy. I note comments from the Town of Sudbury identify concerns regarding the quantification of wetland impacts. Additional information to demonstrate compliance with applicable provisions of the WPA and the Wetlands Regulations should be provided with the future NOI applications.

According to the FEIR, the project will not directly impact any vernal pools. The FEIR identified the distance from the limit of work to the 16 vernal pools within the project corridor and identified measures that will be implemented to protect them during construction. I note it is critically important that the Proponent employ erosion control and stormwater management measures to avoid construction impacts to adjacent Vernal Pool resources and encourage the Proponent to continue evaluating increasing the natural buffers to vernal pools. The FEIR provided an update on consultations with DFW regarding potential impacts to coldwater fishery resources (i.e. the two Hop Brook crossings) and noted that a site visit with DFW was conducted in April 2018. The FEIR concluded that the project is not anticipated to impact coldwater fishery resources as it will not cause a significant increase in stream temperatures, appropriate vegetation will be replanted after construction, and in-stream work will be completed in accordance with appropriate TOY restrictions. The FEIR provided project plans and an update on the structural analysis and proposed improvements at existing culverts, drainage pipes, and other non-bridge stream crossings. The project will construct a new headwall and scour protection at drainage pipe #127B, replace drainage pipe #127A, and remove debris and/or clear vegetation from four other culvert or drainpipe locations (#129C, #127I, #126B, #126A). Minor repairs are also proposed at the cattle crossing. The project includes two new drainage pipes in Hudson (29 ft long and 24 inches wide) and in Stow (28 ft long and 24 inches wide). The FEIR indicated that stream crossings will not be enlarged or replaced to avoid hydraulic impacts.

Stormwater

As described in the FEIR, the transmission line project will not create any impervious area. The gravel access road will serve as the base for the 10-ft wide paved MCRT which will create impervious area. MassDEP comments indicate that the paved MCRT will be required to meet SMS under 310 CMR 10.05(6)(k). The FEIR indicated that 310 CMR 10.05(6)(m)(6) requires "footpaths, bike paths, and other paths for pedestrian and/or non-motorized vehicle use" to comply with the SMS to the maximum extent practicable. According to the FEIR, the stormwater management system has been designed to meet the applicable SMS to the maximum extent possible. The FEIR included an evaluation of consistency of the transmission line and MCRT design with each of the SMS. According to the FEIR, the project has been designed to consider the MCRT and includes vegetated shoulders and conveyance swales with check dams to promote infiltration and recharge. The stormwater management system was designed to maintain existing drainage patterns and sized to accommodate runoff from the MCRT paved surfaces to

accommodate a two-year storm, consistent with DCR's design standards for rail trail facilities. The FEIR indicated the project will not increase peak flows to abutting private properties or closed drainage systems at roadway crossings during the 25-year storm event. The FEIR indicated that the stormwater management system does not incorporate additional BMPs to achieve the total suspended solids (TSS) removal rates identified in the SMS because new pollutants or TSS loads will not be introduced and BMPs to achieve these rates would require additional clearing and grading. The FEIR indicated that the proposed design balances stormwater management with minimization of impacts to wetland resource areas. I refer the Proponent to MassDEP's comment letter which identifies additional information and calculations that should be provided with the future NOI applications. Additional analysis of the stormwater management system will be required as part of this permitting process.

Rare Species

According to the FEIR, the project will impact 4 acres of Priority and/or Estimated Habitat for several state-listed rare species and requires a direct filing with NHESP for compliance with the Massachusetts Endangered Species Act (MESA, MGL c.131A) and its implementing regulations (321 CMR 10.00). The FEIR identified the mapped species (Eastern Box Turtle, Eastern Whip-poor-will, Gerhard's Underwing, and Coastal Swamp Metarranthis) and associated habitat requirements, described existing habitat conditions and identified potential impacts from development of the project and the MCRT. The FEIR included a Turtle Protection Plan (TPP) that was developed with NHESP to avoid and minimize impacts to the turtle population during construction. It includes contractor training, TOY restrictions, protection of overwintering locations, turtle surveys, construction monitoring and turtle sweeps, and relocation of turtles. The following measures are proposed to avoid, minimize and mitigate impacts to the other state-listed species: TOY restrictions, avoiding destruction of host plants (to the extent possible), and revegetating the area with appropriate plant species. The FEIR included a copy of the Corridor Management Plan which identifies maintenance activities (including vegetation management) and incorporates specific measures to protect state-listed species based on consultation with NHESP (i.e. TOY restrictions requiring turtle sweeps prior to vegetation maintenance activities and minimum mower deck heights). Comments from NHESP indicate that the project will not result in a Take of state-listed species, provided that the Proponent implement the TPP and Corridor Management Plan and adhere to construction-period TOY restrictions to protect Eastern Whip-poor-will. Comments indicate any other concerns related to state-listed species can be addressed during the MESA review process.

