McFarland Johnson
Innovative Solutions / Sustainable Results

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April 1, 2021

NHDES Wetlands Bureau
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

RE: Standard Dredge & Fill Permit Application
Sarah Mildred Long Bridge - Submarine Cable
Piscataqua River, Portsmouth, NH
MaineDOT Project 16710.00, NHDOT Project 15731

To Whom it May Concern,

On behalf of the Maine Department of Transportation, McFarland-Johnson, Inc. is pleased to submit the enclosed Standard Dredge and Fill Wetlands Permit Application for re-setting the existing upstream submarine cable of the recently constructed Sarah Mildred Long Bridge to the required depth.

The proposed project will require approximately 75 linear feet (perpendicular to the flow of water) of excavation of the channel bottom located in NH. The total area of required excavation in NH is 75 feet long x 10 feet wide for a total area of 750 square feet of permanent impacts. An additional 400 square feet / 40 linear feet (40 feet long x 10 feet wide) of temporary impacts is also required for temporary disturbance associated with setting aside the existing concrete mats and cable on the riverbed. The total area of impacts to tidal waters of the Piscataqua River is 1,150 square feet.

Please do not hesitate to call me with any questions or comments. Thank you for your time and review of the enclosed materials.

Sincerely,

Christine Perron, CWS
Senior Environmental Analyst
McFarland-Johnson, Inc.

NHDES STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

SARAH MILDRED LONG BRIDGE SUBMARINE CABLE PROJECT

PORTSMOUTH, NH

Prepared for:

Maine Department of Transportation

24 Child Street

Augusta, ME 04330

MaineDOT

Prepared by:

McFarland-Johnson, Inc.

53 Regional Drive

Concord, New Hampshire 03301

McFarland Johnson

MARCH 2021

STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

Water Division/Land Resources Management
Wetlands Bureau

Check the Status of your Application

RSA/Rule: RSA 482-A/Env-Wt 100-900

APPLICANT'S NAME: **MaineDOT, Kristen Chamberlain** **TOWN NAME:** PORTSMOUTH

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

A person may request a waiver of the requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interest of the public or the environment but is still in compliance with RSA 482-A. A person may also request a waiver of the standards for existing dwellings over water pursuant to RSA 482-A:26, III(b). For more information, please consult the Waiver Request Form.

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2)) Please use the Wetland Permit Planning Tool (WPPT), the Natural Heritage Bureau (NHB) DataCheck Tool, the Aquatic Restoration Mapper, or other sources to assist in identifying key features such as: priority resource areas (PRAs), protected species or habitats, coastal areas, designated rivers, or designated prime wetlands.	
Has the required planning been completed?	☒ Yes ☐ No
Does the property contain a PRA? If yes, provide the following information:	☒ Yes ☐ No
• Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.	☐ Yes ☒ No

• Protected species or habitat?
  ○ If yes, species or habitat name(s): Atlantic Sturgeon, Shortnose Sturgeon
  ○ NHB Project ID #: NHB21-0703
	☒ Yes ☐ No

• Bog?	☐ Yes ☒ No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	☒ Yes ☐ No
• Designated prime wetland or duly-established 100-foot buffer?	☐ Yes ☒ No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	☒ Yes ☐ No
Is the property within a Designated River corridor? If yes, provide the following information: • Name of Local River Management Advisory Committee (LAC): N/A • A copy of the application was sent to the LAC on Month: -- Day: -- Year: ----	☐ Yes ☒ No

For dredging projects, is the subject property contaminated? • If yes, list contaminant: N/A	☐ Yes ☒ No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	☒ Yes ☐ No
For stream crossing projects, provide watershed size (see WPPT or Stream Stats): N/A	

SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))

Provide a **brief** description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.

The proposed project involves re-setting submarine cables on the upstream side of the recently constructed Sarah Mildred Long Bridge that power the lift span of the bridge. Due to the location within a Federal navigation channel, and per Condition 19 of the U.S. Army Corps of Engineers Individual Permit, the cables are required to be installed at a minimum of -42 feet below Mean Lower Low Water (MLLW). The bridge replacement project was originally permitted in 2013-2014 and construction took place over multiple years before the new bridge was opened to traffic in the Spring of 2018. Following construction of the bridge, it was discovered that the cables were not installed properly at the required depths. The proposed project involves removing the existing concrete cable mats, moving the entire length of upstream cable (approximately 300') and excavating approximately 125 feet of river bottom (75 feet in NH) to the proper depth, before resetting the cable and re-installing the concrete mats. The dredging work will be completed using a barge-mounted long-reach excavator. Underwater hand jetting may also be used if the work cannot be completed with the excavator alone. Work will be completed between August 1 and March 15, and the repairs are anticipated to require a duration of 30 to 60 days to complete. The proposed project is anticipated to require approximately 1,150 square feet of impacts associated with dredging and resetting the existing cable at the proper depth. Please refer to the materials included with this submittal for additional project information.

SECTION 3 - PROJECT LOCATION

Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.

ADDRESS: Sarah Mildred Long Bridge, US Route 1 Bypass

TOWN/CITY: Portsmouth

TAX MAP/BLOCK/LOT/UNIT: N/A

US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Piscataqua River
☐ N/A

(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 43.08656° North
-70.76136° West

SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a)) If the applicant is a trust or a company, then complete with the trust or company information.		
NAME: Maine Department of Transportation (MaineDOT); Attn: Kristen Chamberlain		
MAILING ADDRESS: 24 Child Street		
TOWN/CITY: Augusta	STATE: ME	ZIP CODE: 04333
EMAIL ADDRESS: kristen.chamberlain@maine.gov		
FAX:	PHONE: 207-557-5089	
ELECTRONIC COMMUNICATION: By initialing here: KC, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c)) ☐ N/A		
LAST NAME, FIRST NAME, M.I.: Perron, Christine		
COMPANY NAME: McFarland-Johnson, Inc.		
MAILING ADDRESS: 53 Regional Drive		
TOWN/CITY: Concord	STATE: NH	ZIP CODE: 03301
EMAIL ADDRESS: cperron@mjinc.com		
FAX:	PHONE: 603-225-2978	
ELECTRONIC COMMUNICATION: By initialing here CJP, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b)) If the owner is a trust or a company, then complete with the trust or company information. ☒ Same as applicant		
NAME:		
MAILING ADDRESS:		
TOWN/CITY:	STATE:	ZIP CODE:
EMAIL ADDRESS:		
FAX:	PHONE:	
ELECTRONIC COMMUNICATION: By initialing here , I hereby authorize NHDES to communicate all matters relative to this application electronically.		

SECTION 7 - RESOURCE-SPECIFIC CRITERIA ESTABLISHED IN Env-Wt 400, Env-Wt 500, Env-Wt 600, Env-Wt 700, OR Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):
Env-Wt 400: Resources located within the proposed project area include the Piscataqua River, a tidal water with a Cowardin Classification of E1UBL. The proposed project is located in the middle of the river channel and no other resources are located in the vicinity of the proposed impacts. Therefore, a formal delineation of the water course was not completed. The project will result in 750 SF of permanent impacts associated with dredging in the channel and 400 SF of temporary impacts associated with temporarily relocating the existing concrete mats and cable. The project is also located within a Priority Resource Area (PRA) including Tidal Waters and Floodplain Wetlands Adjacent to a Tier 3 Stream. Therfore, based on the impacts to a PRA the proposed project is classified as a Major impact project.

Env-Wt 500: Not Applicable - The project does not meet the definition of any of the project-specific requirement types.

Env-Wt 600: All of the required information outlined in Env-Wt 600 has been provided with this application including a Coastal Functional Assessment and a Coastal Vulnerability Assessment. Please refer to the supporting documentation included with this permit application for additional information regarding coastal resources and tidal waters.

Env-Wt 700: Not Applicable - No Prime Wetlands located in the vicinity of the proposed project.

Env-Wt 900: Not Applicable - The proposed project does not involve any stream crossings.

SECTION 8 - AVOIDANCE AND MINIMIZATION

Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).* Any project with unavoidable jurisdictional impacts must then be minimized as described in the Wetlands Best Management Practice Techniques For Avoidance and Minimization and the Wetlands Permitting: Avoidance, Minimization and Mitigation Fact Sheet. For minor or major projects, a functional assessment of all wetlands on the project site is required (Env-Wt 311.03(b)(10)).*

Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the Avoidance and Minimization Checklist, the Avoidance and Minimization Narrative, or your own avoidance and minimization narrative.

**See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.*

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

If unavoidable jurisdictional impacts require mitigation, a mitigation pre-application meeting must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.

Mitigation Pre-Application Meeting Date: Month: Day: Year:

(☒ N/A - Mitigation is not required)

SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)

Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: ☐ I confirm submittal.

(☒ N/A – Compensatory mitigation is not required)

SECTION 11 - IMPACT AREA (Env-Wt 311.04(g))

For each jurisdictional area that will be/has been impacted, provide square feet (SF) and, if applicable, linear feet (LF) of impact, and note whether the impact is after-the-fact (ATF; i.e., work was started or completed without a permit).

For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. *Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.*

For perennial streams/rivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

Permanent impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials).

Temporary impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland			☐			☐
	Scrub-shrub Wetland			☐			☐
	Emergent Wetland			☐			☐
	Wet Meadow			☐			☐
	Vernal Pool			☐			☐
	Designated Prime Wetland			☐			☐
	Duly-established 100-foot Prime Wetland Buffer			☐			☐
Surface Water	Intermittent / Ephemeral Stream			☐			☐
	Perennial Stream or River			☐			☐
	Lake / Pond			☐			☐
	Docking - Lake / Pond			☐			☐
	Docking - River			☐			☐
Banks	Bank - Intermittent Stream			☐			☐
	Bank - Perennial Stream / River			☐			☐
	Bank / Shoreline - Lake / Pond			☐			☐
Tidal	Tidal Waters	750	75	☐	400	40	☐
	Tidal Marsh			☐			☐
	Sand Dune			☐			☐
	Undeveloped Tidal Buffer Zone (TBZ)			☐			☐
	Previously-developed TBZ			☐			☐
	Docking - Tidal Water			☐			☐
TOTAL		750	75		**400**	**40**	

SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)

☐ **MINIMUM IMPACT FEE**: Flat fee of $400.

☐ **NON-ENFORCEMENT RELATED, PUBLICLY-FUNDED AND SUPERVISED RESTORATION PROJECTS, REGARDLESS OF IMPACT CLASSIFICATION:** Flat fee of $400 (refer to RSA 482-A:3, 1(c) for restrictions).

☒ **MINOR OR MAJOR IMPACT FEE:** Calculate using the table below:

Permanent and temporary (non-docking):	1,150 SF	× $0.40 =	$ 460
Seasonal docking structure:	0 SF	× $2.00 =	$ 0
Permanent docking structure:	0 SF	× $4.00 =	$ 0
Projects proposing shoreline structures (including docks) add $400 =			$ 0
		Total =	$ 460

The application fee for minor or major impact is the above calculated total or $400, whichever is greater = $ 460

SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05)

Indicate the project classification.

☐ Minimum Impact Project	☐ Minor Project	☒ Major Project

SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)

Initial each box below to certify:

Initials: KC CJP	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: KC CJP	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.
Initials: KC CJP	The signer understands that: • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. • The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. • The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.
Initials: KC CJP	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

SECTION 15 - REQUIRED SIGNATURES (Env-Wt 311.04(d); Env-Wt 311.11)

SIGNATURE (OWNER):	PRINT NAME LEGIBLY:	DATE:
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): Kristen Chamberlain	Kristen Chamberlain	DATE: 4/1/21
SIGNATURE (AGENT, IF APPLICABLE):	PRINT NAME LEGIBLY: Christine Perron	DATE: 3/26/2021

SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

TOWN/CITY CLERK SIGNATURE:	PRINT NAME LEGIBLY:
TOWN/CITY: Portsmouth	DATE:

DIRECTIONS FOR TOWN/CITY CLERK:
Per RSA 482-A:3, I(a)(1)

1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:
Submit the original permit application form bearing the signature of the Town/City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page. Make check or money order payable to “Treasurer – State of NH”.

COASTAL RESOURCE WORKSHEET

Water Division/Land Resources Management
Wetlands Bureau

Check the Status of your Application

RSA/Rule: RSA 482-A/ Env-Wt 600

APPLICANT LAST NAME, FIRST NAME, M.I.: MaineDOT: Chamberlain, Kristen

This worksheet may be used to present the information required for projects in coastal areas, in addition to the information required for Lower-Scrutiny Approvals, Expedited Permits, and Standard Permits under Env-Wt 603.01.

Please refer to Env-Wt 605.03 for impacts requiring compensatory mitigation.

SECTION 1 - REQUIRED INFORMATION (Env-Wt 603.02; Env-Wt 603.06; Env-Wt 603.09)

The following information is required for projects in coastal areas.

Describe the purpose of the proposed project, including the overall goal of the project, the core project purpose consisting of a concise description of the facilities and work that could impact jurisdictional areas, and the intended project outcome. Specifically identify all natural resource assets in the area proposed to be impacted and include maps created through a data screening in accordance with Env-Wt 603.03 (refer to Section 2) and Env-Wt 603.04 (refer to Section 3) as attachments.

The purpose of the proposed project is to re-set the existing upstream submarine bridge cable of the Sarah Mildred Long Bridge to the required depth in accordance with Federal navigation channel requirements. Condition 19 of the original USACE Individual Wetland Permit (NAE-2013-01623) required that the top of the utility, including the protective cover be installed at a minimum depth of -42 feet below Mean Lower Low Water (MLLW).

The project is needed to ensure the safety of vessels operating in the Federal navigation channel of the Piscataqua River, to prevent anchor drag, and to protect the existing bridge infrastructure to allow the continued safe operation of the lift span of the bridge. The proposed work is a public infrastructure project, that provides a benefit to the public.

The proposed project is located within the channel of the Piscataqua River, a tidal water, and involves approximately 1,150 square feet of impacts (750 SF permanent impacts / 400 SF temporary impacts) associated with removing the existing cable and protective concrete mats, dredging an area approximately 125 feet long by 10 feet wide (only 75 feet located in NH), and re-installing the cable at the proper depth.

The proposed project is not located within a documented shellfish site, salt marsh, salt marsh migration pathway, or eelgrass beds.

For standard permit projects, provide:

☒ A Coastal Functional Assessment (CFA) report in accordance with Env-Wt 603.04 (refer to Section 3).

☒ A vulnerability assessment in accordance with Env-Wt 603.05 (refer to Section 4).

Explain all recommended methods and other considerations to protect the natural resource assets during and as a result of project construction in accordance with Env-Wt 311.07, Env-Wt 313, and Env-Wt 603.04.

Natural resources will be protected to the maximum extent practicable.

- The proposed project will be completed between August 1 - March 15. The intent of this in work window for in-water work is to protect rare species including Atlantic sturgeon and shortnose sturgeon, and other anadromous fish species to the extent possible. This window is a deviation from the standard work window for tidal dredging projects from November 15 - March 15 pursuant to Env-Wt 307.10(i). However, coordination with the proper agencies including NOAA, NHB, and NHFG has been completed and the proposed work window has been approved. A waiver of Env-Wt 307.10(i) has been prepared and is being requested as part of this application submittal.

- Sequential dredging techniques will be utilized to reduce turbidity, noise, and disturbance. The proposed excavation in the channel will be completed over 30-60 days within short windows of time within each tide cycle. This approach will minimize impacts to water quality, rare species, and other fish and aquatic organisms.

-Impacts will occur within the same footprint of the existing cables, an area that has been previously disturbed by construction activities. No new impact areas are required.

Provide a narrative showing how the project meets the standard conditions in Env-Wt 307 and the approval criteria in Env-Wt 313.01.

Env-Wt 307.03 - The proposed project is not anticipated to violate water quality standards. Sequential dredging techniques described above will minimize turbidity releases, sedimentation, and impacts to fish and wildlife including rare species. No erosion control, cofferdams, or turbidity controls are proposed due to the location of the proposed project as well as high water velocities of the Piscataqua River.

Env-Wt 307.04 - The proposed project is not located within a bird migratory areas or fish or shellfish spawning or nursery areas. The work window (August 1 - March 15) and sequential dredging help avoid and minimize potential impacts to fisheries and breeding areas.

Env-Wt 307.05 - No known invasive species populations are located in the project area

Env-Wt 307.06 - Rare, threatened, and endangered species and Critical Habitats will be protected by the time of year restrictions and sequential dredging.

Env-Wt 307.07 - The SWQPA does not apply, the proposed project is not located within the protected shoreland.

Env-Wt 307.08 - There are no designated prime wetlands located in the vicinity of the project

Env-Wt 307.09 - The project does not propose any shoreline structures.

Env-Wt 307.10 - The proposed project complies with the dredging activity conditions with the exception of (i), a waiver of this rule is being requested and included with this permit application.

The proposed project meets the approval criteria outlined in Env-Wt 313.01.

Provide a project design narrative that includes the following:

☒ A discussion of how the proposed project:

- Uses best management practices and standard conditions in Env-Wt 307;
- Meets all avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- Meets approval criteria in Env-Wt 313.01;
- Meets evaluation criteria in Env-Wt 313.01(c);
- Meets CFA requirements in Env-Wt 603.04; and
- Considers sea-level rise and potential flooding evaluated pursuant to Env-Wt 603.05;

☒ A construction sequence, erosion/siltation control methods to be used, and a dewatering plan; and

☒ A discussion of how the completed project will be maintained and managed.

Once completed, the proposed project is expected to require little maintenance. With the cables correctly installed at the proper depth, on the bottom of the rivebed, and covered with the protective concrete mats, minimal mainteance should be required.

☒ Provide design plans that meet the requirements of Env-Wt 603.07 (refer to Section 5);

☒ Provide water depth supporting information required by Env-Wt 603.08 (refer to Section 6); and

☒ For any major project that proposes to construct a structure in tidal waters/wetlands or to extend an existing structure seaward, provide a statement from the Pease Development Authority Division of Ports and Harbors (DP&H) chief harbormaster, or designee, for the subject location relative to the proposed structure's impact on navigation. If the proposed structure might impede existing public passage along the subject shoreline on foot or by non-motorized watercraft, the applicant shall explain how the impediments have been minimized to the greatest extent practicable.

See attached.

SECTION 2 - DATA SCREENING (Env-Wt 603.03, in addition to Env-Wt 306.05)

Please use the Wetland Permit Planning Tool, or any other database or source, to indicate the presence of:

☐ Existing salt marsh and salt marsh migration pathways;

☐ Eelgrass beds;

☐ Documented shellfish sites;

☐ Projected sea-level rise; and

☒ 100-year floodplain.

Conduct data screening as described to identify documented essential fish habitat, and tides and currents that may be impacted by the proposed project, by using the following links:

☒ National Oceanic and Atmospheric Administration (NOAA) Tides & Currents; and

☒ NOAA Essential Fish Habitat Mapper.

☒ Verify or correct the information collected from the data screenings by conducting an on-site assessment of the subject property in accordance with Env-Wt 406 and Env-Wt 603.04.

SECTION 3 - COASTAL FUNCTIONAL ASSESSMENT/ AVOIDANCE AND MINIMIZATION (Env-Wt 603.04; Env-Wt 605.01; Env-Wt 605.02; Env-Wt 605.03)

Projects in coastal areas shall:

☒ Not impair the navigation, recreation, or commerce of the general public; and

☒ Minimize alterations in prevailing currents.

An applicant for a permit for work in or adjacent to tidal waters/wetlands or the tidal buffer zone shall demonstrate that the following have been avoided or minimized as required by Env-Wt 313.04:

☒ Adverse impacts to beach or tidal flat sediment replenishment;

☒ Adverse impacts to the movement of sediments along a shore;

☒ Adverse impacts on a tidal wetland's ability to dissipate wave energy and storm surge; and

☒ Adverse impacts of project runoff on salinity levels in tidal environments.

For standard permit applications submitted for minor or major projects:

☒ Attach a CFA based on the data screening information and on-site evaluation required by Env-Wt 603.03. The CFA for tidal wetlands or tidal waters shall be:

- Performed by a qualified coastal professional; and
- Completed using one of the following methods:

  a. The US Army Corps of Engineers (USACE) Highway Methodology Workbook, dated 1993, together with the USACE New England District *Highway Methodology Workbook Supplement*, dated 1999; or

  b. An alternative scientifically-supported method with cited reference and the reasons for the alternative method substantiated.

For any project that would impact tidal wetlands, tidal waters, or associated sand dunes, the applicant shall:

☒ Use the results of the CFA to select the location of the proposed project having the least impact to tidal wetlands, tidal waters, or associated sand dunes;

☒ Design the proposed project to have the least impact to tidal wetlands, tidal waters, or associated sand dunes;

☒ Where impact to wetland and other coastal resource functions is unavoidable, limit the project impacts to the least valuable functions, avoiding and minimizing impact to the highest and most valuable functions; and

☒ Include on-site minimization measures and construction management practices to protect coastal resource areas.

Projects in coastal areas shall use results of this CFA to:

☒ Minimize adverse impacts to finfish, shellfish, crustacean, and wildlife;

☒ Minimize disturbances to groundwater and surface water flow;

☒ Avoid impacts that could adversely affect fish habitat, wildlife habitat, or both; and

☒ Avoid impacts that might cause erosion to shoreline properties.

SECTION 4 - VULNERABILITY ASSESSMENT (Env-Wt 603.05)

Refer to the New Hampshire Coastal Flood Risk Summary Part 1: Science and New Hampshire Coastal Flood Risk Summary Part II: Guidance for Using Scientific Projections or other best available science to:

Determine the time period over which the project is designed to serve.

The service life of the existing bridge is 100 years. The proposed project is intended to serve the service life of the bridge.

Identify the project's relative risk tolerance to flooding and potential damage or loss likely to result from flooding to buildings, infrastructure, salt marshes, sand dunes and other valuable coastal resource areas.

The proposed project is located at the bottom of the riverbed, within the middle of the channel of the Piscataqua River. Therefore, flooding has little to no effect on the bridge cable project since this structure is currently inundated and remains permanently flooded. Therefore, the risk tolerance to flooding of the bridge cable is very high.

Reference the projected sea-level rise (SLR) scenario that most closely matches the end of the project design life and the project's tolerance to risk or loss.

The proposed project is located at the bottom of the riverbed, within the middle of the channel of the Piscataqua River and is permanently flooded. Therefore, SLR will have little effect on the project.

Identify areas of the proposed project site subject to flooding from SLR.

None, the proposed project is currently located underwater in a permanently flooded portion of the Piscataqua River channel.

Identify areas currently located within the 100-year floodplain and subject to coastal flood risk.

The entire project area is located within the 100-year floodplain (Zone AE) of the Piscataqua River. The project is located on the riverbed and is not anticipated to result in any floodplain impacts or a change in the base flood elevation.

Describe how the project design will consider and address the selected SLR scenario within the project design life, including in the design plans.

The proposed project will not be effected by SLR since it is located at the bottom of the Piscataqua River. Therefore, no SLR scenario was evaluated.

Where there are conflicts between the project's purpose and the vulnerability assessment results, schedule a pre-application meeting with the department to evaluate design alternatives, engineering approaches, and use of the best available science.

☒ Pre-application meeting date held: **03/17/2021**

SECTION 5 - DESIGN PLANS (Env-Wt 603.07, in addition to Env-Wt 311)

Submit design plans for the project in both plan and elevation views that clearly depict and identify all required elements.

The plan view shall depict the following:

☒ The engineering scale used, which shall be no larger than one inch equals 50 feet;

☒ The location of tidal datum lines depicted as lines with the associated elevation noted, based on North American Vertical Datum of 1988 (NAVD 88), derived from https://tidesandcurrents.noaa.gov/datum_options.html, as described in Section 6.

☐ An imaginary extension of property boundary lines into the waterbody and a 20-foot setback from those property line extensions;

☒ The location of all special aquatic sites at or within 100 feet of the subject property;

☐ Existing bank contours;

☒ The name and license number, if applicable, of each individual responsible for the plan, including:

a. The agent for tidal docking structures who determined elevations represented on plans; and

b. The qualified coastal professional who completed the CFA report and located the identified resources on the plan;

☒ The location and dimensions of all existing and proposed structures and landscape features on the property;

☒ Tidal datum(s) with associated elevations noted, based on NAVD 88; and

☒ Location of all special aquatic sites within 100-feet of the property.

The elevation view shall depict the following:

☐ The nature and slope of the shoreline;

☒ The location and dimensions of all proposed structures, including permanent piers, pilings, float stop structures, ramps, floats, and dolphins; and

☒ Water depths depicted as a line with associated elevation at highest observable tide, mean high tide, and mean low tide, and the date and tide height when the depths were measured. Refer to Section 6 for more instructions regarding water depth supporting information.

See specific design and plan requirements for certain types of coastal projects:

- Overwater structures (Env-Wt 606).
- Dredging activities (Env-Wt 607).
- Tidal beach maintenance (Env-Wt 608).
- Tidal shoreline stabilization (Env-Wt 609).
- Protected tidal zone (Env-Wt 610).
- Sand Dunes (Env-Wt 611).

SECTION 6 - WATER DEPTH SUPPORTING INFORMATION REQUIRED (Env-Wt 603.08)

Using current predicted NOAA tidal datum for the location, and tying field measurements to NAVD 88, field observations of at least three tide events, including at least one minus tide event, shall be located to document the range of the tide in the proposed location showing the following levels:

- ☐ Mean lower low water;
- ☐ Mean low water;
- ☐ Mean high water;
- ☐ Mean tide level;
- ☐ Mean higher high water;
- ☐ Highest observable tide line; and
- ☐ Predicted sea-level rise as identified in the vulnerability assessment in Env-Wt 603.05.

