PEASE INTERNATIONAL
PORTSMOUTH, NH

Pease Development Authority
Division of Ports and Harbors

Market Street Marine Terminal

BUILD Project
Portsmouth, NH

NHDES Wetlands Permit Application

September 2021

Market Street Marine Terminal
BUILD Project
Main Wharf Rehabilitation

Wetlands Permit Application

Prepared by:

McFarland Johnson

53 Regional Drive • Concord, NH 03301

Appledore Marine Engineering, LLC

600 State Street • Portsmouth, NH 03801

September 2021

PEASE INTERNATIONAL
PORTSMOUTH, NH

Contents

Section 1 – Project Information

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: Geno Marconi **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, Eelgrass ○ NHB Project ID #: NHB20-3736	☒ 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 no dredging is proposed	☐ 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 Pease Development Authority (PDA) Division of Ports and Harbors (DPH) is proposing the rehabilitation of the main wharf at the Market Street Marine Terminal in Portsmouth, New Hampshire.

This project will consist of the following components:

- Replacement of failed approach bridge
- Construction of deck infill over the open area between the wharf and shore
- Repair deteriorated caissons (install protective jackets and sacrificial anodes)
- Repair deteriorated concrete superstructure elements
- Drainage, grading, and repaving to tie into the deck infill.

The proposed deck infill will result in the addition of 14,000 square feet of deck surface, considered to be a permanent impact to the river. The area of grading will result in slight modifications to existing grades within an area of 19,000 square feet, all of which is located within the developed tidal buffer zone. Additional riprap (340 sq ft) will be installed at the toe of existing riprap to further stabilize the shoreline.

SECTION 3 - PROJECT LOCATION

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

ADDRESS: Market Street Marine Terminal

TOWN/CITY: Portsmouth

TAX MAP/BLOCK/LOT/UNIT: Map 119/Lot 5

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

(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 43.08371° North
70.76099° 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: Marconi, Geno - NH Division of Ports and Harbors		
MAILING ADDRESS: 555 Market Street		
TOWN/CITY: Portsmouth	STATE: NH	ZIP CODE: 03801
EMAIL ADDRESS: g.marconi@peasedev.org		
FAX:	PHONE: 436-8500	
ELECTRONIC COMMUNICATION: By initialing here: , 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: 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 total impact area of shading from deck infill will be approximately 14,000 square feet. 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: The proposed work will address an existing, permanent commercial/industrial docking structure. Applicable conditions in Chapter 500 have been met. The work will also include the installation of additional riprap at the toe of an existing riprap slope. The high velocities of the river and industrial use of the site preclude the use of vegetative, bioengineered, or sem-natural alterantives to slope stabilization.

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: 07 Day: 28 Year: 2021

(☐ 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	340	241	☐			☐
	Tidal Marsh			☐			☐
	Sand Dune			☐			☐
	Undeveloped Tidal Buffer Zone (TBZ)			☐			☐
	Previously-developed TBZ	19,000		☐			☐
	Docking - Tidal Water	14,000		☐			☐
TOTAL							

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):	19,340 SF	× $0.40 =	$	7,736
Seasonal docking structure:	SF	× $2.00 =	$	
Permanent docking structure:	14,000 SF	× $4.00 =	$	56,000
Projects proposing shoreline structures (including docks) add $400 =			$	400
		Total =	$	64,000
The application fee for minor or major impact is the above calculated total or $400, whichever is greater =			$	10,000

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:	
CJP	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: 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: 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: 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: Geno Marconi	DATE: 9/10/21
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGIBLY: Geno Marconi	DATE:
SIGNATURE (AGENT, IF APPLICABLE): Christine Perron	PRINT NAME LEGIBLY: Christine Perron	DATE: 9/3/21

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: Kelli L Barnaby	PRINT NAME LEGIBLY: Kelli L. Barnaby
TOWN/CITY: Portsmouth	DATE: 9-13-2021

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: CJP	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: 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: 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.
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SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGIBLY: Geno Marconi	DATE:
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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”.

MARKET STREET MARINE TERMINAL (PORT OF NH)
BUILD PROJECT
PORTSMOUTH, NH

SUPPLEMENTAL NARRATIVE

Project Setting

The Pease Development Authority (PDA) Division of Ports and Harbors (DPH) oversees the management, maintenance, operation, and maritime security of the ports, harbors, and navigable tidal rivers of the State of New Hampshire. Included in this charge is the Market Street Marine Terminal located on the Piscataqua River. The site is also known as the Port of New Hampshire and is the state's only deep water, public access, general cargo marine terminal.

The Market Street Marine Terminal is located along the southern shore of the Piscataqua River in Portsmouth, New Hampshire. The Piscataqua River is an estuarine river with a Cowardin classification of estuarine, subtidal, unconsolidated bottom, with an intermittently flooded hydrologic regime (E1UBL). It originates northwest of the project area at the confluence of Salmon Falls River and Cocheco River between Dover, New Hampshire and Eliot, Maine and flows primarily in a southeasterly direction between Maine and New Hampshire to its confluence with the Portsmouth Harbor approximately four miles downstream from the Marine Terminal. The overall length of the river is approximately 12 miles. The river depths are 24 to 34 feet in the project area. The tidal range is 9.6 feet upstream at Dover Point to 13.2 feet downstream at Kittery Point. The river typically has flood tide velocities of around 2 knots and ebb flows of about 4 knots. The river is approximately 1,300 feet across at the location of the project. Tributaries include Bellamy River, Cocheco River, Exeter River, Lamprey River, Oyster River, Winnicut River, and Salmon Falls River. Portsmouth Harbor is approximately 4 miles downstream from the Terminal.

According to the NH Coastal Viewer (2019), the project area is not located within mapped shellfish habitat. The shoreline within the project consists of stone riprap. There is no salt marsh in the project area.

According to the NH Coastal Viewer (2019) eelgrass mapping, eelgrass has occurred in the vicinity of the project area in the past (mapped in 1996), with historic eelgrass beds located approximately 400 feet northwest of the wharf and approximately 1,200 feet to the northeast. However, as part of the SML Bridge replacement project, eelgrass surveys were performed on July 17, 2013 by MaineDOT dive crews in the vicinity of the proposed bridge, located immediately upstream of the project 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. The 2017 eelgrass mapping does not show any eelgrass beds in or near the project area. Based on the 2017 mapping, the nearest eelgrass bed is located approximately 4,400 feet downstream of the project area, along the north side of Pierce Island.

A 6.2-mile federal navigational channel, approximately 35 feet deep (-35 MLLW) and 400 to 600 feet wide, extends northwesterly from deep water between New Castle and Seavey islands to a turning basin in Newington, NH/Eliot, ME. The channel is maintained by the Army Corps of Engineers (ACOE). According to the ACOE, Portsmouth Harbor handles approximately 3.5 million tons of shipping a year for New Hampshire, eastern Vermont, and southern Maine. It is also used by submarines from the

Portsmouth Naval Shipyard in Kittery, and is used extensively by a large lobstering fleet, local fishermen, excursion boats to the Isles of Shoals (9 miles offshore), and local and transient boats.

Project Purpose and Need

The purpose of the proposed project is to rehabilitate the main wharf and to address cargo handling issues associated with the open area between the wharf and the shoreline. The main wharf was originally constructed in the 1960s and 1970s, with little repair work done since that time. The wharf was inspected in 2017 by Appledore Marine Engineering, LLC and overall rated in poor condition. The wharf has advanced deterioration of the concrete superstructure and mooring hardware that require restrictions on operations. One section of the wharf has failed due to deterioration and is now out of service. It is anticipated that by the year 2022 the deterioration will progress to a point requiring complete closure of the entire wharf if not repaired.

The replacement of the Sarah Mildred Long Bridge rendered the former barge wharf ineffective and a functional replacement project is currently in the design and permitting phase to reestablish barge berthing capabilities at the Port. The former barge wharf being out of service has increased pressure and use of the Main Wharf that now serves as the only berthing facility at the port. The functional replacement project will not be addressing the poor condition of the wharf.

In addition to the aging infrastructure, efficient loading and transfer of cargo is hampered by the open water area located between the wharf and the shoreline. This open area was never intended to be the permanent configuration of the main wharf but lack of funding precluded the wharf's completion.

Project Description

The PDA DPH is proposing the rehabilitation of the main pier, which will consist of the following:

- Replacement of failed approach bridge
- Construction of deck (infill) over the open area between the wharf and shore between the two existing bridges
- Install riprap berm at the toe of the existing riprap shoreline
- Repair deteriorated caissons (install protective jackets and sacrificial anodes)
- Repair deteriorated concrete superstructure elements
- Other miscellaneous top of deck repairs

The proposed deck infill will consist of piles with a reinforced concrete deck structure. Piles will consist of 28 30-inch diameter steel pipe piles with 8-inch diameter socketed stinger pipe piles, and 25 H-piles that will stop at bedrock. Sockets will be drilled into bedrock for the pile installation. The H-piles will not require drilling. To help prevent corrosion to the steel piles, sacrificial anodes will be installed at each pile. All piles will also be coal tar epoxy coated. An abutment will be installed in the wharf infill area between the two existing access bridges. The abutment will be located above Mean Lower Low Water (MLLW). Once the piles are in place, the cast-in-place pile caps and deck will be installed. The total impact area from deck infill will be approximately 14,000 square feet.

A riprap berm will be placed along the toe of the existing riprap slope that will be located under the deck infill. The intent of the berm is to ensure stability of the existing slope when heavy equipment begins accessing the deck infill from the shore of the terminal. The berm will extend slightly beyond existing riprap, resulting in a new impact to bottom habitat of 340 square feet along 241 linear feet of shoreline.

Env-Wt 306.05 Required Planning For All Projects

For projects that are subject to Env-Wt 600, conduct the data screening required by Env-Wt 603.03:

- Identify documented shellfish sites, existing salt marsh, salt marsh migration pathways, the 100-year floodplain, and eel grass beds that might be impacted by the proposed project using the WPPT or any other database or source that provides the requisite information;

According to the NH Coastal Viewer (2021), the project area is not located within mapped shellfish habitat. The shoreline within the project area consists of stone riprap. There is no salt marsh in the project area. The project is located in the 100-year floodplain of the Piscataqua River.

- Identify documented essential fish habitat that may be impacted by the proposed project;

An Essential Fish Habitat assessment was completed for the project in July 2019. Construction effects will be confined to the area immediately surrounding the main pier at the Port of NH. Only a fraction of available habitat will be subject to construction activities at any given time. The river is 1,300 feet wide at the project area and construction activities will be limited to the southern shoreline of the river in an area that is surrounded by the existing wharf structure. The use of debris booms, as well as working during low tide whenever possible, will help contain construction impacts and turbidity, minimizing impacts to EFH. Based on the assessment, the PDA DPH and MARAD have concluded that there will be no substantial adverse effect on EFH as a result of the proposed project.

Env-Wt 307 Conditions Applicable to All Activities in Jurisdictional Areas

This site sees 3-4 kt currents every 6 hours and during full moon periods the currents are even higher. Substrate is primarily hard substrate due to high velocities. The river in this area is approximately 1600' wide. With the high currents, the turbidity curtain would essentially act as a dam and get ripped out daily. A cofferdam would result in a substantial increase in cost and construction time. Based on these factors and because there is minimal risk for large amounts of turbidity from the project,
a floating debris boom is proposed.

The proposed riprap will be rinsed material that will be placed with a clamshell to form a berm at the toe of the existing riprap slope.

Installation of the proposed piles will require temporary removal of the existing riprap, achieved via an excavator or clamshell. The piles will then be driven to bedrock (elevation varies) via a vibratory hammer or impact hammer if required. The soil within the steel pipe piles will then be removed via an auger or clean out bucket and then stored upland. A rock drill will then be inserted into the pipe pile, advanced to bedrock and a core drilled for the steel pipe socket. Next the steel pipe socket will be placed and grouted. A concrete fill is then placed inside the steel pipe pile. The temporarily removed riprap will then be restored around the pile. Eleven proposed piles are located at Mean Higher High Water elevation. These 11 piles will be driven at lower tides such that pile driving activities can be completed out of the water. The remaining piles will be driven in water. Due to concerns with underwater noise generated by pile driving activities, in-water pile driving will be completed outside the window of anadromous fish spawning (April through June).

A Stormwater Pollution Prevention Plan will be prepared and implemented to ensure that all appropriate sediment and erosion control measures are followed during construction of the project.

MARKET STREET MARINE TERMINAL (PORT OF NH)
BUILD PROJECT
PORTSMOUTH, NH

CONSTRUCTION SEQUENCE

The total duration of construction is anticipated to be approximately 18 months. The construction start date is not yet known, and final construction sequencing will be determined by the Contractor. The following is an outline of the likely construction sequence. This sequence may vary slightly depending on the selected contractor. Work along the shoreline will be completed during lower tides when possible.

- Install perimeter controls around work site.
- Remove concrete from failed bridge.
- Install piles
    - Installation of up to 53 piles will require temporary removal of the existing riprap, achieved via an excavator or clamshell.
    - The piles will then be driven to bedrock (elevation varies) via a vibratory hammer or impact hammer if required.
    - The soil within the steel pipe piles will then be removed via an auger or clean out bucket and then stored upland.
    - A rock drill will then be inserted into the pipe pile, advanced to bedrock and a core drilled for the steel pipe socket.
    - Next the steel pipe socket will be placed and grouted. A concrete fill is then placed inside the steel pipe pile.
    - The temporarily removed riprap will then be restored around the pile.
    - Duration of pile driving will be approximately 20 to 30 days.
    - In-water pile driving will not occur between April 1 and June 30.
- Repair deteriorated caissons and superstructure elements.
- Install riprap berm and supplementary riprap along riprap shoreline. Rinsed material will be placed in the water at the toe of the existing riprap slope with clamshell. The duration of riprap placement is expected to be approximately one to two months.
- Install cast-in-place pile caps and pre-cast deck planks
- Install silt socks, inlet filters, and sediment traps for shoreside work
- Complete shoreside construction (drainage, grading, paving). All work will be carried out according to the Materials Management Plan for the proper management of materials generated from each category of impacted soils. The site will be stabilized within 72 hours of achieving finished grade.
- All erosion controls will be inspected weekly and after every half-inch rainfall.
- Remove all erosion and sediment control measures

Section 2 – US Army Corps Attachments

US Army Corps of Engineers ®
New England District

New Hampshire General Permits (GPs)
Appendix B - Corps Secondary Impacts Checklist
(for inland wetland/waterway fill projects in New Hampshire)

1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
2. All references to "work" include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See GC 5, regarding single and complete projects.
4. Contact the Corps at (978) 318-8832 with any questions.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm to determine if there is an impaired water in the vicinity of your work area.*	X	
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to SAS, special wetlands. Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www2.des.state.nh.us/nhb_datacheck/. The book Natural Community Systems of New Hampshire also contains specific information about the natural communities found in NH.		X
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	n/a	
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		X
2.5 The overall project site is more than 40 acres?		X
2.6 What is the area of the previously filled wetlands?	unknown	
2.7 What is the area of the proposed fill in wetlands?	340 sq ft	
2.8 What is the % of previously and proposed fill in wetlands to the overall project site?	unknown	
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www2.des.state.nh.us/nhb_datacheck/ USFWS IPAC website: https://ecos.fws.gov/ipac/location/index	X	

3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or "Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green, respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological Condition.") Map information can be found at: • PDF: www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html.		X
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		X
3.5 Are stream crossings designed in accordance with the GC 21?	n/a	
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?	X	
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?	n/a	
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review**)** with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**	X	

*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.
** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.
`

MARKET STREET MARINE TERMINAL (PORT OF NH)
BUILD PROJECT
PORTSMOUTH, NH

ACOE APPENDIX B. SUPPLEMENTAL NARRATIVE

1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water?

The portion of the Piscataqua River that flows through the project area (NHDES Assessment Unit ID: NHEST600031001-02-02) is listed on the NHDES Draft 2020 State 303(d) List as an impaired waterbody requiring a TMDL. The segment of the Piscataqua River located in the project area is impaired for aquatic life integrity due to estuarine bioassessments; fish consumption due to polychlorinated biphenyls (PCBS) and mercury; and for shellfish consumption due to dioxin, mercury, and PCBS.

2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?

The proposed work is located on the Piscataqua River. The proposed work involves rehabilitation of the main wharf, which includes replacement of the failed approach bridge, construction of deck (infill) over the open area between the wharf and shore between the two existing bridges, repairs the deteriorated caissons, repair the deteriorated concrete superstructure elements, and other miscellaneous top of deck repairs. Impacts to the river involve direct impacts from the socketed piles as well as placement of a riprap berm along the toe of an existing riprap slope.

3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project?

The NH Natural Heritage Bureau (NHB) identified occurrences of state listed species including Atlantic sturgeon, shortnose sturgeon, and peregrine falcon, as well as the presence of eelgrass beds upstream and downstream from the project.

Shortnose sturgeon (*Acipenser brevirostrum*)

There are no spawning or overwintering sites within the action area based on existing habitat conditions and available data. The project area is tidal habitat with salinities commonly over 23 ppt. These conditions are not conducive to shortnose sturgeon spawning habitat or habitat for eggs, larvae, or young-of-year, which require freshwater conditions. Suitable foraging habitat may be present in or near the project area. Therefore, any shortnose sturgeon that may be in the project area would likely be migrant adults opportunistically foraging between April and November.

Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*)

There are no spawning sites within the project area based on existing habitat conditions and available data and overwintering is very unlikely. Potentially suitable foraging habitat may be present in or near the project area. Therefore, adult and sub-adult Atlantic sturgeon are most likely to occur in the vicinity of the project area between April and November.

Atlantic sturgeon physical and biological features (PBFs) for critical habitat within the project area include soft substrates which could provide suitable foraging habitat, along with suitable salinities, depths, passage,

temperatures, and oxygen values to support the survival and unimpeded passage of subadult and adult Atlantic sturgeon. The project area does not contain PBFs for spawning or rearing.

Peregrine Falcon (*Falco peregrinus anatum*)
Further review by the NHB determined that the project is not expected to result in impacts to the state threated peregrine falcon as there are no new nests in the near vicinity of the proposed work.

Eelgrass Beds
According to the NH Coastal Viewer (2019) eelgrass mapping, eelgrass has occurred in the vicinity of the project area in the past (mapped in 1996), with historic eelgrass beds located approximately 400 feet northwest of the wharf and approximately 1,200 feet to the northeast. However, as part of the SML Bridge replacement project, eelgrass surveys were performed on July 17, 2013 by MaineDOT dive crews in the vicinity of the proposed bridge, located immediately upstream of the project 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. The 2017 eelgrass mapping does not show any eelgrass beds in or near the project area. Based on the 2017 mapping, the nearest eelgrass bed is located approximately 4,400 feet downstream of the project area, along the north side of Pierce Island. Based on the survey history at the site, the NHB has no concerns regarding potential impacts to eelgrass bed from the proposed project.

4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?

The project lies within the mapped 100-year floodplain of the Piscataqua River. The additional piles and riprap within the floodplain will be negligible fill that is not anticipated to result in any change in base flood elevation. Furthermore, the separate functional replacement project includes dredging of 55,000 SF adjacent to the north end of the wharf, which will more than compensate for the additional piles. Therefore, the project is not expected to result in an increase in base flood elevation within the floodplain of the Piscataqua River. The base flood elevation is 12.86 feet MLLW according to the FEMA Flood Insurance Rate Map. Existing and proposed grades along the top of the main wharf vary in elevation from approximately 14 to 16 feet MLLW; therefore, the base flood elevation is below existing grades.