Greenhouse Gas (GHG) Emissions

The project is subject to the MEPA Greenhouse Gas Policy and Protocol (GHG Policy) because it required the preparation of an EIR. Each of the two new 115-kV circuit breakers at the Sudbury Substation will require the use of Sulfur Hexafluoride (SF_6) gas, a potent GHG. The FEIR indicated that each breaker will be designed for an annual emission rate of 0.1% which is as low as is commercially available. According to the FEIR, this is equivalent to a total of 1.688 tons per year (tpy) of greenhouse gas (GHG) emissions. The FEIR indicated that the potential for SF_6 emissions is minimal and identified additional actions the Proponent has taken to reduce SF_6 emissions. According to the FEIR, the Sudbury Substation can accommodate the interconnection

of distributed renewable energy and there are no additional changes that could be implemented in conjunction with this project to improve its ability to accommodate these resources.

Historic/Archaeological Resources

The project corridor is located within and adjacent to historic and archaeological resources identified in MHC's Inventory and/or the State and/or National Registers of Historic Places. The project is subject to review by the MHC acting as State Historic Preservation Office (SHPO) in accordance with Section 106 of the NHPA (as amended) and MGL c. 9 § 26-27C (950 CMR 70-71). The scope and purpose of this review process is focused on preserving historic and archaeological resources. As requested by the MHC, the Proponent completed reconnaissance level surveys in December 2017. The Proponent is currently undertaking intensive (locational) archaeological surveys and will provide the results to MHC upon completion. Comments from MHC indicate that the results of the surveys will be used to avoid, minimize, or mitigate adverse effects to significant historic and archeological resources through the consultation process. I expect the Proponent will provide MHC with the most recent bridge plans, as appropriate, and refer the Proponent to comments from Protect Sudbury and H. Rebecca Cutting which identify additional resources to assist in identifying historic elements in the project area.

Construction Period

Construction is anticipated to commence in April 2019 with a completion date of winter 2020. Work will occur from 7:00 am to 7:00 pm Monday through Friday and from 9:00 am to 5:00 pm on Saturday. The FEIR identified procedures that would be followed if construction needs to be extended beyond normal hours and days. The FEIR clarified that the typical construction sound levels previously identified in the DEIR were conservative as they assumed no physical barrier between the person and the noise source.

Stockpiling of material within the ROW will be limited in size and duration (1 week maximum) and will be located as far from sensitive areas as practicable. At a minimum, stockpiles will be managed in accordance with MassDEP's *Best Management Practices for Controlling Exposure to Soil during the Development of Rail Trails* (Rail Trail BMPs). The Proponent has identified areas of potential contamination concern and is sampling soils in areas where preliminary review indicated a need for further investigation. The FEIR described notification procedures and identified who would be notified if contamination is encountered at the site. Contaminated soil (and stockpiles) will be managed pursuant to the provisions of a Utility Release and Abatement Measures (URAM) regulated under the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000). In these areas, contaminated soil will be encapsulated through installation of a geosynthetic barrier and 12 inches of clean fill will be placed above the potentially contaminated material. The Proponent will develop a site-specific groundwater management plan and will retain a Licensed Site Professional (LSP) to oversee implementation of the MCP.

The project will install temporary steel decks over Bridges #127 and #128 to carry construction equipment loads. At the end of the construction period, the steel decks will be

replaced with permeant wood decks that meet DCR standards for multi-use trails. The FEIR elaborated on mitigation measures that will be implemented during the project to avoid or minimize impacts associated with construction traffic, noise, traffic, site contamination, and other impacts. Mitigation measures identified in the FEIR include erosion and sedimentation control measures, scheduling material deliveries during non-peak hours, and use of low-noise generators and other noise mitigation measures. Designated truck routes will be developed as part of the local permitting process. The project will implement erosion and sedimentation controls and measures to minimize the spread of invasive species in accordance with the Proponent's *Best Management Practices Manual for Massachusetts and Connecticut* ("Eversource's BMP Manual"). I expect the Proponent will coordinate appropriately with emergency services during the construction period to incorporate fire prevention practices, spill containment measures, and to identify potential emergency vehicle access routes. The project must comply with MassDEP Solid Waste and Air Quality Control regulations, pursuant to M.G.L. Chapter 40, Section 54, during construction. All construction activities should be undertaken in compliance with the conditions of all State and local permits.