The following data shall be presented in the application project narrative to support how water depths were determined:

- ☐ The date, time of day, and weather conditions when water depths were recorded; and
- ☐ The name and license number of the licensed land surveyor who conducted the field measurements.

For tidal stream crossing projects, provide:

- ☐ Water depth information to show how the tier 4 stream crossing is designed to meet Env-Wt 904.07(c) and (d).

For repair, rehabilitation or replacement of tier 4 stream crossings:

- ☐ Demonstrate how the requirements of Env-Wt 904.09 are met.

SECTION 7 - GENERAL CRITERIA FOR TIDAL BEACHES, TIDAL SHORELINE, AND SAND DUNES (Env-Wt 604.01)

Any person proposing a project in or on a tidal beach, tidal shoreline, or sand dune, or any combination thereof, shall evaluate the proposed project based on:

- ☐ The standard conditions in Env-Wt 307;
- ☐ The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;
- ☐ The approval criteria in Env-Wt 313.01;
- ☐ The evaluation criteria in Env-Wt 313.05;
- ☐ The project specific criteria in Env-Wt 600;
- ☐ The CFA required by Env-Wt 603.04; and
- ☐ The vulnerability assessment required by Env-Wt 603.05.

New permanent impacts to sand dunes that provide coastal storm surge protection for protected species or habitat shall not be allowed except:

- ☐ To protect public safety; and
- ☐ Only if constructed by a state agency, coastal resiliency project, or for a federal homeland security project.

Projects in or on a tidal beach, tidal shoreline, or sand dune shall support integrated shoreline management that:

- ☐ Optimizes the natural function of the shoreline, including protection or restoration of habitat, water quality, and self-sustaining stability to flooding and storm surge; and
- ☐ Protects upland infrastructure from coastal hazards with a preference for living shorelines over hardened shoreline practices.

SECTION 8 - GENERAL CRITERIA FOR TIDAL BUFFER ZONES (Env-Wt 604.02)

The 100-foot statutory limit on the extent of the tidal buffer zone shall be measured horizontally. Any person proposing a project in or on an undeveloped tidal buffer zone shall evaluate the proposed project based on:

☐ The standard conditions in Env-Wt 307;

☐ The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;

☐ The approval criteria in Env-Wt 313.01;

☐ The evaluation criteria in Env-Wt 313.05;

☐ The project specific criteria in Env-Wt 600;

☐ The CFA required by Env-Wt 603.04; and

☐ The vulnerability assessment required by Env-Wt 603.05.

Projects in or on a tidal buffer zone shall preserve the self-sustaining ability of the buffer area to:

☐ Provide habitat values;

☐ Protect tidal environments from potential sources of pollution;

☐ Provide stability of the coastal shoreline; and

☐ Maintain existing buffers intact where the lot has disturbed area defined under RSA 483-B:4, IV.

SECTION 9 - GENERAL CRITERIA FOR TIDAL WATERS/WETLANDS (Env-Wt 604.03)

Except as allowed under Env-Wt 606, permanent new impacts to tidal wetlands shall be allowed only to protect public safety or homeland security. Evaluation of impacts to tidal wetlands and tidal waters shall be based on:

☒ The standard conditions in Env-Wt 307;

☒ The avoidance and minimization requirements in Env-Wt 311.07 and Env-Wt 313.03;

☒ The approval criteria in Env-Wt 313.01;

☒ The evaluation criteria in Env-Wt 313.05;

☒ The project specific criteria in Env-Wt 600;

☒ The CFA required by Env-Wt 603.04; and

☒ The vulnerability assessment required by Env-Wt 603.05.

Projects in tidal surface waters or tidal wetlands shall:

☒ Optimize the natural function of the tidal wetland, including protection or restoration of habitat, water quality, and self-sustaining stability to storm surge;

☒ Be designed with a preference for living shorelines over hardened stabilization practices; and

☒ Be limited to public infrastructure or restoration projects that are in the interest of the general public, including a road, a bridge, energy infrastructure, or a project that addresses predicted sea-level rise and coastal flood risk.

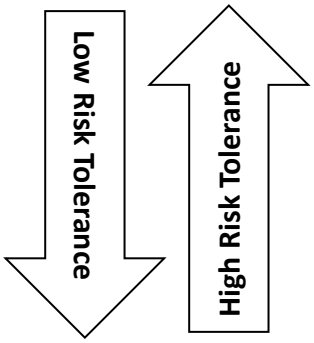
SECTION 10 – GUIDANCE

Your application must follow the New Hampshire Coastal Risk and Hazards Commission's Guiding Principles or other best available science. Below are some of these guidance principles:

- Incorporate science-based coastal flood risk projections into planning;
- Apply risk tolerance* to assessment, planning, design, and construction;
- Protect natural resources and public access;
- Create a bold vision, start immediately, and respond incrementally and opportunistically as projected coastal flood risks increase over time; and
- Consider the full suite of actions including effectiveness and consequences of actions.

*Risk tolerance is a project's willingness to accept a higher or lower probability of flooding impacts. The diagram below gives examples of project with lower and higher risk tolerance:

Critical infrastructures, historic sites, essential ecosystems, and high value assets typically have lower risk tolerance, and thus should be planned, designed, and constructed using higher coastal flood risk projections.



Sheds, pathways, and small docks typically have higher risk tolerance and thus may be planned, designed, and constructed using less protective coastal flood risk projections.

WETLANDS RULE WAIVER OR DWELLING OVER WATER WAIVER REQUEST FORM

WATER DIVISION/LAND RESOURCES MANAGEMENT WETLANDS BUREAU

RSA/Rule: RSA 482-A/ Env-Wt 204

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

A person may request a waiver to requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interests of the public or the environment. A person may also request a waiver of standard for existing dwellings over water pursuant to RSA 482-A:26, III (b).

SECTION 1 - PROJECT LOCATION INFORMATION (Env-Wt 204.03(c))			
ADDRESS: Sarah Mildred Long Bridge, US Route 1 Bypass	TOWN/CITY: Portsmouth	STATE: NH	ZIP CODE: 03801
TAX MAP/LOT NUMBER: N/A			
SECTION 2 - WAIVER REQUESTOR INFORMATION (Env-Wt 204.03(a))			
LAST NAME, FIRST NAME, M.I.: Perron, Christine (McFarland-Johnson, Inc.)			
MAILING ADDRESS: 53 Regional Drive			
TOWN/CITY: Concord		STATE: NH	ZIP CODE: 03301
EMAIL ADDRESS (if available): cperron@mjinc.com or if not FAX NUMBER:		DAYTIME TELEPHONE NUMBER: 603-225-2978	
SECTION 3 - APPLICANT INFORMATION (Env-Wt 204.03(b)) If request is being made on behalf of someone else, include the following information regarding the person being represented. If requestor is the applicant, check the following box and proceed to Section 4. ☐ Requestor is the applicant.			
LAST NAME, FIRST NAME, M.I.: Chamberlain, Kristen (MaineDOT)			
MAILING ADDRESS: 24 Child Street			
TOWN/CITY: Augusta		STATE: ME	ZIP CODE: 04333
EMAIL ADDRESS (if available): kristen.chamberlain@maine.gov or if not FAX NUMBER:		DAYTIME PHONE NUMBER: 207-557-5089	

SECTION 4 - WAIVER INFORMATION

SECTION 4A - WAIVER TO RULE Env-Wt 100-900

☐ N/A - If you are not requesting a rule waiver, check this box and proceed to Section 4b

Provide the number of the specific section of each rule for which a waiver is sought (Env-Wt 204.03(d)):
Env-Wt 307.10(i) & Env-Wt 307.04(a)

Provide a complete explanation of why a waiver is being requested, including an explanation of the operational and economic consequences of complying with the requirement and, if the requested waiver would extend the duration of a permit, the reason(s) why the permit holder was not able to complete the project within the specified time (Env-Wt 204.03(f)(1)):

A waiver of Env-Wt 307.10(i) and Env-Wt 307.04(a) is being requested. These two rules pertain to the timing of in-water work for projects as it relates to spawning/breeding seasons. Env-Wt 307.10(i) states that "no dredging shall occur in tidal waters during a fish migration or larval setting stage of fish and shellfish, which is between November 15 and March 15". The proposed work window for the project is from August 1 - March 15. This work window is required to complete the project as soon as possible to comply with USACE Federal navigation channel regulations, and to allow the contractor enough time to complete the proposed project due to difficult site conditions. Pushing the work window back later in the year complicates the safety and logistics for the contractor associated with winter conditions. MaineDOT is also anxious to resolve this issue with the contractor as quickly as possible due to the legal settlement that is dictating that the work be completed by the contractor as soon as possible.

If applicable, provide a complete explanation of the alternative that is proposed to be substituted for the requirement in Env-Wt, including written documentation or data, or both, to support the alternative (Env-Wt 204.03(g)):

MaineDOT has proposed a work window for completion of the project from August 1 - March 15. The work will likely require 30-60 days to complete. Additional time has been added to the work window as a contingency. MaineDOT has completed the required coordination with NOAA regarding Section 7 and Essential Fish Habitat. NOAA has approved the proposed work window with the recommendation that work be completed as close to the November 15 window as possible. New Hampshire Fish and Game and the Natural Heritage Bureau have also been consulted and have approved the proposed work window. Documentation of the consultation/coordination with these agencies is included with this permit application submission.

SECTION 4B – DWELLING OVER WATERS WAIVER UNDER RSA 482-A:26, III(b).

☒ N/A - If you are not requesting a standard waiver, check this box and proceed to Section 5)

Identify the specific standard to which a waiver is being requested (Env-Wt 204.03(e)):
RSA 482-A: N/A

Provide a complete explanation of why a waiver is being requested, including a complete explanation of how the statutory criteria of RSA 482-A:26, III(b) will be met (Env-Wt 204.03(f)(2)):

N/A

SECTION 5 - ADDITIONAL WAIVER INFORMATION (Env-Wt 204.03(h); Env-Wt 204.03(i))
(applicable to Waivers of Rules *and* Standards under RSA 482-A:26, III(b))

Indicate whether the waiver is needed for a limited duration and, if so, an estimate of when the waiver will no longer be needed (Env-Wt 204.03(h)):

The waiver is needed for the duration of the proposed project: August 1, 2021 through March 15, 2022.

Provide a complete explanation of why the applicant believes that having the waiver granted will meet the criteria in Env-Wt 204.05 or 204.06, as applicable (Env-Wt 204.03(i)):

Based on consultations with NOAA, NHFG, and NHB the proposed waiver is not anticipated to result in an adverse impact on the environment or any natural resources of the state, public health or safety, impacts to abutting properties, or a statutory requirement being waived. The proposed waiver is limited in duration and will not result in an extension of the duration of a wetlands permit.

SECTION 6 - REQUIRED CERTIFICATIONS (Env-Wt 204.04)

Initial each box and sign below to certify:

Initials:	The information provided is true, complete, and not misleading to the knowledge and belief of the signer.
Initials:	The signer understands that: • Any waiver granted based on false, incomplete, or misleading information shall be subject to revocation; and

	• He or she is subject to the penalties for falsification in official matters, currently established in RSA 641.

SECTION 7 - REQUESTOR SIGNATURE (Env-Wt 204.04)		
SIGNATURE (APPLICANT): *	PRINT NAME LEGIBLY: Jeff Folsom	DATE:
SIGNATURE (REQUESTOR):	PRINT NAME LEGIBLY: Christine Perron	DATE:

*In lieu of an applicant signature, you may include a separate signed and dated authorization for the requestor to act on the person's behalf in connection with the request.

STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

SARAH MILDRED LONG BRIDGE SUBMARINE CABLE PROJECT

MAINEDOT 16710.00

PORTSMOUTH, NEW HAMPSHIRE

SUPPLEMENTAL PROJECT NARRATIVE

Table of Contents

Introduction

The proposed Maine Department of Transportation (MaineDOT) project involves re-setting the existing upstream submarine cable of the recently constructed Sarah Mildred Long Bridge to the required depth. The proposed project is located within the Piscataqua River in Portsmouth, New Hampshire and Kittery, Maine, with the State Line bisecting the center of the lift span of the existing bridge.

The original Sarah Mildred Long Bridge Replacement project was a joint venture between MaineDOT, the New Hampshire Department of Transportation (NHDOT), and the Federal Highway Administration that involved constructing a new bridge on a new alignment to the north of the old bridge. Construction of the new bridge was completed between 2015 and 2018. The original bridge replacement project was authorized under U.S. Army Corps of Engineers (USACE) Individual Permit NAE-2013-01623, the New Hampshire Department of Environmental Services (NHDES) Major Impact Dredge and Fill Permit File #2014-01053, and Water Quality Certificate 2014-404I-001.

Photo 1: New Sarah Mildred Long Bridge completed in 2018

The new lift span of the Sarah Mildred Long Bridge has two cables that run between it to power the lift span. As part of the original design, these cables were to be placed at a depth specified by the USACE and they were to be covered in certain areas with concrete cable mats. The intended installed depth was -42 Mean Lower Low Water (MLLW). To protect the cable from anchor drag and other factors, the depth was set at 7 feet below existing depth in the Federal navigation channel given that the original cable was found to have damage caused by ships.

Following completion of the bridge replacement project, side scan sonar surveys indicated that the upstream cable was not installed to the depth specified by the USACE. The cable's current highest point is -38.5 MLLW, approximately 3.5 feet higher than the required depth. The scan below is from 2017 and the red area along the cable shows where the cable is shallower than -42 MLLW.

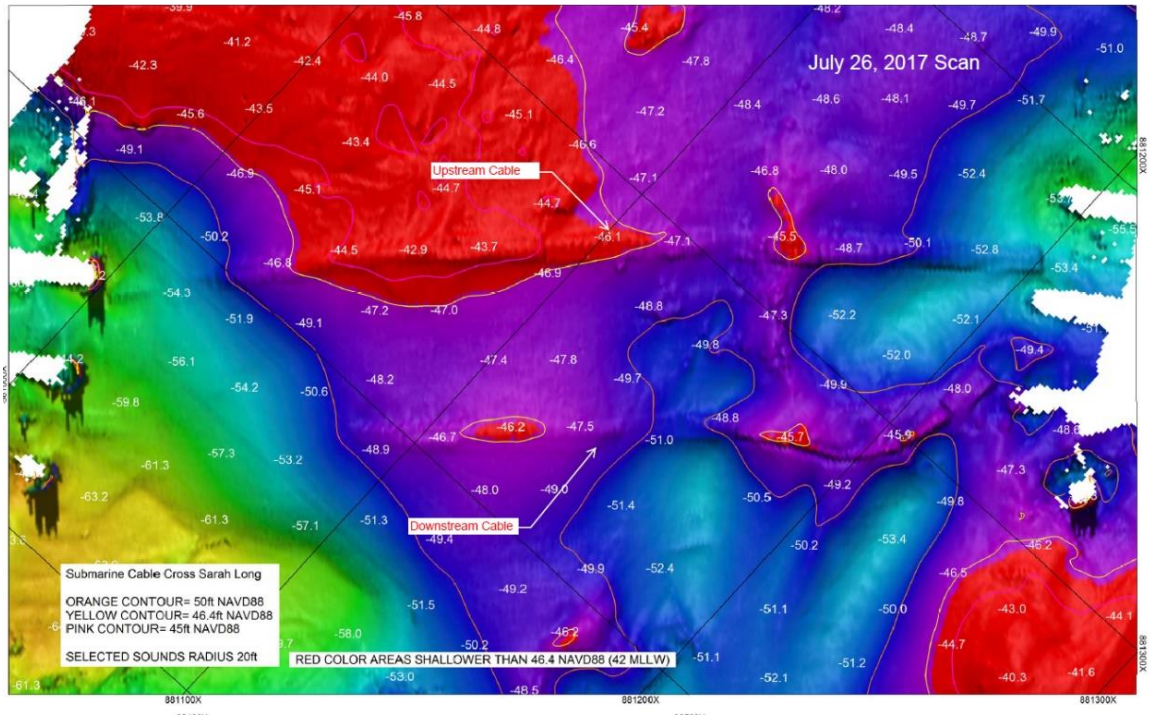


Photo 2: Side scan sonar image from 2017

Through coordination with the USACE and legal proceedings it has been determined that remedial action is required to correct the depth of the upstream submarine cables to protect both the bridge infrastructure as well as the safety of vessels operating within the Federal navigation channel. The downstream cable was found to just meet the required elevations and the Army Corps has approved the downstream cable to remain in its current location.

Purpose & Need

The purpose of the proposed project is to re-set the existing upstream submarine bridge cable of the Sarah Mildred Long Bridge to the required depth in accordance with Federal navigation channel requirements. Condition 19 of the original USACE Individual Wetland Permit (NAE-2013-01623) required that the top of the utility, including the protective cover be installed at a minimum depth of -42 feet below MLLW.

The project is needed to ensure the safety of vessels operating in the Federal navigation channel of the Piscataqua River, to prevent anchor drag, and to protect the existing bridge infrastructure to allow the continued safe operation of the lift span of the bridge. The proposed work is a public infrastructure project that provides a benefit to the public.

Existing Conditions

The proposed project is located within the Piscataqua River in Portsmouth, NH and Kittery ME. The Piscataqua River is a 7th order tidal river with a Cowardin Classification of E1UBL, or estuarine, subtidal, unconsolidated bottom, with a subtidal water regime. At the location of the Sarah Mildred Long Bridge the river has a watershed of approximately 990 square miles and is roughly 1,600 feet wide, with depths ranging from 30 to 50 feet (MLLW) in the vicinity of the bridge.

The NHDES Wetlands Permit Planning Tool (WPPT) was accessed to review existing resources in the project area. According to the WPPT, Priority Resource Areas (PRAs) including Tidal Waters and Floodplain Wetlands Adjacent to Tier 3 Streams are mapped within the limits of the proposed project. The Piscataqua River is a Tidal Water. However, the proposed project is located in the middle of the channel of the river and there are no tidal wetlands located in the vicinity of the project area adjacent to the river that will be impacted by the proposed project. The proposed project is located within the 100-year floodplain (Zone AE) of the Piscataqua River. There are no designated Prime Wetlands located with 100 feet of the proposed project area.

The existing bridge cables are installed on the bottom of the riverbed. Concrete mats have been installed over portions of the cables. However, strong currents and scour have dislodged portions of the mats exposing the cables underneath. In the vicinity of the bridge, the Piscataqua River bottom is dominated by hard substrate, consisting of rock ledge overlain with gravel and cobble. A large sand/gravel shoal is also present along the upstream cable route, primarily on the NH side of the channel. Fine sediments generally do not settle on the main channel substrate due to the high tidal currents in the lower estuary. Current velocities in the vicinity of the bridge average 1.05 to 1.21 knots, or 1.7 to 2.0 feet per second.

Photo 3: Existing Bridge Cables on the bed of the Piscataqua River

There are no shellfish beds and no aquatic vegetation located in the vicinity of the proposed area of disturbance. The New Hampshire Natural Heritage Bureau (NHB) identified eelgrass beds located approximately 1,800 and 5,800 feet upstream and downstream from the proposed project area, respectively. As part of the bridge replacement project, eelgrass surveys were performed on July 17, 2013 by MaineDOT dive crews in the vicinity of the proposed bridge, located just upstream of the action area. A two square foot patch of eelgrass was found on the Kittery, Maine side of the bridge and sporadic eelgrass shoots were identified on the Portsmouth side. In addition, a second eelgrass survey was completed using a ROV camera on September 11, 2013. This survey found sporadic eelgrass shoots but no collections of plants forming any beds. Eelgrass mapping does not show any eelgrass beds in or near the project area. The NHB also identified documented occurrences of Atlantic sturgeon, shortnose sturgeon, and peregrine falcon in the vicinity of the project.

A Coastal Functional Assessment report and a Coastal Vulnerability Assessment have been completed are included with this permit application in accordance with Env-Wt 603.04 and Env-Wt 603.05 respectively. Additional information regarding the existing resources is provided in these reports.

Proposed Project

The contractor is proposing to re-set the upstream cable to the proper depth using the same methods described in the original permitting effort. The Construction Sequence subsection below provides a detailed description of the anticipated approach.

During the initial consultation and permitting efforts, MaineDOT and the Federal Highway Administration proposed to install the cable in the in-water work window recommended by the resource agencies: November 9 - March 15. The effort described below is similar to what was outlined in the initial consultation; however, MaineDOT is now requesting to complete the work between August 1 and March 15. Repairs will likely require between 30 and 60 days to complete within the in-water work window and will ideally be scheduled to begin in August. However, a longer potential work window is requested as a contingency to allow the contractor flexibility in scheduling the work.

A waiver request for NHDES Administrative Rules Env-Wt 307.04(a) and Env-Wt 307.10(i) has been prepared and submitted with this wetland permit application to allow for the deviation in the work window.

The proposed project involves dredging in the Piscataqua River, a tidal water (also a PRA) and therefore will classified as a Major Impact Project pursuant to Env-Wt 607.10(a) and Env-Wt 610.17(a).

Construction Sequence

The anticipated construction sequence will be as follows:

1.) Remove the existing cable mats.

- This process will likely be done with underwater divers and a crane/excavator on a barge or other means as determined by the contractor.
- The mats will be lifted off the cable and placed back on the channel bottom in an area adjacent to the cables or removed and placed on the deck of the barge.

2.) Set aside the entire length of existing upstream cable (+/- 300 feet) alongside its current location to allow room for excavation of the high areas of the river bottom where needed.

3.) Excavate approximately 125 feet of river bottom (75 feet located in New Hampshire) to achieve the necessary depth for the cable.

- Sequential dredging will be completed over a period of 30-60 days within short windows of time within each tide cycle.
- The contractor will use a ‘long reach’ excavator to reach from the barge to the river bottom and excavate any riverbed material necessary to achieve proper embedment.

- In the event it is determined that the existing bottom profile is conducive to alternate methods of removing the high spots, the contractor may use underwater hand jetting to move the high material in lieu of the excavator. This hand jetting option will only be utilized if the excavator cannot complete the necessary removal of the material.
- Excavated material will be placed to the side on the riverbed.

Photo 4: Example of a long-reach excavator operating from a barge during construction of the Sarah Mildred Long Bridge

4.) The existing cable will be re-set and concrete mats will be re-installed overtop the cable.

- The contractor may need to install a new cable if issues with moving the old cable become apparent.

Impacts

Jurisdictional Resources

The proposed project will require approximately 75 linear feet (perpendicular to the flow of water) of excavation (dredging) of the channel bottom located in NH. The total area of required excavation in NH is 75 feet long x 10 feet wide for a total area of 750 square feet of permanent impacts associated with the required dredging. An additional 400 square feet / 40 linear feet (40 feet long x 10 feet wide) of temporary impacts are also required for temporary disturbance associated with setting aside the existing concrete mats and cable on the riverbed. The total area of impacts to tidal waters of the Piscataqua River (Cowardin Classification: E1UBL) are 1,150 square feet / 115 linear feet.

Water Quality

It is anticipated that an increase in TSS will likely be spatially limited to a few hundred meters up and down stream. The river is nearly 500 meters (1,600 feet) wide at the bridge site. This, combined with the swift currents in the river, makes it likely that there will be a sufficient zone of passage so anadromous and other fish species can forage or migrate up/downstream without being exposed to increased TSS levels resulting from construction activities. Based on the scope of the proposed action, its sequential nature, and the small amounts of increased turbidity expected from the action, the effects on water quality will be minimal.

Rare Species

MaineDOT reinitiated consultation with the National Oceanic and Atmospheric Administration (NOAA) regarding Federally listed species as well as Essential Fish Habitat (EFH). NOAA concurred with a Not Likely to Adversely Affect (NLAA) Section 7 Determination. NOAA also accepted the EFH assessment with the single conservation recommendation of completing the work as close to November 15 as possible. Coordination with New Hampshire Fish and Game (NHFG) and NHB has also been completed regarding state listed rare species and eelgrass beds. Documentation of the coordination with NOAA, NHFG, and NHB is included with the permit application materials. As proposed, the project is not anticipated to have an adverse effect on any Federal or state listed species.

Avoidance and Minimization Measures

The cable will be placed in the same location as the original cable footprint, which represents the least environmentally damaging alignment since this area was previously disturbed. The cable will be embedded at a lower depth and covered with concrete mats. Riverbed material removed to allow for lowering the cable will be placed along the river bottom adjacent to the cable site. Again, this area was previously disturbed by bridge construction and the sonar scans over the last several years show that the riverbed is a highly dynamic, changing system in the vicinity of the bridge.

Sequential dredging will be utilized to reduce turbidity and noise. No sediment or turbidity controls are proposed due to the high velocity of the river (average 1.7 to 2.0 feet per second). The substrate is primarily cobble and gravel and the sequential dredging is proposed to help minimize turbidity releases and sedimentation impacts. No dewatering or cofferdams are proposed. The currents in this location

make turbidity curtains ineffective and cofferdams are not practicable given the depth of water, cost, and presence of the navigation channel.

Mitigation Approach

Through coordination with NHDES it was determined that the proposed maintenance/repairs to the existing submarine cable involving 750 SF / 75 LF of permanent impacts (dredging) within the tidal waters of the Piscataqua River would not require mitigation. Mitigation was provided for permanent impacts associated with the placement of the upstream cable through the original 2014 NHDES permit (File #2014-01053). In 2014, an in-lieu fee payment in the amount of $19,432.78 was made for 2,234 SF of proposed impacts associated with the area of dredging required for the proper installation of the cable. However, this impact never occurred because the Contractor did not complete the dredging. The 2021 in-lieu fee payment for the 750 SF of dredging that is now proposed would be $8,491.31. Therefore, based on the original (2014) proposed impacts and mitigation provided in the form of the in-lie fee payment, actual impacts that occurred as a result of the original project, and proposed impacts in 2021, there is a positive variance in the in-lieu fee mitigation in the amount of $10,941.47 and no additional in-lieu fee is required.