5.0 For a minimum, minor or major impact project - a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 11 GC 8(d) of the GP document**

The location of the rehab project was reviewed as part of the functional replacement project and no historic resources were identified. When MARAD completed the NEPA review, they determined that the rehab project would result in no effect to historic resources based on their review of existing information and previous consultations.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To: January 18, 2021
Consultation Code: 05E1NE00-2021-SLI-1019
Event Code: 05E1NE00-2021-E-03201
Project Name: Appledore BUILD Permitting

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2021-SLI-1019
Event Code: 05E1NE00-2021-E-03201
Project Name: Appledore BUILD Permitting
Project Type: TRANSPORTATION
Project Description: The purpose of this project is to improve the main ship wharf at the terminal by decking over the open water area between the wharf and shore to better facilitate transfer of cargo, and also replace an access bridge that collapsed.

The PDA DPH is proposing the rehabilitation of the main pier, which will consist of the following:

• Replacement of failed approach bridge
• Construction of deck (infill) over the open area between the wharf and shore between the two existing bridges
• Repair deteriorated caissons (install protective jackets and sacrificial anodes)
• Repair deteriorated concrete superstructure elements
• Other miscellaneous top of deck repairs

The proposed deck infill will consist of concrete filled steel pipe piles with a reinforced concrete deck structure. Sockets will be drilled into bedrock for the pile installation. A total of 62 40-inch diameter steel piles will be installed in the drilled holes, which will then be filled with concrete. Of the total number of piles, 50 will be located below Mean High Water (MHW). The estimated area of direct impacts from the socketed piles is approximately 540 square feet. Socketed piles are the preferred method of pile installation due to the reduced underwater noise impacts. To help prevent corrosion to the steel piles, sacrificial anodes will be installed at each pile. All piles will also be coal tar epoxy coated. An abutment will be installed in the wharf infill area between the two existing access bridges. The abutment will be located above Mean Lower Low Water (MLLW). Once the piles are in place, the cast-in-place pile caps and deck will be installed. The total impact area from deck infill will be approximately 14,000 square feet.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.08380515,-70.76158466366331,14z

Counties: Rockingham County, New Hampshire

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9045

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

U.S. MARITIME ADMINISTRATION
RECORD OF CATEGORICAL EXCLUSION

SUBJECT:

Market Street Terminal Main Wharf Rehabilitation Project

REFERENCE:

(a) Department of Transportation Order DOT 5610.1C; September 18, 1979
(b) Maritime Administrative Order (MAO) 600-1; July 23, 1985
(c) Better Utilizing Investments to Leverage Development Transportation Discretionary Grants Program (BUILD) Notice of Funding Opportunity, Consolidated Appropriations Act, 2018, 83 FR 18651; April 27, 2018

Action:

The Consolidated Appropriations Act of 2018 (Pub. L. 115-141), signed by the President on March 23, 2018, appropriated funds for the Better Utilizing Investments to Leverage Development Transportation Discretionary Grants Program (BUILD). The purpose of the BUILD Discretionary Grant funding is to advance capital investments in surface transportation infrastructure that will have a significant impact on the nation, a metropolitan area, or a region.

The Pease Development Authority Division of Ports and Harbors (PDA) was awarded funds under the BUILD grant program and these funds will be used for the rehabilitation of the main terminal wharf. The project includes design and reconstruction of the main wharf area. Repairs to the main wharf include the following:

- Replacement of failed approach bridge and deck over the open area between the wharf and shore between the two bridges;
- Repair deteriorated caissons (Install protective jackets and sacrificial anodes) to restore structural integrity and extend service life;
- Recoat portions of the steel sheet pile bulkhead to extend service life;
- Repair deteriorated concrete superstructure elements to restore structural integrity and extend service life;
- Resurface deteriorated concrete deck to restore structural integrity and drainage; and
- Miscellaneous top of deck repairs including recoating mooring hardware, replacing mooring hardwater and associated concrete pedestals, and replacing deteriorated fender units.

This project qualifies for a Categorical Exclusion (CE) under Agency National Environmental Policy Act (NEPA) policy guidance.

Analysis:

It is the Agency's experience that this type of action has no significant effect on the human and natural environment, individually or cumulatively, under normal conditions, and is categorically excluded from further documentation requirements under the National Environmental Policy Act (NEPA) by Maritime Administrative Order 600-1 Categorical Exclusions.

Further, it is noted that the area where the site is located has been extensively analyzed as part of the replacement project for the Sarah Mildred Long Bridge located immediately adjacent to the Main Street Terminal Wharf and as part of the Federal Highways Administration (FHWA) functional replacement project for the east and west ends of the Main Street Terminal Wharf. The functional replacement project is in progress to compensate the PDA for right-of-way alignment impacts to the Main Street Terminal Wharf. As part of the functional replacement project, FHWA prepared a Section 106 Cultural Resources Memo on February 2, 2109. The memo concluded that there would be no adverse effect on historical or archaeological resources and that no DOT Section 4(f) resources were located in the project area. The NH State Historic Preservation Office signed their concurrence on March 4, 2019. Additionally, FHWA issued a Categorical Exclusion for the functional replacement project on August 7, 2019.

The project proponent also received concurrence on August 6, 2019 from NOAA's regional Habitat Conservation Division of the characterization of impacts to Essential Fish Habitat and other National Marine Fisheries trust resources and mitigation measures proposed. The Habitat Conservation Division recommended the use of less toxic coatings on the piles and a response was provided that included the scientific and industry specific justifications for no further measures required. The agency responded that no additional consultation was required. Section 7 consultation was completed via the Army Corp of Engineers on August 13, 2019.

The MAO Categorical Exclusion that applies is MAO Categorical Exclusion # 4: Reconstruction, modification, modernization, replacement, repair, and maintenance (including emergency replacement, repair, or maintenance) of equipment, facilities, or structures which do not change substantially the existing character of the equipment/facility/structure.

Conclusion:

Based upon the analysis completed, the proposed action fits squarely within the scope of MAO 600-1 (Categorical Exclusion No. 4) and is not expected to involve any extraordinary circumstances that would result in significant environmental effects.

Environmental Reviewer:

10-3-19

Kristine A. Gilson, REM, CHMM
Environmental Protection Specialist
Office of Environment

Date

Approval:

10/4/19

Michael C. Carter
Acting Associate Administrator for
Environment, Safety and Vessel Security

Date

U.S. Department of Transportation
Maritime Administration

CONCURRENCE RECORD

ORIGINATING OFFICE	SUBJECT
MAR-410	NEPA Categorical Exclusion BUILD project

SEQUENCE	CODE NO.	ORGANIZATIONAL UNIT	INITIALS		DATE
			WITHIN OFFICE	OFFICE HEAD	
	100	MARITIME ADMINISTRATOR			
	110	DEPUTY MARITIME ADMINISTRATOR			
	130	OFFICE OF CIVIL RIGHTS			
	220	OFFICE OF CHIEF COUNSEL			
	221	DIVISION OF LITIGATION AND GENERAL LAW			
	222	DIVISION OF MARITIME PROGRAMS			
	223	DIVISION OF LEGISLATION AND REGULATIONS			
	230	ASSISTANT ADMINISTRATOR			
	231	OFFICE OF INTERNATIONAL ACTIVITIES			
	232	OFFICE OF POLICY AND PLANS			
	240	OFFICE OF CONGRESSIONAL AND PUBLIC AFFAIRS			
	250	OFFICE OF CHIEF FINANCIAL OFFICER			
	300	ASSOCIATE ADMINISTRATOR FOR ADMINISTRATION			
	340	OFFICE OF CHIEF INFORMATION OFFICER			
	360	OFFICE OF HUMAN RESOURCES			
	380	OFFICE OF ACQUISITION			
	390	OFFICE OF MANAGEMENT AND ADMINISTRATIVE SERVICES			
2	400	ASSOCIATE ADMINISTRATOR FOR ENVIRONMENT AND COMPLIANCE		MCC's w/edits	10/4/19
1	410	OFFICE OF ENVIRONMENT	LG		10-3-19
	420	OFFICE OF SECURITY			
	430	OFFICE OF SAFETY			
	500	ASSOCIATE ADMINISTRATOR FOR INTERMODAL SYSTEM DEVELOPMENT			
	510	OFFICE OF INFRASTRUCTURE DEVELOPMENT AND CONGESTION MITIGATION			
	520	OFFICE OF MARINE HIGHWAYS AND PASSENGER SERVICES			
	530	OFFICE OF DEEPWATER PORTS AND OFFSHORE ACTIVITIES			
	540	OFFICE OF SHIPPER AND CARRIER OUTREACH			
	550	OFFICE OF GATEWAYS			
	600	ASSOCIATE ADMINISTRATOR FOR NATIONAL SECURITY			
	610	OFFICE OF SHIP OPERATIONS			
	620	OFFICE OF EMERGENCY PREPAREDNESS			
	630	OFFICE OF SEALIFT SUPPORT			
	640	OFFICE OF SHIP DISPOSAL			
	700	ASSOCIATE ADMINISTRATOR FOR BUSINESS AND WORKFORCE DEVELOPMENT			
	710	OFFICE OF FINANCIAL APPROVALS AND MARINE INSURANCE			
	720	OFFICE OF SHIPYARDS AND MARINE FINANCE			
	730	OFFICE OF CARGO PREFERENCE AND DOMESTIC TRADE			
	740	OFFICE OF MARITIME WORKFORCE DEVELOPMENT			
	5100	U.S. MERCHANT MARINE ACADEMY			

SUMMARY

Categorical Exclusion document for the Pease Development Authority Market Street Terminal Wharf Rehabilitation Project

FORM MA-71 (REV 01-2008)

PEASE
INTERNATIONAL
PORTS AND HARBORS

555 Market Street, Suite 1 Portsmouth, NH 03801

September 9, 2021

NH Department of Environmental Service
Coastal Division
Pease Field Office
222 International Drive, Suite 175
Portsmouth, NH 03801

Attn: Stefanie Giallongo

Re: NH State Pier expansion project

Dear Stefanie,

We reviewed plans for the rehabilitation of an existing pier on the Piscataqua River in Portsmouth on property belonging to

State of New Hampshire
555 Market Street
Portsmouth, NH
Map 119 Lot 5

We examined the proposed site and found that the structure will have no negative effect on navigation in the channel.

Sincerely,

Tracy R. Shattuck
Chief Harbor Master

Cc: Stephen Riker
Ambit Engineering
200 Griffin Road Unit 3
Portsmouth, NH 03801

Section 3 - Coastal Resources

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.: Marconi, Geno

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 this project is to improve the main ship wharf at the terminal by decking over the open water area between the wharf and shore to better facilitate transfer of cargo, and also replace an access bridge that collapsed.

The need for this project is that the main wharf in its current condition will no longer able to fulfill the needs of the Port. The main wharf was inspected in 2017 and was rated in poor condition due to advanced deterioration of the concrete superstructure and mooring hardware. One section of the wharf has failed and is no longer in service. Without addressing the condition of the wharf, it is anticipated that deterioration will worsen, eventually requiring complete closure of the wharf.

The PDA DPH is proposing the rehabilitation of the main pier, which will consist of replacement of failed approach bridge, construction of deck (infill) over the open area between the wharf and shore between the two existing bridges, repair deteriorated caissons (install protective jackets and sacrificial anodes), repair deteriorated concrete superstructure elements, and other miscellaneous top of deck repairs.

The proposed project is located in the Piscataqua River, a tidal water, that involves approximately 340 square feet of direct impacts from riprap, along with approximately 14,000 square feet of shading from the deck infill.

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.

Debris booms and other appropriate erosion and sediment control measures will be utilized to avoid adverse impacts to the river. A Stormwater Pollution Prevention Plan will be prepared and implemented to ensure that all appropriate sediment and erosion control measures are followed during construction of the project.

All proposed work will be located along the southern shore of the river; therefore, a safe zone of passage of approximately 1,000 feet will be available for any sensitive species that may be foraging or migrating in the river during construction.

Eleven of the 53 proposed piles will be located at Mean Higher High Water elevation. These 11 piles will be driven at lower tides such that pile driving activities can be completed out of the water. The remaining piles will be driven in water. Due to concerns with underwater noise generated by pile driving activities, in-water pile driving will be completed outside the window of anadromous fish spawning (April through June).

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.

ENV-Wt 307.04: A safe zone of passage of approximately 1,000 feet will be available for any fish species that may be foraging or migrating in the river during construction. Due to concerns with underwater noise generated by pile driving activities, in-water pile driving will be completed outside the window of anadromous fish spawning (April through June).

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

ENV-Wt 307.06: Proposed impacts are limited to the footprint of the existing wharf and marine terminal. An Essential Fish Habitat Assessment was completed and determined that the project will not have a substantial adverse effect on EFH in the project area. A Section 7 Not Likely to Adversely Affect (NLAA) Program Verification Form was completed and approved by NOAA and the US Army Corps, confirming that the project is not likely to adversely affect federally listed species.

ENV-Wt 307.08: 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 proposed project will result in a deck infill over the river, however, is located within the existing footprint of the wharf.

ENV-Wt 301.10: The proposed work does not include dredging

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.

The above information has been provided in this wetland permit application package.

☒ 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.

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.

50 years

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 project has a medium risk tolerance to inundation and damage to infrastructure; The wharf is designed to withstand inundation. Flooding events would temporarily limits operations at the port; however, damage to existing infrastructure would not be expected. Given the existing infrastructure already in place, it is not possible to reduce the risk of inundation without replacing the entire wharf.

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.

2.5 feet

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

With a 2.5 foot rise in sea level, the wharf is not expected to be subject to flooding at MHHW. The MHHW elevation plus 2.5 feet is 11.34 feet. The deck elevation of the main wharf is 14.10' MLLW to 16' MLLW.

With a 2 foot rise in sea level plus 1% storm surge at MHHW, the main wharf would be subject to flooding. However, the infrastructure is design to withstand inundation and is not expected to be damaged under this scenario.

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

The base flood elevation of 100-year flood event is 12.86 feet. The deck elevation of the main wharf is 14.10' MLLW to 16' MLLW. The main wharf is currently above the 100-year floodplain.

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

Given the existing infrastructure in place, it is not possible to reduce the risk of inundation without replacing the entire wharf. However, the wharf is designed to withstand inundation.

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: **n/a**

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.

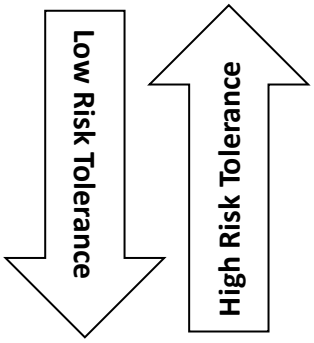
SECTION 10 – GUIDANCE

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.

MARKET STREET MARINE TERMINAL (PORT OF NH)
BUILD PROJECT
PORTSMOUTH, NH

COASTAL VULNERABILITY ASSESSMENT

INTRODUCTION

The proposed rehabilitation of the main wharf will replace the failed approach bridge, construct a concrete deck infill over the open area in the wharf, install a riprap berm at the toe of the existing riprap shoreline, and repair existing deteriorated caissons and concrete superstructure elements. The proposed improvements are needed to maintain safety and to meet current and future demands of the wharf. Approximately 14,340 square feet of bottom habitat will be impacted from proposed piles and deck infill between the existing wharf and the shoreline.

The proposed project is located within the Piscataqua River, a tidal water located in Portsmouth, New Hampshire and Kittery, Maine. The Market Street Marine Terminal is public infrastructure, and the proposed project is needed to ensure the safety of vessels operating at the Port.

DESIGNED SERVICE LIFE

The proposed project is designed for a service life of approximately 50 years.

RISK TOLERANCE TO FLOODING

The proposed project is being installed/constructed within the existing footprint of the terminal and will match existing elevations of the surrounding deck. The project has a medium risk tolerance to inundation and damage to infrastructure. The port's infrastructure has high value and cost but is designed to withstand inundation. Flooding events would temporarily limits operations at the port; however, damage to existing infrastructure would not be expected. Given the existing infrastructure in place, it is not possible to reduce the risk of inundation without replacing the entire wharf.

PROJECTED SEA LEVEL RISE

With a 2.5-foot rise in sea level, the wharf is not expected to be subject to flooding at MHHW. The MHHW elevation plus 2.5 feet is 11.34 feet. The deck elevation of the main wharf is 14.10' MLLW to 16' MLLW.

The project area is located within the FEMA mapped 100-year floodplain (Zone AE) of the Piscataqua River. The proposed project is not anticipated to result in impacts to the floodplain or a change in the Base Flood Elevation. With a 2-foot rise in sea level plus 1% storm surge at MHHW, the main wharf would be subject to flooding. However, the infrastructure is design to withstand inundation and is not expected to be damaged under this scenario.

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.

CONCLUSION

Due to the location of the proposed project and the presence of existing infrastructure, it is not practicable to design the wharf rehabilitation project to avoid all impacts from SLR. However, the main wharf has been designed to withstand periodic inundation without damage. Therefore, it is assumed that the flood risk tolerance is medium, and a detailed evaluation of potential SLR scenarios was not completed for the proposed project.

MARKET STREET MARINE TERMINAL (PORT OF NH)
BUILD PROJECT
PORTSMOUTH, NH

COASTAL FUNCTIONAL ASSESSMENT

Env-Wt 603.04 Coastal Functional Assessment
311.10 (e) For a shoreline structure over inland surface waters that are not vegetated wetlands, in lieu of (a) through(d), ((functional assessment)), the applicant shall submit a statement describing how the project's design meets applicable project-specific rules for the proposed shoreline structure and its proposed location.

Desktop review of resources has been overseen by Christine Perron, CWS, and a field review was carried out on April 2, 2019. This Coastal Functional Assessment was completed by Christine Perron, CWS in January 2021.

The project is located along the southern shoreline of the Piscataqua River at the Market Street Marine Terminal (Port of NH), a deep water, public access, general cargo marine terminal owned and operated by the Pease Development Authority (PDA) Division of Ports and Harbors (DPH). The site has a long history of use as a rail yard and wharf and records show the property was in use in the late 1800s. The State of New Hampshire acquired the property in the early 1960s and the New Hampshire State Port Authority began management in the mid-1960s. The Port is located within the waterfront industrial zone in Portsmouth and is surrounded by areas zoned as commercial.

A 6.2-mile federal navigational channel, approximately 35 feet deep (-35 MLLW) and 400 to 600 feet wide, extends northwesterly from deep water between New Castle and Seavey islands to a turning basin in Newington, NH/Eliot, ME. This channel supports a wide variety of commercial and recreational activities, with over 600 vessels with drafts between 0 and 39 feet recorded on the river in 2016. The terminals along the Portsmouth Harbor and the Piscataqua River generate between 150 and 250 inbound commercial vessel transits per year. Commercial vessels averaged approximately 78 vessel visits per year based on 2011 data. Commercial vessels range in length from 420 feet to 747 feet, with most vessels in the 20,000 to 50,000 deadweight tonnage (DWT) range[1].

In addition to commercial activity, the port is critical to emergency response capabilities in Portsmouth Harbor. The facility supports fire, security, and terrorist response drills with local and federal law enforcement. If there is an emergency on board a ship, the pilot brings the ship to the Terminal.