Mitigation and Draft Section 61 Findings

The FEIR provided revised draft Section 61 Findings for MassDEP, DPU/EFSB, and MassDOT. It described mitigation measures and contained commitments to mitigation. The draft Section 61 Findings will serve as the primary template for State Agency Permit conditions and should be revised, as necessary, in response to this Certificate and/or comment letters and provided to State Agencies to assist in the permitting process and issuance of final Section 61 Findings. As described in the DEIR and FEIR, the Proponent has committed to implement the following measures to avoid, minimize, and mitigate environmental impacts:

Wetlands/Water Quality/Stormwater

- Use of construction mats to minimize direct impacts to wetland resource areas;
- Creation of wetland replication areas at a minimum 2:1 ratio;
- Design of the project to provide a net increase in flood storage capacity;
- Restoration of all disturbed areas with appropriate vegetation (with the exception of the gravel access road);
- Implementation of a post-construction wetland inspection and monitoring plan, including invasive species control efforts;
- Compliance with TOY restrictions prohibiting active construction within 340 ft from vernal pools from March 1 to May 14 to avoid the migratory breeding period; and
- Installation of a stormwater management system that complies with the SMS (to the maximum extent practicable). It will include vegetated shoulders and conveyance swales with check dams.

Rare Species

- Development and implementation of a Turtle Protection Plan specifying TOY restrictions for vegetation and earthwork (November 1 and March 31) and protection of overwintering locations (November 1 and March 31), and requiring additional turtle surveys, construction monitoring (April 1 to October 31), turtle sweeps and relocation, and visual inspections during vegetation management activities (April 1 to November 1);

- Development and implementation of a Corridor Management Plan which incorporates specific measures to protect state-listed species during vegetation management activities;
- Compliance with TOY restrictions (May 1 to August 1) to avoid impacts to Eastern Whip-poor-will during the nesting season;
- Compliance with TOY restrictions (November 1 to March 31) to avoid impacts to black racer hibernaculum;
- Compliance with TOY restrictions (October 1 to May 31) for in-water work at Hop Brook to avoid impacts to coldwater fisheries; and
- Designing the project to avoid destruction of host plants (to the extent possible).

Greenhouse Gas Emissions

- The Proponent will take the following actions to reduce fugitive SF6 emissions: voluntary participation in the US EPA Emission Reduction Partnership for Electric Power Systems, improved SF6 tracking, early detection measures, and active breaker replacements.

Historic/Archaeological Resources

- Completion of an intensive archaeological survey; and
- Consultation with MHC pursuant to Section 106 of the NHPA (as amended) and MGL c. 9 § 26-27C (950 CMR 70-71) to avoid, minimize, and mitigate impacts to historic and archaeological resources.

Construction Period

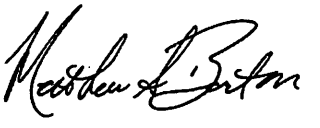
- Use of erosion and sedimentation controls and measures to minimize the spread of invasive species in accordance with the Proponent's Best Management Practices Manual for Massachusetts and Connecticut;
- A Stormwater Pollution and Prevention Plan (SWPP) will be prepared in connection with the project's NPDES CGP;
- Soil stockpiles will be managed in accordance with the MassDEP Rail Trail BMPs document and contaminated soil or other material will be managed pursuant to the provisions of a URAM regulated under the MCP (310 CMR 40.0000);
- Development and implementation of a soil and groundwater management plan that will also include procedures for the management of dewatering;
- Proponent will require that contractors locate construction access and staging/laydown areas in previously disturbed locations that will not require additional clearing or impacts to wetlands or rare species habitat;
- Noise mitigation measures including the use of low noise generators when possible, locating generators as far away as possible from sensitive receptors, and use of vibration dampening pads and/or sound dampening enclosures or barriers;
- Development of work zones to maintain trail connectivity for trails that cross the MBTA ROW from abutting recreational and conservation properties (to the maximum extent feasible);
- Dust control measures will be implemented, including wet suppression, covering trucks leaving the site, covering soil stockpiles and stabilizing disturbed areas;
- Proponent will use ultra-low sulfur diesel (ULSD) fuel in its construction equipment and will require contractors working on the project to retrofit any diesel-powered non-road

construction equipment rated 50 horsepower or above to be used for 30 or more days over the course of the project with U.S. EPA-verified (or equivalent) emission control devices (e.g., oxidation catalysts or other comparable technologies);
- The project will comply with MassDEP regulations limiting vehicle idling (310 CMR 7.11 (1)(b)); and
- Coordination of delivery of materials to off-peak hours and development of designated truck routes.