Compliance with NHDES Coastal Wetland Rules (Env-Wt 600)

Env-Wt 603.02 Required Information

Env-Wt 603.02(a) Please refer to the Introduction, Purpose & Need, and Proposed Project sections above.

Env-Wt 603.02(b) Please refer to the Existing Conditions section above.

Env-Wt 603.02(c)

(1) See attached Coastal Functional Assessment Report

(2) See attached Coastal Vulnerability Assessment

Env-Wt 603.02(d) Please refer to the Proposed Project section above for a discussion of the avoidance and minimization measures and best management practices.

Env-Wt 603.02(e)

(1) Project meets the Standard Conditions Env-Wt 307 (see attached Waiver Request)

(2) Project complies with the Approval Criteria Env-Wt 313.01

Env-Wt 603.03 Data Screening

Env-Wt 603.03 Required Data Screening has been completed and the information is included throughout this application.

Env-Wt 603.04 Coastal Functional Assessment

See Attached.

Env-Wt 603.05 Coastal Vulnerability Assessment

See Attached.

Env-Wt 603.06 Project Design Narrative

Please refer to the Proposed Project section above including the Construction Sequence and Avoidance and Minimization subsections.

Env-Wt 603.07 Design Plans

See Attached.

Env-Wt 603.08 Water Depth Supporting Information

See Attached.

Env-Wt 603.09 Statement Regarding Impact on Navigation and Passage

See attached letter from the Division of Ports and Harbors dated March 22, 2021.

Coastal Functional Assessment

Sarah Mildred Long Bridge Submarine Cable Project

Portsmouth, New Hampshire

Prepared for:

Maine Department of Transportation

24 Child Street

Augusta, ME 04330

Prepared by:

McFarland-Johnson, Inc.

53 Regional Drive

Concord, New Hampshire 03301

March 2021

Coastal Functional Assessment

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INTRODUCTION

The following Coastal Functional Assessment report has been prepared for the proposed Sarah Mildred Long Bridge submarine cable project (**Appendix A** – USGS Location Map) in accordance with the New Hampshire Department of Environmental Services (NHDES) Coastal Lands and Tidal/Waters/Wetlands Rules (Env-Wt 600) and to satisfy the specific requirements of Env-Wt 603.04. This report is intended to supplement the NHDES Major Impact Standard Dredge and Fill Wetland Permit Application for approximately 1,150 square feet of impacts within the Piscataqua River in New Hampshire.

The proposed Maine Department of Transportation (MaineDOT) project involves re-setting the existing upstream submarine cable of the recently constructed Sarah Mildred Long Bridge to the required depth. The proposed project is located within the Piscataqua River in Portsmouth, New Hampshire and Kittery, Maine, with the State Line bisecting the center of the lift span of the existing bridge.

The original Sarah Mildred Long Bridge Replacement project was a joint venture between MEDOT and the New Hampshire Department of Transportation (NHDOT) that involved the replacement of the original bridge with the current bridge on a new alignment. Construction of the new bridge was completed over multiple years between 2015 and 2018 when the new bridge was opened to traffic. The original bridge replacement project was authorized under U.S. Army Corps (USACE) Individual Permit NAE-2013-01623, the New Hampshire Department of Environmental Services (NHDES) Major Impact Dredge and Fill Permit File #2014-01053, and Water Quality Certificate 2014-404I-001. During construction of the new bridge, it was discovered that the submarine cables that power the lift span of the bridge were installed incorrectly, and it has been determined that remedial action is required to correct the depth of the submarine cables to protect both the bridge infrastructure as well as the safety of vessels operating within the Federal navigation channel.

The purpose of the proposed project is to re-set the existing upstream submarine bridge cable of the Sarah Mildred Long Bridge to the required depth. The bridge and cables are located within a Federal navigation channel within the Piscataqua River. Condition 19 of the original USACE Individual Wetland Permit (NAE-2013-01623) required that the top of the utility, including the protective cover be installed at a minimum depth of -42 feet below Mean Lower Low Water (MLLW).

The project is needed to ensure the safety of vessels in the Federal navigation channel of the Piscataqua River and to protect the existing bridge infrastructure to allow the continued safe operation of the lift span of the bridge. Resetting the bridge cable to the proper depth is necessary to precent anchor drag.

METHODS

The proposed project is located in the middle of the channel of the Piscataqua River. Due to the location of the project (completely within the channel of the River) a formal wetland delineation was not completed. Online GIS mapping resources including the NHDES Wetlands Permit Planning Tool (WPPT) were utilized to identify existing resources located in the vicinity of the project area. The New Hampshire Natural Heritage Bureau (NHB) was contacted regarding existing information on documented rare species and natural communities within the vicinity of the project (**Appendix B**).

Wetland functions and values were assessed using the US ACE New England District *Highway Methodology Workbook Supplement, Wetland Functions and Values: A Descriptive Approach*. This method uses 13 functions and values (8 functions and 5 values) and lists of considerations/qualifiers for each function or value to evaluate wetlands. As part of this evaluation the suitability for each function and value is assessed as well as identification of the principal or most important functions and values associated with a given wetland resource. The 13 functions and values used in the US ACE Highway Methodology are described below:

FUNCTIONS

1) **Groundwater Recharge/Discharge:** *This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. Recharge should relate to the potential for the wetland to contribute water to an aquifer. Discharge should relate to the potential for the wetland to serve as an area where groundwater can be discharged to the surface.*

2) **Floodflow Alteration:** *This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events.*

3) **Fish and Shellfish Habitat:** *This function considers the effectiveness of seasonal or permanent waterbodies associated with the wetland in question for fish and shellfish habitat.*

4) **Sediment/Toxicant/Pathogen Retention:** *This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens.*

5) **Nutrient Removal/Retention/Transformation:** *This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.*

6) **Production/Export:** *This function relates to the effectiveness of the wetland to produce food or usable products for humans or other living organisms.*

7) **Sediment/Shoreline Stabilization:** *This function relates to the effectiveness of a wetland to stabilize streambanks and shorelines against erosion.*

8) **Wildlife Habitat:** *This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species must be considered. Species lists of observed and potential animals should be included in the wetland assessment report.*

VALUES

1) **Recreation:** *This value considers the effectiveness of the wetland and associated watercourses to provide recreational opportunities such as canoeing, boating, fishing, hunting, and other active or passive recreational activities. Consumptive activities consume or diminish the plants, animals, or other resources that are intrinsic to the wetland, whereas non-consumptive activities do not.*

2) **Educational/Scientific Value:** *This value considers the effectiveness of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.*

3) **Uniqueness/Heritage:** *This value relates to the effectiveness of the wetland or its associated waterbodies to produce certain special values. Special values may include such things as archaeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geologic features.*

4) **Visual Quality/Aesthetics:** *This value relates to the visual and aesthetic qualities of the wetland.*

5) **Threatened/Endangered Species Habitat:** *This value relates to the effectiveness of the wetland or associated waterbodies to support threatened or endangered species.*

FUNCTIONS AND VALUES ASSESSMENT

According to National Wetland Inventory mapping, the Piscataqua River is a tidal water with a Cowardin Classification of E1UBL. Due to the location of the proposed project (in the center of the channel of the Piscataqua River, a tidal estuarine system), many of the wetland functions and values typically associated with and provided by vegetated palustrine and tidal wetland systems are not present.

The functions and values of the Piscataqua River in the vicinity of the proposed project were evaluated using the US ACE Highway Methodology. The results of the wetland functions and values assessment are provided below. The Wetland Function-Value Evaluation Form is included in **Appendix C**.

- **Groundwater Recharge/Discharge** Suitability: ☒ YES / ☐ NO Principal Function: ☐
  The proposed project is located within the channel of the Piscataqua River, approximately 3.25 miles upstream from the mouth of the river/the Atlantic Ocean. The river carries primarily surface flow and is tidally influenced at the location of the proposed project. While the potential exists and some groundwater discharge is likely occurring, this is not a primary function of the river at the location of the proposed project.

- **Floodflow Alteration** Suitability: ☐ YES / ☒ NO Principal Function: ☐
  The Piscataqua River is a large body of water with a roughly 1,500 square mile watershed. The project is located in the lower portions of the watershed, approximately 3.25 miles upstream from

the mouth of the river/the Atlantic Ocean. The project is located within a FEMA mapped 100-year floodplain (Zone AE). While the Piscataqua River conveys floodflows the opportunity for the river itself to provide floodflow alteration and additional storage potential is limited.

- **Fish and Shellfish Habitat** Suitability: ☒ YES / ☐ NO Principal Function: ☒
  The Piscataqua River provides estuarine habitat for a variety of fish and shellfish species and is therefore considered a principal function. However, there are no mapped shellfish beds located in the vicinity of the proposed project area.

- **Sediment/Toxicant Retention** Suitability: ☐ YES / ☒ NO Principal Function: ☐
  The portion of the river in the vicinity of the proposed project provides limited sediment and toxicant retention potential due to the hard substrate (primarily cobble and gravel), high current velocities, and lack of vegetation.

- **Nutrient Removal** Suitability: ☐ YES / ☒ NO Principal Function: ☐
  The portion of the river in the vicinity of the proposed project provides limited nutrient removal potential due to the hard substrate (primarily cobble and gravel), high current velocities, and lack of vegetation.

- **Production/Export** Suitability: ☒ YES / ☐ NO Principal Function: ☒
  The Piscataqua River provides nutrient and biomass transport. In addition, the river provides fish and wildlife habitat, which in turn can provide commercial and recreational opportunities for fishing. The River also provides commercial shipping and interstate commerce. Therefore, the production/export function is a principal function of the Piscataqua River.

- **Sediment/Shoreline Stabilization** Suitability: ☐ YES / ☒ NO Principal Function: ☐
  The project is located within the middle of the approximately 1,600 wide channel. The area in the immediate vicinity of the proposed project provides limited sediment/shoreline stabilization potential.

- **Wildlife Habitat** Suitability: ☒ YES / ☐ NO Principal Function: ☐
  The Piscataqua River provides potential habitat for a variety of shorebirds, waterfowl, and marine mammals.

- **Recreation** Suitability: ☒ YES / ☐ NO Principal Function: ☒
  The Piscataqua River provides recreational opportunities including boating, fishing, sightseeing, bird watching/wildlife viewing. This is a principal function of the river.

- **Educational/Scientific Value** Suitability: ☒ YES / ☐ NO Principal Function: ☐
  The Piscataqua River provides potential for educational or scientific opportunities.

- **Uniqueness/Heritage** Suitability: ☒ YES / ☐ NO Principal Function: ☐
  The proposed project is located near the mouth of the Piscataqua River in a tidal/estuarine system on a large river in New Hampshire. There are limited rivers of this size and nature in New Hampshire and the surrounding area, making this system somewhat unique.

- **Visual Quality/Aesthetics** Suitability: ☒ YES / ☐ NO Principal Function: ☐
  The expansive river (approximately 1,600 feet wide) provides a contrast to the surrounding urban development consisting of relatively dense commercial/industrial and residential developments.

- **Threatened/Endangered Species Habitat** Suitability: ☒ YES / ☐ NO Principal Function: ☒
  The NHB identified documented occurrences of Atlantic Sturgeon (Federally and state threatened) and shortnose sturgeon (Federally and state endangered) within the Piscataqua River. The NHB also identified eelgrass beds and nesting peregrine falcons in the vicinity of the proposed project. The Piscataqua River is also designated as Critical Habitat for Atlantic sturgeon under the Endangered Species Act. Due to the potential presence of state and Federally listed sturgeon species, threatened and endangered species habitat is one of the principal values of the Piscataqua River.

PROPOSED IMPACTS

The proposed project will require 750 sq. ft. of permanent impacts in NH associated with dredging and re-installing the existing cable and protective concrete mats, and approximately 400 sq. ft. of temporary impacts in NH associated with moving the existing concrete mats and cable. Sequential dredging will be implemented, which will minimize turbidity releases and sedimentation impacts. Additional information regarding the proposed project, impacts, and construction sequence can be found in the application package.

The proposed project is not anticipated to have a significant effect on the functions and values of the Piscataqua River. The project is relatively small in scope and permanent impacts are limited to dredging a 10-foot -wide by 125-foot-long swath to re-install an existing cable and concrete protective mats. At the location of the project the Piscataqua River is roughly 1,600 feet wide. Sequential dredging will further minimize impacts to water quality, fish, habitat, and rare species. Impacts are located in an area previously disturbed by the construction of the existing bridge and submarine cables. The proposed project is located below the water surface and will not be visible or change the nature of the resource area.

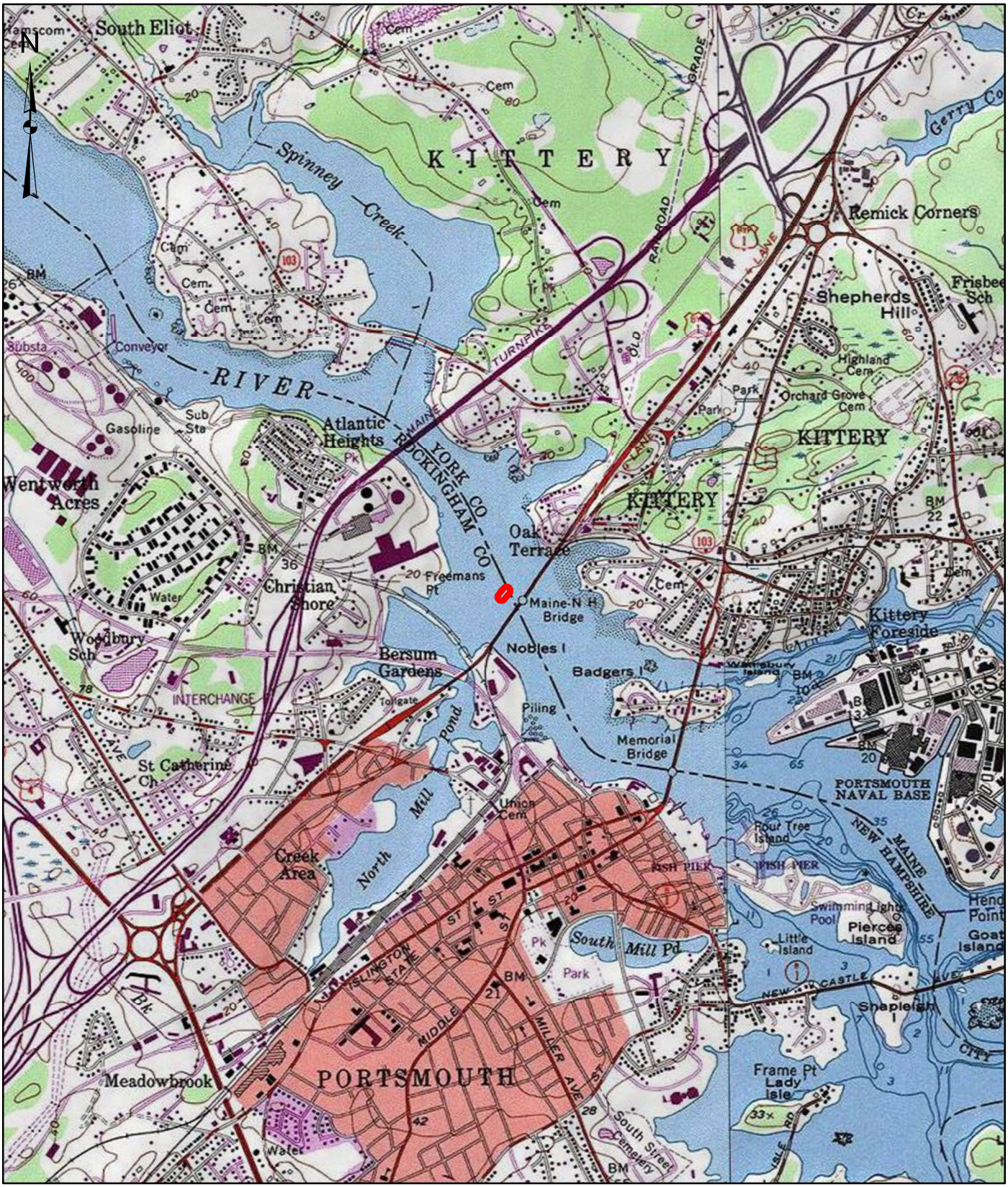
CONCLUSION

Based on a review of the considerations/qualifiers for each of the functions and values it was determined that the portion of the Piscataqua River in the vicinity of the proposed project is suitable for: Groundwater Discharge, Fish and Shellfish Habitat, Production/Export, Wildlife Habitat, Recreation, Educational/Scientific Value, Uniqueness/Heritage, Visual Quality/Aesthetics, and Threatened/Endangered Species Habitat. Of the functions and values found to be suitable, Fish and

Shellfish Habitat, Production/Export, Recreation, and Endangered Species Habitat were determined to be the principal functions.

Overall, for the reasons discussed above, the proposed project is anticipated to have a negligible impact on the functions and values provided by the river.

APPENDIX A:
USGS LOCATION MAP



PROJECT LOCATION

0 2,000 4,000

Feet

MEDOT SARAH MILDRED LONG BRIDGE
CABLE REPLACEMENT PROJECT
PISCATAQUA RIVER, PORTSMOUTH, NH

USGS LOCATION MAP

SCALE :	DATE :	FIGURE :
1 inch = 2,000 feet	MARCH 2021	1

McFarland Johnson

M:\18316.03 MaineDOT SML Cable Permit\Draw\GIS\NHDES Wetland Permit Figures\MEDOT SML Permitting USGS Location Map.mxd

APPENDIX B:
NH NATURAL HERITAGE BUREAU RESULTS

CONFIDENTIAL – NH Dept. of Environmental Services review

Memo

NH Natural Heritage Bureau
NHB Datacheck Results Letter

To: Stephen Hoffmann
53 Regional Drive
Concord, NH 03301

From: Amy Lamb, NH Natural Heritage Bureau
Date: 3/9/2021 (valid until 03/09/2022)
Re: Review by NH Natural Heritage Bureau
Permits: NHDES - Wetland Standard Dredge & Fill - Minimum

NHB ID: NHB21-0703 Town: Portsmouth Location: Sarah Mildred Long Bridge (US Route 1 Bypass)

Description: The proposed project involves resetting an underwater cable that was installed as part of the recently constructed Sarah Mildred Long Bridge replacement project. Concrete mats and the existing cable will be removed and a long-reach boom excavator mounted on a barge will be used to dredge the area to the appropriate depth. Hand jetting may also be utilized if the excavator is unable to complete the required excavation. The cable and concrete mats will be reinstalled in the dredged area at the appropriate depth. The impact area is approximately 125'-150 long and approximately 10' wide. The total area of impacts will likely be in the 1,250-1,500 SF range. The work is anticipated to be completed between August 1 and March 15 and will last for a duration of approximately 30-60 days.

cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments NHB: Avoid staging barges or other equipment near any of the eelgrass beds mapped below.
F&G: Is this the correct permit type? Please send NHFG project details. NHFG Marine Division will be reviewing this project.

Natural Community	**State[1]**	**Federal**	**Notes**
Eelgrass bed	--	--	

Vertebrate species	**State[1]**	**Federal**	**Notes**
Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).
Peregrine Falcon (*Falco peregrinus anatum*)	T	--	Contact the NH Fish & Game Dept (see below).

Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

CONFIDENTIAL – NH Dept. of Environmental Services review

Memo

NH Natural Heritage Bureau
NHB Datacheck Results Letter

Shortnose Sturgeon (*Acipenser brevirostrum*)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

[1]Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NHF&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

APPENDIX C:
WETLAND FUNCTION-VALUE EVALUATION FORM

Wetland Function-Value Evaluation Form

Total area of wetland N/A Human made? NO Is wetland part of a wildlife corridor? YES or a "habitat island"? NO

Adjacent land use Commercial/Industrial; Transportation; Residential Distance to nearest roadway or other development 0'

Dominant wetland systems present E1UBL Contiguous undeveloped buffer zone present NO

Is the wetland a separate hydraulic system? N/A If not, where does the wetland lie in the drainage basin? N/A

How many tributaries contribute to the wetland? N/A Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Piscataqua River

Latitude 43.086637 Longitude -70.761174

Prepared by: S. Hoffmann Date 03/23/2021

Wetland Impact:
Type Permanent / Temporary Area 750 SF PERM / 400 SF T

Evaluation based on:
Office X Field

Corps manual wetland delineation completed? Y N/A N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	7		Potential for groundwater discharge exists, although flow is primarily driven by surface and tidal flow
Floodflow Alteration	N	11		The channel of the river conveys floodflows but does not provide alteration or additional storage potential
Fish and Shellfish Habitat	Y	3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15, 17, 2, 3, 4, 5, 6	X	The Piscataqua River provides fish and shellfish habitat
Sediment/Toxicant Retention	N	1, 8, 10		High velocities within the channel prevent sediment/toxicant retention
Nutrient Removal	N	2, 4		Limited nutrient removal potetntial due to high velocity currents
Production Export	Y	3, 5, 6, 10, 11	X	The Piscataqua River produces fish and shellfish
Sediment/Shoreline Stabilization	N	4, 8, 9, 10, 11		The channel of the Piscataqua River does not provide these functions, adjacent wetlands will not be impacted
Wildlife Habitat	Y	6, 8		The Piscataqua River provides habitat for shorebirds and marine mammals
Recreation	Y	2, 4, 5, 6, 7, 8, 9, 12	X	The Piscataqua River provides recreational opportunities for boating, fishing, and other outdoor activities
Educational/Scientific Value	Y	1, 9, 11		There is potential for educational/scientific use
Uniqueness/Heritage	Y	1, 8, 11, 14, 17, 19, 24,		The project is located near the mouth of the Piscataqua River
Visual Quality/Aesthetics	Y	2, 6, 9		The river provides a scenic quality, contrasting with the surrounding urban area
ES Endangered Species Habitat	Y	1, 2	X	The Piscataqua River provides habitat for both Atlantic and shortnose sturgeon
Other				None

Notes:

* Refer to backup list of numbered considerations.

Coastal Vulnerability Assessment

Sarah Mildred Long Bridge Submarine Cable Project

Portsmouth, New Hampshire

Prepared for:

Maine Department of Transportation

24 Child Street

Augusta, ME 04330

Prepared by:

McFarland-Johnson, Inc.

53 Regional Drive

Concord, New Hampshire 03301

March 2021

Coastal Vulnerability Assessment

Table of Contents

INTRODUCTION

The following Coastal Vulnerability Assessment has been prepared in support of a New Hampshire Department of Environmental Services (NHDES) Major Impact Standard Dredge and Fill Wetland Permit Application for a proposed project sponsored by the Maine Department of Transportation (MaineDOT).

The proposed project involves re-setting the existing upstream submarine cable of the recently constructed Sarah Mildred Long Bridge to a depth of -42 Mean Lower Low Water (MLLW) as required by the US Army Corps of Engineers due to the location within a Federal navigation channel. The proposed project is located within the Piscataqua River, a tidal water located in Portsmouth, New Hampshire and Kittery, Maine. The project is needed to ensure the safety of vessels operating in the Federal navigation channel of the Piscataqua River, to prevent anchor drag, and to protect the existing bridge infrastructure to allow the continued safe operation of the lift span of the bridge. The proposed work is a public infrastructure project that provides a benefit to the public.

DESIGNED SERVICE LIFE

The proposed project is designed to match the service life of the existing bridge, or approximately 100 years. The existing bridge was completed in 2018 so the service life of the proposed project is anticipated to be through 2118.

RISK TOLERANCE TO FLOODING

The proposed project is being installed/constructed at the bottom of the Piscataqua River in the middle of the channel. The proposed project area is currently permanently inundated/flooded and is not sensitive to increases in water levels caused by sea level rise. Therefore, it is the proposed project has a high risk tolerance to flooding.

PROJECTED SEA LEVEL RISE

Sea Level Rise (SLR) is not anticipated to have an effect on the proposed project since the proposed project is located at the bottom of the Piscataqua River. The project area is currently permanently inundated/flooded. The project area is located within the FEMA mapped 100-year floodplain (Zone AE) of the River. The proposed project is not anticipated to result in impacts to the floodplain or a change in the Base Flood Elevation.

SLR has the potential to increase the velocity of tidal currents; however, the existing tidal currents in the river are already significant and the proposed project has been designed accordingly. The cables will be embedded in the bottom of the channel and protective concrete mats will be installed overtop to provide additional protection from high velocity flows and scour. As a Federal navigation channel and major bridge structure, the site will be monitored on a routine basis. Since the proposed project will be unaffected by SLR, projected SLR scenarios for the project design life were not evaluated further.

CONCLUSION

Due to the location of the proposed project, along the riverbed in the middle of the Piscataqua River channel, in an area that is currently permanently flooded/inundated, the proposed infrastructure is assumed to be unaffected by increased flooding and projected SLR. Therefore, it is assumed that the flood risk tolerance is high, and a detailed evaluation of potential SLR scenarios was not completed for the proposed project.

AVOIDANCE AND MINIMIZATION CHECKLIST

Water Division/Land Resources Management
Wetlands Bureau

Check the Status of your Application

RSA/Rule: RSA 482-A/ Env-Wt 311.07(c)

This checklist can be used in lieu of the written narrative required by Env-Wt 311.07(a) to demonstrate compliance with requirements for Avoidance and Minimization (A/M), pursuant to RSA 482-A:1 and Env-Wt 311.07(c).

For the construction or modification of non-tidal shoreline structures over areas of surface waters without wetland vegetation, complete only Sections 1, 2, and 4 (or the applicable sections in Attachment A: Minor and Major Projects (NHDES-W-06-013).