The Piscataqua River is a tidal river with a Cowardin classification of E1UBL. The river depths are 35 to 45 feet deep in the channel of the river and up to 35 feet in the vicinity of the project area. The maximum tidal range is 9.6 feet upstream at Dover Point to 13.2 feet downstream at Kittery Point. The river is approximately 1,300 feet across at the location of the wharf. The substrate within the project area largely consists of coarse materials and riprap due to water velocity that can approach 3.5 knots per hour (6 feet per second) or more, which flushes the area of lighter, unconsolidated material. No eelgrass or shellfish beds occur in the project area or in the immediate vicinity. Some seaweed occurs in the project area along the rocky shoreline. The shoreline and tidal buffer zone adjacent to the project consist entirely of infrastructure associated with the Port of NH. There are no tidal wetlands or natural vegetated riparian areas.

[1] Magnusson, Matthew; Colgan, Charles; and Gittell, Ross. June 2012. The Economic Impact of the Piscataqua River and the Ports of Portsmouth and Newington. 32pp.

The Piscataqua River provides habitat to a number of aquatic and aquatic-dependent species and the river is identified as highest ranked habitat in the NH Wildlife Action Plan. There is suitable foraging habitat for federally listed shortnose sturgeon and Atlantic sturgeon in the vicinity of the project, and the river is designated as Essential Fish Habitat for 16 species.

The purpose of the proposed project is to rehabilitate the main wharf and to address cargo handling issues associated with the open area between the wharf and the shoreline. The main wharf was originally constructed in the 1960s and 1970s, with little repair work done since that time. The wharf was inspected in 2017 by Appledore Marine Engineering, LLC and overall rated in poor condition. The wharf has advanced deterioration of the concrete superstructure and mooring hardware that require restrictions on operations. One section of the wharf has failed due to deterioration and is now out of service. It is anticipated that by the year 2022 the deterioration will progress to a point requiring complete closure of the entire wharf if not repaired.

The replacement of the Sarah Mildred Long Bridge rendered the former barge wharf ineffective and a functional replacement project is currently in the design and permitting phase to reestablish barge berthing capabilities at the Port. The former barge wharf being out of service has increased pressure and use of the Main Wharf that now serves as the only berthing facility at the port. The functional replacement project will not be addressing the poor condition of the wharf.

In addition to the aging infrastructure, efficient loading and transfer of cargo is hampered by the open water area located between the wharf and the shoreline. This open area was never intended to be the permanent configuration of the main wharf but lack of funding precluded the wharf's completion.

The proposed main wharf rehabilitation will replace the failed approach bridge, construct a concrete deck infill over the open area in the wharf, and repair existing deteriorated caissons and concrete superstructure elements. The proposed improvements are needed to maintain safety and to meet current and future demands of the wharf. Approximately 14,340 square feet of bottom habitat will be impacted from proposed piles, deck infill, and riprap berm.

Proposed impacts are limited to the footprint of the existing wharf and marine terminal. An Essential Fish Habitat Assessment was completed and determined that the project will not have a substantial adverse effect on EFH in the project area. A Section 7 Not Likely to Adversely Affect (NLAA) Program Verification Form was completed and approved by NOAA and the US Army Corps, confirming that the project is not likely to adversely affect federally listed species.

Impacts have been minimized to the maximum extent possible while still accomplishing the purpose of the project. Minimization measures that have been incorporated into the project include the following:

- Debris booms and other appropriate erosion and sediment control measures will be utilized to avoid adverse impacts to the river.

- All proposed work will be located along the southern shore of the river; therefore, a safe zone of passage of approximately 1,000 feet will be available for any sensitive species that may be foraging or migrating in the river during construction.

- In-water pile driving will be completed outside the window of anadromous fish spawning (April through June).

Given that all impacts will occur within the existing footprint of the main wharf, along with the implementation of proposed minimization measures, the proposed project will have a negligible effect on the overall functions and values of the Piscataqua River.

Prepared By:
Christine Perron, CWS, QCP

Section 4 – Avoidance & Minimization

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: **Geno Marconi** **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 PURPOSE OF THE PROPOSED PROJECT IS TO REHABILITATE THE MAIN WHARF AND TO ADDRESS CARGO HANDLING ISSUES ASSOCIATED WITH THE OPEN AREA BETWEEN THE WHARF AND THE SHORELINE. THE MAIN WHARF WAS ORIGINALLY CONSTRUCTED IN THE 1960S AND 1970S, WITH LITTLE REPAIR WORK DONE SINCE THAT TIME. THE WHARF WAS INSPECTED IN 2017 BY APPLEDORE MARINE ENGINEERING, LLC AND OVERALL RATED IN POOR CONDITION. THE WHARF HAS ADVANCED DETERIORATION OF THE CONCRETE SUPERSTRUCTURE AND MOORING HARDWARE THAT REQUIRE RESTRICTIONS ON OPERATIONS. ONE SECTION OF THE WHARF HAS FAILED DUE TO DETERIORATION AND IS NOW OUT OF SERVICE. IT IS ANTICIPATED THAT BY THE YEAR 2022 THE DETERIORATION WILL PROGRESS TO A POINT REQUIRING COMPLETE CLOSURE OF THE ENTIRE WHARF IF NOT REPAIRED.

IN ADDITION TO THE AGING INFRASTRUCTURE, EFFICIENT LOADING AND TRANSFER OF CARGO IS HAMPERED BY THE OPEN WATER AREA LOCATED BETWEEN THE WHARF AND THE SHORELINE. THIS OPEN AREA WAS NEVER INTENDED TO BE THE PERMANENT CONFIGURATION OF THE MAIN WHARF BUT LACK OF FUNDING PRECLUDED THE WHARF'S COMPLETION.

THE ONLY ALTERNATIVE THAT WOULD RESULT IN LESS IMPACT TO THE RIVER WOULD THE DO NOTHING ALTERNATIVE, WHICH WOULD EVENUTALLY RESULT IN THE CLOSURE OF THE PORT FOR MOST OF ITS CURRENT FUNCTIONS. GIVEN THE ECONOMIC AND PUBLIC SAFETY BENEFITS OF THE PORT, THE DO NOTHING ALTERNATIVE IS NOT PRACTICABLE.

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.

There are no tidal marshes within the project area.

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 area contains no wetlands or tribuatries and is located entirely within the Piscataqua River. There will be no change in hydrologic connections.

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.

•Debris booms and other appropriate erosion and sediment control measures will be utilized to avoid adverse impacts to the river.

•All proposed work will be located along the southern shore of the river; therefore, a safe zone of passage of approximately 1,000 feet will be available for any sensitive species that may be foraging or migrating in the river during construction.

•In-water pile driving will be completed outside the window of anadromous fish spawning (April through June).

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.

As the state's only deep water, public access, general cargo marine terminal, it is imperative that the facility remain safe and functional. By performing the necessary rehabilitation of the main wharf, public commerce and navigation will both be improved by upgrading the safety and effeciency of the wharf, allowing it to meet current and future demands.

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 will result in direct impacts to the river from 53 30-inch piles (256 sq ft) located under the proposed deck infill, as well 340 sq ft of proposed riprap. These impacts will result in negligible impacts to the floodplain and will not impact flood storage capacity.

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 riverine forested wetlands within or in the vicinity of 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.

The project will not impact drinking water supply or aquifers.

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 number of new piles in the river has been reduced from 60 to 53 to minimize impacts to the river bottom. These piles will be located within the existing open area that is surrounded by the existing wharf structure.

The proposed 14,000 sf concrete deck will be built over the open water area between the existing wharf and the shore. Stormwater runoff from the existing deck flows off the deck into the Piscataqua River. Stormwater runoff from the additional deck surface will also flow into the river. The additional runoff is expected to be negligible given the size and capacity of the river.

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.

The project as proposed minimizes impacts to the maximum extent possible while still addressing the purpose and need of the project. The project will result in 14,000 SF of deck infill over the Piscataqua River, however, the project is located within the existing limits of the terminal and will not further encroach within the stream channel.

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.

The proposed work consists of the a rehabilitation of existing infrastructure. The project will replace the failed approach bridge, construct a concrete deck infill over the open area in the wharf, and repair existing deteriorated caissons and concrete superstructure elements. The proposed improvements are needed to maintain safety and to meet current and future demands of the wharf.

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.

The Port is located within the waterfront industrial zone in Portsmouth and is surrounded by areas zoned as commercial. The proposed project is located entirely within the Market Street Marine Terminal and will not impact the ability of abutting owners to use and enjoy their properties.

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.

All proposed work will be located along the southern shore of the river; therefore, a safe zone of passage of approximately 1,000 feet will be available for navigation and access. The proposed project is designed to enhance the function, efficiency, and safety of the marine terminal, which is an important facility for commerce and recreation in New Hampshire as the state's only deep water, public access, general cargo marine terminal.

Furthermore, the project is located at the Market Street Marine Terminal, which is located within the waterfront industrial zone in Portsmouth and surrounded by areas zoned as commercial. The proposed work will be consistent with the existing use of the facility and adjacent land use and will not interfere with the existing aesthetic.

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.

Proposed impacts are limited to the footprint of the existing wharf and marine terminal. Impacts have been minimized to the maximum extent possible while still accomplishing the purpose of the project. Minimization measures that have been incorporated into the project include the following:

•Debris booms and other appropriate erosion and sediment control measures will be utilized to avoid adverse impacts to the river.

•All proposed work will be located along the southern shore of the river; therefore, a safe zone of passage of approximately 1,000 feet will be available for any sensitive species that may be foraging or migrating in the river during construction.

•In-water pile driving will be completed outside the window of anadromous fish spawning (April through June).

Given that all impacts will occur within the existing footprint of the main wharf, along with the implementation of proposed minimization measures, the proposed project will have a negligible effect on the overall functions and values of the Piscataqua River.

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.

The project area consists entirely of a developed, industrial wharf facility on the Piscataqua River. There will be no removal of vegetation. The proposed deck infill will be accessed from the existing terminal facility. A proposed riprap berm will be placed along the toe of the existing riprap slope that will be located under the deck infill. The intent of the berm is to ensure stability of the existing slope when heavy equipment begin accessing the deck infill from the shore of the terminal.

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: 311.10 (e) For a shoreline structure over inland surface waters that are not vegetated wetlands, in lieu of (a) through(d), ((functional assessment)), the applicant shall submit a statement describing how the project's design meets applicable project-specific rules for the proposed shoreline structure and its proposed location. The functional assessment statement has been included in the wetlands permit application.
NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: CHRISTINE PERRON
DATE OF ASSESSMENT: 1/19/2021
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.

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: Geno Marconi **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?

The proposed project involves the rehabilitation of an existing commercial/industrial docking structure.

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 include approximately 340 square feet from new riprap and 14,000 square feet of shading from the deck infill. The project will take place within the existing footprint of the marine terminal. The site has been an active rail yard and wharf since the late 1800s and has served as the Port of NH since the mid-1960s. This is the state's only deep water, public access, general cargo marine terminal. The Terminal also handles special cargo thus providing a unique service for the region. With a regional economic impact of approximately $275 million in 2012, the Market Street Marine Terminal is a driving economic force for the State of New Hampshire and southern coastal Maine communities. The terminals along the Portsmouth Harbor and the Piscataqua River generate between 150 and 250 inbound commercial vessel transits per year. In addition to commercial activity, the port is critical to emergency response capabilities in Portsmouth Harbor. The facility supports fire, security, and terrorist response drills with local and federal law enforcement.

The proposed work is consistent with the existing purpose and use of the site and there are no other properties available to the applicant that would serve the same purpose without far greater impacts to resources.

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 layout of the proposed deck infill is limited by the existing infrastructure of the wharf, therefore alternative layout designs were not possible. Impacts have been minimized to the maximum extent possible while still accomplishing the purpose of the project. Minimization measures that have been incorporated into the project include the following:

- Debris booms and other appropriate erosion and sediment control measures will be utilized to avoid adverse impacts to the river.
- All proposed work will be located along the southern shore of the river; therefore, a safe zone of passage of approximately 1,000 feet will be available for any sensitive species that may be foraging or migrating in the river during construction.
- In-water pile driving will be completed outside the window of anadromous fish spawning (April through June).

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 river is 1,300 feet wide at the project area and construction activities will be limited to the southern shoreline of the river in an area that is surrounded by the existing wharf structure. The use of debris booms will help contain construction impacts and turbidity. There are no shellfish beds located in the immediate vicinity of the project. Therefore, the production/export and recreation function and values will not be impacted by the proposed project.

Section 5 – Mitigation

MARKET STREET MARINE TERMINAL (PORT OF NH)
BUILD PROJECT
PORTSMOUTH, NH

Mitigation Narrative

The project requires compensatory mitigation for unavoidable permanent impacts to the Piscataqua River associated with the proposed rehabilitation of the main wharf at the Market Street Marine Terminal.

The following information is provided to satisfy requirements for permittee responsible mitigation, as outlined in Chapter Env-Wt 800.

Project Overview

The project will result in 14,340 SF of permanent impacts to the channel of the Piscataqua River, a tidal river with a Cowardin classification of E1UBL. The enclosed application materials provide detailed information on the proposed project and existing conditions and resources.

Mitigation for Unavoidable Impacts

Impacts to jurisdictional areas have been avoided and minimized to the extent practicable while still accomplishing the purpose and need of the project.

The project is funded by a BUILD grant from the US Department of Transportation, with federal oversight by the Maritime Administration (MARAD). In an effort to keep the proposed rehabilitation work more clearly divided from other ongoing projects at the Port, namely the FHWA-funded functional replacement project, MARAD has placed strict limitations on what the grant funding can be used for and has stated that there cannot be any overlap in the two funding sources. This has been interpreted to apply to permitting and mitigation. Since there is already agreement between NHDOT, FHWA, and the regulatory agencies to provide funding toward the Cutts Cove Living Shoreline as mitigation for impacts associated with the upcoming functional replacement project, it has been decided that it would not be appropriate or allowed to include Cutts Cove as mitigation for the BUILD project.

Therefore, payment to the Aquatic Resource Mitigation (ARM) Fund is proposed. Based on the NHDES ARM Fund 2021 Wetland Payment Calculator, the ARM Fund payment will be as follows:

14,000 sq ft of channel impact from deck infill: $166,585.57

241 linear feet of channel impact from riprap berm: $71,987.77

Total ARM Fund payment: $238,573.34

PERMITTEE RESPONSIBLE MITIGATION PROJECT WORKSHEET

Water Division/Land Resources Management
Wetlands Bureau

Check the Status of your Application

RSA/Rule: 482-A: / Env-Wt 800

SECTION 1. PROPOSED PERMITTEE RESPONSIBLE MITIGATION PROJECT TYPE		
UPLAND BUFFER PRESERVATION: ☐ AQUATIC RESOURCE RESTORATION: ☐ MITIGATION PAYMENT: ☒		
SECTION 2. PROPOSED MITIGATION PROJECT LOCATION INFORMATION (if applicable)		
STREET/ROAD:	TOWN/CITY:	TAX MAP/LOT #:
SECTION 3. APPLICANT INFORMATION		
APPLICANT NAME: Geno Marconi, NH Division of Ports and Harbors		
APPLICANT MAILING ADDRESS: 555 Market Street		
CONTACT INDIVIDUAL: Geno Marconi		
DAYTIME TELEPHONE: 436-8500	EMAIL (IF ANY): g.marconi@peasedev.org	
SECTION 4. RESOURCE WORKSHEET SUMMARY		
AQUATIC RESOURCES INVOLVED IN PROJECT: See Table Below.		
TOTAL PRESERVATION PROPOSED: Upland: Acres Wetland: Acres		
TOTAL LENGTH OF STREAM ON PROPERTY: Linear Feet % having 100-ft wooded zone: in direction % upland: in direction		
# CONFIRMED VERNAL POOLS:	# POTENTIAL VERNAL POOLS:	
AREA OF WETLAND RESTORATION PROPOSED: acres	AREA OF WETLAND CREATION PROPOSED: acres	
AREA OF WETLAND ENHANCEMENT PROPOSED: acres	AREA OF UPLAND ENHANCEMENT PROPOSED: acres	
SECTION 5. BRIEF NARRATIVE DESCRIBING PROPOSED PERMITTEE RESPONSIBLE MITIGATION		
Mitigation is proposed via an in-lieu fee payment		
SECTION 6. SIGNATURE AND CERTIFICATION		
- I hereby certify that: ▪ The information contained in or otherwise submitted with this application is true, complete, and not misleading to the best of my knowledge and belief; ▪ **I understand that:** - Submitting false, incomplete, or misleading information is grounds for denying the application or revoking any award of ARM Funds that is made based on such information; and - I am subject to the penalties for making unsworn false statements specified RSA 641:3 or any successor New Hampshire statute.		
SIGNATURE: Christine Perron	**DATE:** 9 / 3 / 21	

Lori.Sommer@des.nh.gov or (603) 271-4059
NHDES Wetlands Bureau, Concord, NH 03303-0095
www.des.nh.gov

Summary of Aquatic Resource(s) Involved in Project

The following information is required to be provided about the aquatic resources found on the proposed impact site and the mitigation site. New Hampshire RSA 482-A:3 requires a wetland permit for any proposed project that involves dredging and filling wetlands or impacts to the bed or bank surface waters such as rivers and streams. Before NHDES will issue a permit, applicants must demonstrate that their project proposal will avoid adverse impacts to aquatic resources and will minimize and mitigate those impacts that are unavoidable. When impacts to aquatic resources are unavoidable, applicants must identify the wetland and stream(s) resource types that will be lost during the development of the project. Identifying the functions and values of the aquatic resource that will be lost at the project site better ensures that they can be recreated and transferred to the proposed mitigation site. Please use the table formats provided below to document all aquatic resources types on the impact site and the mitigation site. A separate table should be prepared for each site. *Additional rows may be required for projects proposing impacts to multiple resource types.*

Wetland Resources: Wetlands shall be classified by US Fish and Wildlife Service Manual WS/OBS-79/31 Classification of Wetlands and Deepwater Habitats of the United States, Cowardin et al, 1979, reprinted 1992.

Stream Resources: For permittee responsible mitigation projects to restore or improve stream systems, the streams on the project site shall be reviewed and the following information collected to the best extent possible:

Stream order according to New Hampshire Hydrography Dataset (NHHD)	Geomorphology including degradation
Rosgen stream type	Position within the surrounding landscape
Impacts to upstream and downstream flooding	Connectivity improvement for aquatic organism passage
Stream bed materials	Fisheries presence
Sediment Transport capacity	Characterization of the adjacent buffers in terms of vegetative coverage
Channel form	Floodplain connectivity

These general principals are described within the New Hampshire Stream Crossing Guidelines, University of New Hampshire, May 2009.

Wetland Functions & Values: A wetland evaluation is the process of determining the values of a wetland based on an assessment of the functions it performs. The evaluation of wetland functions and values should be determined through use of the *Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire*, 2015 edition (2015 NH Method) –*OR*– U.S. Army Corps of Engineers (USACE) New England District *Highway Methodology Workbook Supplement*, 1999 edition (1999 US ACE Highway Workbook Supplement). The evaluation should focus on the following:

Ecological Integrity (EI), Wetland-Dependent Wildlife Habitat (WH), Fish and Aquatic Habitat (FH), Scenic Quality (SQ), Educational Potential (EP), Wetland-based Recreation (WR), Flood Storage (FS), Groundwater (GW), Sediment Trapping (ST), Nutrient Trapping/Retention/Transformation (NT), Shoreline Anchoring (SA), Noteworthiness (NW).

Secondary Impacts: The USACE federal mitigation guidance should be consulted if the project involves conversion of forested wetlands to scrub-shrub or emergent wetlands, cutting of riparian buffer and impacts within the buffer to vernal pools.