Conclusion

The FEIR is responsive to the issued in the December 15, 2017 Certificate on the DEIR. Comments from State Agencies do not identify issues that warrant additional analysis in a Supplemental FEIR. Additional analysis and review are necessary to finalize design of the stormwater management system and cultural/historic resources and rare species mitigation and will continue through project permitting. Based on a review of the FEIR, comment letters, and consultation with State Agencies, I find that the FEIR adequately and properly complies with MEPA and its implementing regulations. Outstanding issues can be addressed during State and local permitting and review. The project may proceed to permitting. The Proponent and State Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.

If there is a material change to the project that will increase environmental impacts prior to the completion of Agency Actions for the project, the Proponent may be required to file a NPC.



September 14, 2018
Date

Matthew A. Beaton

Comments received:

08/03/2018 State Representative Kate Hogan
08/19/2018 Gregory Opp
08/23/2018 Gleasondale Village Association
08/28/2018 Town of Hudson, Thomas Moses, Executive Assistant
09/04/2018 Joe and Donna DiFranco
09/04/2018 Town of Hudson, Conservation Commission
09/05/2018 Massachusetts Historical Commission (MHC)
09/06/2018 H. Rebecca Cutting
09/06/2018 Natural Heritage and Endangered Species Program (NHESP)
09/06/2018 Brian O'Neill
09/06/2018 Elisa Pearmain
09/06/2018 Protect Sudbury

09/06/2018	Brian White and Catherine Schoenleber
09/07/2018	Todd Billings
09/07/2018	Sudbury Valley Trustees (SVT)
09/07/2018	Town of Sudbury, George Pucci, KP Law, P.C.
09/07/2018	Christine Nelson
09/07/2018	Massachusetts Department of Environmental Protection (MassDEP) – Waterways Regulation Program
09/07/2018	MassDEP – Northeast Regional Office

MAB/PRC/prc

Notices of Intent (under separate cover)

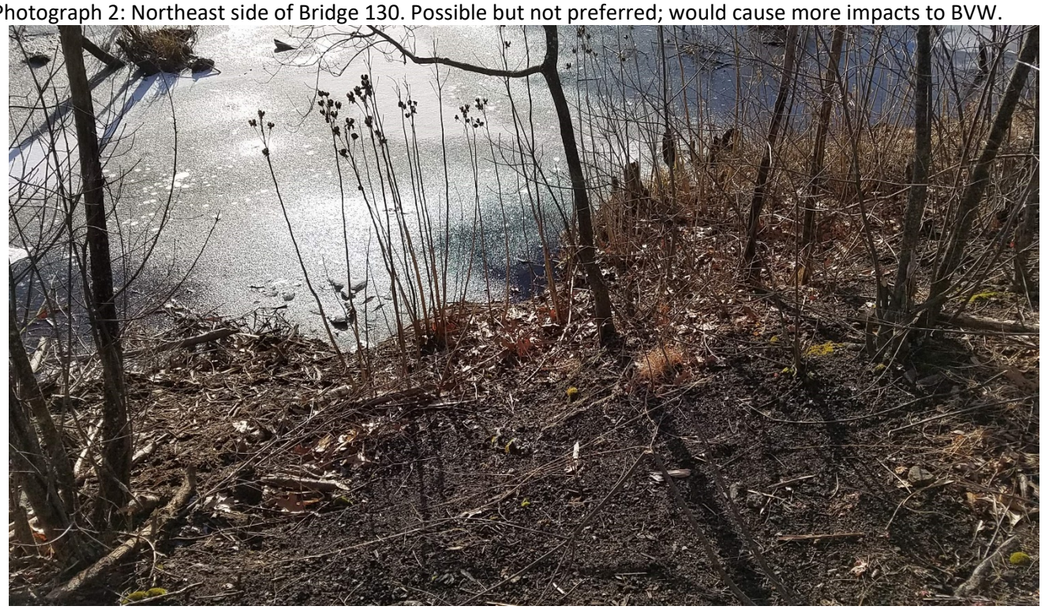
- Hudson Notice of Intent
- Stow Notice of Intent
- Sudbury Notice of Intent

Portage Assessment

Photograph 1: Northwest side of Bridge 130. Heavily vegetated and steep slope.

Photograph 2: Northeast side of Bridge 130. Possible but not preferred; would cause more impacts to BVW.

Photograph 3: Southwest side of Bridge 130. Steep slope.



Photograph 4: Southeast side of Bridge 130. Possible but not preferred; would have greater impacts to BVW.

Figure 4-1	**Portage Opportunities** Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project	vhb

Photograph 5: Northwest side of Bridge 128. Heavily vegetated.