The following definitions and abbreviations apply to this worksheet:

- "A/M BMPs" stands for Wetlands Best Management Practice Techniques for Avoidance and Minimization dated 2019, published by the New England Interstate Water Pollution Control Commission (Env-Wt 102.18).
- "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Env-Wt 103.62).

SECTION 1 - CONTACT/LOCATION INFORMATION	
APPLICANT LAST NAME, FIRST NAME, M.I.: MaineDOT: Chamberlain, Kristen	
PROJECT STREET ADDRESS: Sarah Mildred Long Bridge, US Rte 1 Bypass	PROJECT TOWN: Portsmouth
TAX MAP/LOT NUMBER: N/A	

SECTION 2 - PRIMARY PURPOSE OF THE PROJECT		
Env-Wt 311.07(b)(1)	Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.	☐ Yes ☒ No

If you answered "no" to this question, describe the purpose of the "non-access" project type you have proposed:

The purpose of the proposed project is to re-set the existing upstream submarine bridge cable of the Sarah Mildred Long Bridge to the required depth in accordance with Federal navigation channel requirements. Condition 19 of the USACE Individual Wetland Permit (NAE-2013-01623) required that the top of the utility, including the protective cover be installed at a minimum depth of -42 feet below MLLW.

The project is needed to ensure the safety of vessels operating in the Federal navigation channel of the Piscataqua River, to prevent anchor drag, and to protect the existing bridge infrastructure to allow the continued safe operation of the lift span of the bridge. The proposed work is a public infrastructure project that provides a benefit to the public.

SECTION 3 - A/M PROJECT DESIGN TECHNIQUES Check the appropriate boxes below in order to demonstrate that these items have been considered in the planning of the project. Use N/A (not applicable) for each technique that is not applicable to your project.		
Env-Wt 311.07(b)(2)	For any project that proposes new permanent impacts of more than one acre or that proposes new permanent impacts to a Priority Resource Area (PRA), or both, whether any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs.	☒ Check ☐ N/A
Env-Wt 311.07(b)(3)	Whether alternative designs or techniques, such as different layouts, construction sequencing, or alternative technologies could be used to avoid impacts to jurisdictional areas or their functions and values.	☒ Check ☐ N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(1) Env-Wt 311.10(c)(2)	The results of the functional assessment required by Env-Wt 311.03(b)(10) were used to select the location and design for the proposed project that has the least impact to wetland functions.	☒ Check ☐ N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(3)	Where impacts to wetland functions are unavoidable, the proposed impacts are limited to the wetlands with the least valuable functions on the site while avoiding and minimizing impacts to the wetlands with the highest and most valuable functions.	☒ Check ☐ N/A
Env-Wt 313.01(c)(1) Env-Wt 313.01(c)(2) Env-Wt 313.03(b)(1)	No practicable alternative would reduce adverse impact on the area and environments under the department's jurisdiction and the project will not cause random or unnecessary destruction of wetlands.	☒ Check ☐ N/A
Env-Wt 313.01(c)(3)	The project would not cause or contribute to the significant degradation of waters of the state or the loss of any PRAs.	☒ Check ☐ N/A
Env-Wt 313.03(b)(3) Env-Wt 904.07(c)(8)	The project maintains hydrologic connectivity between adjacent wetlands or stream systems.	☒ Check ☐ N/A
Env-Wt 311.10 A/M BMPs	Buildings and/or access are positioned away from high function wetlands or surface waters to avoid impact.	☐ Check ☒ N/A
Env-Wt 311.10 A/M BMPs	The project clusters structures to avoid wetland impacts.	☒ Check ☐ N/A
Env-Wt 311.10 A/M BMPs	The placement of roads and utility corridors avoids wetlands and their associated streams.	☐ Check ☒ N/A
A/M BMPs	The width of access roads or driveways is reduced to avoid and minimize impacts. Pullouts are incorporated in the design as needed.	☐ Check ☒ N/A
A/M BMPs	The project proposes bridges or spans instead of roads/driveways/trails with culverts.	☐ Check ☒ N/A

A/M BMPs	The project is designed to minimize the number and size of crossings, and crossings cross wetlands and/or streams at the narrowest point.	☐ Check ☒ N/A
Env-Wt 500 Env-Wt 600 Env-Wt 900	Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage.	☐ Check ☒ N/A
Env-Wt 900	Stream crossings are sized to address hydraulic capacity and geomorphic compatibility.	☐ Check ☒ N/A
A/M BMPs	Disturbed areas are used for crossings wherever practicable, including existing roadways, paths, or trails upgraded with new culverts or bridges.	☐ Check ☒ N/A
SECTION 4 - NON-TIDAL SHORELINE STRUCTURES		
Env-Wt 313.03(c)(1)	The non-tidal shoreline structure has been designed to use the minimum construction surface area over surfaces waters necessary to meet the stated purpose of the structure.	☐ Check ☒ N/A
Env-Wt 313.03(c)(2)	The type of construction proposed for the non-tidal shoreline structure is the least intrusive upon the public trust that will ensure safe navigation and docking on the frontage.	☐ Check ☒ N/A
Env-Wt 313.03(c)(3)	The non-tidal shoreline structure has been designed to avoid and minimize impacts on the ability of abutting owners to use and enjoy their properties.	☐ Check ☒ N/A
Env-Wt 313.03(c)(4)	The non-tidal shoreline structure has been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.	☐ Check ☒ N/A
Env-Wt 313.03(c)(5)	The non-tidal shoreline structure has been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.	☐ Check ☒ N/A
Env-Wt 313.03(c)(6)	The non-tidal shoreline structure has been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.	☐ Check ☒ N/A

AVOIDANCE AND MINIMIZATION WRITTEN NARRATIVE

Water Division/Land Resources Management

Wetlands Bureau

Check the Status of your Application

RSA/ Rule: RSA 482-A/ Env-Wt 311.04(j); Env-Wt 311.07; Env-Wt 313.01(a)(1)b; Env-Wt 313.01(c)

APPLICANT'S NAME: **MaineDOT, Kristen Chamberlain** **TOWN NAME:** **Portsmouth**

An applicant for a standard permit shall submit with the permit application a written narrative that explains how all impacts to functions and values of all jurisdictional areas have been avoided and minimized to the maximum extent practicable. This attachment can be used to guide the narrative (attach additional pages if needed). Alternatively, the applicant may attach a completed Avoidance and Minimization Checklist (NHDES-W-06-050) to the permit application.

SECTION 1 - WATER ACCESS STRUCTURES (Env-Wt 311.07(b)(1))

Is the primary purpose of the proposed project to construct a water access structure?

NO

SECTION 2 - BUILDABLE LOT (Env-Wt 311.07(b)(1))

Does the proposed project require access through wetlands to reach a buildable lot or portion thereof?

NO

SECTION 3 - AVAILABLE PROPERTY (Env-Wt 311.07(b)(2))*

For any project that proposes permanent impacts of more than one acre, or that proposes permanent impacts to a PRA, or both, are any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, that could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs?

**Except as provided in any project-specific criteria and except for NH Department of Transportation projects that qualify for a categorical exclusion under the National Environmental Policy Act.*

Permanent impacts from the proposed project are limited to 750 square feet, however, the impacts are located within the Piscataqua River, a tidal water and PRA. The proposed project involves maintenance and repairs to the existing bridge infrastructure and therefore, impacts cannot reasonably be avoided or relocated to avoid impacts to the PRA. The proposed project is a joint venture public infrastructure project between MaineDOT and NHDOT that provides a public benefit.

SECTION 4 - ALTERNATIVES (Env-Wt 311.07(b)(3))

Could alternative designs or techniques, such as different layouts, different construction sequencing, or alternative technologies be used to avoid impacts to jurisdictional areas or their functions and values as described in the Wetlands Best Management Practice Techniques For Avoidance and Minimization?

The proposed project involves modifications to the existing bridge cables and re-setting to the proper depth as required by the USACE due to the location within a Federal navigation channel. Therefore, alternative designs and techniques are somewhat limited. The cable will be placed in the same location as the original cable footprint, which represents the least environmentally damaging alignment since this area was previously disturbed. Sequential dredging techniques will be used, which will help minimize TSS and water quality impacts. The proposed work will also be completed during the work window from August 1 - March 15 as agreed upon by multiple agencies in order to minimize and avoid impacts to rare sturgeon species and other anadromous fish species.

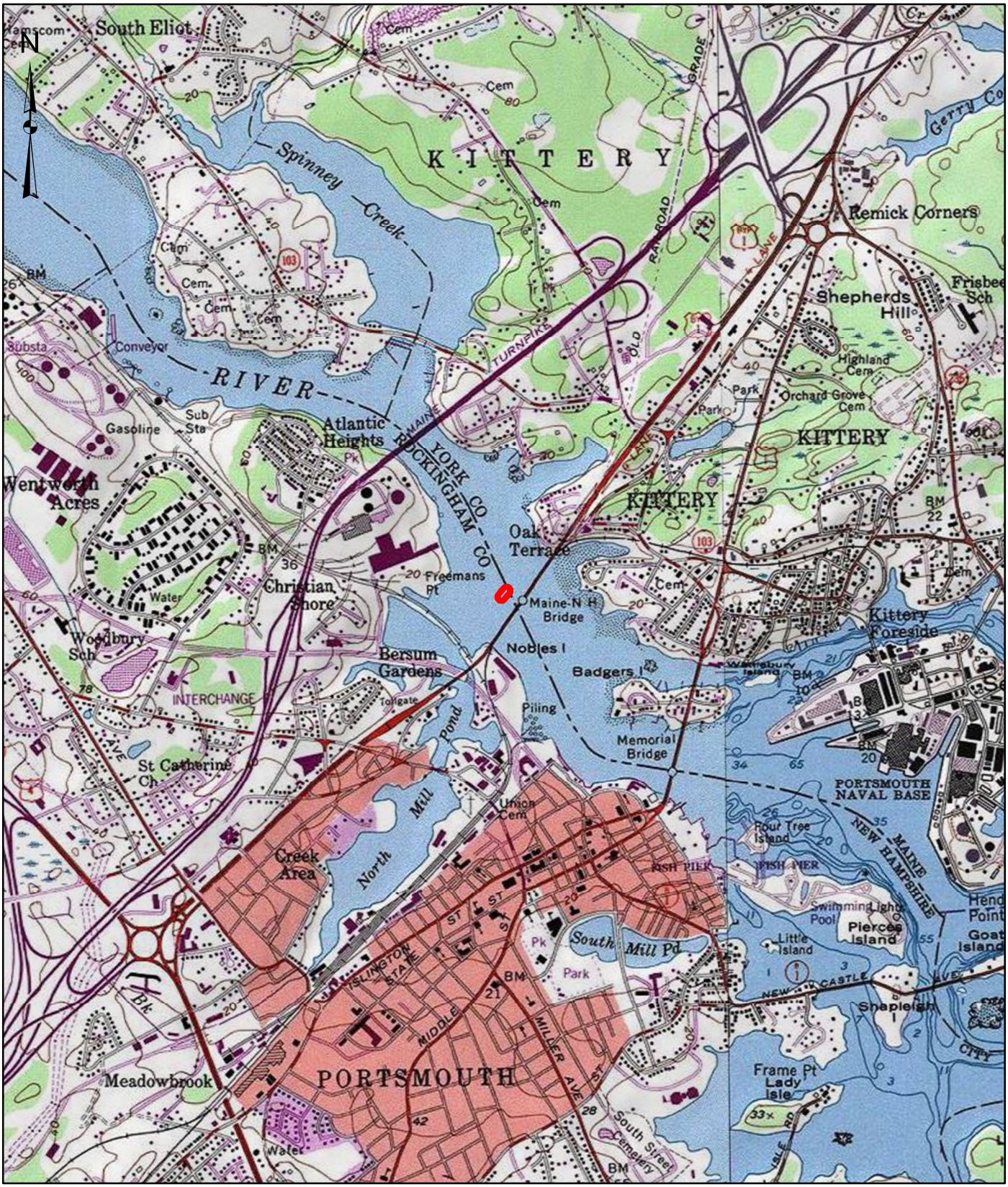
SECTION 5 - CONFORMANCE WITH Env-Wt 311.10(c) (Env-Wt 311.07(b)(4))**

How does the project conform to Env-Wt 311.10(c)?

***Except for projects solely limited to construction or modification of non-tidal shoreline structures only need to complete relevant sections of Attachment A.*

A Coastal Functional Assessment was completed and is included with this permit application. The location of the proposed project was primarily dictated by the location of the existing infrastructure. However, the project has been designed to have the least impact to the wetland functions. The primary functions of the Piscataqua River are fish and shellfish habitat, production/export, recreation, and endangered species habitat. The proposed project is anticipated to have a negligible effect on the overall functions and values of the river. The time of year restrictions and sequential dredging will help minimize impacts to fish and shellfish as well as rare species located in the vicinity of the project. There are no shellfish beds located in the immediate vicinity of the project. The proposed project will only impact approximately +/-300 feet (perpendicular to the flow of water) of the channel of the Piscataqua River (only 75 feet in NH). At this location the River is roughly 1,600 feet wide. Therefore, the production/export and recreation function and values will not be impacted by the proposed project.

Impacts have been avoided and minimized to the maximum extent practicable. The cable will be placed in the same location as the original cable footprint, which represents the least environmentally damaging alignment since this area was previously disturbed. Sequential dredging techniques will be used which will help minimize TSS and water quality impacts. The proposed work will also be completed during the work window from August 1 - March 15 as agreed upon by multiple agencies in order to minimize and avoid impacts to rare sturgeon species and other anadromous fish species.



PROJECT LOCATION

0 2,000 4,000

Feet

MEDOT SARAH MILDRED LONG BRIDGE
CABLE REPLACEMENT PROJECT
PISCATAQUA RIVER, PORTSMOUTH, NH

USGS LOCATION MAP

SCALE :	DATE :	FIGURE :
1 inch = 2,000 feet	MARCH 2021	1

McFarland Johnson

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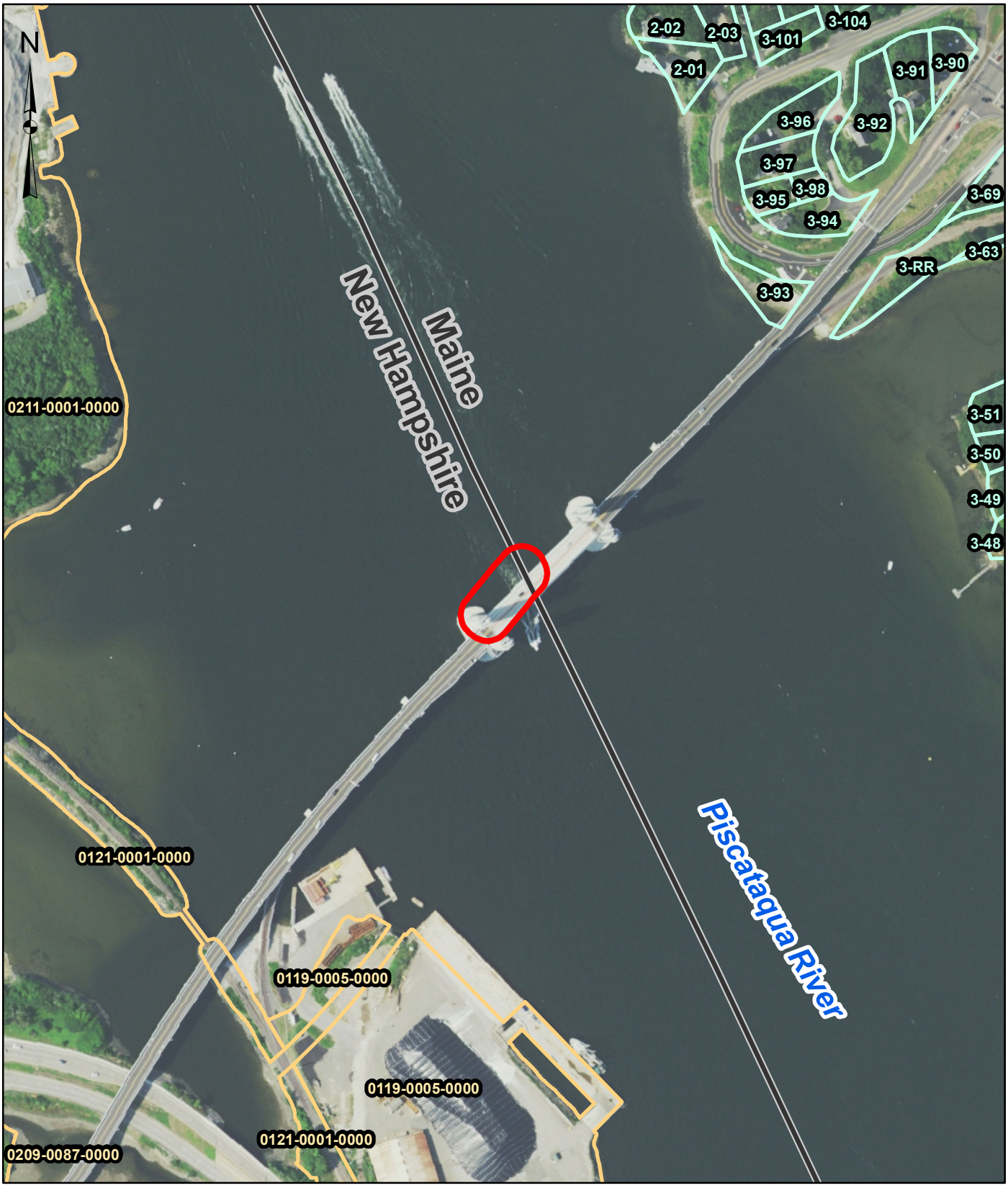

Project Location
New Hampshire Parcels
Maine Parcels
State Line

0 300 600
Feet

MEDOT SARAH MILDRED LONG BRIDGE
CABLE REPLACEMENT PROJECT
PISCATAQUA RIVER, PORTSMOUTH, NH

PARCEL MAP

SCALE :	DATE :	FIGURE :
1 inch = 300 feet	MARCH 2021	2

McFarland Johnson

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STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION ATTACHMENT A: MINOR AND MAJOR PROJECTS

Water Division/Land Resources Management

Wetlands Bureau

Check the Status of your Application

RSA/ Rule: RSA 482-A/ Env-Wt 311.10; Env-Wt 313.01(a)(1); Env-Wt 313.03

APPLICANT'S NAME: MaineDOT **TOWN NAME:** Portsmouth

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the Avoidance and Minimization Narrative or Checklist that is required by Env-Wt 307.11.

For projects involving construction or modification of non-tidal shoreline structures over areas of surface waters having an absence of wetland vegetation, only Sections I.X through I.XV are required to be completed.

PART I: AVOIDANCE AND MINIMIZATION

In accordance with Env-Wt 313.03(a), the Department shall not approve any alteration of any jurisdictional area unless the applicant demonstrates that the potential impacts to jurisdictional areas have been avoided to the maximum extent practicable and that any unavoidable impacts have been minimized, as described in the Wetlands Best Management Practice Techniques For Avoidance and Minimization.

SECTION I.I - ALTERNATIVES (Env-Wt 313.03(b)(1))

Describe how there is no practicable alternative that would have a less adverse impact on the area and environments under the Department's jurisdiction.

THE CABLE WILL BE PLACED IN THE SAME LOCATION AS THE ORIGINAL CABLE FOOTPRINT, WHICH REPRESENTS THE LEAST ENVIRONMENTALLY DAMAGING ALIGNMENT SINCE THIS AREA WAS PREVIOUSLY DISTURBED. THE CABLE WILL BE EMBEDDED AT A LOWER DEPTH AND COVERED WITH CONCRETE MATS. RIVERBED MATERIAL REMOVED TO ALLOW FOR LOWERING THE CABLE WILL BE PLACED ALONG THE RIVER BOTTOM ADJACENT TO THE CABLE SITE. AGAIN, THIS AREA WAS PREVIOUSLY DISTURBED BY BRIDGE CONSTRUCTION AND THE SONAR SCANS OVER THE LAST SEVERAL YEARS SHOW THAT THE RIVERBED IS A HIGHLY DYNAMIC, CHANGING SYSTEM IN THE VICINITY OF THE BRIDGE. AS PART OF THE BRIDGE REPLACEMENT PROJECT, OTHER OPTIONS FOR POWERING THE LIFT TOWER WERE CONSIDERED, SUCH AS OVERHEAD CABLES OR POWERING EACH SIDE INDEPENDENTLY. HOWEVER, BECAUSE OF LOGISTICS AND THE DIFFICULTY OF MAINTAINING CONSISTENT POWER FROM TWO SOURCES, INSTALLATION OF SUBMARINE CABLES WAS FOUND TO BE THE ONLY PRACTICABLE ALTERNATIVE.

SECTION I.II - MARSHES (Env-Wt 313.03(b)(2))

Describe how the project avoids and minimizes impacts to tidal marshes and non-tidal marshes where documented to provide sources of nutrients for finfish, crustacean, shellfish, and wildlife of significant value.

The project will not impact marsh habitat.

SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))

Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.

The project involves embedding a submarine cable across a portion of the riverbed of the Piscataqua River. The proposed work will have no impact on hydrological connnections between wetlands and the river.

SECTION I.IV - JURISDICTIONAL IMPACTS (Env-Wt 313.03(b)(4))

Describe how the project avoids and minimizes impacts to wetlands and other areas of jurisdiction under RSA 482-A, especially those in which there are exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern, or any combination thereof.

The proposed project involves modifications to the existing bridge cables and re-setting to the proper depth as required by the USACE due to the location within a Federal navigation channel. The cable will be placed in the same location as the original cable footprint, which represents the least environmentally damaging alignment since this area was previously disturbed. Sequential dredging techniques will be used which will help minimize TSS and water quality impacts. The proposed work will also be completed during the work window from August 1 - March 15 as agreed upon by multiple agencies in order to minimize and avoid impacts to rare sturgeon species and other anadromous fish species.

SECTION I.V - PUBLIC COMMERCE, NAVIGATION, OR RECREATION (Env-Wt 313.03(b)(5))

Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation.

The proposed work is located within a federal navigation channel that is managed by the Army Corps. The project is needed to ensure the safety of vessels operating in the Federal navigation channel of the Piscataqua River, to prevent anchor drag, and to protect the existing bridge infrastructure to allow the continued safe operation of the lift span of the bridge. MaineDOT will continue to coordinate with the Army Corps, US Coast Guard, and NH Division of Ports and Harbors to ensure that all appropriate measures will taken to minimize impatcs to boat traffic during construction.

SECTION I.VI - FLOODPLAIN WETLANDS (Env-Wt 313.03(b)(6))

Describe how the project avoids and minimizes impacts to floodplain wetlands that provide flood storage.

The project is located within the FEMA mapped 100-year floodplain (Zone AE) of the Piscataqua River. The proposed project will not result in a decrease in flood storage.

SECTION I.VII - RIVERINE FORESTED WETLAND SYSTEMS AND SCRUB-SHRUB – MARSH COMPLEXES (Env-Wt 313.03(b)(7))

Describe how the project avoids and minimizes impacts to natural riverine forested wetland systems and scrub-shrub – marsh complexes of high ecological integrity.

There are no vegetated wetlands in the project area.

SECTION I.VIII - DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS (Env-Wt 313.03(b)(8))

Describe how the project avoids and minimizes impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.

All appropriate precautions will be taken to avoid and minimize impacts to water quality. Based on the scope of the proposed action, its sequential nature, and the small amounts of increased turbidity expected from the action, the effects on water quality will be minimal. The project will not impact aquifer levels.

SECTION I.IX - STREAM CHANNELS (Env-Wt 313.03(b)(9))

Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to handle runoff of waters.

The proposed project will have no effect on the ability of the Piscataqua River to handle runoff of waters.

SECTION I.X - SHORELINE STRUCTURES - CONSTRUCTION SURFACE AREA (Env-Wt 313.03(c)(1))

Describe how the project has been designed to use the minimum construction surface area over surface waters necessary to meet the stated purpose of the structures.

This project does not involve the construction of shoreline structures.

SECTION I.XI - SHORELINE STRUCTURES - LEAST INTRUSIVE UPON PUBLIC TRUST (Env-Wt 313.03(c)(2))

Describe how the type of construction proposed is the least intrusive upon the public trust that will ensure safe docking on the frontage.

This project does not involve the construction of shoreline structures.

SECTION I.XII - SHORELINE STRUCTURES – ABUTTING PROPERTIES (Env-Wt 313.03(c)(3))

Describe how the structures have been designed to avoid and minimize impacts on ability of abutting owners to use and enjoy their properties.

This project does not involve the construction of shoreline structures.

SECTION I.XIII - SHORELINE STRUCTURES – COMMERCE AND RECREATION (Env-Wt 313.03(c)(4))

Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.

This project does not involve the construction of shoreline structures.

SECTION I.XIV - SHORELINE STRUCTURES – WATER QUALITY, AQUATIC VEGETATION, WILDLIFE AND FINFISH HABITAT (Env-Wt 313.03(c)(5))

Describe how the structures have been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.

This project does not involve the construction of shoreline structures.

SECTION I.XV - SHORELINE STRUCTURES – VEGETATION REMOVAL, ACCESS POINTS, AND SHORELINE STABILITY (Env-Wt 313.03(c)(6))

Describe how the structures have been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.

This project does not involve the construction of shoreline structures.

PART II: FUNCTIONAL ASSESSMENT
REQUIREMENTS Ensure that project meets the requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).
FUNCTIONAL ASSESSMENT METHOD USED: Highway Methodology
NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: CHRISTINE PERRON, CWS
DATE OF ASSESSMENT: MARCH 2021
Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT: ☒
For minor or major projects requiring a standard permit without mitigation, the applicant shall submit a wetland evaluation report that includes completed checklists and information demonstrating the RELATIVE FUNCTIONS AND VALUES OF EACH WETLAND EVALUATED. Check this box to confirm that the application includes this information, if applicable: ☒ Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.