WETLAND/STREAM RESOURCE SUMMARY

Wetland ID or Stream Number	**Cowardin Wetland Class** (list all that apply) **or Stream Type**	**Principal Functions & Values**	**Project Impacts**						**Vernal Pool Present? ID or Number**	**Other Comments**
			Permanent Wetland (sq.ft.)	**Permanent Stream Bank** (lin.ft.)			**Temporary** (sq.ft.)	**Secondary** (sq.ft.)		
				Bank Left	Bank Right	Channel				
1	E1UBL	floodflow alteration, ~~fish/shellfish habitat,~~ wildlife habitat, recreation	14,300			241				Piscataqua River

MITIGATION RESOURCE SUMMARY

Wetland ID or Stream Number	**Cowardin Wetland Class** (list all that apply) **or Stream Type**	**Principal Functions & Values**	**Wetland/Stream Resources**			**Vernal Pool Present? ID or Number**	**Other Comments**
			Area of Wetland (sq.ft. or acres)	**Streams** (lin.ft.)			
				Length on Property	% having 100 foot wooded zone		

53 Regional Drive
Concord, NH 03313

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

McFARLAND JOHNSON
Established 1946

MEETING NOTES

PROJECT: Port of NH Main Wharf Rehabilitation **DATE OF MEETING**: July 28, 2021

LOCATION: Virtual - Microsoft Teams

SUBJECT: Pre-Application Meeting

ATTENDEES

Project Team:
Geno Marconi, Pease Development Authority (PDA)
Brenda Therrien, PDA
Noah Elwood, Appledore Marine Engineering (AME)
Eric Levesque, AME
Vanessa Swasey, AME
Christine Perron, McFarland Johnson (MJ)

Agencies:
Stefanie Giallongo, Wetlands Permitting Specialist, NHDES Wetlands Bureau
David Price, Regional Supervisor, NHDES Wetlands Bureau
Lori Sommer, Wetland Mitigation Coordinator, NHDES Wetlands Bureau
Mike Hansen, Civil Engineer, Alteration of Terrain Program, NHDES
Jean Brochi, USEPA Region 1
Lindsey Lefebvre, Project Manager, USACE
Mike Johnson, National Marine Fisheries Service (NMFS)
Mike Dionne, Marine Fisheries Biologist, NH Fish & Game (NHFG)
Cheri Patterson, Chief, Marine Fisheries Division, NHFG

NOTES ON MEETING

Christine Perron introduced the project, which involves the rehabilitation of the main wharf at the NH Port Authority Market Street Marine Terminal (herein referred to as the Port). The Port is located on the Piscataqua River in Portsmouth, adjacent to the recently replaced Sarah Mildred Long Bridge. Aerial images were reviewed to show the location of the main wharf and other resources at the Port, as well as the former and current Sarah Mildred Long bridge alignment.

Geno Marconi, PDA Director of Ports and Harbors, provided background on the condition of the Port and need for the proposed project. The main wharf is in overall Poor condition due to continued degradation of the 1964 and 1977 vintage structures that comprise the wharf. The northern access bridge of the main wharf failed in 2011 due to deterioration and corrosion of internal reinforcing steel within the bridge planks. The PDA was awarded a federal BUILD grant in 2019 to complete the rehabilitation. The Market Street Marine Terminal is the state's only deep water, public access, general cargo marine terminal. The Terminal also handles special cargo thus providing a unique service for the region. In addition to

commercial activity, the port is critical to emergency response capabilities in Portsmouth Harbor. The facility supports fire, security, and terrorist response drills with local and federal law enforcement.

The rehabilitation of the main wharf consists of the following components:

- Replace failed approach bridge
- Construct a 14,000 sf concrete deck over the open area of the Wharf
- Repair deteriorated caissons and concrete superstructure elements.
- Grading and drainage work associated with matching into the shore

The deck infill will provide a larger area for material lay down and assembly. The rehabilitated wharf will result in an increased loading capacity as well, which will allow larger cranes and vehicles to operate at the site. Overall, these improvements will result in a more efficient and operational marine facility.

The proposed grading and drainage work consists of regrading the area between the salt storage area and open area in the deck. Drainage from this area is currently being conveyed to an existing closed drainage system and will continue to be conveyed to the same closed drainage system in the final condition. A catch basin is proposed at the new low point and will connect to the existing closed drainage system that is treated by a Downstream Defender hydrodynamic vortex separator unit at the north end of the wharf before outletting into the Piscataqua River. Stormwater runoff from the existing wharf flows off the deck into the river. Runoff from the proposed 14,000 sf concrete deck infill will also flow directly into the river. The elevation of the existing wharf is ~14', the infill will have an elevation of ~15', and the elevation along the shore is ~16', so it is not possible to drain water from the existing wharf or proposed wharf infill into existing treatment systems on shore without substantial excavation in contaminated soils. Any excavations required in contaminated soils at the site result in a substantial increase in cost for handling and disposal. Additionally, existing contamination and the industrial use of this site make it unsuitable infiltration.

The Functional Replacement project is a separate project planned at the Port that has been discussed with the regulatory agencies. That project involves extending the main wharf to replace the lost functionality of the barge wharf and is an entirely separate project that is funded by the Federal Highway Administration due to impacts to the barge wharf from the Sarah Mildred Long bridge project. The two projects have independent utility, have separate funding sources, and are on different schedules. With only 19,000 SF of terrain alteration, the main wharf rehab project doesn't trigger Alteration of Terrain (AOT) but when this project was discussed with DES in November 2020, it was decided that the project should be considered part of a larger plan of development (defined in Env-Wq 1502.39), in part because the projects were happening concurrently. That is no longer the case because the timing of the funding for the functional replacement is now uncertain, and we don't know when the project will be permitted and constructed.

Christine asked Mike Hansen for his thoughts on the need for an AOT permit for the rehab project. Mike replied that he would look into it. Subsequent to the meeting, Mike noted that a 2012 permit was obtained for 75,000 SF of terrain alteration at the Port. Since the rehab project would be constructed within 10 years of that permit, the cumulative area of terrain alteration needs to be considered, so the rehab project does require an AOT permit.

Proposed in-water work was reviewed. The proposed deck infill will be 14,000 SF of impact from shading. The infill will consist of concrete filled steel pipe piles with a reinforced concrete deck structure. Sockets will be drilled into bedrock for the pile installation. Up to 62 40-inch diameter steel piles will be installed in the drilled holes, which will then be filled with concrete. The estimated area of direct impacts from the socketed piles is approximately 540 square feet, although the number of piles is being refined and will likely be lower.

A portion of the slope along the deck infill is existing riprap. It has been determined that additional riprap is needed under the existing wharf where there is currently no riprap in order to provide increased stability of

this slope under heavy loads at the edge of the wharf and eliminate the need for a costly steel bulkhead along the shoreline at the infill. This additional riprap will be a berm approximately 5' high, located at the toe of the existing slope along approximately 260 feet. The slope of the berm would extend approximately 15' under the existing wharf. This will result in approximately 3900 sq ft of new impact, although that number is still preliminary and may be refined. Impacts at this time total 17,900 SF. This equates to an in-lieu fee of approx. $213,000.

Mike Johnson asked if reduced mitigation would be requested for the deck infill since there would still be habitat present below the deck. Christine said that this has not been discussed but she would look into it.

Lori Sommer noted that the linear feet of impacts from the proposed riprap (parallel to the shoreline) should be used to calculate the in-lieu fee instead of the square feet of impact. Lindsey Lefebvre agreed with this approach.

Factors related to turbidity were reviewed. This site sees 3-4 kt currents every 6 hours and during full moon periods the currents are even higher. Substrate is primarily hard substrate due to high velocities. The river in this area is approximately 1600' wide. With the high currents, the turbidity curtain would essentially act as a dam and get ripped out daily. A cofferdam would result in a substantial increase in cost and construction time. Based on these factors and because there is minimal risk for large amounts of turbidity from the project, a floating debris boom is proposed. This approach is consistent with what was proposed for the recently permitted Sarah Mildred Long cable project.

The NEPA process was completed with the Maritime Administration as the lead federal agency. Section 7 consultation under the Endangered Species Act was completed using the Army Corps Not Likely to Adversely Affect programmatic consultation. An Essential Fish Habitat Assessment was completed. Section 106 consultation was also completed with no historic properties within the project area.

Lindsey asked for more information on the Section 7 consultation. Christine agreed to send her additional information following the meeting.

Avoidance and minimization measures related to fisheries were reviewed. In-water work will be completed at low tide whenever possible. Debris booms will be utilized to minimize impacts and contain construction impacts. Socketed piles reduce underwater noise impacts below impact thresholds. The Port is located along one shoreline of the river and a substantial zone of passage will remain throughout the duration of construction. The total duration of construction is anticipated to be approximately 18 months. No time of year restrictions for in-water work were requested from NOAA. It was later clarified that the measure to complete work at low tide whenever possible was only pertinent to the sheet pile bulkhead that has since been removed from the project.

The NH Natural Heritage Bureau (NHB) reviewed the proposed project and identified eelgrass beds in the vicinity of the project. However, the nearest eelgrass bed is located approximately 4,400 feet downstream of the project area, along the north side of Pierce Island, and the NHB determined that there are no concerns regarding potential impacts to eelgrass beds from the proposed project.

Cheri Patterson asked for clarification on the duration of in-water work and if the pile installation and riprap could be done outside the window of anadromous fish spawning (April-June). Eric Levesque and Noah Elwood replied that pile installation would be 3 to 4 months and riprap placement would be 1 to 2 months. The anticipated start date is early 2022, at which time the Contractor would need to mobilize and order materials so a more exact start date is unknown.

The site is shallow to bedrock. The piles will be driven to bedrock via a vibratory hammer or impact hammer if required. The soil within the steel pipe piles will then be remove via an auger or clean out bucket and stored upland. A rock drill will then be inserted into the pipe pile, advanced to bedrock and a core drilled for the steel pipe socket. Next the steel pipe socket will be placed and grouted. A concrete fill is then placed inside the steel pipe pile. The duration of the actual pile driving activity will likely be approximately 20 to 30 days.

Cheri noted that the drilling wasn't a concern but the impact or vibratory driving was. Mike Johnson said that a vibratory hammer is preferred but it doesn't necessarily reduce noise to below the behavioral impact threshold.

David Price noted that DES also supports a time of year restriction, with no pile driving between April and June.

Christine asked if there was any flexibility in the time of year restriction. Cheri noted that fish start coming up the river in April. Below normal temperatures can sometimes delay this, but that would require evaluating conditions 'on the fly.' She noted that scare tactics are generally only recommended for migrating fish to get the fish to use another part of the river to migrate up or downstream. She asked if bubble curtains could be used to reduce noise. There was some discussion about the effectiveness of bubble curtains in high velocity currents, with some available information indicating that their effectiveness diminishes as current velocity increases.

Mike Johnson noted that he did not know that impact driving would be utilized when he reviewed the EFH Assessment. After hearing the current description of pile installation, he now concurs with NHFG and recommends a time of year restriction for pile driving. Lindsey commented that Section 7 consultation may need to be revisited if any methodology has changed.

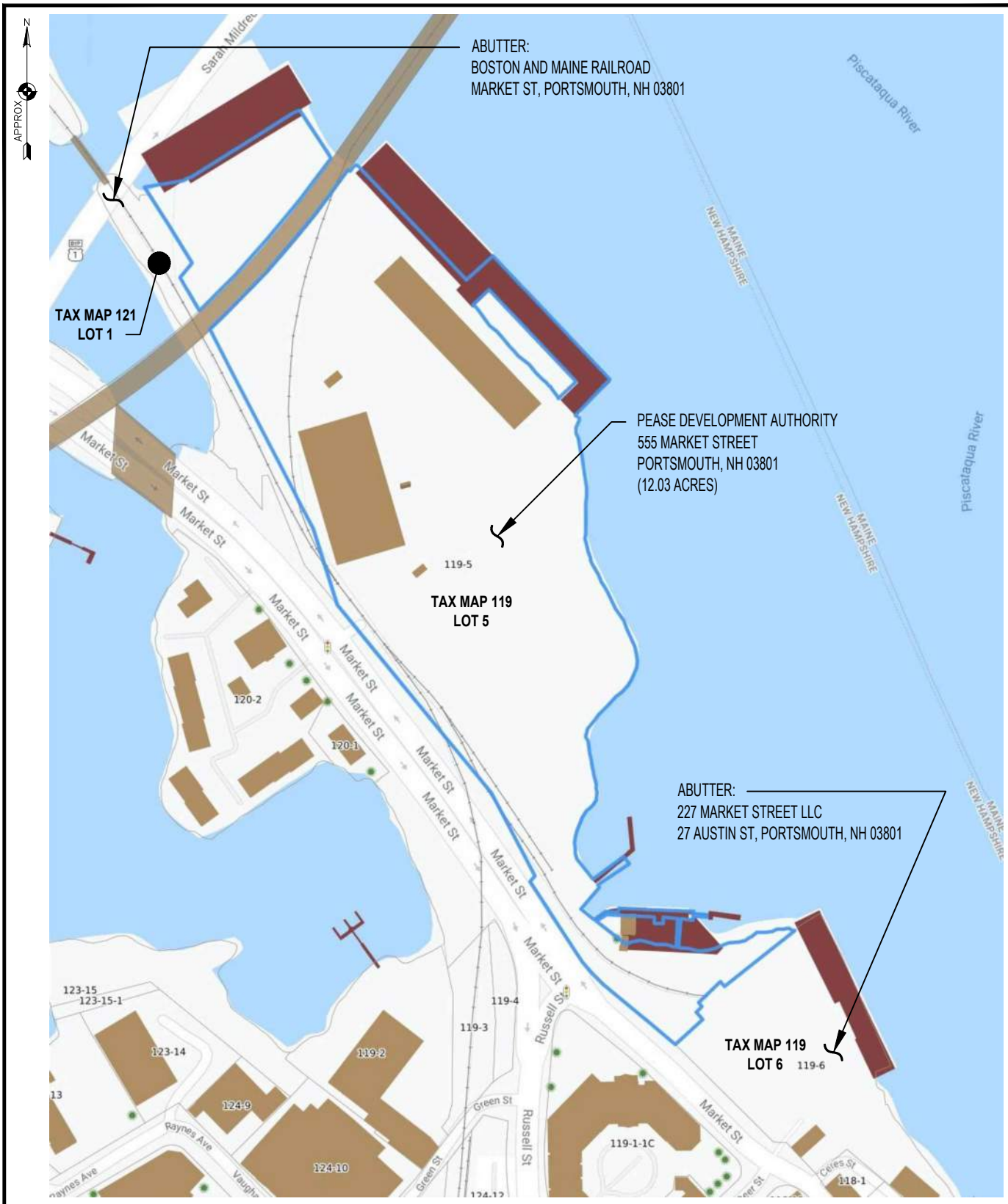
Christine noted that the project team would review the time of year restriction and potential minimization measures and address these concerns in the permit application.

Riprap installation was discussed. Riprap would be placed after the piles are installed, with periodic disturbance from that activity occurring over 1 to 2 months. The riprap will be large material located in 25 feet of water and would be installed in all tides by placing with a clamshell rather than simply dumped. Cheri asked if the riprap would be clean (rinsed) material. David noted that DES would expect clean material to be placed. He also said that the permit application would need to include a detailed construction sequence that includes a description of how the riprap will be placed. Cheri stated that she would be less concerned about the time of year of riprap placement if it is clean material that is strategically placed rather than dumped. Mike Johnson stated that if the material is cleaned, he would not require scare tactics to drive fish away from the area.

Wetland mitigation was discussed. Lori Sommer asked if it would be possible fund the Cutt's Cove living shoreline project instead of paying an in-lieu fee. Christine noted the Cutt's Cove funding was discussed as part of the functional replacement project and the timing of incorporating that funding into the rehab project may be an issue. Geno stated that MARAD made it clear that the rehab project and functional replacement project could not 'mingle' in any way.

Lindsey commented that she would coordinate with the Army Corps navigation branch to determine if Section 408 approval would be required. Noah clarified that the proposed in water work would be entirely behind the existing wharf and no work was proposed in or near the navigational channel.

Section 6 – Property Information



REFERENCE:
GOOGLE AppGEO 2021

NOTE:
PROPERTY DATA UPDATED 7/17/2019

GRAPHIC SCALE	DATE		
0 250' 500'	AUGUST 2021	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS MARKET STREET MARINE TERMINAL PORTSMOUTH, NH **MAIN WHARF REHABILITATION** **TAX MAP**

FIG. NO. 2

1871 036

DEED OF WARRANTY

09778

Aug 4 10 03 AM '67

THAT, WE, JOSEPH GERACI AND ANGELINA GERACI, Both

of Portsmouth, Rockingham County, State of New Hampshire, for consideration paid, grant to The State of New Hampshire, with WARRANTY covenants,

A certain lot of land with buildings thereon in the City of Portsmouth, County of Rockingham, The State of New Hampshire, located on Nobles Island so-called, bounded and described as follows:

Northerly by land now or formerly of DOROTHY PHILBRICK sixty-five (65') feet, more or less, Easterly by Market Street forty-six (46') feet, more or less, Southerly by land now or formerly of the STANDARD OIL COMPANY OF NEW YORK seventy-one and seven tenths (71.7') feet, more or less, and Westerly by the Piscataqua River thirty-four and six tenths (34.6') feet, more or less.

Meaning and intending to convey the same parcel of land as deeded by NELLIE E. TREFETHEN etals to the GRANTORS by Warranty Deed of June 22, 1 9 4 6, and recorded in the Rockingham County Registry of Deeds Book 1058, Page 107.

Buildings to be vacated on or before November 1, 1 9 6 7.

1 9 6 7 taxes to be pro-rated as of November 1, 1 9 6 7.

The undersigned, PISCATAQUA SAVINGS BANK hereby releases and discharges a certain mortgage of JOSEPH AND ANGELINA GERACI to PISCATAQUA SAVINGS BANK, recorded in the Rockingham County Registry of Deeds, Book 1609, Page 350 so far as said mortgage pertains to the above-described premises and no further.

PISCATAQUA SAVINGS BANK

By: Assistant Treasurer

Title: Treasurer Cashier

Date: August 1 1967

AND the Grantors do hereby convey to The State of New Hampshire the right to extend and maintain such slopes and embankments beyond the limits of the land hereby conveyed as may be necessary to construct slopes and embankments at such an angle as will hold the material of said slope in repose against ordinary erosion: together with the right to construct and maintain on other land of the Grantor pipes or ditches incidental to the construction.

We, Joseph and Angelina Geraci, wife& (husband), release to the said Grantee all rights of dower& (curtesy) and Homestead and other interests therein.

WITNESS our hands and seals this 1st day of August A. D., 1967.