Photograph 6: Northeast side of Bridge 128. Portage here would result in minimal new impacts, as it is in the crane mat area, but impacts would be permanent rather than temporary.

Photograph 7: Southwest side of Bridge 128. Heavily vegetated.

Photograph 8: Southeast side of Bridge 128. Possible but would need to confirm if water depth is sufficient.

Figure 4-2	**Portage Opportunities** Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project	vhb

Photograph 9: Northwest side of Bridge 127. Heavily vegetated and steep slope.

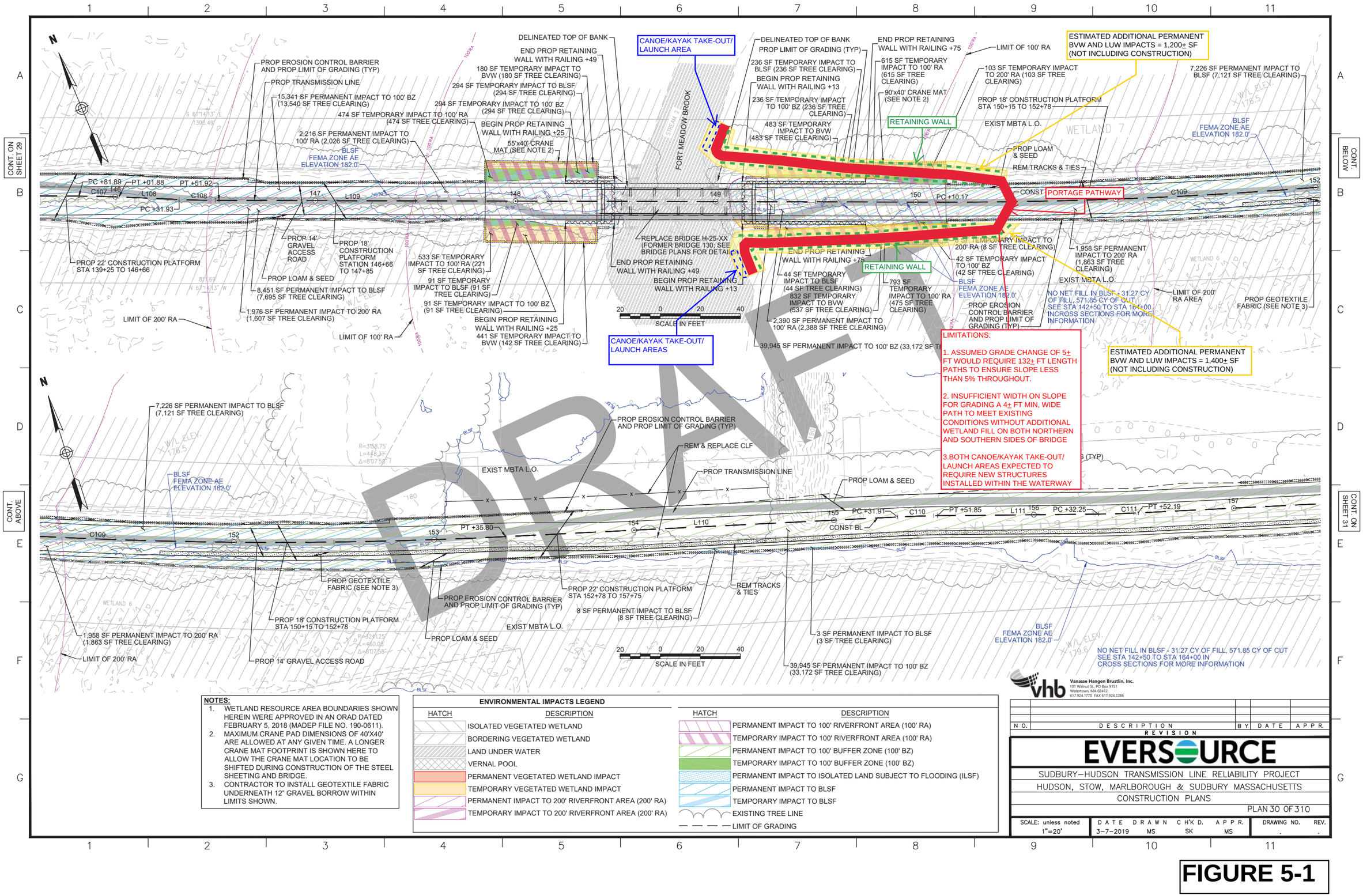
Photograph 10: Northeast side of Bridge 127. Gentle slope.

Photograph 11: Southwest side of Bridge 127. Steep slope.

Photograph 12: Southeast side of Bridge 127. Fair slope and wide open but would require fill in Land Under Water.