53 Regional Drive
Concord, NH 03313

Tel: (603) 225-2978
Fax: (603) 225-0095

McFARLAND JOHNSON
Established 1946

MEETING NOTES

PROJECT: Portsmouth-Kittery 15731
(MJ Project No: 18316.03)

DATE OF MEETING: March 17, 2021

LOCATION: ZOOM

SUBJECT: NHDOT Natural Resource Agency Coordination Meeting – DRAFT minutes

PROJECT REPRESENTATIVES:

MaineDOT: Eric Ham, Jeff Folsom

NHDOT: Marc Laurin

MJ: Christine Perron, Stephen Hoffmann

NOTES ON MEETING:

Christine Perron provided an overview of the permitting considerations for re-setting the upstream cable at the Sarah Mildred Long (SML) Bridge. The SML bridge carries US Route 1 Bypass over the Piscataqua River between Portsmouth NH and Kittery ME. The bridge was recently replaced, and a Google Earth image was provided, showing the location of the new bridge and the former alignment over the river. The lift span is located in the center of the river, with the state line running through the middle. This stretch of the river is within a federal navigation channel that is managed by the Army Corps. The lift span has two submarine power cables running between the two towers roughly parallel to the bridge. Following the placement of the cables, concrete block mats were laid over them in the middle of the channel to add further protection.

The bridge replacement project was initiated about 10 years ago. Endangered Species Act and EFH consultations were completed 2012-2013, with an agreement to complete in-water work between Nov 15 and March 15. The project required a number of other permits and approvals, including an Army Corps Individual Permit (NAE-2013-01623), NHDES Major Impact Dredge & Fill Permit (2014-01053), and Individual Water Quality Certificate (2014-404I-001). Construction of the new bridge took place over several years and the new bridge was open to traffic Spring of 2018.

Because the project is within a federal navigation channel, the project team had to work closely with the navigation branch of the Army Corps. As part of that coordination, the Corps required as a condition of the IP that the submarine cables be buried at least 42 feet below MLLW. It was discovered following construction of the cables that the contractor did not place the cables at the appropriate depth. Sonar scans showed part of the upstream cable about 3.5 feet higher than required. The Contractor, in fact, just placed the cables on top of the streambed without burying. Since this issue was discovered, MaineDOT has been coordinating with the Corps. The Corps has confirmed the need for resetting the upstream cable to the

required depth in order to protect the cable from anchor drag from large ships in the channel. Concurrently, MaineDOT was also engaged in legal disputes with the Contractor. Ultimately, a legal settlement was reached and included the requirement for the Contractor to address the upstream cable.

To address the cable depth of the upstream cable, the following construction sequence is anticipated:

1) Remove the existing cable mats (either set aside or place on barge)
2) Set aside the entire length of existing upstream cable (+/- 300 feet)
3) Excavate approximately 125 feet of river bottom (75 feet in NH)
   -'long reach' excavator to reach from the barge to the river bottom
   -underwater hand jetting may also be used
   -excavated material will be placed to the side on the riverbed.
4) Re-set cable and re-install concrete mats.

The initial plan was to require the contractor to complete the work as soon as possible (June-July); however, due to concerns regarding fisheries and to accommodate permitting needs, starting work in early August is now proposed.

Factors related to turbidity were summarized. The excavation will be carried out sequentially over a period of 30-60 days within short windows of time within each tide cycle. Due to the high velocities in the river, which average 1.7 to 2 ft/sec but are often much higher, the substrate of the riverbed is primarily gravel and cobble. For consultation purposes, it has been assumed that sediment plumes could potentially extend up to 2400 feet upstream or downstream but likely no more than 300 feet in width due to small work area. The upstream and downstream distances are based on the standard distances used for Section 7 effect analysis for mechanical dredging. However, the Army Corps Piscataqua River turning basin project assumed that the majority of the sand and gravel to be dredged for that project would settle out within 1000 feet of dredging. That assumption was based on prior monitoring conducted during Boston Harbor and other dredging operations while dredging silty material, which showed that the majority of resuspended material settled within a 1,000 feet from the dredge. Given the coarse substrate at the SML and the fact that much less material will be moved for the cable, it is reasonable to assume that any turbidity plume would not extend as much as 2400 feet. The currents in this location make turbidity curtains ineffective and cofferdams are not practicable given the depth of water, cost, and presence of the navigation channel.

Mapped eelgrass beds are located 2,000 feet upstream from the bridge and 5,700' downstream. It is not anticipated that a sediment plume from the cable work would reach these locations.

As part of the agreement with the Contractor, MaineDOT will be securing all the environmental approvals and permits required to address the cable.

Consultation with NOAA has been reinitiated and is summarized below:

Endangered Species Act

- Atlantic sturgeon and shortnose sturgeon, Atlantic sturgeon critical habitat
- NOAA concurred with the MaineDOT/FHWA Not Likely to Adversely Affect determination, which assumed a work window between August 1- March 15. This work avoids the TOY when sturgeon are more likely to be present in the action area.

Essential Fish Habitat

- Updated EFH Assessment submitted to allow for a work window between August 1 – March 15
- Mike Johnson provided one conservation recommendation, which was to complete work as close to the normal dredging work window as possible (Nov 15 – March 15) if any flexibility in scheduling was possible.

Section 404/10 Individual Permit: MaineDOT confirmed with the Army Corps that work could be done under the existing permit. An amendment will be required to allow for a change in the in-water work window. MaineDOT is coordinating with the Corps to get the amendment.

Water Quality Certificate: The project team met with Gregg Comstock from NHDES on March 11th. Gregg stated that he would call Mike Hicks to determine the appropriate next steps but was hopeful that a new WQC would not be required.

NHDES Dredge & Fill Permit: The original permit for the bridge replacement expired in 2019. Two meetings have been held with the DES Wetlands Bureau (February 25, 2021 and March 11, 2021) and it has been confirmed that a new permit would be required for the proposed cable work and that the permit would be classified as major. A request for a rule waiver would be required to allow the proposed in-water work window, since Env-Wt 307.10(i) states that no dredging can occur between Nov 15 and Mar 15. Coordination with NH Fish & Game is underway to determine if a rule waiver would be supported.

Proposed impacts would entail the following:
The total required excavation in NH: 75 feet (perpendicular to the flow of water) x 10 feet wide **= 750 SF**
Additional 40 feet construction disturbance (removal of concrete mats and cable) x 10 feet wide = **400 SF**

All proposed work will be within the previously permitted impact area shown as Locations CCC and DDD in the 2014 wetland impact plans. No new permanent impacts are proposed. The proposed work will result in a total of 1,150 SF of impact. The 2014 impact plan estimated that placement of the cable and mats would require 3,088 SF of impact.

The next steps for this project entail continued coordination with NH Fish & Game, Army Corps, and Gregg Comstock. The intent is to submit the Dredge & Fill application to NHDES by April 2nd to allow enough time to obtain the permit and receive approval of the permit by the NH Governor & Council.

Carol Henderson (NH Fish & Game) asked if NOAA noted specific concerns with allowing the work to begin in August. If the work would require only 30-60 days to complete, Carol asked why it couldn't be scheduled to begin within the preferred in-water work window. Eric Ham noted that Mike Johnson asked this question as well during EFH consultation. MaineDOT is anxious to resolve the issue with the contractor as quickly as possible due to the legal settlement. Also, the work is challenging to complete, with the need for a barge and divers, and these logistics are especially challenging if winter conditions exist. It is also preferred to have a little room for error in scheduling, so a longer potential work window is preferred as a contingency.

Mike Dionne (NH Fish & Game) noted that other anadromous species are present earlier in the spring, so moving the work to August and avoiding the June-July window helps avoid impacts to those species.

Karl Benedict (NHDES) supported the ongoing coordination regarding water quality and in-water work window. He noted that documentation of coordination with NOAA and NHFG should be included with the request for a rule waiver.

Dave Price (NHDES) noted that, because the project involves work in public waters, the permit would require approval by the NH Governor & Council, so the timing of that approval should be taken into account. He also noted that coordination with the Pease Development Authority Division of Ports and Harbor should take place as a requirement of the Dredge & Fill permit in tidal waters.

Lori Sommer (NHDES) noted that the impacts required for placement of the cable in the 2014 permit required mitigation. She recommended that the 2014 impacts and mitigation paid be compared with the impacts now proposed to determine if additional mitigation is required. Subsequent to the meeting, additional information was provided to Lori and she confirmed that no additional mitigation was required.

Chris Williams (NH Coastal Program) stated that a Coastal Zone consistency determination was required in 2014 due to the need for an Individual Permit. Since the proposed work will be authorized under the same Individual Permit, he does not anticipate the need for a new consistency determination. However, he asked that he be copied on information provided to the Army Corps for the permit amendment.
CZA determination 2014

Mike Hicks commented that the US Coast Guard needs to be kept closely involved in the proposed work and schedule. He noted that MaineDOT and the Corps has been wrestling with the cable issue for over a year and a major meeting was scheduled for this Friday to discuss the work. This is a challenging site and the cable create a safety concern. He confirmed that a permit amendment would be required due to the change in in-water work window. Historic resources were cleared as part of the original permit coordination. He did not see any need for a new Water Quality Certificate and would discuss with Gregg Comstock at NHDES. He further noted that there is no viable eelgrass habitat in the work area. He noted that the Corps permit allows for maintenance work, and this is essentially maintenance work.

Jeff Folsom (MaineDOT) added that the issue with the cables has been discussed since 2018. The meeting on Friday with the Corps was primarily to discuss the concrete mats, which must be addressed separate from the cable elevation concern.

Amy Lamb (NHB) commented that the reasoning regarding turbidity and the unlikelihood that sediment would impact existing eelgrass beds made sense but asked if that reasoning was based on any engineering or modeling. C. Perron said that no modeling was completed but water quality monitoring reports from the bridge replacement project were reviewed and there had been minimal concerns with water quality at that time.

Jean Brochi (EPA) asked for clarification on the proposed impacts and 2014 impacts. C. Perron explained that the proposed impacts actually reduce the area of permanent impact as compared with the impacts assumed in 2014. J. Brochi ask for the dimensions of the concrete mats, and if they are moving. J. Folsom respomnded that the mats consist of 2'x2' blocks that lock together, creating a 8' wide x 300' long mat. Some portions are getting pushed around on the riverbed and some have moved off the cable. The concern is that they will continue to move. A permanent solution is still being worked out.

J. Brochi asked where the dredged material would be taken. C. Perron responded that the material would be cast aside on the riverbed. J. Folsom further clarified that the work needed to achieve the required cable elevation was more consistent with regrading rather than excavating a hole in the riverbed.

Pete Steckler (TNC) asked if any turbidity controls were in place for the original cable installation. Eric Ham replied that no turbidity controls were in place at that time. The cables were just laid on the riverbed.
Any turbidity controls for original installation?

Submitted by:

Christine Perron
McFarland Johnson, Inc.

Note: Finalized minutes and the complete list of attendees will be available in the Conference Report for the March 17, 2021, Natural Resource Agency Coordination Meeting.

CONFIDENTIAL – NH Dept. of Environmental Services review

Memo

NH Natural Heritage Bureau
NHB Datacheck Results Letter

To: Stephen Hoffmann
53 Regional Drive
Concord, NH 03301

From: Amy Lamb, NH Natural Heritage Bureau
Date: 3/9/2021 (valid until 03/09/2022)
Re: Review by NH Natural Heritage Bureau
Permits: NHDES - Wetland Standard Dredge & Fill - Minimum

NHB ID: NHB21-0703 Town: Portsmouth Location: Sarah Mildred Long Bridge (US Route 1 Bypass)

Description: The proposed project involves resetting an underwater cable that was installed as part of the recently constructed Sarah Mildred Long Bridge replacement project. Concrete mats and the existing cable will be removed and a long-reach boom excavator mounted on a barge will be used to dredge the area to the appropriate depth. Hand jetting may also be utilized if the excavator is unable to complete the required excavation. The cable and concrete mats will be reinstalled in the dredged area at the appropriate depth. The impact area is approximately 125'-150 long and approximately 10' wide. The total area of impacts will likely be in the 1,250-1,500 SF range. The work is anticipated to be completed between August 1 and March 15 and will last for a duration of approximately 30-60 days.

cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments NHB: Avoid staging barges or other equipment near any of the eelgrass beds mapped below.
F&G: Is this the correct permit type? Please send NHFG project details. NHFG Marine Division will be reviewing this project.

Natural Community	**State[1]**	**Federal**	**Notes**
Eelgrass bed	--	--	

Vertebrate species	**State[1]**	**Federal**	**Notes**
Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)	T	T	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).
Peregrine Falcon (*Falco peregrinus anatum*)	T	--	Contact the NH Fish & Game Dept (see below).

Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

CONFIDENTIAL – NH Dept. of Environmental Services review

Memo

NH Natural Heritage Bureau
NHB Datacheck Results Letter

Shortnose Sturgeon (*Acipenser brevirostrum*)	E	E	Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

[1]Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NHF&G, (603) 271-6544.

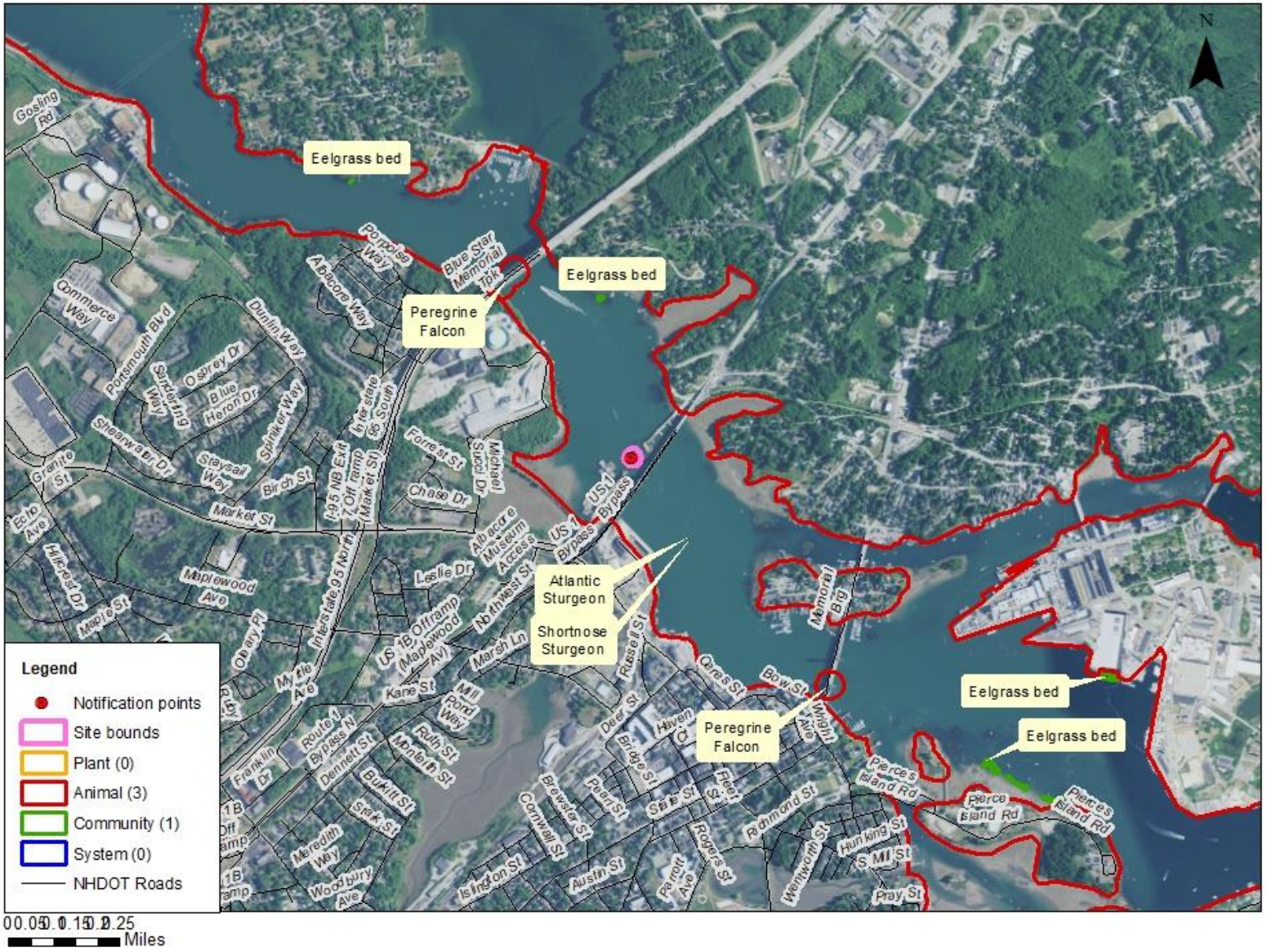
A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

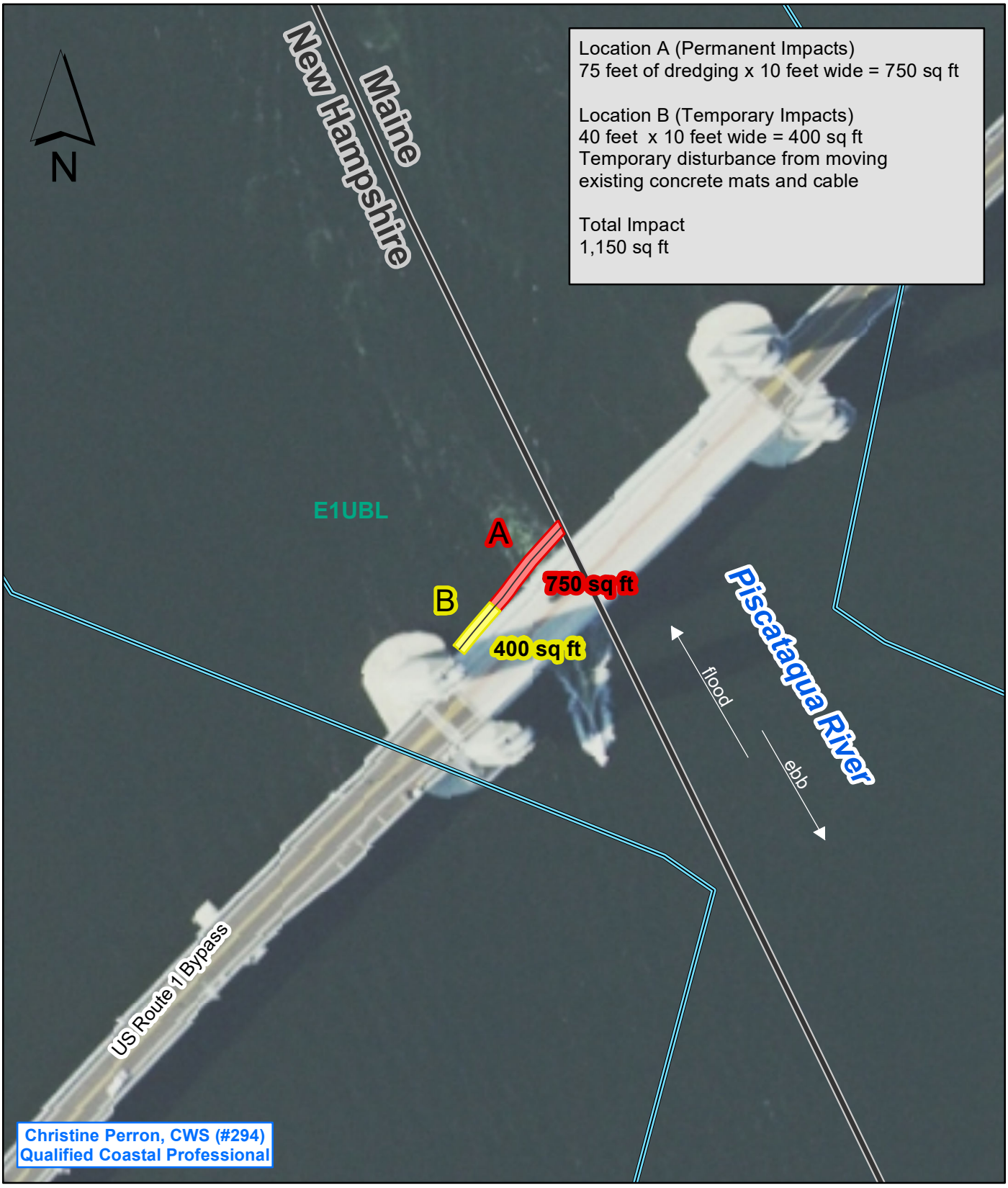
Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

CONFIDENTIAL – NH Dept. of Environmental Services review

NHB21-0703





Existing Cable Location

Federal Navigation Channel

State Line

Proposed Impact Locations

PERMANENT

TEMPORARY

0 100 200

Feet

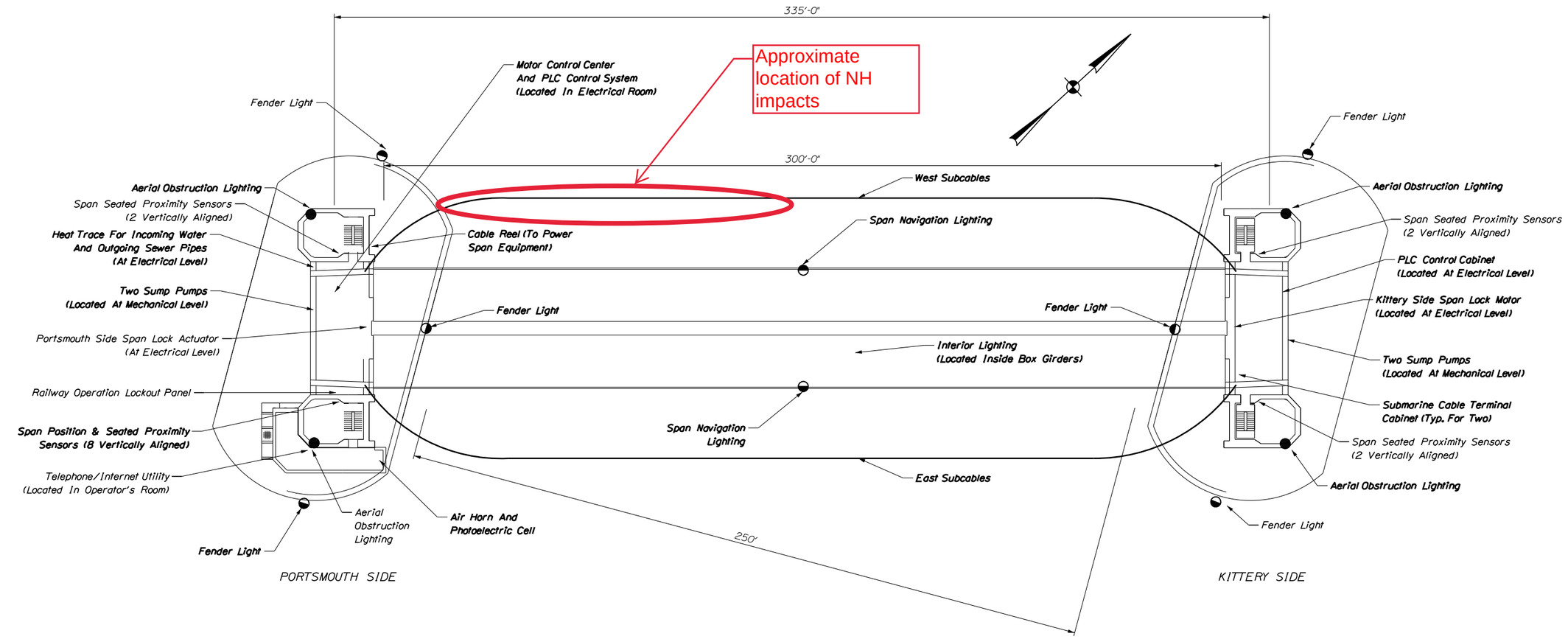
MAINE DOT
SARAH MILDRED LONG BRIDGE CABLE REPLACEMENT
PORTSMOUTH-KITTERY 15731

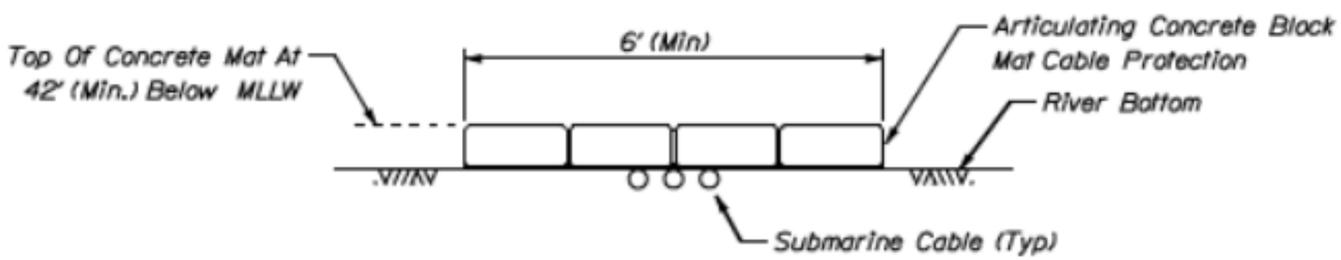
IMPACT PLAN

SCALE :	DATE :	SHEET:
1 inch = 100 feet	MARCH 23, 2021	1

McFarland Johnson

M:\18316.03 MaineDOT SML Cable Permit\Draw\GIS\NHDES Wetland Permit Figures\SML Cable Wetland Impact Plan.mxd





SUBMARINE CABLE TRENCH DETAIL

(Typical For Two, Not To Scale)

Elevations of tidal datums referred to Mean Lower Low Water (MLLW), in Feet, for NOAA Station 8419870, Seavey Island, ME

REFERENCE	ELEVATION
BASE FLOOD ELEVATION	12.86
HIGHEST OBSERVED WATER LEVEL (02/07/1978)	12.52
MEAN HIGHER HIGH WATER (MHHW)	8.84
MEAN HIGH WATER (MHW)	8.43
North American Vertical Datum (NAVD88)	4.62
MEAN SEA LEVEL (MSL)	4.43
MEAN TIDE LEVEL (MTL)	4.37
MEAN LOW WATER (MLW)	0.32
MEAN LOWER LOW WATER (MLLW)	0.00
UPSTREAM SUBMARINE CABLE at SML BRIDGE (PROPOSED)	-42.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

16710.00

PIN 16710.00

BRIDGE PLANS

ME 3641 NH 251/108

SIGNATURE

P.E. NUMBER

DATE

PROJ MANAGER SRT TOUSSAINT BT DATE
DESIGN-DETAILED
CHECKED-REVIEWED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
REVISIONS 5
REVISIONS 6
REVISIONS 7
REVISIONS 8

SARAH MILDRED LONG BRIDGE
PISCATAQUA RIVER
PORTSMOUTH, NH
KITTERY, ME

GENERAL ELECTRICAL PLAN

SHEET NUMBER

2

PREPARED BY:

100% PLANS (7-3-2014)

Filename: ...\GEOTECH\MSTA\G26_PROFILE_2.dgn Division: GEOTECH Username: D. LANDI Date:7/3/2014

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

16710.00

PIN 16710.00

GEOTECH PLANS

ME 3641 NH 251/108

BB-PV3-01 (OFFSET 6' R) El. -4.3
BB-PV3-02 (OFFSET 11' L) El. -10.0
BB-PR4-01 (OFFSET 18' R) El. -29.3
BB-PS5-01 (OFFSET 23' R) El. -30.4
BB-PS5-02 (OFFSET 23' L) El. -30.4
BB-PR6-01 (OFFSET 2' R) El. -45.0
BB-PS7-01 (OFFSET 7' R) El. -52.3
BB-PS7-02 (OFFSET 19' L) El. -49.2
BB-PR8-01 (OFFSET 5' L) El. -53.4
BB-PT9-01 (OFFSET 39' R) El. -65.3
BB-PT9-02 (OFFSET 32' L) El. -48.3
BB-PT10-02 (OFFSET 39' L) El. -45.8
BB-PT10-01/01A (OFFSET 27' R) El. -47.0
BB-PR11-01 (OFFSET 7' R) El. -53.7
BB-PR11-01A (OFFSET 1' L) El. -53.7

PV3 PS5 PS7 PR4 PR6 PR8 PT9 PT10 PR11

MHW EL 3,8

PISCATAQUA RIVER

EXISTING MUDLINE

SOIL

SUITABLE BEDROCK

BEDROCK (POOR QUALITY)

AVERAGE TOP OF ROCK (SEE NOTE 2, SHEET G25)

ANTICIPATED AVERAGE TOP OF SUITABLE ROCK (SEE NOTES 2 AND 3, SHEET G25)

ELEVATION (FEET, NAVD88)

224+00 225+00 226+00 227+00 228+00 229+00 230+00 231+00 232+00 233+00 234+00 235+00 236+00 237+00 238+00

60 50 40 30 20 10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130

NOTES:

1) SEE INTERPRETIVE SUBSURFACE PROFILE, SHEET G25 FOR NOTES AND LEGEND.