WITNESS:

Joseph Geraci

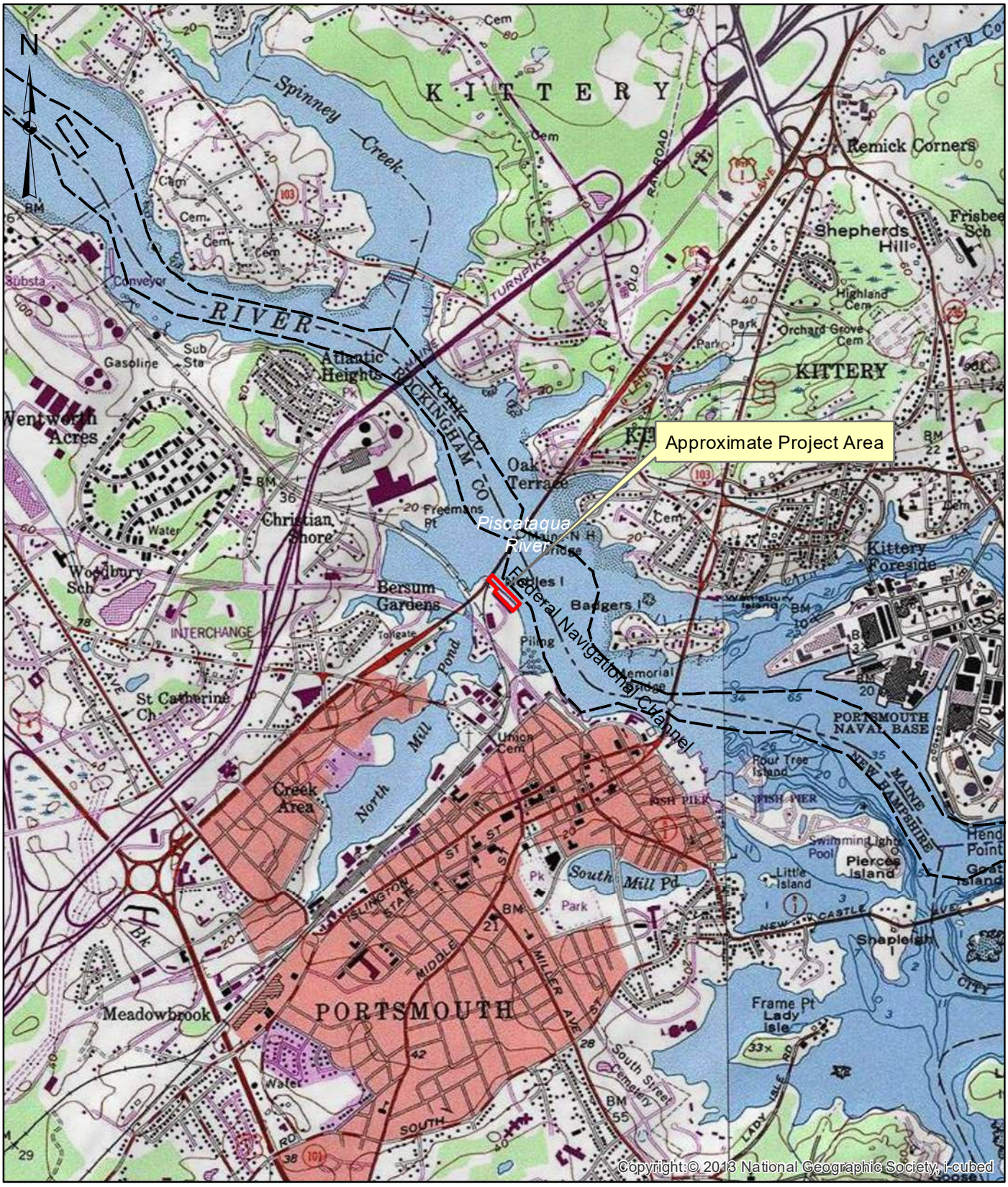
Charles G. Burke

Angelina Geraci

STATE OF NEW HAMPSHIRE

County of ROCKINGHAM

Section 7 – Maps and Photographs



0 2,000 4,000

Feet

PEASE DEVELOPMENT AUTHORITY

MAIN PIER REHABILITATION

LOCATION MAP

SCALE :	DATE :	FIGURE :
AS SHOWN	JANUARY 2021	1

McFarland Johnson

J:\18395.02 Appledore BUILD Permitting\Draw\GIS\Location.mxd

Photo 1. Overall Site - Looking South

Photo 2. Overall Site - Looking Southeast

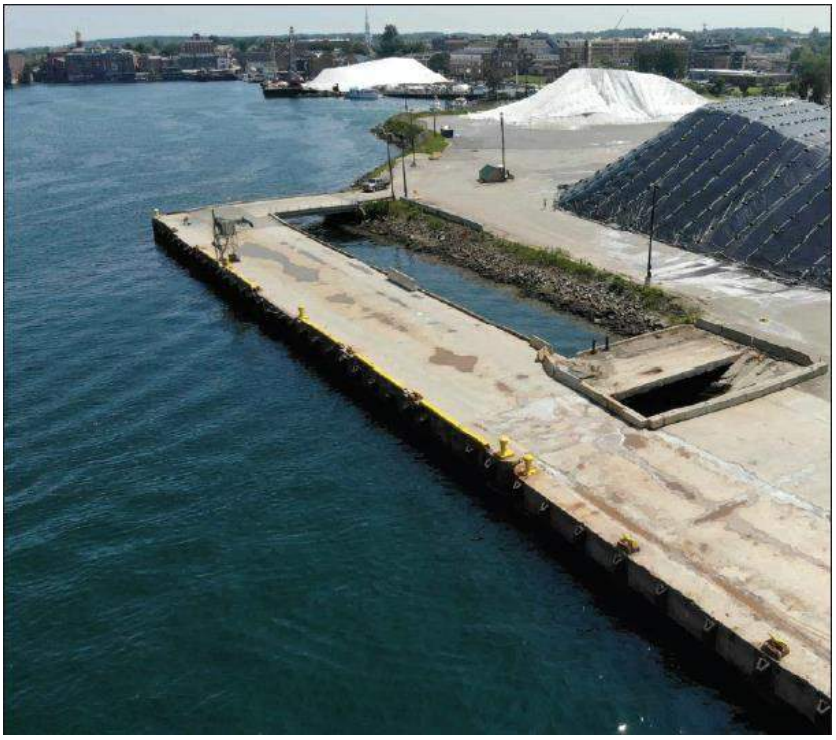


Photo 3. Main Wharf (1964 Vintage) – Looking Southeast

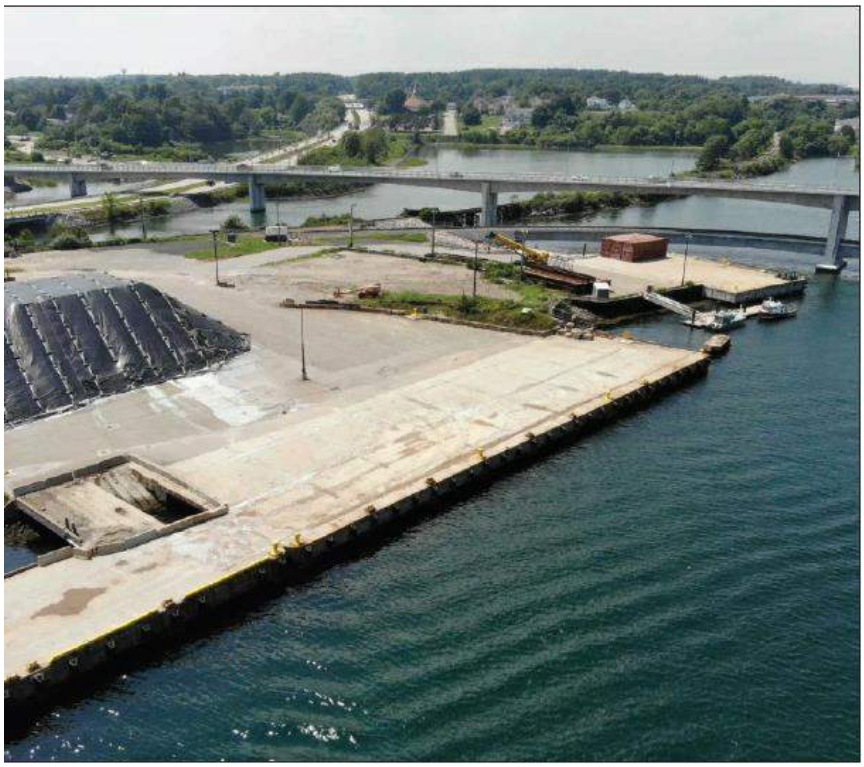


Photo 4. Main Wharf (1977 Vintage) – Looking West

Photographs Courtesy of Appledore Marine Engineering, LLC

Section 8 – Agency Correspondence

CONFIDENTIAL – NH Dept. of Environmental Services review

Memo

NH Natural Heritage Bureau
NHB Datacheck Results Letter

To: Jordan Tate, McFarland Johnson
5 Depot Street
Suite 25
Freeport, ME 04032

From: Amy Lamb, NH Natural Heritage Bureau
Date: 1/7/2021 (valid until 01/07/2022)
Re: Review by NH Natural Heritage Bureau
Permits: NHDES - Other Permit, NHDES - Wetlands Permit, NHDOT - Unknown - NH DOT

NHB ID: NHB20-3736 Town: Portsmouth Location: Tax Maps: 0119-0005-0000
Description: The Pease Development Authority Division of Ports and Harbors (PDA-DPH) is proposing to rehabilitate the main wharf at the Market Street Terminal through a US Department of Transportation Better Utilizing Investments to Leverage Development (BUILD) grant. The rehabilitation will include the following:
? Repairing deteriorated caissons and concrete superstructure elements of existing wharf
? Resurfacing concrete deck of existing wharf
? Recoating portions of the steel sheet bulkhead
? New decking over the open water area between the main wharf and the shore
? Replacing the collapsed bridge adjacent to the open water area
? Miscellaneous top of deck repairs

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: Contact NHB if there will be impacts to eelgrass beds (e.g., from anchoring barges to complete the work).
F&G: Contact Kim Tuttle (cc'd) to address wildlife concerns.

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

Vertebrate species	**State[1]**	**Federal**	**Notes**

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

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).
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, NH F&G, (603) 271-6544.

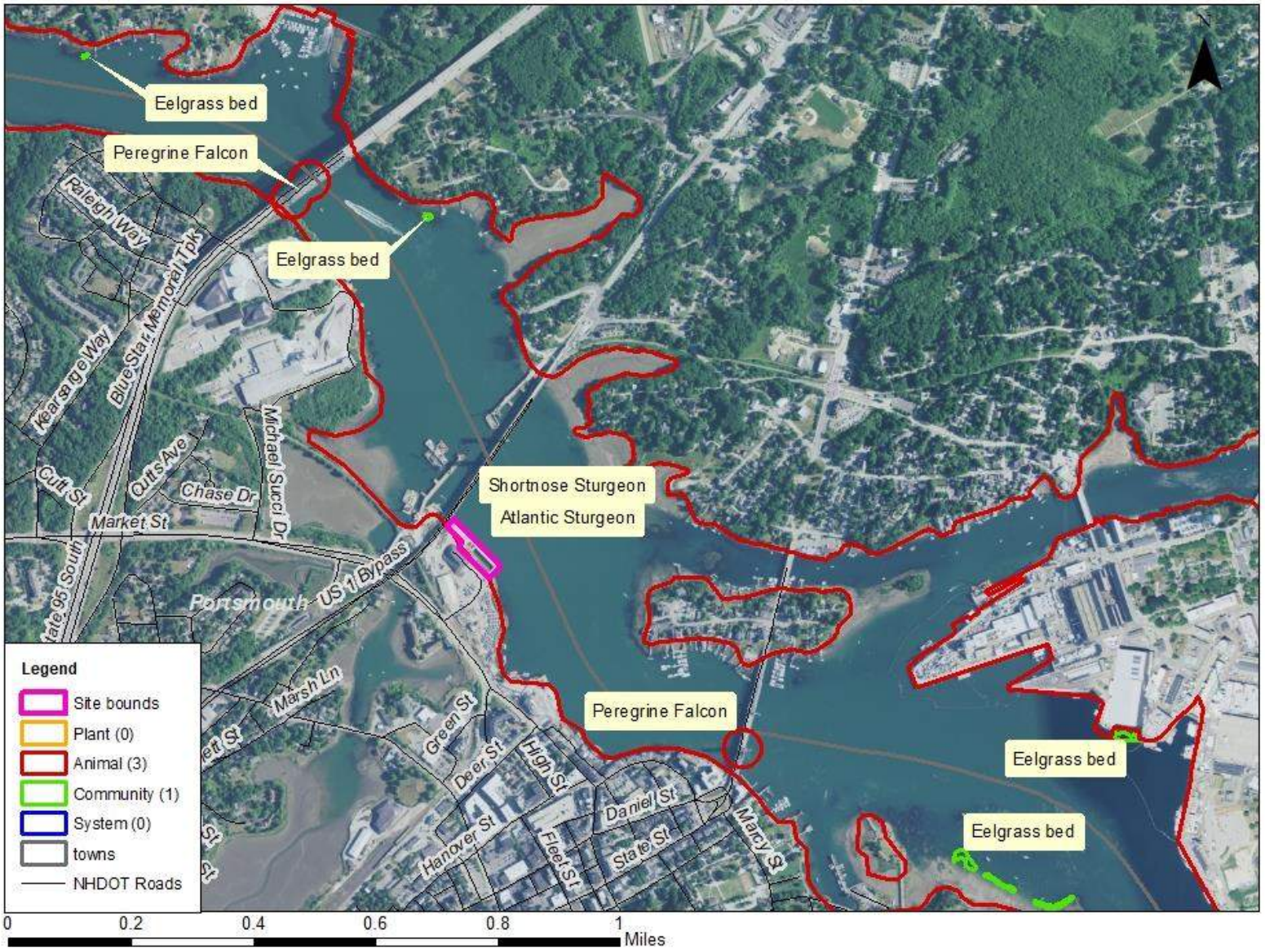
A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed 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

NHB20-3736



Christine J. Perron

From: Bouchard, Jessica <Jessica.R.Bouchard@dncr.nh.gov>
Sent: Friday, July 16, 2021 10:53 AM
To: Christine J. Perron
Subject: RE: Pre-application meeting for the Port of NH Wharf Rehab (BUILD) project

Hi Christine,

Thank you for the information. In looking at the NH Coastal Viewer and associated metadata for the eelgrass bed layer, the most recent eelgrass bed survey was performed in 2019, with methods described. Given the previous survey history you provided, including the recent 2019 survey, NHB has no concerns regarding potential impacts to eelgrass beds for the proposed project.

Thank you,

Jessica Bouchard
Environmental Reviewer / Ecological Information Specialist
New Hampshire Natural Heritage Bureau (NHB)
Division of Forests & Lands
NH Dept. of Natural & Cultural Resources
172 Pembroke Rd
Concord, NH 03301
(603) 271-2834 (office)

NHB DataCheck Tool

From: Christine J. Perron <CPerron@mjinc.com>
Sent: Monday, July 12, 2021 12:15 PM
To: Bouchard, Jessica <Jessica.R.Bouchard@dncr.nh.gov>
Subject: RE: Pre-application meeting for the Port of NH Wharf Rehab (BUILD) project

I had not yet corresponded with Amy about the project because she raised no concerns with eelgrass when I coordinated with her on another project at the Port of NH. The proposed project will not involve dredging. There may need to be a work barge anchored along the wharf.

Here is eelgrass information that I provided for the other port project:

According to the NH Coastal Viewer (2019) eelgrass mapping, eelgrass has occurred in the vicinity of the project area in the past (mapped in 1996), with historic eelgrass beds located approximately 400 feet northwest of the wharf and approximately 1,200 feet to the northeast. However, as part of the SML Bridge replacement project, eelgrass surveys were performed on July 17, 2013 by MaineDOT dive crews in the vicinity of the proposed bridge, located immediately upstream of the project 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 in the area of the proposed dredge. This survey found sporadic eelgrass shoots but no collections of plants forming any beds. The 2017 eelgrass mapping does not show any eelgrass beds in or near the project area. Based on the 2017 mapping, the nearest eelgrass bed is located approximately 4,400 feet downstream of the project area, along the north side of Pierce Island.

From: Bouchard, Jessica <Jessica.R.Bouchard@dncr.nh.gov>
Sent: Monday, July 12, 2021 11:16 AM
To: Christine J. Perron <CPerron@mjinc.com>
Subject: RE: Pre-application meeting for the Port of NH Wharf Rehab (BUILD) project

Hi Christine,

Thank you. Have the NHB comments been addressed, i.e. was there previous correspondence between Amy Lamb and a project consultant?

Eelgrass beds do not appear to be reported in the project area, however it is possible that eelgrass beds may be present but have not been surveyed or reported.

Will the project require any work that would disturb eelgrass beds, such as the use of anchoring barges, or dredging?

Thank you,

Jessica Bouchard
Environmental Reviewer / Ecological Information Specialist
New Hampshire Natural Heritage Bureau (NHB)
Division of Forests & Lands
NH Dept. of Natural & Cultural Resources
172 Pembroke Rd
Concord, NH 03301
(603) 271-2834 (office)

NHB DataCheck Tool

From: Christine J. Perron <CPerron@mjinc.com>
Sent: Monday, July 12, 2021 10:53 AM
To: Bouchard, Jessica <Jessica.R.Bouchard@dncr.nh.gov>
Subject: RE: Pre-application meeting for the Port of NH Wharf Rehab (BUILD) project

Hi Jessica,

You're in luck - I'm the correct contact. The NHB # is 20-3736.

Let me know if you need any additional info to determine if you should attend the pre-app meeting.

Christine

McFarland Johnson
Christine J. Perron, CWS | Senior Environmental Analyst
603-225-2978
Visit our website to see how MJ employee owners are innovating to improve our world.

From: Bouchard, Jessica <Jessica.R.Bouchard@dncr.nh.gov>
Sent: Monday, July 12, 2021 10:03 AM
To: Christine J. Perron <CPerron@mjinc.com>
Subject: FW: Pre-application meeting for the Port of NH Wharf Rehab (BUILD) project

Hi Christine,

I'm hoping you are the correct contact. NHDES invites NHB (and NHF&G) to all mitigation pre-application meetings however we only need to attend if the NHB DataCheck Letter indicates that listed species are within the project vicinity. Can you provide the NHB DataCheck ID# for this project so NHB can determine if we should attend the meeting?

Thank you,

Jessica Bouchard
Environmental Reviewer / Ecological Information Specialist
New Hampshire Natural Heritage Bureau (NHB)
Division of Forests & Lands
NH Dept. of Natural & Cultural Resources
172 Pembroke Rd
Concord, NH 03301
(603) 271-2834 (office)

NHB DataCheck Tool

From: Guerdet, Carolyn <CAROLYN.C.GUERDET@des.nh.gov>
Sent: Friday, July 9, 2021 2:07 PM
To: Sommer, Lori <LORI.L.SOMMER@des.nh.gov>; Giallongo, Stefanie <Stefanie.M.Giallongo@des.nh.gov>; Price, David <DAVID.A.PRICE@des.nh.gov>; Tilton, Mary Ann <mary.a.tilton@des.nh.gov>; Schlosser, Michael <Michael.J.Schlosser@des.nh.gov>; Lamb, Amy <Amy.E.Lamb@dncr.nh.gov>; Bouchard, Jessica <Jessica.R.Bouchard@dncr.nh.gov>; lindsey.e.lefebvre@usace.army.mil; Brochi.Jean@epa.gov; Patterson, Cheri <Cheri.A.Patterson@wildlife.nh.gov>; Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>; mike.r.johnson@noaa.gov; Christine J. Perron <CPerron@mjinc.com>; nelwood@appledoremarine.com; elevesque@appledoremarine.com; vswasey@appledoremarine.com
Subject: Pre-application meeting for the Port of NH Wharf Rehab (BUILD) project

Hello All,
A pre-application meeting has been requested for the rehabilitation of the Port of NH Wharf. Please use the Doodle poll link below to indicate what dates/times will work for you to meet via Microsoft Teams. When a majority has been reached for a date/time, an Outlook invitation will be sent.
https://doodle.com/poll/75giis34fyx5kcui?utm_source=poll&utm_medium=link

NOAA FISHERIES
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
Greater Atlantic Region

US Army Corps of Engineers ®

GARFO ESA Section 7: 2017 NLAA Program Verification Form

(Please submit a signed version of this form, together with any project plans, maps, supporting analyses, etc., to nmfs.gar.esa.section7@noaa.gov with "2017 NLAA Program" in the subject line)

Section 1: General Project Details

Application Number:	NAE-2009-00088
Applicant(s):	Pease Development Authority
Permit Type (e.g. NWP, LOP, RGP, IP, Permit Modification):	General Permit
Anticipated project start date (e.g., 9/1/2017)	01/01/2020
Anticipated project end date (e.g., 3/14/2018 – if there is no permit expiration date, write "N/A")	07/30/2021

Project Type/Category (check all that apply to entire action):

☐	Aquaculture (shellfish) and artificial reef creation	☐	Transportation and development (e.g., culvert construction, bridge repair)
☐	Routine maintenance dredging and disposal/beach nourishment	☐	Mitigation (fish/wildlife enhancement or restoration)
☑	Piers, ramps, floats, and other structures	☐	Bank stabilization and dam maintenance
☐	If other, describe project type/category:		

Project/Action Description and Purpose (*include town/city/state and water body where project is occurring; relevant permit conditions that aren't captured elsewhere on form*):

The Pease Development Authority (PDA) Division of Ports and Harbors (DPH) and the Maritime Administration (MARAD) are proposing the rehabilitation of the main wharf at the Market Street Marine Terminal on the Piscataqua River in Portsmouth, New Hampshire.