Figure 4-3	**Portage Opportunities** Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project	vhb

BRIDGE 130



NOTES:

1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED FEBRUARY 5, 2018 (MADEP FILE NO. 190-0611).
2. MAXIMUM CRANE PAD DIMENSIONS OF 40'X40' ARE ALLOWED AT ANY GIVEN TIME. A LONGER CRANE MAT FOOTPRINT IS SHOWN HERE TO ALLOW THE CRANE MAT LOCATION TO BE SHIFTED DURING CONSTRUCTION OF THE STEEL SHEETING AND BRIDGE.
3. CONTRACTOR TO INSTALL GEOTEXTILE FABRIC UNDERNEATH 12" GRAVEL BORROW WITHIN LIMITS SHOWN.

ENVIRONMENTAL IMPACTS LEGEND

HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT VEGETATED WETLAND IMPACT
	TEMPORARY VEGETATED WETLAND IMPACT
	PERMANENT IMPACT TO 200' RIVERFRONT AREA (200' RA)
	TEMPORARY IMPACT TO 200' RIVERFRONT AREA (200' RA)

HATCH	DESCRIPTION
	PERMANENT IMPACT TO 100' RIVERFRONT AREA (100' RA)
	TEMPORARY IMPACT TO 100' RIVERFRONT AREA (100' RA)
	PERMANENT IMPACT TO 100' BUFFER ZONE (100' BZ)
	TEMPORARY IMPACT TO 100' BUFFER ZONE (100' BZ)
	PERMANENT IMPACT TO ISOLATED LAND SUBJECT TO FLOODING (ILSF)
	PERMANENT IMPACT TO BLSF
	TEMPORARY IMPACT TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

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NO.	DESCRIPTION	BY	DATE	APPR.

REVISION

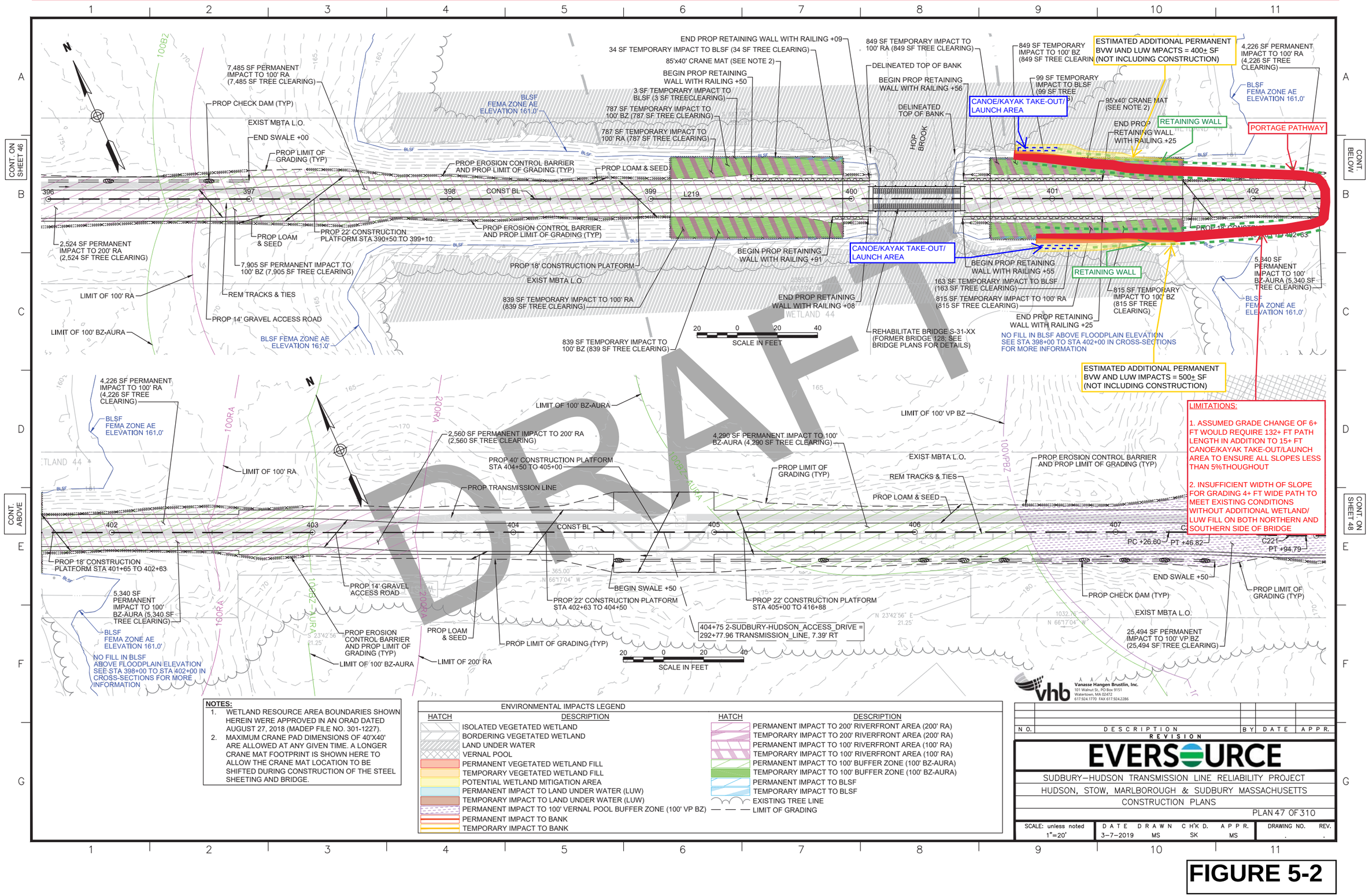
EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 30 OF 310