VERTICAL SCALE IN FEET
0 5 10 20
HORIZONTAL SCALE IN FEET
0 25 50 100

PRELIMINARY - NOT FOR CONSTRUCTION

SARAH MILDRED LONG BRIDGE
PISCATAQUA RIVER
KITTERY, ME PORTSMOUTH, NH

INTERPRETIVE SUBSURFACE PROFILE 2 OF 3

		BY	DATE
PROJ. MANAGER	J. FOLSOM		
DESIGN-DETAILED	-	ETL	
CHECKED-REVIEWED	ARB	CLS	
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
REVISIONS 5			
REVISIONS 6			
REVISIONS 7			
REVISIONS 8			

SIGNATURE

P.E. NUMBER

DATE

PREPARED BY: GZA

SHEET NUMBER G26

OF G54

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF

10 November 2014

Regulatory Division
File No. NAE-2013-01623

Jeff Folsom, P.E., Bridge Program
Maine Department of Transportation
Bureau of Project Development
16 State House Station
Augusta, ME 04333-0016

Robert Landry, Consultant Design Chief
Bureau of Bridge Design
New Hampshire Department of Transportation
P.O. Box 483
7 Hazen Drive
Concord, NH 03302-0483

Dear Mr. Folsom and Mr. Landry:

Attached are two copies of a Department of the Army permit authorizing your project. **Please sign both copies of the permit and return one signed copy to this office at the address above.** The authorized work cannot start until we receive a complete, signed copy of the permit.

You are required to complete and return the attached forms to this office:

1. Work Start Notification Form at least two weeks before the anticipated work start date.
2. Compliance Certification Form within one month following the completion of the authorized work.
3. Mitigation Work Start Notification Form since your project involves mitigation.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with those conditions, **including any conditions contained on the attached NH state water quality certification and Maine Permit By Rule which incorporates ME WQC.** If a contractor does the work for you, both you and the contractor are responsible for ensuring that the work is done in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties.

The Corps of Engineers has consulted with the National Marine Fisheries Service (NMFS) regarding the effects of your project on Essential Fish Habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act. The NMFS provided EFH conservation recommendations, which we included in the attached special conditions #13a. through # 13g. These conditions will reduce impacts to Essential Fish Habitat (EFH) by imposing time of year restrictions on construction of temporary fill roads, pile driving activities, removal of an existing rubble pile and any future dredging activities with a pending Port of New Hampshire Wharf Project. Additional conditions include the development and approval of a blasting plan if blasting of underwater rock ledge is required, restoration of depressions resulting from abutment and pier removals, in-lieu fee payments into the NH ARM Fund for permanent and temporary impacts, pre-construction and post-construction project monitoring requirements and review of the mitigation plan (including at Cutt's Cove) for any future work associated with the Port of New Hampshire Wharf Project.

Our verification of this project's wetland delineation under the Corps of Engineers Wetlands Delineation Manual, and its applicable supplement, is valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date.

A combined Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) form, and flow chart explaining the appeals process and your options, are attached to this letter. If you desire to appeal this proffered permit, you must submit a completed RFA form along with any supporting or clarifying information to James W. Haggerty; Administrative Appeals Review Officer; North Atlantic Division, Corps of Engineers; Fort Hamilton Military Community Bldg. 301, General Lee Avenue Brooklyn, NY 11252-6700. Telephone: (347) 370-4650 or Email: James.W.Haggerty@usace.army.mil

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP.

You may not appeal conditions contained in the State water quality certification or the CZM consistency determination under this program as they are automatically included in the Federal permit. Also note that the Department of the Army permit process does not supersede any other agency's jurisdiction.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

If you have any questions regarding this correspondence, please contact Mr. Michael Hicks at (978) 318-8157, (800) 343-4789, or use (800) 363-4367 within Massachusetts.

Sincerely,

Frank J. DelGiudice
Chief, Permits & Enforcement Branch
Regulatory Division

Enclosures
Copy furnished:
NHDES
MEDEP
SHPO-NH
SHPO-ME
FHWA
USCG
NMFS
USEPA
USFWS
McFarland Johnson

DEPARTMENT OF THE ARMY PERMIT

Permittee Maine Department of Transportation and New Hampshire Department of Transportation

Permit No. NAE-2013-01623

Issuing Office New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Fill approximately 79,388 sq. ft. of Waters of the United States which includes 17,245 sq. ft. of temporary impacts and 26,424 sq. ft. of permanent impacts in New Hampshire, and 23,665 sq. ft. of temporary impacts and 12,054 sq. ft. of permanent impacts in Maine associated with the replacement (including removal of existing bridge) of the Sara Mildred Long Bridge.

This work is shown on the attached plans entitled, MAINEDOT/NHDOT SARAH MILDRED LONG BRIDGE PROJECT, on 24 sheets, and dated "September 25, 2014, Revised October 31, 2014."

Project Location:

US RT 1 By-Pass over the Piscataqua River between Portsmouth, New Hampshire and Kittery, Maine.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2019. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The permittee shall ensure that a copy of this permit is at the work site (and the project office) authorized by this permit whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this permit. This shall be achieved by including the entire permit in the specifications for work. The term "entire permit" means this permit (including its drawings, plans, appendices and other attachments) and also includes permit modifications.

(Special conditions continued on Page 4)

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

_____ 14 Nov 14

(PERMITTEE) *(DATE)*

MASON

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

_____ 10 NOV 14

(DATE)

Christopher J. Barron
Colonel, Corps of Engineers
District Engineer

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____

(TRANSFEREE) *(DATE)*

☆U.S. GOVERNMENT PRINTING OFFICE: 1986 — 717-425

(Special conditions continued from Page 2)

If the permit is issued after the construction specifications, but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

2. The permittee shall complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work.

3. Prior to the commencement of work authorized by this permit, the MaineDOT/NHDOT shall schedule and hold a pre-construction meeting with at a minimum the U.S. Army Corps of Engineers, the MaineDOT, the NHDOT and the MaineDOT Contractor attending.

4. All construction, including the removal of the existing bridge and bridge pier columns, shall be completed in accordance with the limits of construction and construction sequences detailed on the enclosed plan drawings, entitled "MaineDOT/NHDOT SARAH MILDRED LONG BRIDGE PROJECT" on a total of 24 sheets, and dated "September 25, 2014, Revised October 31, 2014". If you change the plans or construction methods for work within or adjacent to the Piscataqua River, please contact us immediately to discuss modification of this authorization. The Corps must approve any changes before you undertake them.

5. After the construction phase of this project is complete, temporary cofferdams shall be removed in their entirety.

6. All work shall be conducted in a manner that prevents any debris, lumber or construction materials and/or equipment from falling into the waterway. Any material or equipment that does fall into the waterway shall be removed. Except for the work authorized by this permit, nothing shall be in the waterway post-construction that was not there pre-construction. No later than 30 days after the completion of construction, a written certification by a registered professional engineer shall be submitted to the Corps stating that this is the case. In addition, the permittee shall remove any pre-existing debris and solid waste from the waterway and embankment within the contract limits of the project.

7. The construction area, where lead or other hazardous materials are being removed from the existing bridge must be isolated with protective coverings that will contain these materials and will prevent them from entering the air, water or land outside the isolated area.

8. Inasmuch as heavy construction equipment, such as cranes, will be in place for significant periods during construction, the following condition is included and applies to the entire project: A spill kit shall be maintained on-site during all operations that involve heavy equipment at or near the waterway. Refueling shall not be allowed within 100 feet of the waterway with the exception of stationary equipment, such as cranes, drill rigs, etc. Maintenance, other than emergency maintenance of such equipment, is not allowed within 100 feet of the waterway. Any above ground fuel storage, regardless of its location within the work zone, requires secondary containment.

9. Work associated with this permit shall not affect the depth or width of the Piscataqua River FNP except as authorized by this permit. Any material, machinery or equipment lost, dumped, thrown into, or otherwise entering the waterway shall be removed immediately or as soon as possible. If immediate removal is impractical and the object entering the waterway is or could become an obstruction or hazard to navigation, the object shall be marked immediately to protect navigation and the U.S. Coast Guard Sector Boston – Waterway Management Division shall be notified immediately at (617) 223-3010 (during day time hours) or (617) 223-5757 (24-hour telephone line).

10. Safety lights and signals required by the United States Coast Guard ("USCG") shall be installed and maintained at the authorized facilities. The USCG may be reached at: U.S. Coast Guard, Aids to Navigation Branch, First Coast Guard District, 408 Atlantic Avenue, Boston, Massachusetts 02110, (617) 223-8355.

11. Mitigation shall be provided in the form of :

a. An "in-lieu-fee" (ILF) payment of $351,895.87 (includes $265,895.87 for permanent impacts to tidal resources and $86,000.00 for temporary impacts associated with the temporary causeways and fill in Maine and New Hampshire) shall be made to the State of New Hampshire Aquatic Resource Mitigation (ARM) fund in accordance with the terms of the above-referenced Wetlands Bureau permit. Work shall not begin until this payment is made.

b. The Applicant shall restore 3,926 sq. ft. of tidal wetlands associated with the removal of Pier 1, 2 and 6, P15, P19, P20, P21, P22 and the boat ramp. The responsibility to complete this required compensatory mitigation as set forth in this Special Condition will not be considered fulfilled until you have demonstrated mitigation success. The term "mitigation success" means as-built written verification or photographic verification provided to the U.S. Army Corps of Engineers that this compensatory mitigation has been completed. One or more typical restoration locations (Pier1, etc.) will suffice as verification.

12. The MOA, entitled "FINAL MEMORANDUM OF AGREEMENT BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION THE MAINE STATE HISTORIC PRESERVATION OFFICER THE NEW HAMPSHIRE STATE HISTORIC PRESERVATION OFFICER THE MAINE DEPARTMENT OF TRANSPORTATION AND THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION REGARDING THE SARAH MILDRED LONG BRIDGE REPLACEMENT PROJECT IN KITTERY, MAINE AND PORTSMOUTH, NEW HAMPSHIRE", and dated August 25, 2014, is a Special Condition of this permit and shall strictly adhered to.

13. All work shall be completed in accordance with the following EFH considerations and Time of Year Restrictions:

a. The contractor performing the work will be required to construct and remove all temporary fill roads in North Mill Pond within the time of year window between November 15 and March 15 of any year. In addition, all temporary fill roads in North Mill Pond will be constructed with clean stone (riprap) material placed on a geotextile filter fabric layer and free of sediment sources, to help minimize sedimentation and turbidity. The contractor will also be required to install turbidity curtains around the temporary fill road and implement other best management practices for turbidity and sedimentation control.

b. All pile driving activities on this project, including the use of impact and vibratory hammers, within North Mill Pond will not take place between March 15 and July 30 of any year to protect spawning winter flounder and migrating diadromous fish.

c. The excavation of the rubble mound, within the Piscataqua River and northwest of the existing bridge, shall not take place between March 15 and July 30 of any year to protect spawning winter flounder and migrating diadromous fish.

d. Any dredging associated with this project, including any future application for dredging associated with the Port of New Hampshire Wharf Project, will be required to take place between November 15 and March 15 of any year. NOAA Fisheries will have the opportunity to comment further and make additional conservation recommendations on the Port of New Hampshire Wharf Project during that separate EFH consultation.

e. Existing depressions resulting from the removal of Abutment #1 and Piers #1, #2, #3, #5, #6, and #7 in subtidal and intertidal habitats will be restored to the surrounding bottom conditions.

f. Pre- and post-monitoring and surveying of North Mill Pond shall be performed by the University of New Hampshire (UNH). Post-construction monitoring will occur for at least three years after the removal of the temporary access roads. A contingency plan shall be developed, should North Mill Pond not restore, to pre-construction conditions within three years. The contingency plan will be developed in consultation with NOAA Fisheries, the University of New Hampshire and others, as appropriate.

g. A mitigation plan for Cutt's Cove shall be developed for the Port of New Hampshire Wharf Project, prior to the Applicant submitting an application for that project. NOAA Fisheries will continue to be included in any mitigation plan, revised or otherwise, and will be provided an opportunity to review and comment. The Cutt's Cove mitigation plan will include a habitat restoration/enhancement of approximately 216,000 sq. ft. for the proposed 51,000 sq. ft. estimated dredging impacts, recognizing the Cutt's Cove site may have the availability of approximately 5 acres of habitat restoration/enhancement. NOAA Fisheries will be provided an opportunity to review and comment on all proposed mitigation for the Sarah Mildred Long Bridge Replacement project and the Port of New Hampshire wharf project, throughout project development.

14. Should blasting be deemed necessary for either the Sarah Mildred Long Bridge Replacement Project (or any work associated with the Port of New Hampshire Wharf Project), the FHWA, MaineDOT, and New Hampshire DOT, in cooperation with the contractor, will be required to develop a blasting plan. The blasting plan will include measures to minimize and avoid impacts to living marine resources. If blasting is required, NOAA Fisheries (Habitat Conservation Division and Protected Resources Division) will receive a copy of the draft blasting plan(s) at least thirty days prior to implementation, for review, comment and approval for the Sarah Mildred Long Bridge Replacement Project and the Port of New Hampshire Wharf Project.

15. Prior to being onsite, the contractor shall thoroughly inspect and remove seeds, plant material, soil, mud, insects, and other invertebrates on all equipment, including construction mats, to be used on the project site to prohibit introduction of invasive organisms. At a minimum, the following shall be inspected and cleaned on terrestrial vehicles where applicable:

a. Rubber Tired Vehicles - Crevices in upper surface and panels, tires, rims, and fender wells, spare tire mounting area, bumpers, front and rear quarter panels, around and behind grills, bottom of radiator vent openings, brake mechanisms, transmission, stabilizer bar, shock absorbers, front and rear axles, beds, suspension units, exhaust systems, light casings, and mirrors.

b. Tracked Land Vehicles - Crevices in upper surface and panels, top of axles and tensioners, support rollers, between rubber or gridded areas, beneath fenders, hatches, under casings, and grills.

c. Interiors of All Vehicles - Beneath seats, beneath floor mats, upholstery, beneath foot pedals, inside folds of gear shift cover.

d. When equipment has been previously used in an area known or suspected to contain live zebra or quagga mussels at any life stage, the contractor shall thoroughly clean all equipment that was in contact with the body of water before bringing it. Whenever practical, the least infested (or least likely to be infested) sites should be visited first to reduce the risk of accidentally infecting a new area during field work.

16. The Nautical Data Branch at the National Oceanic and Atmospheric Administration (NOAA) has been notified of this authorization. You must notify NOAA and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Your notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used) and a copy of the Corps permit.

a. All submittals to the Corps and NOAA shall be marked with the words "Permit No. NAE-2013-01623." Send NOAA submittals to: Department of Commerce, NOAA; Attn: Allison Wittrock, Acting Chief - Nautical Data Branch, N/CS261, Station 7331, 1315 East-West Highway, Silver Spring, MD 20910; or email: allison.wittrock@noaa.gov and ocs.ndb@noaa.gov . Send Corps submittals to: a) PATS Branch - Regulatory Division, Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751; or cenae-r@usace.army.mil. Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit. The Corps may note the location on future survey drawings and NOAA may use the information for charting purposes.

b. The notification of completion shall be done within 60 days of completing an activity that involves an aerial transmission line, submerged cable, or submerged pipeline across a tidal or non-tidal navigable water of the U.S. (i.e., Section 10 waters). The permittee shall furnish the NOAA and this office with certified (professional engineer or land surveyor registered in the state the work is being performed) as-built drawings, to scale, with control (i.e., latitude/longitude, state plane coordinates), depicting the alignment and minimum clearance of the aerial wires above the MHW/OHW line at the time of survey or depicting the elevations and alignment of the buried cable or pipeline across the tidal or non-tidal navigable waterway. Authorization in

writing and as-built documentation is required when: a) a new cable or pipeline (overhead or submerged) is installed; b) an existing pipeline or cable is moved to another location or is completely removed; c) an overhead cable or overhead pipeline clearance above the MHW line is changed; d) there is a change in the type of cables (power, telephone, etc.) at a water crossing; or e) there is a change in elevation of the submerged pipeline or cable.

17. Within 180 days of project completion, MaineDOT/NHDOT shall forward a set of project plans and relevant technical documentation to the Risk Analysis Branch, Mitigation Division, Federal Emergency Management Agency (FEMA), Region 1, 99 High Street, Boston Massachusetts, 02110. This submission shall be made in a digital format, and provide a level of content detail, acceptable to FEMA Region 1 personnel.

If at any time there is a project design change that may:

a. result in any increase to the crossed waterway's National Flood Insurance Program (NFIP) Base Flood Elevation (BFE) profile;

b. result in a greater than 0.5 foot decrease to the crossed waterway's NFIP BFE profile;

c. require an alteration to the waterway's existing NFIP Regulatory Floodway delineation;

MaineDOT/NHDOT shall coordinate with the FEMA Region 1 Risk Analysis Branch personnel to determine if initiation of an NFIP flood insurance study change review process is warranted. If FEMA personnel determine that a change to the flood insurance study pertinent to the project may be required, MaineDOT/NHDOT will submit all required information to FEMA and complete the applicable process. Once completed, MaineDOT/NHDOT will provide written notice to the Corps regarding the coordination process outcome.

18. Any work within, adjacent to, beneath, above, upstream or downstream of a FNP must be coordinated with Edward O'Donnell, Chief, Navigation Branch, US Army Corps of Engineers, New England District, 696 Virginia Road, Concord, Massachusetts 01742. The proposed work was coordinated with the Navigation Branch and is subject to the following Special Conditions:

a. In order to ensure that the existing FNP is not compromised, pre and post-construction electronic sweep surveys of the FNP covering the entire area of the proposed work shall be performed.

b. To ensure that the proposed method of surveying is acceptable, a detailed description of the method and the equipment to be employed shall be furnished to the Corps (see address below) at least 30 days prior to the start of each survey. The detailed description shall include as a minimum the type of system to be employed and a sketch of the sweep setup to verify sweep coverage. Successive sweeps shall have a minimum overlap of 3'.

c. Sounding lines shall be numbered on depth sounder rolls and plots. Event marks shall be taken at thirty-second intervals correlating horizontal position with depth and shall be marked and numbered on depth sounder rolls. Tide readings shall be made with every change of 0.1' and recorded on the depth sounder roll or recorded in the field book with date and time. Calibration techniques and information shall be provided if survey is performed with GPS equipment.

d. Sweep surveys shall be done only during daylight hours.

e. Survey data shall be submitted to the Corps in a format that will allow independent plotting and verification of survey results.

f. The Corps may assign a government representative to accompany the survey party during performance of the sweep surveys. The permittee shall notify the Corps in writing a minimum of ten working days prior to the start of each survey.

g. Plans adequately showing the results of the pre and post-construction sweep surveys along with a written description of how they were performed, copies of all field books, notes, and depth-sounder rolls shall be submitted to the Corps (see address below) for review and acceptance no later than 30 days after completion of the authorized work.

19. To reduce the potential for damage to the submarine cable during future dredging operations and in accordance with NEDER 1110-1-9 (enclosed), the cable shall be buried a minimum of -42 feet (i.e. to the top of the utility, including protective cover) below Mean Lower Low Water (MLLW). (The MLLW to NAVD 88 correction from NOAA's V-Datum Program is 4.40 ft.) In the event the cable is installed in the channel side slope area, the cable shall rise on a gradient no steeper than the channel's design side slope. The theoretical side slope is 3' horizontal to 1' vertical. Following construction, any material placed in the Federal channel during construction shall be removed and placed back into the trench, where practicable.

a. No later than 30 days after completion of the authorized work, the permittee shall submit as-built drawings of the authorized work to the Corps. As-built drawings shall include:

a1. At least one plan view drawing showing the submarine cable's horizontal location and one cross-section view drawing showing the cable's vertical location.

a2. The plan view showing the horizontal location and the cross-section view showing the vertical location of the cable: a) for the crossing's entire length from mean high water (MHW) on one side of the waterway to MHW on the other, b) relative to the FNP and the waterway, c) the FNP limits, d) bar (graphic) scale, e) the dates of the survey and drawings.

a3. The plan view shall show: north arrow, horizontal grid, and shoreline features.

a4. The cross-section view shall show the theoretical side-slopes and the actual elevation of the top of the cable below MLLW.

a5. The cable's horizontal coordinates and vertical elevation at: a) each horizontal and vertical turning point, b) the points of curvature and tangency, c) the radius of curvature for horizontal and vertical curves, and d) each location where the utility intersects the limits of the FNP. Show the cable's horizontal coordinates in feet based on the Maine West (ME 1802) State Plane Coordinate System NAD 83. Show the cable's top vertical elevation in MLLW updated to the National **Tidal** Datum **Epoch (1983-2001).**

a6. A stamp by a professional engineer or land surveyor registered in the state the work is being performed.

20. Existing bridge Piers 1 through 13, Pier 15 and Piers 19 through 26 shall be removed to an elevation of one (1) foot below river bottom. Pier 14 shall remain in place, as existing. Pier 16 shall be removed to a top of pier elevation of -45 feet (NAVD 88), Pier 18 shall be removed to a top of pier elevation of -46.6 feet (NAVD 88), Pier 17 shall be removed to a top of pier elevation of -53.21 feet (NAVD 88), and the rubble pile (mound) shall be removed to a top of pile (mound) elevation of -50 feet (NAVD 88), as shown on the attached plans.

21. As-built drawings depicting the new bridge structure, appurtenant structures of the new bridge, piles, etc. and remnants of the existing bridge shall be provided to the Corps that include:

a. The structure's horizontal location (including outer limits of fender piles, etc.) relative to the closest FNP and the Waterway, horizontal coordinates, the FNP limits, bar (graphic) scale, north arrow, and the dates of the survey and drawings.

b. The structure's horizontal state plane coordinates in U.S. survey feet based on the State(s) grid system and zone, NAD 1983.

22. The permittee shall locate all structures (including vessels and floats), except as authorized, far enough outside the Federal Navigation Project (FNP) limits so neither the structures, nor any vessels tied to these structures, encroach into the FNP at any time, except as authorized.

23. The permittee shall not interfere with Corps of Engineers personnel or its contractors engaged in hydrographic surveys, maintenance or improvement of the existing FNP. If, in the opinion of the Corps, the permittee's structures or vessels attached to them must be moved to allow for the maintenance or improvement of the existing FNP, the permittee shall move the structures or vessels as directed by the Corps. NHDOT and/or MaineDOT shall not hold the Government, or its contractor, responsible for damages to these structures, or any vessels tied to them, during surveying or dredging operations.