This project will consist of the following components:
• Replacement of failed approach bridge
• Construction of deck (infill) over the open area between the wharf and shore between the two existing bridges

Type of Habitat Modified (e.g., sand, cobble, silt/mud/clay):	Area (acres):
Gravel, sand, riprap	0.40
Project Latitude (e.g., 42.625884)	43.083623
Project Longitude (e.g., -70.646114)	-70.760979

Section 2: ESA-listed species and/or critical habitat in the action area:

☑	Atlantic sturgeon (all DPSs) If not all DPSs, list which here:	☐	Kemp's ridley sea turtle
☑	Atlantic sturgeon critical habitat (proposed or designated) Indicate which DPS (GOM, NYB, Chesapeake Bay DPSs): GOM	☐	Loggerhead sea turtle (NW 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 (N. Atlantic DPS)	☐	Fin whale

Section 3: NLAA Determination (check all applicable fields):

a) GENERAL PDC	
☑	Yes, my project meets all of the General PDC.
☐	No, my project does not meet all the General PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):
	Information for PDC 8 (if "max extent of stressor" exceeds "width of water body", PDC 8 is NOT met, and a justification in Section 4 is required to proceed with the verification form)

	Width (m) of water body in action area:	Stressor Category (stressor that extends furthest distance into water body – e.g., turbidity plume; sound pressure wave):	Max extent (m) of stressor into the water body:
	390.00	Turbidity	305.00

☐	1.	No work will individually or cumulatively have an adverse effect on ESA-listed species or designated critical habitat; no work will cause adverse modification or destruction to proposed critical habitat.
☐	2.	No work will occur in the tidally influenced portion of rivers/streams where Atlantic salmon presence is possible from April 10–November 7.
☐	3.	No work will occur in Atlantic or shortnose sturgeon spawning grounds as follows: i. New England: April 1–Aug. 31 ii. New York/Philadelphia: March 15–August 31 iii. Baltimore/Norfolk: March 15–July 1 and Sept. 15–Nov. 1
☐	4.	No work will occur in shortnose sturgeon overwintering grounds as follows: i. New England District: October 15–April 30 ii. New York/Philadelphia: Nov. 1–March 15 iii. Baltimore: Nov. 1–March 15
☐	5.	Within designated Atlantic salmon critical habitat, no work will affect spawning and rearing areas (PBFs 1-7).
☐	6.	Within proposed/designated Atlantic sturgeon critical habitat, 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 not change temperature, water flow, salinity, or dissolved oxygen levels.
☐	8.	If it is possible for ESA-listed species to pass through the action area, a zone of passage 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.	Any work in designated North Atlantic right whale critical habitat must have no effect on the physical and biological features (PBFs).
☐	10.	The project will not adversely impact any submerged aquatic vegetation (SAV).
☐	11.	No blasting will occur.

b) The following stressors are applicable to the action (check all that apply – use Stressor Category Table for guidance):

☑	Sound Pressure
☐	Impingement/Entrapment/Capture
☑	Turbidity/Water Quality
☐	Entanglement

☑	Habitat Modification
☐	Vessel Traffic

	Stressor Category					
Activity Category	Sound Pressure	Impingement/ Entrapment/ Capture	Turbidity/ Water Quality	Entanglement	Habitat Mod.	Vessel Traffic
Aquaculture (shellfish) and artificial reef creation	N	N	Y	Y	Y	Y
Routine maintenance dredging and disposal/beach nourishment	N	Y	Y	N	Y	Y
Piers, ramps, floats, and other structures	Y	N	Y	Y	Y	Y
Transportation and development (e.g., culvert construction, bridge repair)	Y	N	Y	N	Y	Y
Mitigation (fish/wildlife enhancement or restoration)	N	N	Y	N	Y	Y
Bank stabilization and dam maintenance	Y	N	Y	N	Y	Y

c) SOUND PRESSURE PDC

☑	Yes, my project meets all of the Sound Pressure PDC below.
☐	No, my project does not meet all the Sound Pressure PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):

Information for PDC 14 (refer to SOPs for guidance):

	Pile material (e.g., steel pipe, timber, concrete)	Pile diameter/width (inches)	Number of piles	Installation method (e.g., impact hammer, vibratory start and then impact hammer to depth)
a)	Steel pipe	40.00	62	Socket drilling
b)				

	c)				
	d)				

☐	12.	If the 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 of those species (please see SOPs), a 20 minute "soft start" is required to allow for animals to leave the project vicinity before sound pressure increases.
☐	13.	Any new pile supported structure must involve the installation of ≤ 50 piles (below MHW).
☐	14.	All underwater noise (pressure) is below (<) the physiological/injury noise threshold for ESA-listed species in the action area (if project involves steel piles, or non-steel piles > 24-inches in diameter/width, include noise estimate with this form).

d) IMPINGEMENT/ENTRAINMENT/CAPTURE PDC

☐		Yes, my project meets all of the Impingement/Entrainment/Capture PDC below.
☐		No, my project does not meet all the Impingement/Entrainment/Capture PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):
		Information for Dredging:
		If dredging permit/authorization includes multiple years of maintenance, include estimated number of dredging/disposal events:
		Information for PDC 18 (refer to SOPs for guidance):
		Mesh screen size (mm) for temporary intake:
☐	15.	Only mechanical, cutterhead, and low volume hopper (e.g., CURRITUCK) dredges may be used.
☐	16.	No new dredging in proposed or designated Atlantic sturgeon or Atlantic salmon critical habitat (maintenance dredging still must meet all other PDCs). New dredging outside Atlantic sturgeon or salmon critical habitat is limited to one time dredge events (e.g., burying a utility line) and minor (≤ 2 acres) expansions of areas already subject to maintenance dredging (e.g., marina/harbor expansion).
☐	17.	Work behind cofferdams, turbidity curtains, and other methods to block access of animals to dredge footprint is required when operationally feasible and ESA-listed species may be present.
☐	18.	Temporary intakes related to construction must be equipped with appropriate sized mesh screening (as determined by GARFO section 7 biologist and/or according to Chapter 11 of the NOAA Fisheries Anadromous Salmonid Passage Facility Design) and must not have greater than 0.5 fps intake velocities, to prevent impingement or entrainment of any ESA-listed species life stage.
☐	19.	No new permanent intake structures related to cooling water, or any other inflow at facilities (e.g. water treatment plants, power plants, etc.).

e) TURBIDITY/WATER QUALITY PDC

☑	Yes, my project meets all of the Turbidity/Water Quality PDC below.

☐	No, my project does not meet all the Turbidity/Water Quality PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):	
☐	20.	Work behind cofferdams, turbidity curtains, or other methods to control turbidity are required when operationally feasible and ESA-listed species may be present.
☐	21.	In-water offshore disposal may only occur at designated disposal sites that have already been consulted on with GARFO.
☐	22.	Any temporary discharges must meet state water quality standards; no discharges of toxic substances.
☐	23.	Only repair of existing discharge pipes allowed; no new construction.

f) ENTANGLEMENT PDC

☐	Yes, my project meets all of the Entanglement PDC below.	
☐	No, my project does not meet all the Entanglement PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):	
	Information for Aquaculture Projects:	
	Type of Aquaculture (e.g., cage on bottom)	Acreage
	a)	
	b)	
	c)	
☐	24.	Shell on bottom <50 acres with maximum of 4 corner marker buoys;
☐	25.	Cage on bottom with no loose floating lines <5 acres and minimal vertical lines (1 per string of cages, 4 corner marker buoys);
☐	26.	Floating cages in <3 acres in waters and shallower than -10 feet MLLW with no loose lines and minimal vertical lines (1 per string of cages, 4 corner marker buoys);
☐	27.	Floating upweller docks in >10 feet MLLW.
☐	28.	Any in-water lines, ropes, or chains must be made of materials and installed in a manner (properly spaced) to minimize the risk of entanglement by keeping lines taut or using methods to promote rigidity (e.g., sheathed or weighted lines that do not loop or entangle).

g) HABITAT MODIFICATION PDC

☑	Yes, my project meets all of the Habitat Modification PDC below.	
☐	No, my project does not meet all the Habitat Modification PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):	

☐	29.	No conversion of habitat type (soft bottom to hard, or vice versa) for aquaculture or reef creation.	
h) VESSEL TRAFFIC PDC			
☑	Yes, my project meets all of the Vessel Traffic PDC below.		
☐	No, my project does not meet all the Vessel Traffic PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):		
	Information for PDC 33 (refer to SOPs for guidance):		
		Temporary Project Vessel Type (e.g., work barge, tug, scow, etc.)	Number of Vessels
	a)	Work barge	1
	b)		
	c)		
		Type of Non-Commercial Vessels Added (e.g., 20' recreational motor boat *– only include if there is a net increase directly/indirectly resulting from project*)	Number of Vessels (*if sum > 2, PDC 33 is not met and justification required in Section 4*)
	a)		
	b)		
		Type of Commercial Vessels Added (*only include if there is a net increase directly/indirectly resulting from project*)	Number of Vessels (*if > 0, PDC 33 is not met and justification required in Section 4*)
	a)		
	b)		
☐	30.	Speed limits below 10 knots for project vessels with buffers of 150 feet for all listed species (1,500 feet for right whales).	
☐	31.	While dredging, dredge buffers of 300 feet in the vicinity of any listed species (1,500 feet for right whales), with speeds of 4 knots maximum.	
☐	32.	The number of project vessels must be limited to the greatest extent possible, as appropriate to size and scale of project.	
☐	33.	The permanent net increase in vessels resulting from a project (e.g., dock/float/pier/boating facility) must not exceed two non-commercial vessels. A project must not result in the permanent net increase of any commercial vessels (e.g., a ferry terminal).	

Section 4: Justification for Review under the 2017 NLAA Program

If the action is not in compliance with all of the General PDC and appropriate stressor PDC, 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 PDC 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.

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

Section 5: USACE Verification of Determination

☑	In accordance with the 2017 NLAA Programmatic Consultation, the Corps has determined that the action complies with all applicable PDC and is not likely to adversely affect listed species.
☐	In accordance with the 2017 NLAA Programmatic Consultation, the Corps has determined that the action is not likely to adversely affect listed species per the justification and/or special conditions provided in Section 4.

USACE Signature:	Date:
KRISTOFF.RICHARD.C.JR.1273626391 Digitally signed by KRISTOFF.RICHARD.C.JR.1273626391 Date: 2019.08.13 09:56:36 -04'00'	

Section 6: GARFO Concurrence

☑	In accordance with the 2017 NLAA Program, GARFO PRD concurs with USACE's determination that the action complies with all applicable PDC and is not likely to adversely affect listed species or critical habitat.
☐	In accordance with the 2017 NLAA Program, GARFO PRD concurs with USACE's determination that the action is not likely to adversely affect listed species or critical habitat per the justification and/or special conditions provided in Section 4.
☐	GARFO PRD does not concur with USACE's determination that the action complies with the applicable PDC (with or without justification), and recommends an individual Section 7 consultation to be completed independent from the 2017 NLAA Program.

GARFO Signature:	Date:
JYLKKA.ZACHARY.E.1504438283 Digitally signed by JYLKKA.ZACHARY.E.1504438283 Date: 2019.08.13 12:54:31 -04'00'	08/13/2019

Christine J. Perron

From: mike.r.johnson@noaa.gov on behalf of NMFS.GAR EFH.Consultation - NOAA Service Account <nmfs.gar.efh.consultation@noaa.gov>
Sent: Wednesday, September 4, 2019 12:25 PM
To: Christine J. Perron
Cc: Gilson, Kristine (MARAD); Stephanie Desing
Subject: Re: Port of NH BUILD grant project - wharf rehabilitation - EFH Assessment

Christine,

That's not how an EFH consultation works. As per the EFH regulations at 50 CFR § 600.920(k), when NMFS provides EFH conservation recommendations to the federal action and the response is inconsistent with our recommendations, the "Federal agency must explain its reasons for not following the recommendations, including the scientific justification for any disagreements with NMFS over the anticipated effects of the action and the measures needed to avoid, minimize, mitigate, or offset such effects." Furthermore, the "response must be provided at least 10 days prior to final approval of the action if the response is inconsistent with any of NMFS' EFH conservation recommendations, unless NMFS and the Federal agency have agreed to use alternative time frames for the Federal agency response."

As I interpret your response, the MARAD is not accepting our conservation recommendations because they do not agree that the coal tar epoxy would cause an adverse affect to EFH and federally-managed species. You have provided an explanation for why the MARAD has made this determination. Therefore, other than waiting at least 10 days prior to final approval of the action, there is no other requirement by the MARAD per EFH regulations. NMFS does not issue concurrences on the federal action agencies decisions, either for a decision that is or is not consistent with our conservation recommendations.

Let me know if you have further questions.

Mike

On Wed, Sep 4, 2019 at 11:33 AM Christine J. Perron <CPerron@mjinc.com> wrote:

> The preferred coating system is the coal tar coating. We would like NMFS's concurrence that the coal tar coating can be used based on input received from suppliers that the coating system is hydrophobic and does not leach into the water.

Christine Perron, CWS

Project Manager • Senior Environmental Analyst

McFarland Johnson

53 Regional Drive • Concord, NH 03301
OFFICE: 603-225-2978 ext. 1280

www.mjinc.com

From: mike.r.johnson@noaa.gov <mike.r.johnson@noaa.gov> **On Behalf Of** NMFS.GAR EFH.Consultation - NOAA Service Account
Sent: Wednesday, September 04, 2019 11:17 AM
To: Christine J. Perron <CPerron@mjinc.com>
Cc: Gilson, Kristine (MARAD) <kristine.gilson@dot.gov>; Stephanie Desing <sdesing@appledoremarine.com>
Subject: Re: Port of NH BUILD grant project - wharf rehabilitation - EFH Assessment

Christine,

Can you please clarify what you mean by "we would recommend reconsideration based on the industry research we have completed"?

On Tue, Sep 3, 2019 at 7:02 AM Christine J. Perron <CPerron@mjinc.com> wrote:

> Good morning,
>
> Thank you for providing the conservation recommendation regarding pile coatings. MARAD has reviewed your recommendation with the project team and we are providing the following response.
>
> The coal tar coating that is proposed is one of the standard systems used in the marine environment to combat corrosion and has been in use for many years. We have evaluated other types of suitable coating systems and identified fusion bonded epoxy as a functional alternative; however, the cost of the coating system material is double and would add a potential cost increase to the project of $100,000 or more. To better understand NMFS's concerns with coal tar coating, we reached out to coating suppliers to discuss the concern with toxicity. The consensus we received was that coal tar epoxy is a very hydrophobic coating. The coal tar is embedded within the coating and does not want to leave nor dissolve into water. For this coating to open up or be harmful to humans or wildlife, solvent would need to be present to release these hydrocarbons outward. If by chance these hydrocarbons were released into the water, it would be so small that nothing would be harmed.
>
> Prior to excluding the use of coal tar epoxy coating from this project, we would recommend reconsideration based on the industry research we have completed.
>
> Thank you,
>
> Christine

Christine Perron, CWS

Project Manager • Senior Environmental Analyst

McFarland Johnson

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OFFICE: 603-225-2978 ext. 1280

www.mjinc.com

From: mike.r.johnson@noaa.gov <mike.r.johnson@noaa.gov> **On Behalf Of** NMFS.GAR EFH.Consultation - NOAA Service Account
Sent: Tuesday, August 06, 2019 3:02 PM
To: Christine J. Perron <CPerron@mjinc.com>
Cc: Gilson, Kristine (MARAD) <kristine.gilson@dot.gov>; Stephanie Desing <sdesing@appledoremarine.com>
Subject: Re: Port of NH BUILD grant project - wharf rehabilitation - EFH Assessment

Christine,

I have reviewed the EFH assessment provided for the subject project, and concur with the characterization of impacts to EFH and other NMFS trust resources described in the document. As indicated on page 20 of the assessment, the proposed measures for mitigating the effects of the project include:

- In-water work will be completed at low tide whenever possible.
- Debris booms will be utilized as appropriate to minimize impacts and contain construction impacts.
- A substantial zone of passage for diadromous fish will remain throughout the duration of construction.
- Mitigation for 14,000 square feet of permanent impacts to EFH will be provided as part of the NH Dredge & Fill Permit.

In addition, considering the project does not include dredging, and all piles will be installed using drilled shaft method which is not expected to generate underwater noise levels reaching behavioral or physiological impact thresholds, we are not recommending a time-of-year restriction. However, we are making a conservation recommendation related to the application of coal tar epoxy on pilings. Coal tar epoxy contains a number of polycyclic aromatic hydrocarbon compounds that has been identified as toxic to aquatic life with long lasting effects (the MSDS for coal tar epoxy is attached here). Therefore, we are provided the following EFH conservation recommendation for this project:

- We recommend the Pease Development Authority and the Maritime Administration seek alternative pile materials and/or pile coatings that are less toxic to marine aquatic organisms.

Please note that Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act requires you to provide us with a detailed written response to this EFH conservation recommendation, including a description of adopted measures for avoiding, mitigating, or offsetting the impact of the project on EFH. In the case of a response that is inconsistent with our recommendation, Section 305(b)(4)(B) of the MSA also indicates that you must explain your reasons for not following the recommendation. Included in such reasoning would be the scientific justification for any disagreements with us over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate or offset such effects pursuant to 50 CFR 600.920(k).

Please also note that a distinct and further EFH consultation must be reinitiated pursuant to 50 CFR 600.920(1) if new information becomes available or the project is revised in such a manner that affects the basis for the above EFH conservation recommendation.