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
1"=20'	3–7–2019	MS	SK	MS	.	.

FIGURE 5-1

BRIDGE 128



NOTES:

1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).
2. MAXIMUM CRANE PAD DIMENSIONS OF 40'X40' ARE ALLOWED AT ANY GIVEN TIME. A LONGER CRANE MAT FOOTPRINT IS SHOWN HERE TO ALLOW THE CRANE MAT LOCATION TO BE SHIFTED DURING CONSTRUCTION OF THE STEEL SHEETING AND BRIDGE.

ENVIRONMENTAL IMPACTS LEGEND

HATCH	DESCRIPTION	HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND		PERMANENT IMPACT TO 200' RIVERFRONT AREA (200' RA)
	BORDERING VEGETATED WETLAND		TEMPORARY IMPACT TO 200' RIVERFRONT AREA (200' RA)
	LAND UNDER WATER		PERMANENT IMPACT TO 100' RIVERFRONT AREA (100' RA)
	VERNAL POOL		TEMPORARY IMPACT TO 100' RIVERFRONT AREA (100' RA)
	PERMANENT VEGETATED WETLAND FILL		PERMANENT IMPACT TO 100' BUFFER ZONE (100' BZ-AURA)
	TEMPORARY VEGETATED WETLAND FILL		TEMPORARY IMPACT TO 100' BUFFER ZONE (100' BZ-AURA)
	POTENTIAL WETLAND MITIGATION AREA		PERMANENT IMPACT TO BLSF
	PERMANENT IMPACT TO LAND UNDER WATER (LUW)		TEMPORARY IMPACT TO BLSF
	TEMPORARY IMPACT TO LAND UNDER WATER (LUW)		EXISTING TREE LINE
	PERMANENT IMPACT TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)		LIMIT OF GRADING
	PERMANENT IMPACT TO BANK		
	TEMPORARY IMPACT TO BANK		

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NO.	DESCRIPTION	BY	DATE	APP'R.