24. The permittee shall submit the as-built drawings and a copy of this permit to the Corps. All submittals to the Corps shall be marked with the words "Permit No. NAE-2013-01623." The Corps address is "PATS Branch, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751."

25. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

Appendix A. Verification Form (updated December 10, 2020)

Federal Highway Administration (FHWA) or the applicable state Department of Transportation (DOT) shall submit a signed version of this completed form, together with any project plans, maps, supporting analyses, etc., to NOAA's National Marine Fisheries Service (NMFS), Greater Atlantic Regional Fisheries Office, Protected Resources Division (GARFO PRD) at nmfs.gar.esa.section7@noaa.gov with "FHWA GARFO NLAA Program: [Project Title or Number]" in the subject line. **Note:** project design contractors and/or consultants may assist in preparing the form, but only FHWA/DOT staff shall sign off on it on the final page.

Project Activity Type (check all that apply to the entire action):

☐ 1. Bridge repair, demolition, or replacement project
☐ 2. Culvert repair or replacement project
☐ 3. Dock, pier, or waterway access project (includes construction, demolition, and repairs)
☐ 4. Slope stabilization project

Transportation Project Information

Name of Project:			
Reinitiation (Yes/No):			
State DOT/Program:			
DOT ID Code:			
Contact Person:			
Phone:		Email:	
Project Latitude (e.g., 42.625884):			
Project Longitude (e.g., -70.646114):			
Maximum Water Depth (m)			
Anticipated Project Start Date:		Anticipated Project End Date:	
City/Town:		Water body:	
Project/Action Description and Purpose:			

ESA-listed species and/or critical habitats in the action area (Check all that apply)

☐	Atlantic sturgeon (all DPSs)	☐	Kemp's ridley sea turtle
☐	Atlantic sturgeon critical habitat Indicate which DPS (GOM, NYB, Chesapeake Bay DPSs):	☐	Loggerhead sea turtle (Northwest Atlantic DPS)
☐	Shortnose sturgeon	☐	Leatherback sea turtle
☐	Atlantic salmon (GOM DPS)	☐	North Atlantic right whale
☐	Atlantic salmon critical habitat (GOM DPS)	☐	North Atlantic right whale critical habitat
☐	Green sea turtle (North Atlantic DPS)	☐	Fin whale

* Please consult GARFO PRD's ESA Section 7 Mapper for ESA-listed species and critical habitat information for your action area at: https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-species-critical-habitat-information-maps-greater.

The following stressors are applicable to the action:

☐ Underwater Noise
☐ Impingement/Entrainment and Entanglement
☐ Water Quality/Turbidity
☐ Habitat Alteration
☐ Vessel Traffic

Impacts Table

Habitat Alteration		
	Permanent (acres)	Temporary (acres)
Sand (saline)		
Silt/Mud/Clay (saline)		
Hard bottom (saline)		
Submerged Aquatic Vegetation (SAV) (saline)		
Sand (freshwater)		
Silt/Mud/Clay (freshwater)		
Hard bottom (freshwater)		
Submerged Aquatic Vegetation (SAV) (freshwater)		
Total amount of habitat alteration		0.16
In-water Construction Impacts		
	Amount in meters	
Width of water body in action area (m)		
Stressor category that extends furthest distance into water body (e.g.; underwater noise, turbidity plume)		
Maximum extent of stressor into the water body (m)		

Project Design Criteria (PDC) Checklist
FHWA/DOT shall incorporate all general PDCs and all applicable PDCs in the appropriate stressor categories. For any PDCs that are not incorporated, additional justification is required for a project to be eligible for the NLAA Program. FHWA/DOT shall check the corresponding box for each PDC that is, or will be, incorporated into the project or indicate if not applicable.

GENERAL PDCs			
Yes	N/A	PDC #	PDC Description
☐	☐	1.	Ensure all operators, employees, and contractors are aware of all FHWA environmental commitments, including these PDC, when working in areas where ESA-listed species may be present or in critical habitat.
☐	☐	2.	No portion of the proposed action will individually or cumulatively have an adverse effect on ESA-listed species or critical habitat.
☐	☐	3.	No portion of the proposed action that may affect the GOM DPS of Atlantic salmon will occur in the tidally influenced portion of rivers/streams where their presence is possible from April 10 through November 7. The range of the GOM DPS only occurs in Maine. **Note**: If the project will occur within the geographic range of the GOM DPS Atlantic salmon but their presence is not expected following the best available commercial scientific data, the work window does not need to be applied. Please attach best available information (i.e. local fisheries biologist correspondence).
☐	☐	4.	No portion of the proposed action that may affect shortnose or Atlantic sturgeon will occur in areas identified as spawning grounds as follows: i. Gulf of Maine: Apr 1-Aug 31 ii. Southern New England/New York Bight: Mar 15-Aug 31 iii. Chesapeake Bay: Mar 15-Jul 1 and Sep 15-Nov 1 **Note**: If river specific information exists that provides better or more refined time of year information, those dates may be substituted with NMFS approval.
☐	☐	5.	No portion of the proposed action that may affect shortnose or Atlantic sturgeon will occur in areas identified as overwintering grounds where dense aggregations are known to occur as follows: i. Gulf of Maine: Oct 15-Apr 30 ii. Southern New England/New York Bight: Nov 1-Mar 15 iii. Chesapeake Bay: Nov 1-Mar 15 **Note**: If river specific information exists that provides better or more refined time of year information, those dates may be substituted with NMFS approval.
☐	☐	6.	Within designated critical habitat for Atlantic sturgeon, no work will affect hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand) (PBF 1).
☐	☐	7.	Work will result in no or only temporary/short-term changes in water temperature, water flow, salinity, or dissolved oxygen levels.

Yes	N/A	PDC #	PDC Description
☐	☐	8.	If ESA-listed species are (a) likely to pass through the action area at the time of year when project activities occur; and/or (b) the project will create an obstruction to passage when in-water work is completed, then a zone of passage (~50% of water body) with appropriate habitat for ESA-listed species (e.g., depth, water velocity, etc.) must be maintained (i.e., physical or biological stressors such as turbidity and sound pressure must not create barrier to passage).
☐	☐	9.	The project will not adversely impact any submerged aquatic vegetation (SAV) or oyster reefs.
☐	☐	10.	No blasting or use of explosives will occur.
☐	☐	11.	No in-water work on large dams or tide gates (small dam and tide gate repairs may be permitted with prior review and approval from NMFS).

UNDERWATER NOISE PDCs			
Yes	N/A	PDC #	PDC Description
☐	☐	12.	If pile driving is occurring during a time of year when ESA-listed species may be present, and the anticipated noise is above the behavioral noise threshold, a "soft start" is required to allow animals an opportunity to leave the project vicinity before sound pressure levels increase. *In addition to using a soft start at the beginning of the work day for pile driving, one must also be used at any time following cessation of pile driving for a period of 30 minutes or longer.* <u>For impact pile driving</u>: pile driving will commence with an initial set of three strikes by the hammer at 40% energy, followed by a one minute wait period, then two subsequent three-strike sets at 40% energy, with one-minute waiting periods, before initiating continuous impact driving. <u>For vibratory pile installation</u>: pile driving will be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This sequence of 15 seconds of reduced energy driving, one-minute waiting period will be repeated two additional times, followed immediately by pile-driving at full rate and energy.

Yes	N/A	PDC #	PDC Description
☐	☐	13.	If the project includes non-timber piles*, please attach your calculation to this verification form showing that the noise is below the injury thresholds of ESA-listed species in the action area. The GARFO Acoustic Tool can be used as a source, should you not have other information: https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-consultation-technical-guidance-greater-atlantic. *Effects from timber and steel sheet piles were analyzed in the NLAA programmatic consultation, so no additional information is necessary.
☐	☐	14.	Any new pile-supported structure must involve the installation of no more than 50 piles (below MHW).

Pile material (e.g., steel pipe, concrete)	Pile diameter/ width (inches)	Number of piles	Installation method (e.g., impact hammer, vibratory start and then impact hammer to depth, drilling)

IMPINGEMENT/ENTRAINMENT AND ENTANGLEMENT PDCs			
Yes	N/A	PDC #	PDC Description
☐	☐	15.	If excavating or dredging, only mechanical buckets, hydraulic cutterheads, or low volume hopper dredges (e.g., CURRITUCK, ≤300 cubic yard maximum bin capacity) may be used. **Note**: We consider excavating a smaller scale form of mechanical dredging.
☐	☐	16.	No new excavation or dredging in Atlantic sturgeon or salmon critical habitat (excavation in a prior construction footprint or maintenance dredging is permitted, but still must meet all other PDCs). New excavation or dredging outside Atlantic sturgeon or salmon critical habitat is limited to one-time events (e.g., burying a cable or utility line) and minor (≤2 acres) expansions of areas already subject to prior excavation or maintenance dredging. Locating a replacement bridge within 250 feet (centerline to centerline) of an existing bridge and excavation of sediment around bridge piers are considered work in a previous construction footprint. **Note**: We consider excavating a smaller scale form of mechanical dredging.

Yes	N/A	PDC #	PDC Description
☐	☐	17.	Temporary intakes related to construction are prohibited in sturgeon and salmon spawning, rearing, or overwintering habitat during the time of year windows identified in General PDCs 3-5. If utilized outside those areas and times of year and in an area with anticipated sturgeon and salmon presence, temporary intakes must be equipped with 2-millimeter wedge wire mesh screening and must not have greater than 0.5 feet per second intake velocities, to prevent impingement or entrainment of juvenile and early life stages of these species.
☐	☐	18.	Work behind cofferdams, turbidity curtains, or other instruments that prevent access of animals to the project area is required when ESA-listed species are likely to be present (if presence is limited to rare, transient individuals, access control measures are not necessary). Once constructed, work inside a cofferdam at any time of year may be permitted with NMFS approval, provided the cofferdam is installed/removed outside the time-restricted period.
☐	☐	19.	No new permanent surface water withdrawal, water intakes, or water diversions.
☐	☐	20.	Turbidity control measures, including cofferdams, must be designed to not entangle or entrap ESA-listed species.
☐	☐	21.	Any in-water lines, ropes, or chains must be made of materials and installed in a manner to minimize or avoid the risk of entanglement by using thick, heavy, and taut lines that do not loop or entangle. Lines can be enclosed in a rigid sleeve.

WATER QUALITY/TURBIDITY PDCs			
Yes	N/A	PDC #	PDC Description
☐	☐	22.	In-water offshore disposal may only occur at designated disposal sites that have already been the subject of ESA section 7 consultation with NMFS and where a valid consultation is in place.
☐	☐	23.	Any temporary discharges must meet state water quality standards (e.g., no discharges of substances in concentrations that may cause acute or chronic adverse reactions, as defined by EPA water quality standards criteria).
☐	☐	24.	Only repair, upgrades, relocations, and improvements of existing discharge pipes or replacement in-kind are allowed; no new construction of untreated discharges.
☐	☐	25.	Work behind cofferdams, turbidity curtains, or other instruments to control turbidity is required when operationally feasible and ESA-listed species are likely to be present (if presence is limited to rare, transient individuals, turbidity control methods are not necessary).

HABITAT ALTERATION PDCs			
Yes	N/A	PDC #	PDC Description
☐	☐	26.	Minimize all new waterward encroachment and permanent fill.
☐	☐	27.	In Atlantic salmon critical habitat, stream simulation design with a minimum span of 1.2 bankfull width will be used in areas with minimal tidal influence. In tidal areas, a design that allows for unimpeded flow will be used (no delay in water entering or exiting the area upstream of the crossing).
☐	☐	28.	In Atlantic salmon critical habitat, no culvert end extensions, invert line culvert rehabilitation, or slipline culvert rehabilitation may occur.

VESSEL TRAFFIC PDCs			
Yes	N/A	PDC #	PDC Description
☐	☐	29.	Maintain project (i.e., construction) vessels operating within the action area to speed limits below 10 knots and dredge vessels to speeds of 4 knots maximum, while dredging.
☐	☐	30.	Maintain a 1,500-foot buffer between project (i.e., construction) vessels and ESA-listed whales and a 300-foot buffer between project vessels and sea turtles. This also applies to dredge vessels.
☐	☐	31.	The number of project (construction) vessels must be limited to the greatest extent possible, as appropriate to size and scale of project.
☐	☐	32.	The project must not result in the permanent net increase of commercial vessels.

Justification for NLAA Determination if not Incorporating All PDC

If the project is not in compliance with all of the general and stressor-based PDCs, but you can provide justification and/or special conditions to demonstrate why the project still meets the NLAA determination and is consistent with the aggregate effects considered in the programmatic consultation, you may still certify your project through the NLAA program using this verification form. Please identify which PDCs your project does not meet (e.g., PDC 9, PDC 15, PDC 22, etc.) and provide your rationale and justification for why the project is still eligible for the verification form. Project modifications must not result in different effects not already considered.

To demonstrate that the project is still NLAA, you must explain why the effects on ESA-listed species or critical habitat are **insignificant** (i.e., too small to be meaningfully measured or detected) or **discountable** (i.e., extremely unlikely to occur). **Please use this language in your justification.**

PDC#	Justification

FHWA/DOT Verification of Determination (To be filled out by FHWA/DOT staff only)
By submitting this Verification Form, FHWA, or the state DOT as FHWA's designated non-federal representative, indicates that they determined that the proposed activity described above is not likely to adversely affect (NLAA) ESA-listed species or designated critical habitat under NMFS jurisdiction in accordance with the Program, and all effects (direct, indirect, interrelated, and interdependent) are either insignificant (so small they cannot meaningfully be measured, detected, or evaluated) or discountable (extremely unlikely to occur).

☐	In accordance with the FHWA GARFO NLAA Program, we have determined that the action complies with all applicable PDCs and is not likely to adversely affect listed species.
☐	In accordance with the FHWA GARFO NLAA Program, we have determined that the action is not likely to adversely affect listed species per the justifications and/or special conditions provided above.

FHWA/DOT Signature:	Date:

By providing your determination and signature, you are certifying that to the best of your knowledge the information provided in this form is accurate and based upon the best available scientific information. This form must be filled out and signed by FHWA or state DOT staff, as an officially designated non-federal representative.

GARFO PRD Concurrence (To be filled out by GARFO PRD)
After receiving the Verification Form, GARFO PRD will contact FHWA/DOT with any concerns and indicate whether GARFO PRD concurs with FHWA/DOT's determination.

☐	In accordance with the FHWA GARFO NLAA Program, GARFO PRD concurs with FHWA/DOT's determination that the action complies with all applicable PDCs and is not likely to adversely affect listed species or critical habitat.
☐	In accordance with the FHWA GARFO NLAA Program, GARFO PRD concurs with FHWA/DOT's determination that the action is not likely to adversely affect listed species or critical habitat per the justifications and/or special conditions provided above.
☐	GARFO PRD does not concur with FHWA/DOT's determination that the action complies with the applicable PDCs (with or without justifications), and recommends an individual Section 7 consultation to be completed independent from the FHWA GARFO NLAA Program.

GARFO PRD Signature:	Date:

Christine J. Perron

From: Ham, Eric <Eric.Ham@maine.gov>
Sent: Monday, March 15, 2021 11:36 AM
To: Christine J. Perron
Subject: FW: FW: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

From: Mike R Johnson - NOAA Federal <mike.r.johnson@noaa.gov>
Sent: Friday, March 12, 2021 11:44 AM
To: Ham, Eric <Eric.Ham@maine.gov>
Cc: Birk, Eva (FHWA) <eva.birk@dot.gov>; Price, David <DAVID.A.PRICE@des.nh.gov>; Chamberlain, Kristen <Kristen.Chamberlain@maine.gov>; Giallongo, Stefanie <Stefanie.M.Giallongo@des.nh.gov>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>; Patterson, Cheri <cheri.patterson@wildlife.nh.gov>; Roosevelt Mesa - NOAA Affiliate <roosevelt.mesa@noaa.gov>; Benedict, Karl <Karl.D.Benedict@des.nh.gov>
Subject: Re: FW: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

Eric,
I thought I had already sent you a response on the SML cable replacement project, but it doesn't look like I did. Sorry for the delay.
I wanted to note that the EFH worksheet still has the June 1 to Oct. 31 work window, although the supplementary information includes the work window we discussed on our call (Aug. 1 to Mar. 15) so I assume that this was an oversight.
I don't have any additional recommendations for the project, except to request that since the DOT believes this work will take just 2 months to complete that it be done in or as close to the normal NH dredging work window, as possible. I understand the DOT wants as much flexibility as possible, and to avoid re-initiating the consultation if things change. However, this is dredging activity and we have TOY windows for a reason. Since our mandate is to protect and conserve NOAA trust resources, I would be remiss if I did not recommend adherence to the TOY work window that we would use for any project.
Thanks,
Mike

On Wed, Mar 3, 2021 at 11:00 AM Mike R Johnson - NOAA Federal <mike.r.johnson@noaa.gov> wrote:

> Eric,
> I don't see an attachment in your last email. Only the previous one has an attachment.
> MJ
>
> On Tue, Mar 2, 2021 at 2:45 PM Ham, Eric <Eric.Ham@maine.gov> wrote:
>
> > Please use this version of the assessment. I managed to attach a version that I had not saved the most recent changes in the first time. My apologies.

From: Ham, Eric
Sent: Tuesday, March 2, 2021 2:39 PM
To: Mike R Johnson - NOAA Federal <mike.r.johnson@noaa.gov>
Cc: Birk, Eva (FHWA) <eva.birk@dot.gov>
Subject: RE: FW: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

Mike,

The Maine Department of Transportation (MaineDOT) is proposing to amend the work window to remediate issues with the placement of a submarine cable associated with the Sarah Mildred Long Bridge project between Kittery Maine and Portsmouth NH. The Piscataqua River was determined to be designated Essential Fish Habitat (EFH) multiple coastal species. The Federal Highway Administration is the lead action agency for this project and has delegated to MaineDOT the authority to consult with NOAA-Fisheries on projects that may have potential adverse effects on coastal and Atlantic salmon EFH. Based on review of the available data and the proposed cable fix scope, MaineDOT has determined the project will not have a substantial adverse effect to EFH and therefore requests an abbreviated consultation under the Magnuson Steven's Conservation and Management Act per 50 CFR 600.92(h). A completed EFH Assessment worksheet for the project is attached. We look forward to your response within 30 days from today (March 2, 2021).

From: Mike R Johnson - NOAA Federal <mike.r.johnson@noaa.gov>
Sent: Friday, February 26, 2021 8:36 AM
To: Ham, Eric <Eric.Ham@maine.gov>
Subject: Re: FW: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

Yes, please send me the revised EFH assessment with the change in the work window, and I will review and respond in 30 days.

Thanks,

MJ

On Fri, Feb 26, 2021 at 8:23 AM Ham, Eric <Eric.Ham@maine.gov> wrote:

> Mike,

Thanks for weighing in yesterday. You referenced getting comments to us in 30 days. I am assuming I should just initiate consultation to start your review and you can issue your conservation recommendations?

From: Mike R Johnson - NOAA Federal <mike.r.johnson@noaa.gov>
Sent: Friday, February 5, 2021 10:44 AM
To: Ham, Eric <Eric.Ham@maine.gov>
Cc: Birk, Eva (FHWA) <eva.birk@dot.gov>; Chamberlain, Kristen <Kristen.Chamberlain@maine.gov>
Subject: Re: FW: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

Eric,

Regarding process, because this work would affect the nature of our previous EFH conservation recommendations and could have adverse effects to NOAA trust resources, I would consider this a reinitiation of the EFH consultation. You did not indicate when you wish to receive our response, but since this is a reinitiation of consultation we will need at least 30 days to review and respond.

In one of my previous emails, I had asked about coordination with state (NH and ME) resource and permitting agencies. Has that been done and have they responded with a determination of the requested work window. As we discussed, work beginning on June 1 would be in the TOY restriction for diadromous fish spawning migration, so I continue to be concerned about that. Since you have indicated the work would take up to 60 days, and the requested work window is about 150 days from June 1- October 31, is there any reason the work window can't start later in the summer-fall time?

Thanks,

Mike

On Thu, Feb 4, 2021 at 11:07 AM Ham, Eric <Eric.Ham@maine.gov> wrote:

> Hey Mike,
>
> I have attached a draft EFH assessment for you review for the changes we corresponded about below. We talked a bit about what was needed, but I did not ask about process. I am not sure it matters much if we call it a re-initiation or if there is a different process to follow.

From: Mike R Johnson - NOAA Federal <mike.r.johnson@noaa.gov>
Sent: Monday, November 23, 2020 10:19 AM
To: Ham, Eric <Eric.Ham@maine.gov>
Cc: Birk, Eva (FHWA) <eva.birk@dot.gov>; Chamberlain, Kristen <Kristen.Chamberlain@maine.gov>
Subject: Re: FW: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

Eric,

Based on what you've provided, this would be considered dredging and the general TOY restriction for NH and ME is March 15 to November 15 to protect winter flounder, diadromous fish, and shellfish. I don't think shellfish spawning is an issue in this part of Piscataqua River, but the winter flounder and diadromous windows are certainly applicable. Those restrictions would extend from March 15 to June 30.

Have you contacted NHDES and NHDFG on the TOY restriction question?

Mike

On Mon, Nov 23, 2020 at 10:07 AM Ham, Eric <Eric.Ham@maine.gov> wrote:

> Hey Mike,
>
> I contacted the protected resource division folks about some potential remedy work for the buried cables between the lift spans of the SML bridge.
>
> One of the cables was not placed deep enough to satisfy commitments to the ACOE naviagation folks. We are working with the contractor to get it fixed. It sounds like we are proposing to move the old cable mats out of the way, remove the old cable, use a long reach excavator to get to the required depth, put a new cable in place, and then put the cable concrete mats back on top of the cable. The moving of the mats would also likely be completed by a long reach excavator and divers. We would like to be able to complete this work anytime, which was the biggest issue to work out. I think it generally meets to programmatic, but I wanted to make sure the discuss to ensure we end up at an NLAA determination.
>
> The footprint, methods, and materials will be the same as we originally proposed. However, The contractor is hopeful to be able to start with the work before November. Originally, this work was to take place between November 9th and March 15th to avoid impacts to ESA species and EFH habitats.

Because of concerns with weather and trying to get in compliance with the ACOE requests ASAP, we are hoping to start work sometime late this spring or summer. Would you be willing to open up the work window here? I know the November date usually comes from PRD and not you. Could this work begin June 1 here?

I know I am asking you to remember details of an older project, so please let me know if you I can help provide anything else here.

From: Roosevelt Mesa - NOAA Affiliate <roosevelt.mesa@noaa.gov>
Sent: Friday, November 13, 2020 1:15 PM
To: Ham, Eric <Eric.Ham@maine.gov>
Cc: Birk, Eva (FHWA) <eva.birk@dot.gov>
Subject: Re: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

Hi Eric,

Thank you for the follow up.

Zach gave me some basic background information and we had the chance to chat a little about the project. Based on the information you've provided and the guidance from Zach, it is my understanding that we would be able to process this project through a programmatic verification form. Is there any preliminary document you can share that included some more details of the project/extent of the action area? Is part of the work taking place from land, or is it all from vessels?

Regarding the NLAA Verification Form, you might need to provide justifications related to any requests for "relaxation" of the in-water work windows, so the narratives and information provided as part of those justifications will be important. If needed, I can share with you a recent BA from Ian and the Navy which have good descriptive narratives for projects at PNSY that could be helpful guidance.

I hope this is helpful. Please, let me know if you have any questions or if I'm missing anything.

Best regards,

Roosevelt

On Thu, Nov 12, 2020 at 9:19 AM Ham, Eric <Eric.Ham@maine.gov> wrote:

Hey Roosevelt,

I am not sure how much background Zach had passed along to you about the project and my most recent request. I will give a quick summary below, but I am happy to share and discuss anything you may need.

We finished consultation on the bridge replacement project and the IWW prior to the listing of Atlantic sturgeon critical habitat. It was a very long extensive bridge project. You can probably tell be the size of it if you have driven by/over it.

After construction, sonar surveys found that one of the submarine cables that run between the lift spans was not laid far enough down to satisfy navigation concerns by the ACOE. We are now working to get in a reset the cable.

The area to be effected is Critical Habitat for Atlantic sturgeon and is within the range both listed sturgeon species. The area is not spawning habitat or overwinter habitat. As Zach stated below, it likely functions and foraging and migratory habitat.

When I originally talked to Zach, I had though it had a chance at being processed under the NLAA programmatic with FHWA. I had questioned whether it has a new consult, a re-initiation, and if was eligible for the programmatic. I believe that is the direction we were moving, but Zach was looking for a little more information first.

It sounds like we are proposing to move the old cable mats out of the way, remove the old cable, use a long reach excavator to get to the required depth, put a new cable in place, and then put the cable concrete mats back on top of the cable. The moving of the mats would also likely be completed by a long reach excavator and divers. We would like to be able to complete this work anytime, which was the biggest issue to work out. I think it generally meets to programmatic, but I wanted to make sure the discuss to ensure we end up at an NLAA determination.

Would you like to set up a quick call to discuss? Or we can just exchange emails if I can effectively transfer information to you 😊.

From: Zachary Jylkka - NOAA Federal <zachary.jylkka@noaa.gov>
Sent: Monday, November 2, 2020 10:22 PM
To: Ham, Eric <Eric.Ham@maine.gov>
Cc: Roosevelt Mesa - NOAA Affiliate <roosevelt.mesa@noaa.gov>; William Barnhill - NOAA Federal <william.barnhill@noaa.gov>
Subject: Re: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

Hi Eric,

I recently got the latest sturgeon data from Ian Trefrey and Micah Kieffer. Mostly confirms what we already knew - that the PIscataqua continues to be an important stopover point and possible foraging ground for migrating Atlantic and shortnose sturgeon, mostly from late April to early November (though there are intermittent detections in the winter). Shortnose detections are more concentrated in the spring and fall, while Atlantics have the most detections in the summer.