Thanks,

Mike

On Wed, Jul 31, 2019 at 12:01 PM Christine J. Perron <CPerron@mjinc.com> wrote:

> Good morning,
>
> The Maritime Administration is funding the subject project, which will entail rehabilitation of the main wharf at the Port of NH on Market Street in Portsmouth, NH. The project will require work in the Piscataqua River that will result in impacts to Essential Fish Habitat. An abbreviated consultation under the Magnuson Stevens Conservation and Management Act per 50 CFR 600.92(h) is requested. The Maritime Administration and the Pease Development Authority have determined that the project will not have a substantial adverse effect on EFH in the area being impacted. On behalf of the Maritime Administration, the attached EFH Assessment is being provided for NMFS's review and concurrence.
>
> Thank you.
>
> **Christine Perron, CWS**
>
> Project Manager • Senior Environmental Analyst
>
> McFarland Johnson
>
> 53 Regional Drive • Concord, NH 03301
> OFFICE: 603-225-2978 ext. 128
>
> www.mjinc.com

Christine J. Perron

From: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>
Sent: Thursday, June 13, 2019 1:53 PM
To: Christine J. Perron
Subject: RE: NHB18-1674 - Portsmouth, Barge wharf functional replacement project

Hello Christine,

The NHFG Nongame and Endangered Wildlife Program has reviewed NHB18-1674 for proposed extension of the main wharf at the Port of NH to compensate for impacts caused by the new alignment of the Sarah Mildred Long Bridge in Portsmouth. The NHB database check identified the state threatened peregrine falcon nesting at the Memorial Bridge to the north and I-95 bridge to the south. We do not expect impacts to the state threatened peregrine falcon as a result of the proposed work as there are no new nests in the near vicinity to the work.

Regards,

Kim Tuttle
Wildlife Biologist
NH Fish and Game
11 Hazen Drive
Concord, NH 03301
603-271-6544

From: Christine J. Perron [mailto:CPerron@mjinc.com]
Sent: Monday, June 10, 2019 2:50 PM
To: Tuttle, Kim
Subject: NHB18-1674 - Portsmouth, Barge wharf functional replacement project

Hi Kim,

I am completing the environmental review for the subject project, which involves the extension of the main wharf at the Port of NH to compensate for impacts caused by the new alignment of the Sarah Mildred Long Bridge. I am working with Cheri Patterson and NOAA on Atlantic and shortnose sturgeon. I'm writing to you for input on the peregrine falcon records on the Memorial Bridge to the north and I-95 bridge to the south.

The project will consist of the following components:

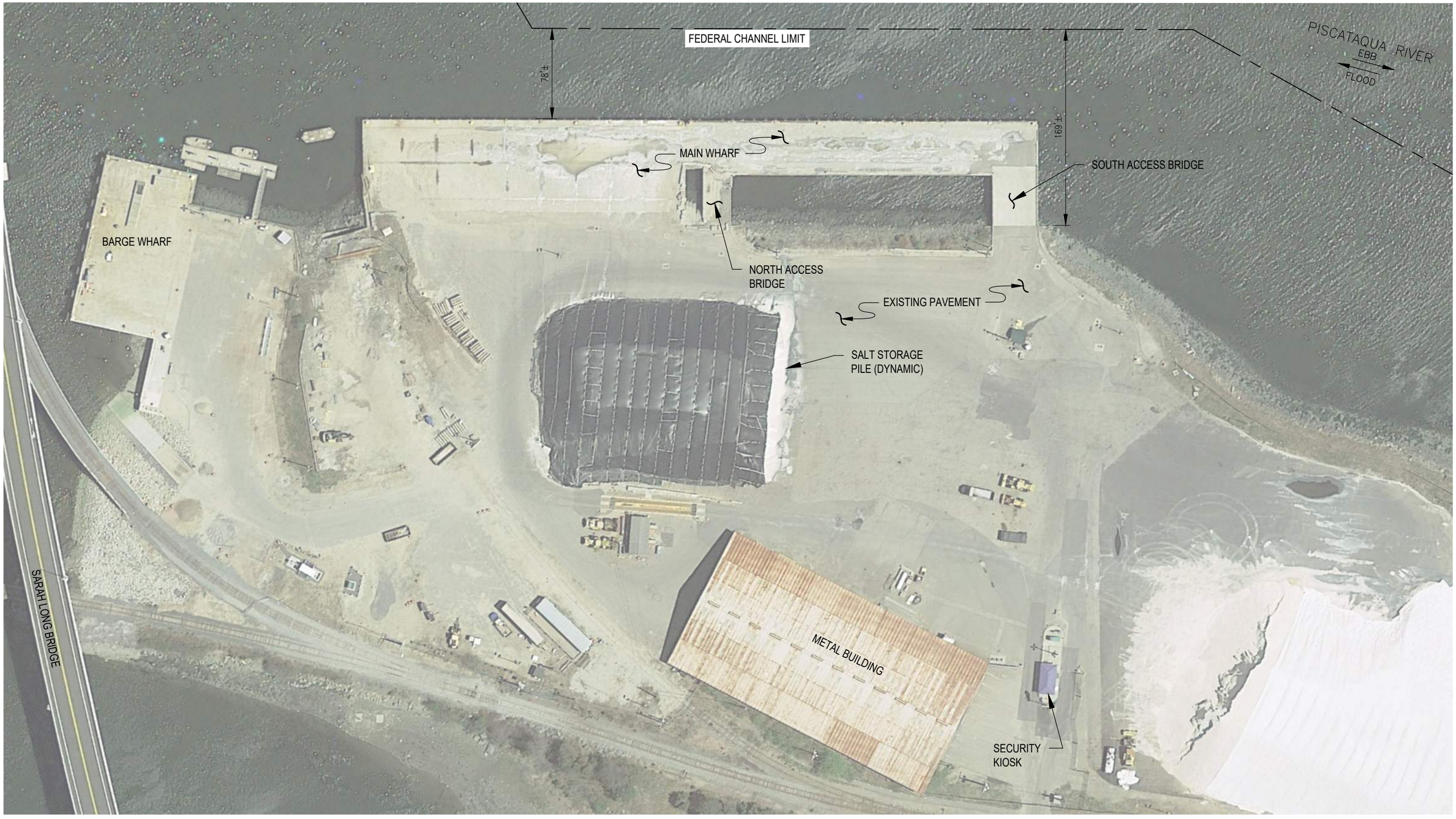
- Construction of a new dock structure approximately 60 x 120 feet at the south end of the existing main wharf.
- Construction of a new dock structure approximately 145 x 80 feet at the north end of the existing main wharf.
- Modification of the fender system along the length of the wharf.
- Shoreside alterations, including soil and rock removal, grading, drainage, and paving within a 70,000-square foot area.
- Dredging approximately 55,000 square feet of the river bed adjacent to the north end of the extended wharf.
- Relocation of the floating dock located to the north of the main wharf.

Photos of the site are attached, along with an aerial view showing the location of proposed activities. Let me know if you need additional information to determine if the proposed project could cause concerns with Peregrine falcons.

Thanks,
Christine

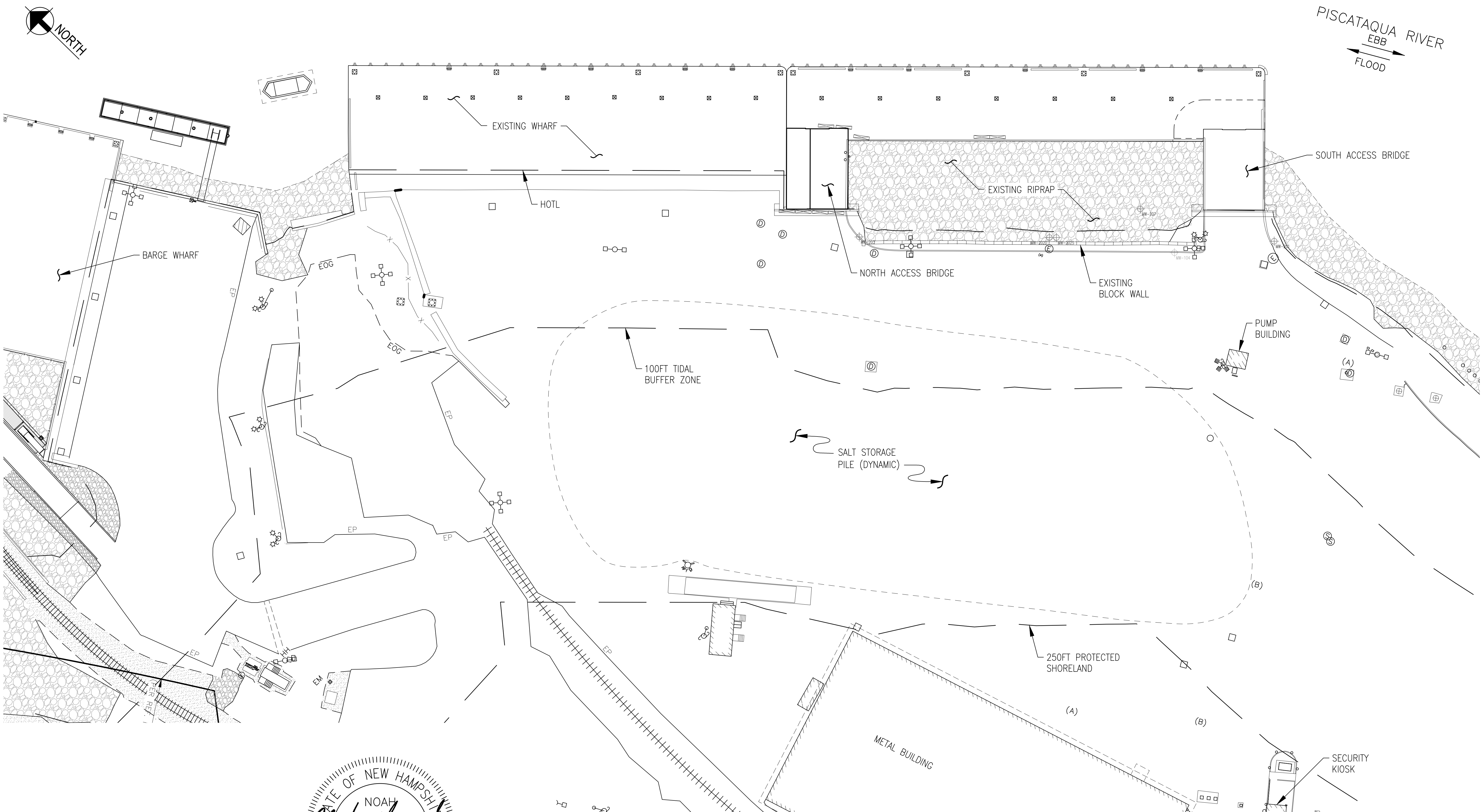
Christine Perron, CWS
Project Manager • Senior Environmental Analyst
McFarland Johnson
53 Regional Drive • Concord, NH 03301
OFFICE: 603-225-2978 ext. 1280
www.mjinc.com

Section 9 – Project Plans



REFERENCE:
© GOOGLE EARTH

GRAPHIC SCALE	DATE	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS	
0 40' 80' 160'	AUGUST 2021		MARKET STREET MARINE TERMINAL PORTSMOUTH, NH MAIN WHARF REHABILITATION AERIAL PHOTOGRAPH	FIG. NO. 3



TIDAL DATUM:

DATUM REFERENCE: 8418150 (1983–2001 TIDAL EPOCH)
100YR – 100-YEAR FLOOD EL. = 8.00' (ZONE AE)
HOTL – HIGHEST OBSERVED TIDE EL. (02/07/1978) = 7.90'
HAT – HIGHEST ASTRONOMICAL TIDE EL. (06/15/1995) = 5.90'
MHHW – MEAN HIGHER HIGH WATER EL. = 4.22'
NAVD88 – NORTH AMERICAN VERTICAL DATUM OF 1988 EL. = 0.00'
MLLW – MEAN LOWER LOW WATER EL. = -4.62'

STATE OF NEW HAMPSHIRE
NOAH
ELWOOD
No 10534
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE	DATE	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS	
0 30' 60' 120'	AUGUST 2021		MARKET STREET MARINE TERMINAL PORTSMOUTH, NH MAIN WHARF REHABILITATION EXISTING SITE PLAN	FIG. NO. 4

NORTH

RESURFACE CONCRETE DECK

REPLACE CLEATS

NOT SHOWN
- REPAIR CAISSONS
- REPAIR PILE CAP AND BEAM SPALLS

RECOAT MOORING HARDWARE

REPLACE FENDER UNITS

EXISTING WHARF

EXISTING WHARF

HOTL

CLEAN AND RECOAT STEEL SHEET PILE BULKHEAD

EOG

EOG

100FT TIDAL BUFFER ZONE

EP

SALT STORAGE PILE (DYNAMIC)

NOTE:
SEE SECTIONS FOR ADDITIONAL REPAIR CALLOUTS.

TIDAL DATUM:
DATUM REFERENCE: 8418150 (1983–2001 TIDAL EPOCH)
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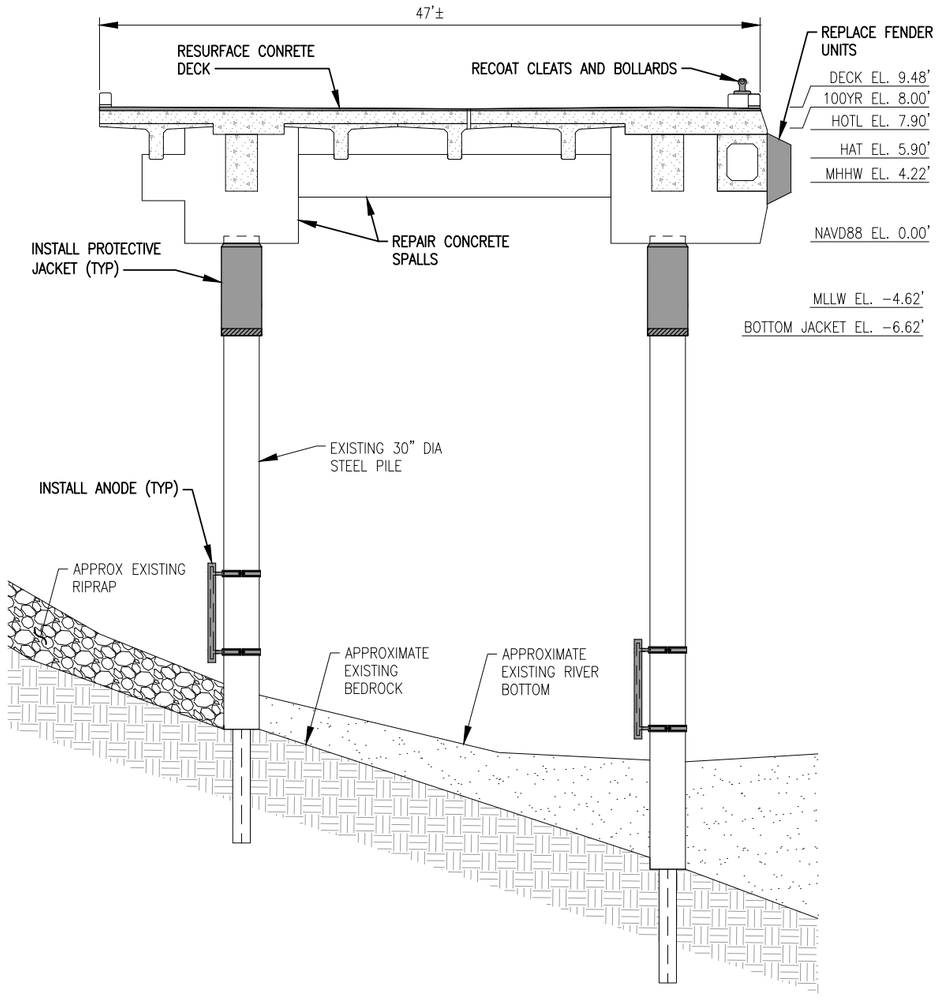
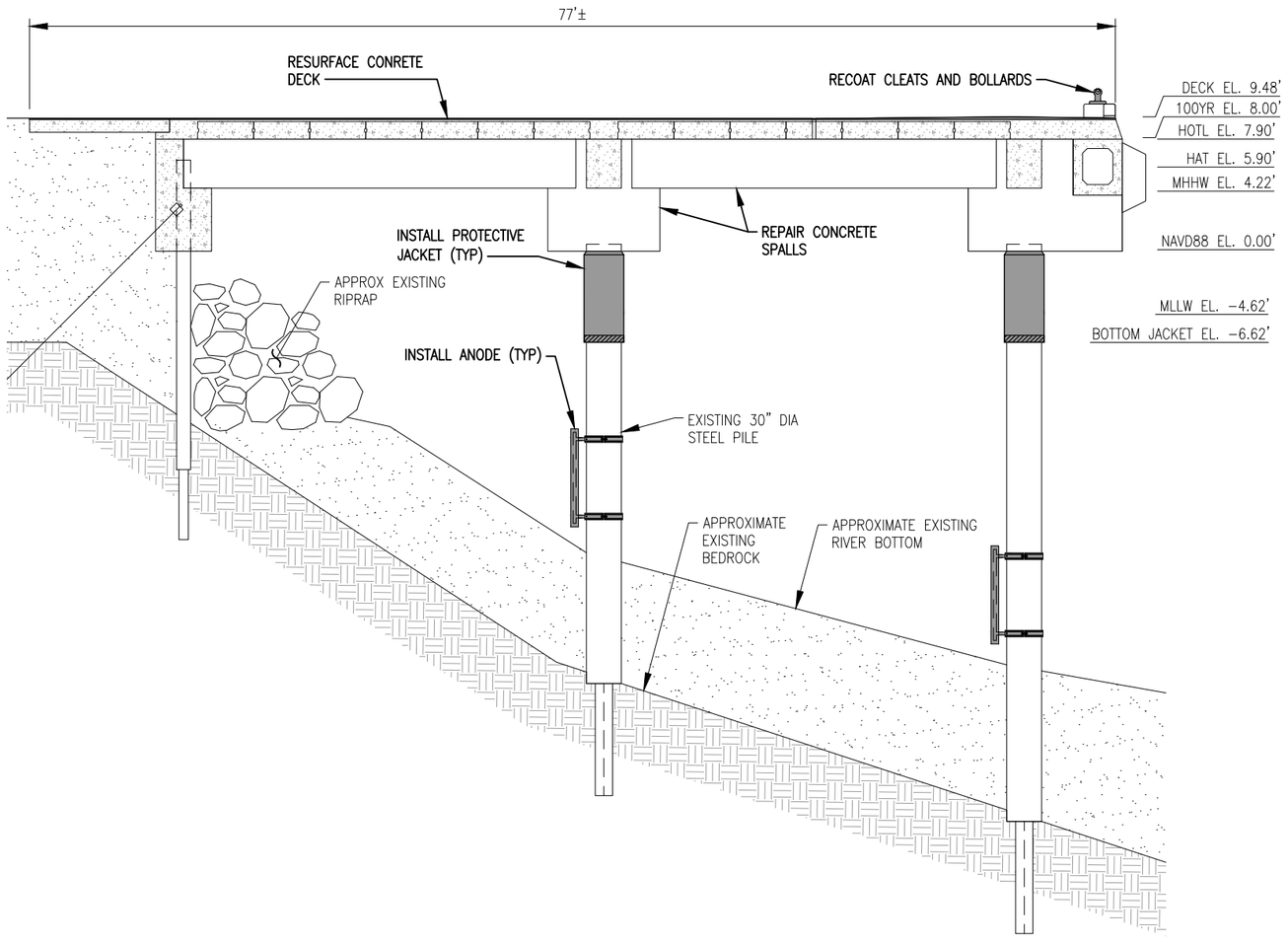
STATE OF NEW HAMPSHIRE
NOAH ELWOOD
No 10534
LICENSED PROFESSIONAL ENGINEER