REVISION

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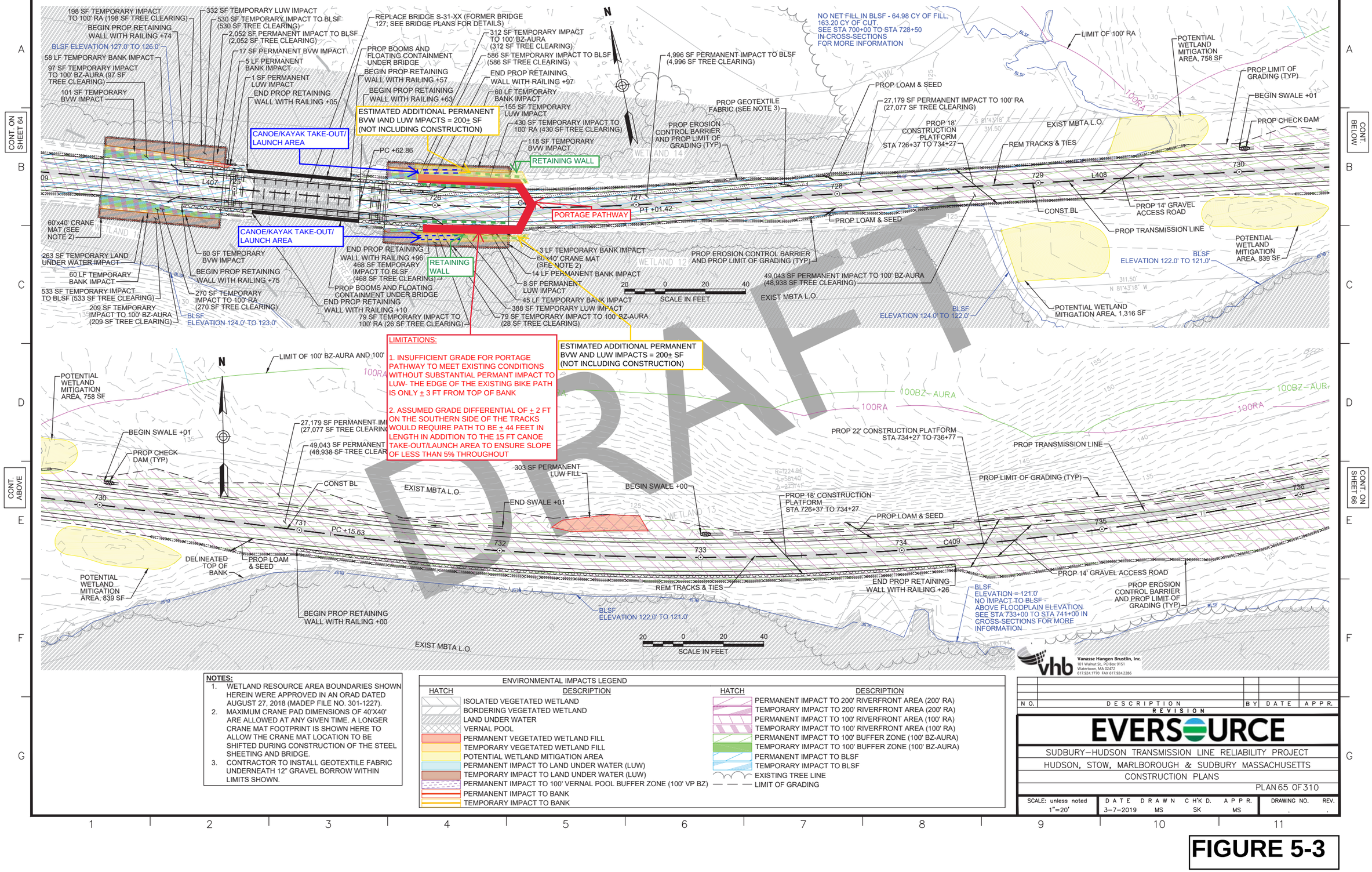
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 47 OF 310

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP'R.	DRAWING NO.	REV.
1"=20'	3–7–2019	MS	SK	MS	.	.

FIGURE 5-2

BRIDGE 127



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2. MAXIMUM CRANE PAD DIMENSIONS OF 40'X40' ARE ALLOWED AT ANY GIVEN TIME. A LONGER CRANE MAT FOOTPRINT IS SHOWN HERE TO ALLOW THE CRANE MAT LOCATION TO BE SHIFTED DURING CONSTRUCTION OF THE STEEL SHEETING AND BRIDGE.
3. CONTRACTOR TO INSTALL GEOTEXTILE FABRIC UNDERNEATH 12" GRAVEL BORROW WITHIN LIMITS SHOWN.

ENVIRONMENTAL IMPACTS LEGEND

HATCH	DESCRIPTION	HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND		PERMANENT IMPACT TO 200' RIVERFRONT AREA (200' RA)
	BORDERING VEGETATED WETLAND		TEMPORARY IMPACT TO 200' RIVERFRONT AREA (200' RA)
	LAND UNDER WATER		PERMANENT IMPACT TO 100' RIVERFRONT AREA (100' RA)
	VERNAL POOL		TEMPORARY IMPACT TO 100' RIVERFRONT AREA (100' RA)
	PERMANENT VEGETATED WETLAND FILL		PERMANENT IMPACT TO 100' BUFFER ZONE (100' BZ-AURA)
	TEMPORARY VEGETATED WETLAND FILL		TEMPORARY IMPACT TO 100' BUFFER ZONE (100' BZ-AURA)
	POTENTIAL WETLAND MITIGATION AREA		PERMANENT IMPACT TO BLSF
	PERMANENT IMPACT TO LAND UNDER WATER (LUW)		TEMPORARY IMPACT TO BLSF
	TEMPORARY IMPACT TO LAND UNDER WATER (LUW)		EXISTING TREE LINE
	PERMANENT IMPACT TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)	— — —	LIMIT OF GRADING
	PERMANENT IMPACT TO BANK		
	TEMPORARY IMPACT TO BANK		

vhb
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NO.	DESCRIPTION	BY	DATE	APPR.
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 65 OF 310

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
1"=20'	3–7–2019	MS	SK	MS	.	.

FIGURE 5-3