If you don't already have copies, we can give you recent BAs from Ian and the Navy which have good descriptive narratives with additional info.

I'm on a detail from now until February, so Roosevelt will be your main POC with the section 7 group.

Zach

On Thu, Sep 17, 2020 at 1:16 PM Ham, Eric <Eric.Ham@maine.gov> wrote:

> Nevermind. Let's try after 3 pm. I forgot we have out employee appreciation online event at 1:30 😊.

From: Zachary Jylkka - NOAA Federal <zachary.jylkka@noaa.gov>
Sent: Thursday, September 17, 2020 12:27 PM
To: Ham, Eric <Eric.Ham@maine.gov>
Subject: Re: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

I'm about to break for lunch. Want to give me a call around 1:30pm? I'm also free anytime after 3pm.

On Thu, Sep 17, 2020 at 12:21 PM Ham, Eric <Eric.Ham@maine.gov> wrote:

> I can chat whenever you have time. Probably easier to discuss first.

From: Zachary Jylkka - NOAA Federal <zachary.jylkka@noaa.gov>
Sent: Thursday, September 17, 2020 11:57 AM
To: Ham, Eric <Eric.Ham@maine.gov>
Subject: Re: Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00

Hi Eric,

I chatted with Bill and we're comfortable completing the reinitiation via the verification form, although I do want to hear just how much wider your hoping to extend the IWW. Happy to discuss over phone or just review a draft form when it's ready.

Zach

On Tue, Sep 15, 2020 at 1:17 PM Zachary Jylkka - NOAA Federal <zachary.jylkka@noaa.gov> wrote:

> Hi Eric,

Sorry about that - lost track of this one. Thanks for the reminder. I'm checking with Bill on the programmatic fit. I'm fine with it generally as a vehicle for reinitiation, but it may not fit the project activity type categories.

Zach

On Tue, Sep 15, 2020 at 11:29 AM Ham, Eric <Eric.Ham@maine.gov> wrote:

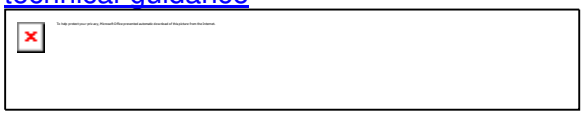
> Hey Zach,
>
> I hadn't heard back from you on this yet. Do you have any time to chat about it coming up?
>
> ---
>
> **From:** Ham, Eric
> **Sent:** Wednesday, September 2, 2020 4:03 PM
> **To:** zachary.jylkka@noaa.gov
> **Cc:** Birk, Eva (FHWA) <eva.birk@dot.gov>; Chamberlain, Kristen <Kristen.Chamberlain@maine.gov>
> **Subject:** Sarah Mildred Long Bridge Kittery to Portsmouth MaineDOT WIN 16710.00
>
> Hey Zach,
>
> Hope all is well. I know that the consultation for the SML project over the Piscataqua was completed by Max, but it looks like we are going to have to reinitiate.
>
> We placed a submarine cable as a part of the project. The cable was not set to the proper depth and the ACOE is mandating that the cable is placed at the proper depth. Also, there may be some issues with the cable itself so we are going to be putting in a new cable. At this time, I believe the new cable is going to be placed in the location that was described in the original consultation and ACOE permit. When the project was completed, Atlantic sturgeon critical habitat had not be listed. I believe we have to reinitiate consultation due the Atlantic sturgeon critical habitat effects as the Piscataqua river is listed as CH.
>
> Before I look to far into it, is there flexibility to reinitiate potentially using the programmatic agreement to cover the effects to the CH and pursue a slightly bigger IWW? The project originally had a 11/9 to 3/15 window on cable installation as combination of sturgeon and EFH concerns. Do you think process wise that it is an option worth pursuing? As a stand along project we would likely be able to work it in. It is not spawning, overwintering, or low salinity water so it at least gets past the exclusions.

If you think it is an option, I will provide a bit more information to make sure it qualifies. If not, I will have to start working up a re initiation request. I will also start EFH discussions with Mr. Johnson.

--

Zach Jylkka
Fisheries Biologist
Protected Resources Division
Greater Atlantic Regional Fisheries Office
NOAA Fisheries
Gloucester, MA 01930
zachary.jylkka@noaa.gov
office: (978) 282-8467
Pronouns: (he/him/his)

For additional ESA Section 7 information and Critical Habitat guidance, please see:
https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-consultation-technical-guidance



--

Zach Jylkka
Fisheries Biologist
Protected Resources Division
Greater Atlantic Regional Fisheries Office
NOAA Fisheries
Gloucester, MA 01930
zachary.jylkka@noaa.gov
office: (978) 282-8467
Pronouns: (he/him/his)

Stephen Hoffmann

From: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Sent: Thursday, March 18, 2021 3:26 PM
To: Christine J. Perron; Stephen Hoffmann
Cc: Tuttle, Kim; Patterson, Cheri; Dionne, Michael
Subject: RE: NHB review: NHB21-0703

Thank you Christine.

From: Christine J. Perron <CPerron@mjinc.com>
Sent: Thursday, March 18, 2021 3:18 PM
To: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>; Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

Hi Amy,

The work will need to comply with the Individual Water Quality Certificate and the DES Dredge & Fill permit, both of which will require monitoring to ensure that water quality standards are met.

Christine

From: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Sent: Thursday, March 18, 2021 3:00 PM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

Hi Steve,

Thanks for your presentation yesterday and for following up. I am inclined to agree with your assessment that any impacts to eelgrass beds would be minimal as a result of this project, but I was wondering if there was a plan to do any turbidity monitoring to be sure.

Thank you,
Amy

From: Stephen Hoffmann <shoffmann@mjinc.com>
Sent: Thursday, March 18, 2021 10:38 AM
To: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Amy,

I'm just following up to see if you have any additional questions or concerns regarding the eelgrass beds following yesterday's resource agency meeting. Based on the distance from the proposed dredging, cobble/gravel substate, water velocities in the river, and sequential dredging methods, it is our professional opinion that impacts to the mapped eelgrass beds are not anticipated.

Mike and Cherri,

Does NHFG have any concerns with the proposed work window of August 1 – March 15? As discussed at yesterday's meeting, NOAA Protected Species concurred with a Not Likely to Adversely Affect (NLAA) Section 7 determination (see attached NLAA Program Verification Form), and NOAA Habitat Conservation accepted the EFH consultation with the conservation recommendation of completing the work as close to November 15 as possible. As Mike mentioned yesterday, completing the work earlier in August helps minimize impacts to other anadromous fish species present in the river at other times of the year. MaineDOT has already pushed the work window back to August and there are concerns with pushing this work back later in the season given the limited amount of time work can be performed due to daily tide cycles, and logistical/safety challenges performing this work during the winter months. MaineDOT is also eager to get this work completed as soon as possible since the work is being completed by the contractor under a legal settlement with MaineDOT. Please let us know if you have any additional questions or concerns regarding the proposed project and timing of the proposed work.

Thanks,
Steve

From: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Sent: Tuesday, March 16, 2021 3:34 PM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

Sounds good, thank you!

From: Stephen Hoffmann <shoffmann@mjinc.com>
Sent: Tuesday, March 16, 2021 2:19 PM
To: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Amy,

The project will be reviewed at tomorrow's NHDOT Resource Agency Meeting and sedimentation and turbidity will be discussed. If you have any additional questions after tomorrow's meeting I am happy to discuss further.

Thanks,
Steve

From: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Sent: Tuesday, March 16, 2021 1:52 PM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

Hi Stephen,

Thank you for the update about the anticipated permit type and additional details about the project.

Provided that there will be no staging of barges or other impacts in the vicinity of the eelgrass beds mapped in NHB21-0703 (greater than 0.25 miles upstream and close to 1 mile downstream of the project area), and appropriate sedimentation controls will be in place to prevent sediment migration to the eelgrass beds, then NHB would have no concerns about the project.

Could you provide some details about the proposed sedimentation controls for this project?

Thank you,
Amy

From: Stephen Hoffmann <shoffmann@mjinc.com>
Sent: Tuesday, March 16, 2021 10:53 AM
To: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

I wanted to provide an update on the permit category for the subject NHB review. Through coordination with NHDES and other agencies, it has been determined that the proposed project will be categorized as a *Major Impact Project*, due to the location in tidal waters of the Piscataqua River. Given the relatively small area of impacts, it had originally been thought at the time of the NHB submittal that the project may qualify as a Minimum Impact Project, however, the impact category has been updated to *Major*.

Kim,

I am also reaching out regarding the rare species identified in the NHB review. The proposed work will be completed from a barge and consists of the following steps:

1) Remove existing cable mats
2) Set aside entire length of existing upstream cable
3) Excavate approximately 125' of river bottom (75' in NH)
    a. long-reach excavator mounted on a barge
    b. underwater hand jetting may be used if needed
    c. excavated material will be placed to the side on the riverbed
4) Re-set cable and re-install concrete mats

The work will be completed between August 1 and March 15 and will likely last for a duration of 30-60 days. Sequential dredging will be completed over the duration of the project within short windows of time within each tide cycle in order to minimize turbidity impacts. The substrate is primarily gravel and cobble due to the high current velocities (1.7 to 2 feet per second).

The proposed project is located a sufficient distance from the eelgrass beds identified by NHB upstream and downstream from the Sarah Mildred Long Bridge and is not anticipated to impact these resources. There are no shellfish beds or aquatic vegetation in the vicinity of the area of proposed disturbance. MEDOT is completing fisheries coordination with NOAA regarding Atlantic and shortnose sturgeon as well as Essential Fish Habitat. There are also nesting peregrine falcons identified on the I-95 Bridge and Memorial Bridge over the Piscataqua River located approximately 2,500 feet upstream and 3,400 feet downstream from the proposed project respectively. Please let me know if you have any concerns regarding the proposed project as it relates to peregrine falcons or any recommendations to avoid potential impacts to this species.

Thanks,
Steve

McFarland Johnson

Stephen Hoffmann | Environmental Analyst
802-862-9381
Visit our website to see how MJ employee owners are innovating to improve our world.

From: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Sent: Tuesday, March 9, 2021 3:26 PM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Subject: NHB review: NHB21-0703

Attached, please find the review we have completed. If your review memo includes potential impacts to plants or natural communities please contact me for further information. If your project had potential impacts to wildlife, please contact NH Fish and Game at the phone number listed on the review.

Best,
Amy

Amy Lamb
Ecological Information Specialist

NH Natural Heritage Bureau
DNCR - Forests & Lands
172 Pembroke Rd
Concord, NH 03301
603-271-2834

Stephen Hoffmann

From: Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Sent: Wednesday, March 24, 2021 10:25 AM
To: Stephen Hoffmann
Cc: Christine J. Perron; Dionne, Michael; Henderson, Carol; 'Mike Johnson'; 'Ham, Eric'
Subject: Re: NHB review: NHB21-0703

Good morning, Steve.

Yes, NHFGD is fine with not using blasting caps or other methods of scare tactics for this project. I would like to point out that I did not indicated blasting caps in the previous email only to consider "BMP's conducted and outlined in the permit for scare tactics for sturgeon and other fish and mammals in-river at the time." BMP's doesn't indicate "blasting caps" as a sole scare/startle tactic. We have recommended in other projects to produce any startle sound prior to in-water work to startle any marine mammals or species from the work site. The "blasting cap" scare tactic was agreed upon for the recent SML Bridge construction due to the blasting that was occurring for this particular construction project outside of the dredge window, it is not appropriate for other projects that need a milder startle tactic.

Thank you and have a nice day.

Cheri Patterson
Chief, Marine Division
NH Fish and Game Department
225 Main Street
Durham, NH 03824
(603)868-1095 – office
(603)868-3305 – fax

Did you know? New Hampshire Fish and Game is the steward for New Hampshire's marine resources, from lobsters and clams to stripers and bluefish, and also manages the Great Bay National Estuarine Research Reserve.

From: Stephen Hoffmann <shoffmann@mjinc.com>
Sent: Wednesday, March 24, 2021 9:05 AM
To: Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Cc: Christine J. Perron <CPerron@mjinc.com>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>; Henderson, Carol <Carol.B.Henderson@wildlife.nh.gov>; 'Mike Johnson' <mike.r.johnson@noaa.gov>; 'Ham, Eric' <Eric.Ham@maine.gov>
Subject: RE: NHB review: NHB21-0703

Hi Cheri,

I'm just following up to close the loop on this coordination as we will likely be submitting the permit application in the next week or so. Since no blasting, pile driving, or other percussive activities are proposed and the TSS levels are anticipated to remain below the levels shown to have adverse effects on sturgeon and other fish species, it is the opinion of MaineDOT and McFarland-Johnson that the use of blasting caps as scare tactics for fish and wildlife is not

necessary and will only result in additional disturbance. Please let us know if you concur with this approach or if you have any additional recommendations or concerns.

Thanks,
Steve

From: Stephen Hoffmann
Sent: Monday, March 22, 2021 10:36 AM
To: 'Patterson, Cheri' <Cheri.A.Patterson@wildlife.nh.gov>
Cc: Christine J. Perron <CPerron@mjinc.com>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>; Henderson, Carol <Carol.B.Henderson@wildlife.nh.gov>; Mike Johnson <mike.r.johnson@noaa.gov>; Ham, Eric <Eric.Ham@maine.gov>
Subject: RE: NHB review: NHB21-0703

Hi Cheri,

Thank you for your response. It is our understanding that the intent of the scare tactics was to use blasting caps to scare away fish and other wildlife prior to blasting. In the case of the bridge cable project, with no blasting proposed, the scare charge seems like it would create an additional, unnecessary stressor, especially since it's assumed that TSS levels will be below those shown to have adverse effects for sturgeon and other species, and the dredging will be done intermittently over 30-60 days across less than 200 feet of a 1600-foot wide channel. We are assuming that fish will vacate the immediate area once the excavator begins dredging/disturbing the area. Please let us know if you agree with this approach or if there is something we are missing.

Thanks,
Steve

From: Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Sent: Monday, March 22, 2021 9:04 AM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Christine J. Perron <CPerron@mjinc.com>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>; Henderson, Carol <Carol.B.Henderson@wildlife.nh.gov>; Mike Johnson <mike.r.johnson@noaa.gov>
Subject: Re: NHB review: NHB21-0703

Good morning, Stephen.

Mike and I have spoken frequently on this project. We agree with Mike Johnson, NOAA Fisheries, that the work is preferred to be conducted during the dredge window (Nov. 15-March 15). However, considering the safety factor of getting this cable buried we understand the need to get the work completed as soon as possible. We would still prefer to have the work conducted as close to the dredge window as possible (such as mid-September to mid-November). As well as, BMP's conducted and outlined in the permit for scare tactics for sturgeon and other fish and mammals in-river at the time.

Thank you, have a nice day.

Cheri Patterson
Chief, Marine Division
NH Fish and Game Department
225 Main Street
Durham, NH 03824

(603)868-1095 – office
(603)868-3305 – fax

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From: Stephen Hoffmann <shoffmann@mjinc.com>
Sent: Monday, March 22, 2021 8:46 AM
To: Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>
Cc: Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>
Subject: RE: NHB review: NHB21-0703

Good Morning Mike,

I'm just following up to see if you and Cheri had a chance to discuss the Sarah Mildred Long Bridge cable replacement project and the proposed time of year work window.

Thanks,
Steve

From: Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>
Sent: Thursday, March 18, 2021 1:39 PM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Subject: Re: NHB review: NHB21-0703

Hi Steve,
Cheri is out of the office today. I will be discussing this with her hopefully tomorrow and we will send along a response.

Thanks, Mike

From: Stephen Hoffmann <shoffmann@mjinc.com>
Sent: Thursday, March 18, 2021 10:37 AM
To: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

Hi Amy,

I'm just following up to see if you have any additional questions or concerns regarding the eelgrass beds following yesterday's resource agency meeting. Based on the distance from the proposed dredging, cobble/gravel substate, water velocities in the river, and sequential dredging methods, it is our professional opinion that impacts to the mapped eelgrass beds are not anticipated.

Mike and Cherri,

Does NHFG have any concerns with the proposed work window of August 1 – March 15? As discussed at yesterday's meeting, NOAA Protected Species concurred with a Not Likely to Adversely Affect (NLAA) Section 7 determination (see attached NLAA Program Verification Form), and NOAA Habitat Conservation accepted the EFH consultation with the conservation recommendation of completing the work as close to November 15 as possible. As Mike mentioned yesterday, completing the work earlier in August helps minimize impacts to other anadromous fish species present in the river at other times of the year. MaineDOT has already pushed the work window back to August and there are concerns with pushing this work back later in the season given the limited amount of time work can be performed due to daily tide cycles, and logistical/safety challenges performing this work during the winter months. MaineDOT is also eager to get this work completed as soon as possible since the work is being completed by the contractor under a legal settlement with MaineDOT. Please let us know if you have any additional questions or concerns regarding the proposed project and timing of the proposed work.

Thanks,
Steve

From: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Sent: Tuesday, March 16, 2021 3:34 PM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

Sounds good, thank you!

From: Stephen Hoffmann <shoffmann@mjinc.com>
Sent: Tuesday, March 16, 2021 2:19 PM
To: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

Hi Amy,

The project will be reviewed at tomorrow's NHDOT Resource Agency Meeting and sedimentation and turbidity will be discussed. If you have any additional questions after tomorrow's meeting I am happy to discuss further.

Thanks,
Steve

From: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Sent: Tuesday, March 16, 2021 1:52 PM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

Hi Stephen,

Thank you for the update about the anticipated permit type and additional details about the project.

Provided that there will be no staging of barges or other impacts in the vicinity of the eelgrass beds mapped in NHB21-0703 (greater than 0.25 miles upstream and close to 1 mile downstream of the project area), and appropriate sedimentation controls will be in place to prevent sediment migration to the eelgrass beds, then NHB would have no concerns about the project.

Could you provide some details about the proposed sedimentation controls for this project?

Thank you,
Amy

From: Stephen Hoffmann <shoffmann@mjinc.com>
Sent: Tuesday, March 16, 2021 10:53 AM
To: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>; Christine J. Perron <CPerron@mjinc.com>; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>
Subject: RE: NHB review: NHB21-0703

I wanted to provide an update on the permit category for the subject NHB review. Through coordination with NHDES and other agencies, it has been determined that the proposed project will be categorized as a *Major Impact Project*, due to the location in tidal waters of the Piscataqua River. Given the relatively small area of impacts, it had originally been thought at the time of the NHB submittal that the project may qualify as a Minimum Impact Project, however, the impact category has been updated to *Major*.

Kim,

I am also reaching out regarding the rare species identified in the NHB review. The proposed work will be completed from a barge and consists of the following steps:

1. Remove existing cable mats
2. Set aside entire length of existing upstream cable
3. Excavate approximately 125' of river bottom (75' in NH)
    a. long-reach excavator mounted on a barge
    b. underwater hand jetting may be used if needed
    c. excavated material will be placed to the side on the riverbed
4. Re-set cable and re-install concrete mats

The work will be completed between August 1 and March 15 and will likely last for a duration of 30-60 days. Sequential dredging will be completed over the duration of the project within short windows of time within each tide cycle in order to minimize turbidity impacts. The substrate is primarily gravel and cobble due to the high current velocities (1.7 to 2 feet per second).

The proposed project is located a sufficient distance from the eelgrass beds identified by NHB upstream and downstream from the Sarah Mildred Long Bridge and is not anticipated to impact these resources. There are no shellfish beds or aquatic vegetation in the vicinity of the area of proposed disturbance. MEDOT is completing fisheries coordination with NOAA regarding Atlantic and shortnose sturgeon as well as Essential Fish Habitat. There are also

nesting peregrine falcons identified on the I-95 Bridge and Memorial Bridge over the Piscataqua River located approximately 2,500 feet upstream and 3,400 feet downstream from the proposed project respectively. Please let me know if you have any concerns regarding the proposed project as it relates to peregrine falcons or any recommendations to avoid potential impacts to this species.

Thanks,
Steve

McFarland Johnson

Stephen Hoffmann | Environmental Analyst
802-862-9381
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From: Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>
Sent: Tuesday, March 9, 2021 3:26 PM
To: Stephen Hoffmann <shoffmann@mjinc.com>
Cc: Tuttle, Kim <Kim.A.Tuttle@wildlife.nh.gov>
Subject: NHB review: NHB21-0703

Attached, please find the review we have completed. If your review memo includes potential impacts to plants or natural communities please contact me for further information. If your project had potential impacts to wildlife, please contact NH Fish and Game at the phone number listed on the review.
Best,
Amy
Amy Lamb
Ecological Information Specialist
NH Natural Heritage Bureau
DNCR - Forests & Lands
172 Pembroke Rd
Concord, NH 03301
603-271-2834

PEASE
INTERNATIONAL
PORTS AND HARBORS

555 Market Street, Suite 1 Portsmouth, NH 03801

March 22, 2021

Christine J. Perron, CWS
McFarland Johnson
53 Regional Dr.
Concord, NH 03301

Dear Ms. Perron,

Thank you for the information that you have provided regarding the submarine power cable project relative to the replacement project of the Sarah Mildred Long Bridge.

In consultation with the Chief Harbor Master, the Division of Ports and Harbors has no issues with the project and we look forward to the resolution of the issues with the cable.

Sincerely,

Geno J. Marconi
Division Director

Christine J. Perron

From: Sommer, Lori <LORI.L.SOMMER@des.nh.gov>
Sent: Monday, March 22, 2021 10:07 AM
To: Christine J. Perron
Cc: Price, David; Benedict, Karl
Subject: RE: SML Cable - mitigation

Hi Christine,
This is the right approach and I would agree, no additional mitigation is required. Thank you for researching the numbers and following up. And nice to see/hear you last week. I hope this project gets wrapped up in a good fashion. Take care,

Lori

From: Christine J. Perron <CPerron@mjinc.com>
Sent: Thursday, March 18, 2021 12:24 PM
To: Sommer, Lori <LORI.L.SOMMER@des.nh.gov>
Subject: SML Cable - mitigation

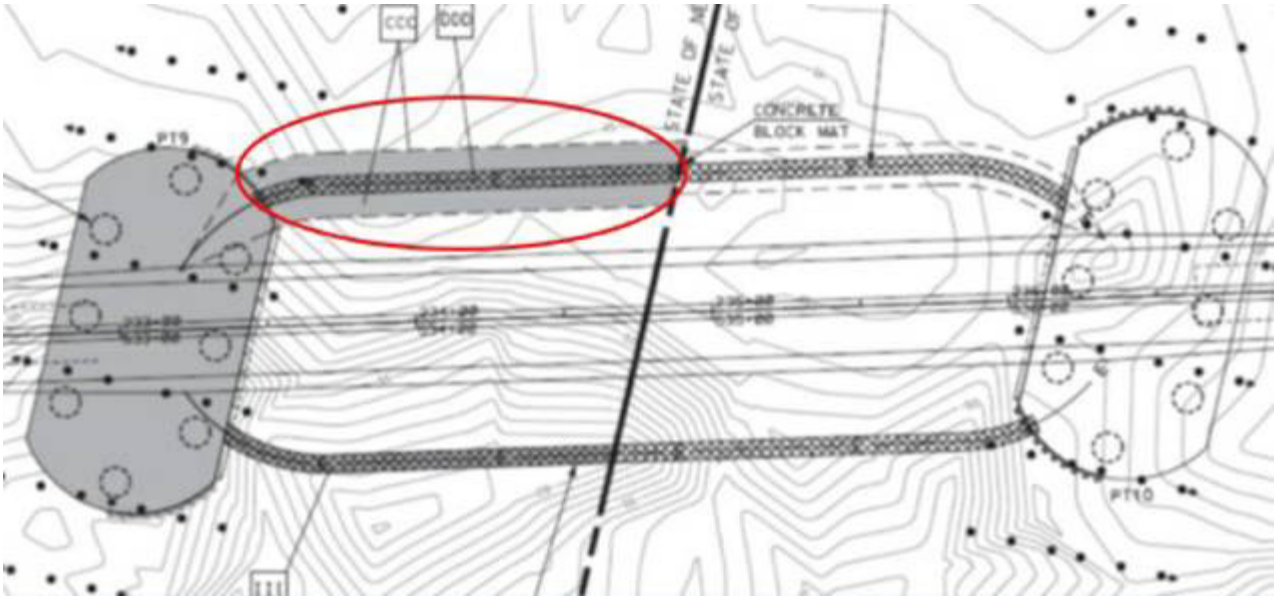
Hi Lori,

It was nice to see/hear you yesterday.

I wanted to touch base about your comment on the previously paid in-lieu fee vs. what the current in-lieu fee is. When considering this question, we should consider only impact location CCC (2234 SF) from the 2014 impact plan, which is the area assumed to be needed for dredging for the required cable depth. This impact did not occur as part of the bridge replacement. Impact location DDD (854 SF) was the area of the concrete mats placed over the cable. This impact did occur.

The 2014 in-lieu fee included $19,432.78 for impact location CCC (2234 SF). This was the amount included in the total ARM payment that NHDOT paid in ~2014.
The total area of dredging that is now proposed is 750 SF.
The 2021 in-lieu fee for 750 SF is $8491.31.

Based on these numbers, and if I'm understanding your comment correctly, NHDOT "overpaid" for mitigation by $10,941.47 and the work as now proposed does not require any additional mitigation. Am I approaching this correctly?



McFarland Johnson

Christine J. Perron, CWS | Project Manager | Senior Environmental Analyst

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