GRAPHIC SCALE	DATE	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS	
0 20' 40' 80'	AUGUST 2021		MARKET STREET MARINE TERMINAL PORTSMOUTH, NH MAIN WHARF REHABILITATION REPAIR PLAN	FIG. NO. 5



SECTION A-A



SECTION B-B

TIDAL DATUM:

DATUM REFERENCE: 8418150 (1983–2001 TIDAL EPOCH)
100YR – 100–YEAR FLOOD EL. = 8.00' (ZONE AE)
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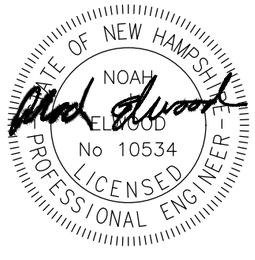
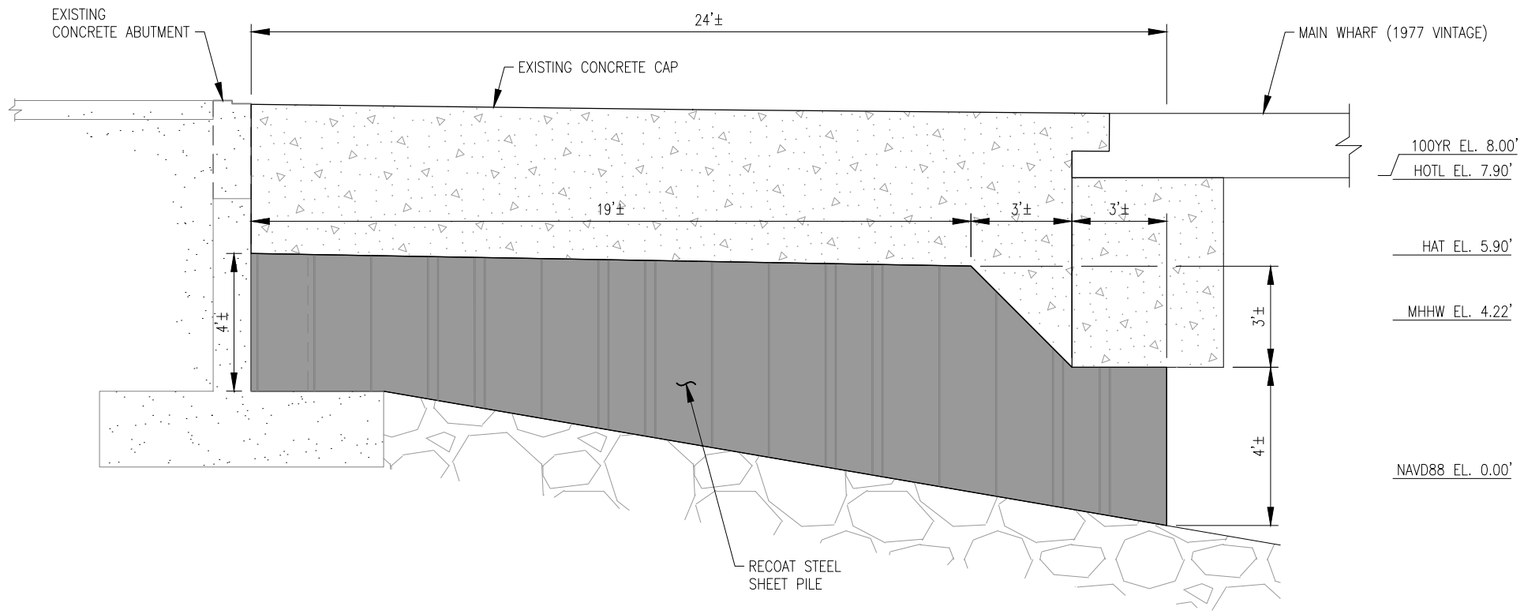
LEGEND:

APPROX REPAIR AREAS



GRAPHIC SCALE	DATE	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS	
0 8' 16' 24'	AUGUST 2021		MARKET STREET MARINE TERMINAL PORTSMOUTH, NH **MAIN WHARF REHABILITATION** **REPAIR SECTIONS**	FIG. NO. **6**



SECTION C-C

TIDAL DATUM:

DATUM REFERENCE: 8418150 (1983–2001 TIDAL EPOCH)
100YR – 100–YEAR FLOOD EL. = 8.00' (ZONE AE)
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LEGEND:

APPROX REPAIR AREAS

STATE OF NEW HAMPSHIRE
NOAH ELWOOD
No 10534
LICENSED PROFESSIONAL ENGINEER

GRAPHIC SCALE	DATE		
0 2' 4' 8'	AUGUST 2021	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS MARKET STREET MARINE TERMINAL PORTSMOUTH, NH **MAIN WHARF REHABILITATION** **REPAIR SECTION C** FIG. NO. 7

NORTH

Impact Location A:
-Wharf Infill
-E1UBL
-14,000 sq ft

265'± APPROXIMATE
WHARF INFILL

EXISTING WHARF

EXISTING WHARF

A

A

57'±

HOTL

LIMITS OF
PAVEMENT/RE-GRADING

Ⓓ

Ⓔ

EOG

100FT TIDAL
BUFFER ZONE

EOG

EP

Impact Location B:
-Grading and
Drainage
-Tidal Buffer Zone
(Developed)
-19,000 sq ft

EXISTING PUMP HOUSE

SALT STORAGE
PILE (DYNAMIC)

LEGEND:

APPROXIMATE LIMIT OF NEW STRUCTURES

APPROXIMATE LIMIT OF PAVING/RE-GRADING

TIDAL DATUM:

DATUM REFERENCE: 8418150 (1983-2001 TIDAL EPOCH)
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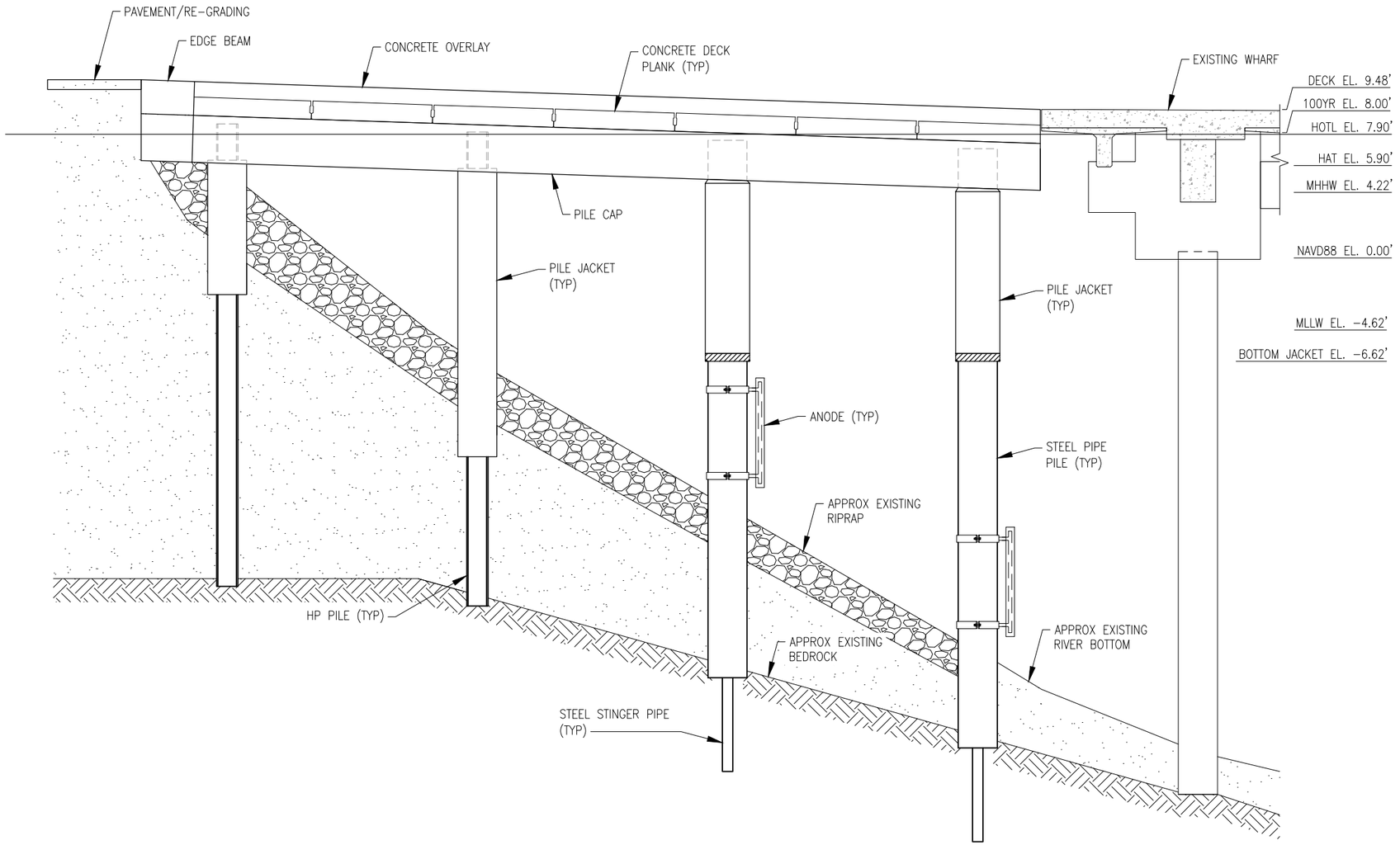
STATE OF NEW HAMPSHIRE
NOAH ELWOOD
No 10534
LICENSED PROFESSIONAL ENGINEER

GRAPHIC SCALE	DATE		
0 20' 40' 80'	AUGUST 2021	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS
			MARKET STREET MARINE TERMINAL PORTSMOUTH, NH MAIN WHARF REHABILITATION WHARF INFILL PLAN
			FIG. NO. 8



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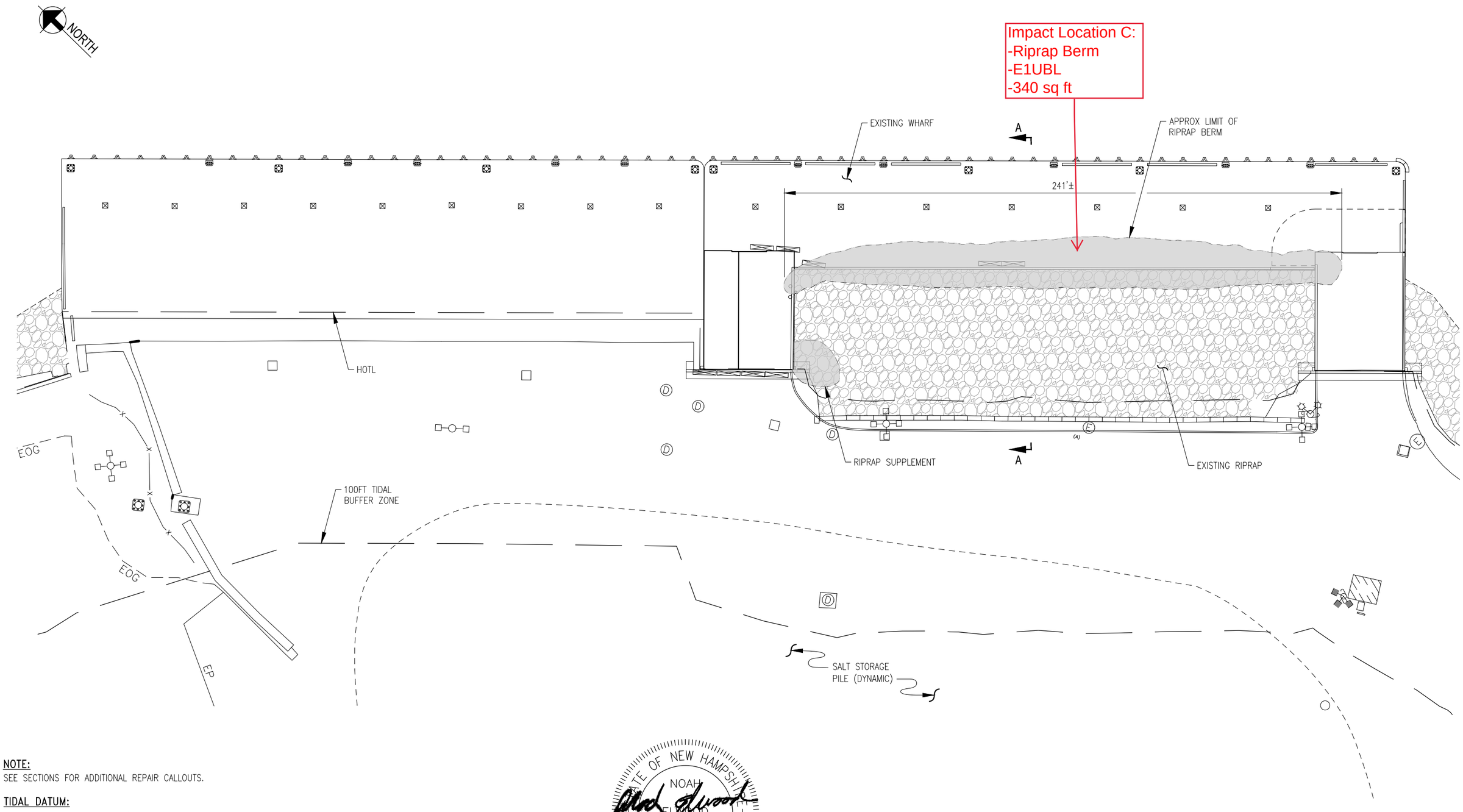
STATE OF NEW HAMPSHIRE
NOAH ELWOOD
No 10534
LICENSED PROFESSIONAL ENGINEER

GRAPHIC SCALE	DATE		
0 4' 8' 16'	AUGUST 2021	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS MARKET STREET MARINE TERMINAL PORTSMOUTH, NH **MAIN WHARF REHABILITATION** **WHARF INFILL SECTION A** FIG. NO. **9**



NOTE:

SEE SECTIONS FOR ADDITIONAL REPAIR CALLOUTS.

TIDAL DATUM:

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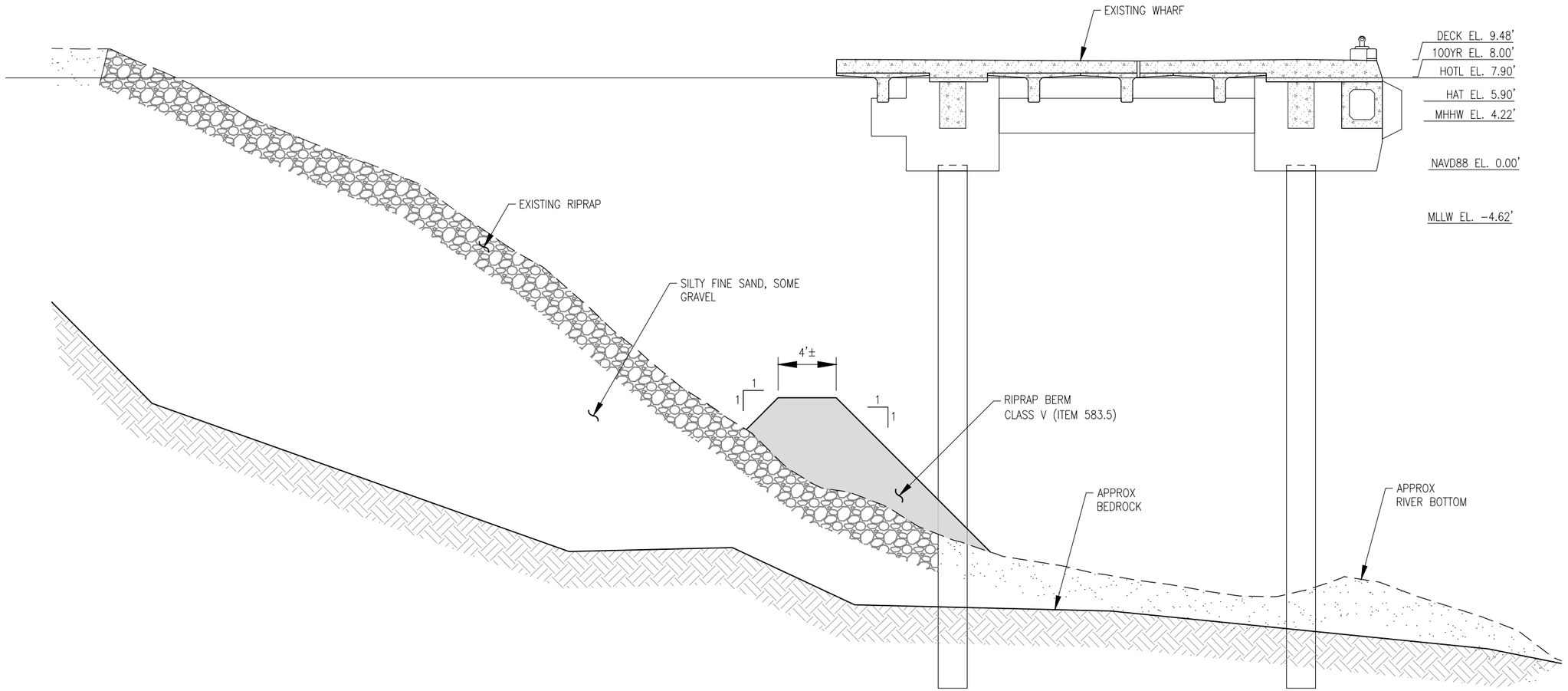
STATE OF NEW HAMPSHIRE
NOAH ELWOOD
No 10534
LICENSED PROFESSIONAL ENGINEER

GRAPHIC SCALE	DATE		
0 20' 40' 80'	AUGUST 2021	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS
			MARKET STREET MARINE TERMINAL PORTSMOUTH, NH MAIN WHARF REHABILITATION RIPRAP PLAN
			FIG. NO. 10



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STATE OF NEW HAMPSHIRE
NOAH ELWOOD
No 10534
LICENSED PROFESSIONAL ENGINEER

GRAPHIC SCALE	DATE		
0 10' 20'	AUGUST 2021	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS MARKET STREET MARINE TERMINAL PORTSMOUTH, NH MAIN WHARF REHABILITATION RIPRAP SECTION A-A FIG. NO. 11

NORTH

FEDERAL CHANNEL LIMIT

FLOATING DEBRIS BOOM
(SHOWN SCHEMATICALLY)

EXISTING WHARF

EXISTING RIPRAP (TYP)

CONSTRUCT SILT
FENCE BARRIER

CONSTRUCT SILT
FENCE BARRIER

CONSTRUCT SILT
BARRIER (TYP)

HOTL

HOTL

EOG

EP

100FT TIDAL
BUFFER ZONE

LIMIT OF SITE WORK

SALT STORAGE
PILE (DYNAMIC)

PAVED AREA

TIDAL DATUM:

DATUM REFERENCE: 8418150 (1983–2001 TIDAL EPOCH)
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STATE OF NEW HAMPSHIRE
NOAH
ELWOOD
No 10534
LICENSED
PROFESSIONAL ENGINEER

GRAPHIC SCALE	DATE		
0 50' 100'	AUGUST 2021	Appledore Marine Engineering, LLC	PEASE DEVELOPMENT AUTHORITY DIVISION OF PORTS AND HARBORS

MARKET STREET MARINE TERMINAL PORTSMOUTH, NH
MAIN WHARF REHABILITATION
SEDIMENT AND EROSION CONTROL PLAN

FIG. NO. 12